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Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

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United States International Trade Commission

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Errata

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- In the executive summary, page 25, table ES.4 has been recalculated based on the final data provided by the Office of the U.S. Trade Representative (USTR) in January 2016. The original table was based on USTR's original public release of the data on its website in November 2015. The differences between the original and recalculated tables do not alter the conclusions drawn from the table in any significant way. The text drawing on table ES.4 has been modified to reflect the recalculated table.
- In chapter 1, page 52, table 1.4 is the same as table ES.4. This table has also been recalculated. The text drawing on table 1.4 has also been modified to reflect the recalculated table.
- In chapter 3, pages 120–22, table 3.5 has been modified to clarify that certain quota increases which are permanent in nature result in quantities that grow larger each year in perpetuity.
- In chapter 3, page 141, table 3.13 has been corrected to show that Japanese tariffs on whey, modified whey, and lactose will be eliminated in 21 years, not 24 years.
- A new appendix, appendix J, has been added to the publication. It contains data tables for all figures in the report.

June 29, 2016

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Acronyms and Abbreviations

Terms	Definitions
AAFA	American Apparel & Footwear Association
ACC	American Chemistry Council
ACTPN	Advisory Committee for Trade Policy and Negotiations
AD/CVD	antidumping and countervailing duty
AFL-CIO	American Federation of Labor & Congress of Industrial Organizations
AIA	Aerospace Industries Association
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ATI	Allegheny Technologies Incorporated
AVE	ad valorem equivalent
BEA	Bureau of Economic Analysis
BIO	Biotechnology Innovation Organization
BSA	Business Software Alliance
CAFTA-DR	Dominican Republic–Central America Free Trade Agreement
CBP	Customs and Border Protection
CBTS	cross-border trade in services
CECATEC-DR	Central American–Dominican Republic Apparel and Textile Council
CGE	computable general equilibrium
CIA	Central Intelligence Agency
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPMA	Color Pigments Manufacturers Association
CSI	Coalition of Services Industries
CTC	cooperative technical consultation
CTHA	Chemical Tariff Harmonization Agreement
DOE	U.S. Department of Energy
EAA	Express Association of America
ECAT	Emergency Committee for American Trade
E-commerce	electronic commerce
EFF	Electronic Frontier Foundation
EIAP	Earned Import Allowance Program
EIF	entry into force
ESA	Entertainment Software Association
EU	European Union
FDI	foreign direct investment
FDRA	Footwear Distributors and Retailers Association
FTA	free trade agreement
FTE	full-time equivalent
GATT	General Agreement on Tariffs and Trade
GATS	General Agreement on Trade in Services
GE	General Electric Company
GEO	Genetically engineered organisms
GDP	gross domestic product
GI	geographical indication
GPM	United Nations Global Policy Model
GTAP	Global Trade Analysis Project
GTIS	Global Trade Information Services
HS	Harmonized System (international tariff schedule of the United States)

Terms	Definitions
HTS	Harmonized Tariff Schedule (international tariff schedule of the United States)
ICSID	International Centre for Settlement of Investment Disputes
ICT	information and communications technology
IFPI	International Federation of the Phonographic Industry
IIPA	International Intellectual Property Alliance
ILO	International Labour Organization
IP	intellectual property
IP receipts	income U.S. firms receive from the use of intellectual property abroad
IPR or IPRs	intellectual property rights
ISP	Internet service provider
ISDS	investor-state dispute settlement
ITA	Information Technology Agreement
ITAC	Industry Trade Advisory Committee
ITIC	Information Technology Industry Council
ITIF	Information Technology and Innovation Foundation
IUU	illegal, unreported, and unregulated fishing practices
KEI	Knowledge Ecology International
KORUS	U.S.-Korea Free Trade Agreement
LNG	liquefied natural gas
MEA	multilateral environmental agreement
MFN	most-favored nation
MNE	multinational enterprise
MNRE	manufactured goods, natural resources, and energy
MPAA	Motion Picture Association of America, Inc.
MOFA	majority-owned foreign affiliate
MOUSA	majority-owned U.S. affiliate
MRA-ETR	APEC Mutual Recognition Arrangement for Equivalence of Technical Requirements
MRATEL	APEC Mutual Recognition Arrangement for Conformity Assessment of Telecommunications Equipment
MSF	Doctors Without Borders/Médecins San Frontières
NAFTA	North American Free Trade Agreement
NAICS	North American Industry Classification System
NAM	National Association of Manufacturers
NC	National Committee (Malaysia) to Coordinate the Implementation of Environment Chapters under Our Free Trade Agreements
NCC	National Chicken Council
NCM	nonconforming measure
NCTO	National Council of Textile Organizations
NGO	nongovernmental organization
n.i.e.	not included elsewhere
NMPF	National Milk Producers Federation
NRF	National Retail Federation
NTM	nontariff measure
OECD	Organisation for Economic Co-operation and Development
OIE	World Organization for Animal Health
Park Index	patent protection index developed by Juan Ginarte and Walter Park
PhRMA	Pharmaceutical Research and Manufacturers of America
POP	point of presence
PSMA	Port State Measures Agreement
PSRs	product-specific rules
RMI	rights management information
ROOs	rules of origin

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Terms	Definitions
RRI	FDI regulatory restrictiveness index
RVC	regional value content
SBS	simultaneous buy-sell
SCM Agreement	WTO Agreement on Subsidies and Countervailing Measures
SIA	Semiconductor Industry Association
SIIA	Software & Information Industry Association
SMEs	small and medium-sized enterprises
SOE	state-owned enterprise
SPS	sanitary and phytosanitary
STRI	Services Trade Restrictiveness Index
TBTs	technical barriers to trade
TCNA	Tile Council of North America
TEPAC	Trade and Environment Policy Advisory Committee
TiCl ₄	titanium tetrachloride
TIMET	Titanium Metals Corporation
TPP	Trans-Pacific Partnership
TPM	technological protection measure
TRIMs	WTO Agreement on Trade-related Investment Measures
TRIPS	WTO Agreement on Trade-related Aspects of Intellectual Property Rights
TRQ	tariff-rate quota
UACT	Union for Affordable Cancer Treatment
UBO	ultimate beneficial owner
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UPOV	International Union for the Protection of New Varieties of Plants
U.S.	United States
USAPEEC	USA Poultry and Egg Export Council
USCIB	U.S. Council for International Business
USDA	U.S. Department of Agriculture
USDEC	U.S. Dairy Export Council
USDOC	United States Department of Commerce
USFIA	U.S. Fashion Industry Association
USITC	United States International Trade Commission
USO	universal service obligation
USTR	Office of the United States Trade Representative
USW	United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union
WTO	World Trade Organization

Preface

The United States concluded negotiations on the Trans-Pacific Partnership Agreement (TPP Agreement) with Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam on October 5, 2015. On November 5, 2015, President Obama notified Congress of his intent to enter into the TPP Agreement. As provided for in section 105(c)(1) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (Trade Priorities Act), on November 5, 2015, the President, through the United States Trade Representative (USTR), provided the U.S. International Trade Commission (the Commission) with the details of the TPP Agreement as it existed at that time and requested that the Commission prepare and submit an assessment of the TPP Agreement as described in section 105(c)(2)–(3) of the Trade Priorities Act.

The President entered into the TPP Agreement on February 4, 2016. Section 105(c)(2) of the Trade Priorities Act requires that not later than 105 calendar days after the President enters into a trade agreement under section 103(b) of the Trade Priorities Act (in this case, by May 19, 2016), the Commission submit to the President and the Congress a report assessing the likely impact of the agreement on the U.S. economy as a whole and on specific industry sectors, including its impact on gross domestic product; exports and imports; aggregate employment and employment opportunities; the production, employment, and competitive position of industries likely to be significantly affected by the agreement; and the interests of United States consumers. Section 105(c)(3) provides that the Commission, in preparing its assessment, is to (1) review available economic assessments regarding the agreement, (2) provide in its assessment a description of the analyses used and conclusions drawn in that literature, and (3) discuss areas of consensus and divergence between the various analyses and conclusions, including those of the Commission regarding the agreement.

A copy of the request letter from USTR for this investigation is in appendix A. The Commission's notice of institution and scheduling of a public hearing, published in the *Federal Register* of November 20, 2015, is in appendix B. The Commission held a public hearing for this investigation on January 13–15, 2016. A calendar of the hearing is included in appendix C of this report, and summaries of hearing testimony and written submissions provided by interested parties are included in appendix D.

Executive Summary

In accordance with section 105(c) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015, this report, by the U.S. International Trade Commission (Commission or USITC), assesses the likely effects of the Trans-Pacific Partnership Agreement (TPP, TPP Agreement, or the agreement) on the U.S. economy as a whole and on specific industry sectors. It encompasses TPP's impact on the United States' gross domestic product (GDP), exports, and imports; U.S. aggregate employment and employment opportunities; the production, employment, and competitive position of U.S. industries likely to be significantly affected by TPP; and the interests of U.S. consumers. The report also reviews other assessments of TPP's economic effects available in the literature, and discusses areas of consensus and divergence between the Commission's analyses and conclusions and those in the literature reviewed.

This executive summary gives an overview of the agreement; presents the Commission's principal findings as to the likely economy-wide effects of TPP, specific sectoral effects, and the expected effects of TPP's cross-cutting rules and other provisions; and briefly summarizes the relevant economic literature.

Main Findings

The Commission used a dynamic computable general equilibrium model to determine the impact of TPP relative to a baseline projection that does not include TPP. The model estimated that TPP would have positive effects, albeit small as a percentage of the overall size of the U.S. economy. By year 15 (2032), U.S. annual real income would be \$57.3 billion (0.23 percent) higher than the baseline projections, real GDP would be \$42.7 billion (0.15 percent) higher, and employment would be 0.07 percent higher (128,000 full-time equivalents). U.S. exports and U.S. imports would be \$27.2 billion (1.0 percent) and \$48.9 billion (1.1 percent) higher, respectively, relative to baseline projections. U.S. exports to new FTA partners would grow by \$34.6 billion (18.7 percent); U.S. imports from those countries would grow by \$23.4 billion (10.4 percent).

Among broad sectors of the U.S. economy, agriculture and food would see the greatest percentage gain relative to the baseline projections; output would be \$10.0 billion, or 0.5 percent, higher by year 15. The services sector would benefit, with a gain of \$42.3 billion (0.1 percent) in output. Output in manufacturing, natural resources, and energy would be \$10.8 billion (0.1 percent) lower with the TPP Agreement than it would be compared with baseline estimates without the agreement.

Many stakeholders consider two new electronic commerce provisions that protect cross-border data flows and prohibit data localization requirements to be crucial to the development of cross-border trade in services, and vital to optimizing the global operations of large and small U.S. companies in all sectors.

TPP would generally establish trade-related disciplines that strengthen and harmonize regulations, increase certainty, and decrease trade costs for firms that trade and invest in the TPP region. Interested parties particularly emphasized the importance of TPP chapters addressing intellectual property rights, customs and trade facilitation, investment, technical barriers to trade, sanitary and phytosanitary standards, and state-owned enterprises.

Overview of Findings

Economy-wide Assessment

The TPP Agreement would affect the trade and investment relationship between the United States and the region in many areas. In addition to the United States, the parties to the agreement are Australia, Brunei Darussalam,¹ Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. Together, these countries accounted for 36 percent of global GDP in 2014. The United States already has FTAs in force with Australia, Canada, Chile, Mexico, Peru, and Singapore. The agreement would influence bilateral trade in goods and services, rules governing trade and investment, and the regulatory environment facing U.S. exports to the region. The overall impact of the TPP Agreement would be small as a percentage of the overall size of the U.S. economy; it would be stronger with respect to countries with which the United States does not already have a free trade agreement (FTA) in force: Brunei, Japan, Malaysia, New Zealand, and Vietnam.

The quantitative assessment in this report estimates the economic effects of TPP provisions related to tariffs and tariff-rate quotas; selected nontariff measures affecting trade in goods and cross-border trade in services; and restrictions affecting foreign investment, compared to a baseline estimate of economic growth in the absence of the TPP Agreement. Table ES.1 summarizes the agreement's estimated macroeconomic effects on the U.S. economy, based on Commission economic model simulations.²

Table ES.1: Economy-wide effects of TPP: Changes relative to baseline in 2032 and 2047

	2032		2047	
	Billion \$	Percent	Billion \$	Percent
Real income	57.3	0.23	82.5	0.28
Real GDP	42.7	0.15	67.0	0.18
Employment (full time equivalents, thousands)	128.2	0.07	174.3	0.09
Capital stock	171.5	0.18	343.5	0.24

Source: USITC estimates.

Note: Dollar values are in 2017 prices.

The Commission estimates that by 2032, U.S. real GDP would be \$42.7 billion (or 0.15 percent) higher than a baseline scenario that reflects expected global economic conditions without TPP.³ Real income, a measure of economic welfare that measures consumers' purchasing power,

¹ Hereafter Brunei.

² Among other inputs, the Commission's modeling analysis also reflects U.S. industry representatives' assessment of how the provisions affect their respective sectors.

³ For the analysis, an entry into force in 2017 is assumed. 2032 would be year 15 of the agreement, at which time most TPP provisions would have been implemented.

would be \$57.3 billion higher (or 0.23 percent) over the same time period. Employment would be 0.07 percent higher, or close to 128,000 full-time equivalents. These gains would be slightly higher after 30 years (that is, 2047), when all provisions of the agreement would be in force. By 2047, real GDP would rise by \$67 billion (0.18 percent); real income, by \$82.5 billion (0.28 percent); and employment, by 0.09 percent, or nearly 174,000 full-time equivalents, compared to the baseline.

According to Commission estimates, U.S. exports to TPP partners will grow faster than U.S. exports to the rest of the world. U.S. imports from TPP partners will grow faster than overall U.S. imports, but not as fast as exports to TPP partners. By 2032, under the agreement, total U.S. exports to the TPP parties would be \$57.2 billion (5.6 percent) higher than the baseline and U.S. imports from the TPP parties would be \$47.5 billion (3.5 percent) over the baseline (table ES.2). Some of this impact would represent trade diversion from other trading partners to TPP parties. According to Commission estimates, U.S. exports to the world would be \$27.2 billion higher (1.0 percent), while U.S. total imports would be \$48.9 billion higher (1.1 percent).

Table ES.2: Effects of TPP on U.S. trade: Changes relative to baseline in 2032

	Exports		Imports	
	Billion \$	Percent	Billion \$	Percent
Trade with TPP partners	57.2	5.6	47.5	3.5
New FTA partners	34.6	18.7	23.4	10.4
Existing FTA partners	22.6	2.7	24.2	2.1
Trade with the world	27.2	1.0	48.9	1.1

Source: USITC estimates.

Note: Dollar values are in 2017 prices.

Sector-specific Assessments

Fifteen years after TPP's entry into force (2032), total U.S. exports and imports for each of the broadly defined sectors of the U.S. economy would exceed the level of the baseline estimate (table ES.3). Both exports and imports in the food and agriculture sector would experience the largest impacts from TPP in percentage terms. The Commission estimates that U.S. output and employment for the sector would both be 0.5 percent higher than the baseline estimate. This sector would experience the largest growth because it would experience the broadest liberalization under the agreement.

Table ES.3: Broad sector level effects of TPP on U.S. output, employment, and trade: Changes relative to baseline estimates in 2032

	Exports		Imports		Output		Employment
	Billion \$	Percent	Billion \$	Percent	Billion \$	Percent	Percent
Agriculture and food	7.2	2.6	2.7	1.5	10.0	0.5	0.5
Manufacturing, natural resources, and energy	15.2	0.9	39.2	1.1	-10.8	-0.1	-0.2
Services	4.8	0.6	7.0	1.2	42.3	0.1	0.1

Source: USITC estimates.

Note: Dollar values are in 2017 prices.

In dollar terms, however, the manufacturing, natural resources, and energy (MNRE) sector, which accounts for the largest share of U.S. trade with the TPP parties, would see the largest absolute expansions in total exports and imports under TPP, although these changes represent smaller shares than for agriculture owing to the MNRE sector's much larger relative size. U.S. exports of MNRE products would be higher by an estimated \$15.2 billion and U.S. imports would be \$39.2 billion higher than the 2032 baseline. Nonetheless, U.S. MNRE output would be 0.1 percent lower by 2032, relative to the baseline in that year, and employment would also be lower, by 0.2 percent. Under TPP, the MNRE sector would not grow as quickly as the projected baseline, primarily because trade barriers are already low in many of these industries; liberalization would have a stronger positive effect in other sectors of the economy, which would likely cause resources to be reallocated away from MNRE. The model does not capture the costs associated with employment transition or temporary unemployment.

The services sector represents the largest share of the U.S. economy, and it would expand the most, in dollar terms, under TPP. U.S. imports and exports of services would be 1.2 percent and 0.6 percent higher in 2032, respectively, compared to the baseline. U.S. output in the services sector would be \$42.3 billion higher in 2032, relative to the baseline, while output and employment would both be 0.1 percent higher.

Overview of the Agreement⁴

The TPP is a comprehensive trade and investment agreement that would remove most tariffs, some tariff-rate quotas (TRQs),⁵ and many nontariff barriers to goods and services trade and investment between the 12 parties to the agreement. TPP also includes a wide range of regulatory provisions that would define rules for trade between the parties. These involve investment, intellectual property, government procurement, rules of origin for trade in certain

⁴ USTR, Trans-Pacific Partnership Agreement, full text, <https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text> (hereafter "USTR, TPP full text").

⁵ Tariff-rate quotas impose a low tariff on imports up to a certain ceiling (a country's quota), but a high tariff on imports exceeding the quota.

goods, customs facilitation, sanitary and phytosanitary measures, technical barriers to trade, competition policy, and labor and environmental standards, among other issues. The likely impacts of some of these provisions are difficult to quantify, but they have the potential to positively affect the U.S. economy by strengthening and harmonizing regulations, increasing certainty, and decreasing trade costs for firms that trade and invest in the TPP region.

Most tariff changes from TPP would apply to new U.S. FTA partners Brunei, Japan, Malaysia, New Zealand, and Vietnam, because few tariffs remain between the United States and its existing FTA partners. Table ES.4 summarizes the tariff elimination schedule under TPP as it applies to these five countries. Virtually all import tariffs affecting U.S. exports or imports would be eliminated by the time TPP is fully implemented at year 30; most would be eliminated as soon as the agreement enters into force. By year 15 of the agreement, TPP would eliminate more than 99 percent of the U.S. tariffs now imposed on imports from the five new FTA partners. Also by year 15, TPP would eliminate, on average, 98 percent of the tariffs facing U.S. exports to these countries.

Table ES.4: Tariff commitments with TPP partners with which the United States has no existing FTA, percent of tariff lines in respective schedule

		Brunei	Japan	Malaysia	New Zealand	Vietnam
U.S. tariff lines applied on TPP partners	Already zero	36.7	36.7	36.7	36.7	36.7
	Eliminated at entry into force	90.7	83.9	89.7	87.7	78.8
	Eliminated after 15 years	100.0	99.2	99.8	99.0	99.6
	Eliminated after 30 years	100.0	99.8	99.8	99.0	99.7
	Subject to TRQs under TPP ^a	0.0	0.2	0.2	1.0	0.3
TPP partner tariff lines applied on U.S. exports	Already zero	75.2	39.4	64.7	58.3	32.9
	Eliminated at entry into force	91.7	83.6	85.6	94.9	66.3
	Eliminated after 15 years	100.0	93.2	99.1	100.0	97.8
	Eliminated after 30 years	100.0	94.7	99.8	100.0	98.0
	Partially reduced or unchanged	0.0	3.5	0.0	0.0	0.1
Subject to TRQs under TPP ^a	0.0	1.8	0.2	0.0	1.9	

Source: USTR, TPP full text; USITC staff calculations.

^a TRQs on some lines are slated to be completely eliminated by the time the agreement is fully implemented.

Approach

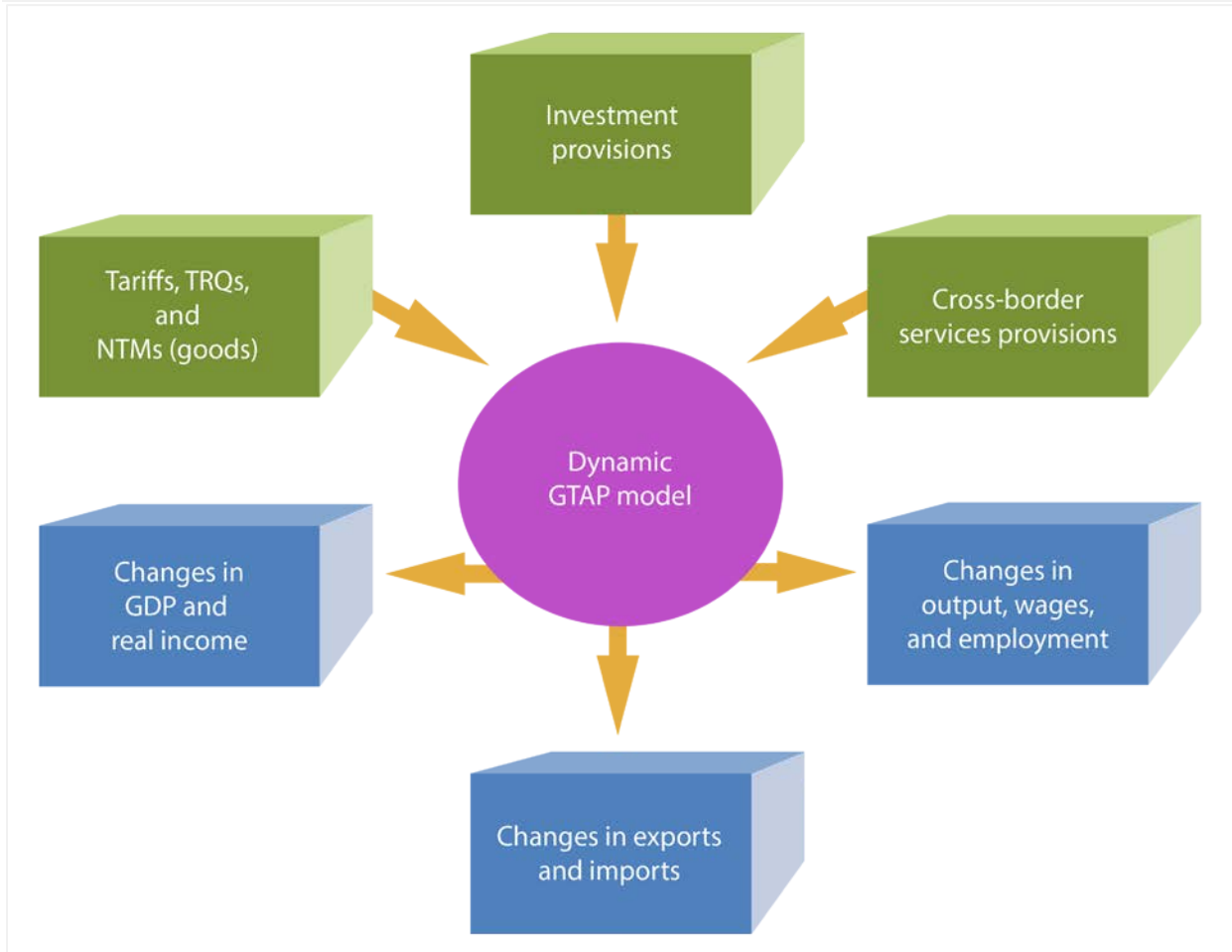
To assess the agreement, the Commission employed both quantitative and qualitative analyses. The Commission's quantitative analysis in this report relies primarily on simulations from a

dynamic computable general equilibrium (CGE)⁶ model of trade among the 12 TPP countries and the rest of the world. The CGE model is based on the Global Trade Analysis Project (GTAP) model, an economy-wide CGE model of world trade specified at the sector level. The simulation analysis estimates the effects of TPP on U.S. real GDP and income; exports, imports, and production in the aggregate and by sector; and U.S. employment and wages by labor type (skilled vs. unskilled labor). Because of the dynamic nature of the analysis, the estimated effects capture the impact of TPP over time from entry into force, showing how the effects of immediate commitments differ from those of commitments over longer timeframes. The estimated effects also capture the agreement's reinforcing impact on U.S. economic growth during the period of implementation.

In the past, the Commission has assessed prospective FTAs using the CGE model to simulate the effects of the agreements' provisions regarding tariffs, TRQs, and selected nontariff measures (NTMs) for trade in goods. The current analysis goes further by also estimating the effect of TPP provisions on (1) NTMs affecting cross-border trade for certain services, and (2) restrictive measures affecting foreign direct investment (FDI). Figure 1.1 shows how TPP's provisions, once quantified, are integrated into the dynamic CGE model to obtain estimates of economic outcomes that take into account TPP liberalization in goods, services, and investment.

⁶ A CGE model uses actual economic data to make a quantitative estimate of the way markets in an overall economy might react to changes in policy, technology, or other factors.

Figure ES.1: TPP provisions quantified in the main CGE analysis



Source: Compiled by USITC.

For TPP provisions that the Commission model analysis cannot quantify, the report provides a summary of the provisions of each TPP chapter, a summary of the views of interested parties as received by the Commission, and a qualitative assessment of the provisions’ impact on the U.S. economy. In most cases, the qualitative assessment is based on a variety of sources, including the views of interested parties as expressed in testimony at the Commission hearing, written submissions provided for the record, public reports of trade advisory committees established under Section 135 of the Trade Act of 1974 (19 U.S.C. 2155), interviews by Commission staff, and Commission staff industry expertise. The assessments take into account publicly available estimates of the effects of the TPP Agreement from outside of the Commission. In order to evaluate the effect of certain intellectual property rights, the Commission presents the results of a separate econometric model that estimates the relationship between a country’s patent protections and its payments to U.S. firms for the use of their intellectual property.

Industry-specific Impacts of TPP

Food and Agriculture Products

The TPP Agreement would provide positive benefits for the U.S. food and agriculture sector, primarily through new export market access in Japan and Vietnam—two countries where the agricultural sectors are currently protected by high tariffs. The increase in export opportunities as a result of additional access to TPP markets would outweigh the effects of the new access the United States would provide to TPP partners. However, export growth in certain sectors, such as horticulture and meats, would likely continue to be restricted by sanitary and phytosanitary (SPS) measures in certain markets. TPP would achieve only limited additional access for U.S. agricultural exports to Canada (in dairy, poultry, and eggs). Although total U.S. agricultural exports to Japan would increase significantly, access would be limited for a narrow basket of goods, particularly dairy, beef, pork, and rice.

TPP would benefit the sector primarily by reducing or eliminating tariffs and expanding access to markets protected by TRQs. TPP also outlines procedures for the administration of TRQs and establishes new SPS, technical barriers to trade (TBT), and modern biotechnology provisions. TPP countries would commit to eliminating export subsidies on agricultural products sold in TPP markets. The countries would also collaborate on developing rules on exports by state trading enterprises, as well as on export credits and insurance programs in the WTO. Table ES.5 provides Commission estimates for TPP’s impact on selected U.S. food and agriculture industries likely to be significantly affected by the agreement.

Table ES.5: Estimated effects of TPP on U.S. food and agricultural output, employment, and trade: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Agriculture and food (total)	7,226.9	2.6	2,733.9	1.5	10,014.9	0.5	0.5
Selected industry sectors:							
Sugar, sweeteners, and SCP ^a	129.6	4.3	132.1	2.4	517.7	0.4	0.4
Dairy products	1,845.5	18.0	348.6	10.3	1,839.3	1.3	1.1
Beef meat	876.1	8.4	419.0	5.7	614.6	0.5	0.4
Pork meat products	219.3	1.9	94.4	4.4	180.3	0.3	0.3
Poultry meat products	173.9	1.3	-16.6	-3.6	265.8	0.6	0.6
Rice	-12.5	-0.3	15.3	1.6	-17.7	-0.1	0.0
Wheat	-1.5	0.0	18.2	1.5	-7.9	0.0	-0.7
Corn grain	-31.3	-0.1	2.5	1.3	206.7	0.3	0.4
Processed foods	1,540.0	3.8	427.2	1.1	2,396.5	0.8	0.7
Fresh fruit, vegetables, and nuts	574.9	2.0	119.2	0.5	172.1	0.2	0.3
Seafood	74.1	2.2	231.9	0.9	-51.5	-0.2	-0.2

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = “not elsewhere classified.”

^a Sugar-containing products.

Dairy

Overall, the TPP Agreement would have a positive impact on U.S. dairy exports and a more limited impact on U.S. dairy imports. The Commission's model results indicate that by 2032, new exports under TPP would exceed new imports by roughly \$1.5 billion, compared to baseline estimates. Japan and Canada, important U.S. export markets, would lower selected tariffs over long phase-in periods, but both markets would remain highly managed even after TPP's full implementation. In the U.S. import market, dairy producers in Australia, Canada, and New Zealand would be granted additional access under TPP with new dairy TRQs. However, with two exceptions—butter and butter oil, and whole milk powder—imported dairy products no longer fill current U.S. import TRQs due to transportation costs to the United States and relatively high prices in Asia. TPP members are not expected to significantly increase exports to the United States from current volumes.

Beef

TPP is expected to lead to a substantial increase in U.S. beef exports and a moderate increase in U.S. beef imports. Most of the increase in exports would be to Japan, though exports to Vietnam would also increase, from a low base. Japan is currently the largest export market for U.S. beef, and Japan's 38.5 percent tariffs on fresh and frozen beef cuts would be reduced to 9 percent over 16 years. The TPP would also give U.S. beef producers parity with the access that Australian producers currently enjoy in the Japanese beef market, due to preferences under the Japan-Australia Economic Partnership Agreement. In addition, Vietnam's beef tariffs, currently as high as 34 percent, would be eliminated over 8 years. However, the increase in U.S. exports to Japan and Vietnam would likely be partly offset by a decline in U.S. exports to countries outside TPP. Most of the increase in U.S. beef imports under TPP would be from New Zealand. Model results indicate that, by 2032, U.S. beef exports would increase by nearly \$876 million over the baseline, compared with an increase in U.S. beef imports of \$419 million over the baseline.

Processed Foods

The TPP Agreement would have a positive impact on U.S. net exports of processed foods, compared to baseline estimates. The growth in exports would primarily result from tariff reductions in Japan and Vietnam. In certain TPP markets, U.S. exporters would gain from the leveling of the playing field with other competitor countries that already have tariff preferences owing to a previous FTA. TPP's impact on U.S. imports is likely to be smaller than on exports. Most U.S. imports of processed foods from TPP partners are from Canada and Mexico, which already face low or no tariffs because of NAFTA. Commission model results estimate that, by 2032, U.S. exports of processed foods would be \$1.5 billion higher than the baseline estimate,

with the largest growth expected to Japan and Vietnam; imports of processed foods from all countries would likely be \$427 million higher than the level in the baseline.

Manufactured Goods, Natural Resources, and Energy Products

Because a relatively small value of U.S. MNRE trade with TPP partners is currently dutiable, the direct impact of TPP is likely to be limited. The Commission's model results estimate that TPP would have a positive impact on total U.S. trade in manufactured goods and natural resource and energy products (MNRE products). As discussed above, overall TPP would result in an increase in exports of \$15.2 billion (0.9 percent) above the projected 2032 baseline, and an increase in imports of \$39.2 billion (1.1 percent) above the baseline. Output in MNRE sectors would be 0.1 percent (\$10.8 billion) lower and employment 0.2 percent lower than the projected 2032 baseline. Some individual industries, such as titanium metal and auto parts, would experience lower growth from TPP as compared to the baseline. Passenger vehicles would likely benefit from TPP. Table ES.6 provides Commission estimates for selected MNRE industries.

Table ES.6: Estimated effects of TPP on U.S. MNRE output, employment, and trade: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Manufacturing, natural resources, and energy	15,187.5	0.9	39,245.4	1.1	-10,843.0	-0.1	-0.2
Selected industry sectors							
Chemicals	1,944.1	0.7	5,283.4	1.3	-2,854.8	-0.3	-0.3
Textiles	256.6	1.3	869.4	1.6	-328.5	-0.4	-0.4
Wearing apparel	10.3	0.3	1,891.3	1.4	424.7	1.0	0.9
Footwear	137.7	12.2	1,103.6	2.7	29.8	0.5	0.8
Titanium downstream products	-33.9	-1.1	115.4	14.2	-202.4	-1.2	-1.3
Passenger vehicles	1,953.9	1.9	2,371.7	0.8	1,628.3	0.3	0.3
Auto parts and trailers	1,219.8	1.2	3,039.2	1.6	-1,365.9	-0.3	-0.3

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

U.S. exports of MNRE products would benefit from the reductions in tariffs and elimination of nontariff barriers by TPP partners. For the five non-FTA partners in TPP combined, the share of tariff lines that are duty free for U.S. MNRE exports would increase from 53 percent to 86 percent upon entry into force of the agreement, with further tariff reductions phased in over time. The tariff rate reductions for MNRE products, however, are not as pronounced as in other sectors in general. Nonetheless, the elimination of these tariff barriers would result in a higher level (16.2 percent) of U.S. exports to new FTA partners and a 3.9 percent higher level in exports to all TPP partners compared to the estimated 2032 baseline. These benefits, though,

would be partially offset by a 1.6 percent lower level of exports to the rest of the world. Overall, U.S. MNRE exports would be 0.9 percent higher (\$15.2 billion) compared with baseline estimates.

U.S. imports would rise faster than U.S. exports for manufactured goods, to 1.1 percent above the 2032 baseline estimate (\$39.2 billion). U.S. imports from new FTA partners would be 11.3 percent above the baseline estimate and imports from all TPP partners would be 3.7 percent higher. Imports from the rest of the world would be 0.2 percent lower. MNRE goods from TPP parties would enter duty free under 84 to 91 percent of tariff lines at entry into force, though some of the highest-value imports—such as passenger vehicle imports from Japan—would not be duty free immediately.

Passenger Vehicles and Auto Parts

Overall, as a result of TPP, the Commission's model results estimate that the level of imports and exports of U.S. passenger vehicles and parts would be higher than the baseline estimate (table ES.7).⁷ Passenger vehicle output would be \$1.6 billion (0.3 percent) higher than the baseline estimate in 2032. For auto parts, output would be lower by \$1.4 billion (0.3 percent) relative to the baseline in 2032. Exports to Japan and Vietnam would be the primary drivers of the increase in exports. Vehicle imports from Japan would be higher than the baseline, driven by the decline in U.S. tariffs on passenger vehicles; imports from NAFTA partners would also be higher than the baseline, due to higher U.S. demand for vehicles and parts. The TPP bilateral agreements to reduce nontariff measures, primarily with Japan, would be the most important factor in higher U.S. exports.

According to hearing witnesses, academic experts, and industry sources, the TPP rules of origin for passenger vehicles could have a negative impact on U.S. production of certain auto parts, but also could facilitate U.S. vehicle exports. Under the rules of origin, the regional value content (RVC) required for a vehicle to receive tariff preferences under TPP would be 45 percent, which is lower than required under NAFTA. Some observers have stated that the lower RVC will lead producers in NAFTA countries to source fewer vehicle parts from the United States, but others have said that the lower RVC may be necessary to facilitate U.S. passenger vehicle exports.

⁷ Because of barriers that would continue to be reduced in this sector after 2032, table ES.7 also includes the impact on the U.S. passenger vehicle and parts industries relative to the baseline by the full implementation of the agreement in 2047.

Table ES.7: Estimated effects of TPP on U.S. output, employment, and trade of passenger vehicles and parts: Changes relative to baseline in 2032 and 2047

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Passenger vehicles							
2032 (15 years)	1,954	1.9	2,372	0.8	1,628	0.3	0.3
2047 (30 years)	2,899	2.2	4,272	1.1	1,429	0.2	0.2
Parts							
2032 (15 years)	1,220	1.2	3,039	1.4	-1,366	-0.3	-0.3
2047 (30 years)	2,062	1.5	4,516	1.5	-1,394	-0.2	-0.3

Source: USITC estimates.

Note: Estimates for year 15 are shown above to match results in other sector analyses. Year 15 includes all tariff and nontariff changes from the agreement directly affecting passenger vehicles and parts except for the removal of tariffs on U.S. imports of passenger vehicles from Japan. Percentages and values calculated for the projected 2032 and 2047 economies. Dollar values may not match the value produced by applying percentage changes in this table to values reported for the 2015 economy.

Textiles and Apparel

The Commission's model results estimate that U.S. imports of apparel would be 1.4 percent higher (\$1.9 billion) as a result of TPP, compared with the 2032 baseline. These results reflect a 35.2 percent (\$7.3 billion) increase in U.S. imports from new FTA partners compared with baseline estimates, which is partially offset by lower imports from non-TPP countries, including China. Vietnam in particular is expected to be the largest beneficiary in terms of increased U.S. apparel imports. Vietnam is already a competitive, major supplier of apparel to the U.S. market, ranking second after China. Nevertheless, initial growth in U.S. imports from Vietnam under TPP preferences would likely be moderated by Vietnam's limited ability to meet the TPP's yarn-forward rules of origin, coupled with long duty phaseouts for certain key products. For textiles, the Commission's model results estimate that U.S. imports under TPP would be 1.6 percent higher (\$869 million) compared with the 2032 baseline. U.S. imports of textiles and apparel from TPP countries totaled \$19.9 billion in 2015, accounting for 17 percent of total U.S. textile and apparel imports from the world (\$118.5 billion).

The Commission's model results estimate that U.S. exports of textiles under TPP would be 1.3 percent higher (\$257 million) than baseline economic growth, and U.S. exports of apparel would be 0.3 percent higher (\$10 million) compared with the 2032 baseline. Certain textile subsectors would likely benefit more than others under TPP. According to industry sources, there may be some opportunities to increase U.S. exports of certain textiles on a limited scale to new FTA partner countries, including technical textiles and cotton and specialty yarns. U.S. exports of textiles and apparel to TPP countries totaled \$7.9 billion in 2015, accounting for 54 percent of total U.S. textile and apparel exports to the world (\$14.7 billion).

Footwear

TPP would likely result in an increase in U.S. footwear trade. U.S. imports of footwear from all countries would be \$1.1 billion higher (2.7 percent) than 2032 baseline growth estimates. U.S. imports of footwear from the TPP countries would be \$1.6 billion higher (23.4 percent) than the baseline; most of this increase would be accounted for by imports of footwear from Vietnam. The growth in U.S. footwear imports from TPP countries is expected to occur at the expense of China and other non-TPP footwear suppliers to the U.S. market. U.S. imports from China would fall by \$400 million (1.3 percent) under TPP, compared with the non-TPP baseline. TPP's impact on U.S. footwear exports is expected to be small in absolute terms, with total U.S. footwear exports expected to be \$138 million higher (12.2 percent). Most of these exports would be of footwear parts to Vietnam, to be used to assemble footwear for the U.S. market.

Titanium

The U.S. titanium industry would likely experience lower growth due to U.S. tariff reductions under TPP. The Commission's model results estimate that output in the downstream titanium industry would be 1.2 percent lower and employment 1.3 percent lower than the projected 2032 baseline. Under TPP, Commission estimates indicate that U.S. imports from Japan would more than double, contributing to a decline in U.S. exports and production. Japan is among the leading global titanium producers and is already the principal source of U.S. titanium imports, despite a 15 percent U.S. import duty on both unwrought titanium (titanium sponge, ingot, billet, and powders) and wrought titanium (e.g., bars, sheets, and tubes).

Chemicals

Under TPP, the Commission estimates that U.S. exports of chemical products, including pharmaceuticals, would be 0.7 percent higher (\$1.9 billion) than baseline estimates; U.S. imports would be 1.3 percent higher (\$5.3 billion) than the baseline, due in part to tariff reductions. This could result in decline in output, relative to the baseline, due to higher levels of imports than exports compared with baseline estimates. The modeling results indicate that by 2032 output would be 0.3 percent lower under TPP, relative to the baseline. Much of TPP's impact on trade is expected to center on the new FTA partners. In addition to tariff elimination and market access, industry sources identified rules of origin, regulatory harmonization, and transparency as generally positive factors in helping to reduce their costs of doing business in the TPP region. However, the data protection provisions for biologic products in the Intellectual Property Rights chapter raised concerns, as addressed in more detail below in this executive summary. The TPP would also include a Cosmetics Annex that is expected to harmonize regulations among TPP parties; among other things, this development would allow U.S. companies to enjoy benefits similar to those enjoyed by companies exporting from countries

with access to other regional agreements (e.g., it would address some labeling and regulatory requirements).

Impact on U.S. Trade in Services

The TPP Agreement contains market access provisions that liberalize cross-border trade in services with TPP partners, and national treatment provisions that enable firms to more easily establish a commercial presence in TPP markets. Three important sources of services liberalization in TPP are expected to contribute to significant reductions in trade costs for U.S. services exporters: (1) adoption of a “negative list” approach means that the agreement covers all services, present and future, unless a TPP signatory has listed specific exceptions known as nonconforming measures (NCMs); (2) fewer NCMs, compared with existing U.S. FTAs and each party’s WTO commitments; and (3) cross-industry (horizontal) liberalization due to the data provisions included in the TPP’s Electronic Commerce chapter (allowing greater freedom of data flows). In order to quantify the effects of services liberalization, these factors were included in the CGE analysis by estimating the value of reductions in trade costs for each factor in each sector and market. Other liberalizing aspects of the TPP arising out of the provisions for state-owned enterprises (SOEs) or IP, for instance, are likely to be significant, but were not able to be incorporated into the Commission’s model.

The Commission’s model estimates that output for the U.S. services sector under TPP would be \$42.3 billion higher (a 0.1 percent increase) relative to the 2032 baseline level; employment would also be 0.1 percent higher. U.S. exports of services to TPP partner markets would be 10.8 percent (\$16.6 billion) higher than the baseline estimate, but exports to non-TPP countries would be 1.9 percent (\$11.8 billion) less than the baseline estimate. Overall, global U.S. services exports would be 0.6 percent (\$4.8 billion) higher, relative to baseline estimates. Exports in two services sectors shown in the table (transportation, logistics, travel, and tourism and recreational and other services) would be lower than the baseline under TPP; these are sectors that would not experience significant liberalization under TPP, so the model assumes that economic resources would shift away from them, towards sectors that would be liberalized under the agreement. At the same time, overall U.S. services imports are estimated to be 1.2 percent higher (\$7 billion) than the baseline estimate. Table ES.8 provides Commission estimates for selected services industries and the services sector as a whole.

Table ES.8: Estimated effects of TPP on U.S. output, employment, and trade in services: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Services	4,797.4	0.6	6,962.5	1.2	42,342.6	0.1	0.1
Selected industry sectors							
Wholesale and retail trade	848.7	2.5	542.4	1.2	7,447.5	0.1	0.1
Transportation, logistics, travel, and tourism	-1,258.4	-1.1	1,770.5	1.5	-719.9	0.0	-0.1
Communications	877.7	2.8	306.4	1.2	2,845.6	0.2	0.1
Financial services n.e.c.	-12.1	0.0	787.8	1.1	1,520.0	0.1	0.1
Insurance	34.4	0.1	703.5	1.1	707.9	0.1	0.0
Business services	4,575.5	1.6	2,031.5	1.2	11,576.0	0.2	0.1
Recreational and other services	-687.8	-1.5	199.3	0.9	1,749.8	0.1	0.1

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified. The services industries, which are addressed in detail later in this executive summary and in the report, do not track closely with the model results presented. The reason is that the services sectors defined in the GTAP database often aggregate several industries, while some services industries are spread among several GTAP categories. Electronic commerce is relevant to almost all GTAP services sectors. Computer services are mostly included in the GTAP business services category, but Internet service providers are included in the GTAP communications category, as are telecommunications. Except for insurance and pension funding, all financial services are included in GTAP's other financial services category. Professional services (engineering, legal, etc.) are included in the broad business services category. Express delivery services are mostly found in the broad transportation, logistics, travel, and tourism category, although courier services are included in the communications category. While broadcasting falls within the communications category, the remainder of audiovisual services are included in the recreational and other services category.

Digital Trade and Computer Services

The Electronic Commerce (E-commerce) chapter, together with other parts of TPP—including the chapters on Cross-border Trade in Services (CBTS), Intellectual Property, Investment, and Customs and Trade Facilitation—provides a broad framework for digital trade. Many observers have called TPP's digital trade-related provisions the most transformative measures in the agreement. U.S. providers of cloud computing, the Internet of Things, and big data⁸ would have greater opportunities for trade and investment in important and growing markets. The expanded opportunities would likely strengthen U.S. companies' leading position in information and communications technology (ICT).

TPP's e-commerce provisions provide a framework for an open Internet that promotes electronic commerce by ensuring the free flow of digital information and prohibiting forced data and server localization measures. The agreement also prohibits customs duties on electronic transmissions; promotes electronic authentication and signatures and paperless trading; eases electronic transactions; and provides for increased privacy and online consumer protections. According to a broad range of industry representatives, the expanded e-commerce protections would likely benefit a wide array of large and small U.S. businesses across a broad

⁸ These terms refer to recent innovations in the transmission, storage, and analysis of data using Internet technologies.

range of sectors, including many in which the United States has strong competitive advantages. Beneficiaries would not only include U.S. businesses with higher levels of digital intensity, including ICT firms (cloud computing and storage services providers, producers of audiovisual products, and providers of streaming services), but also manufacturers, retailers, and other services providers that are dependent on e-commerce and the Internet. At the consumer level, individual Internet users and cross-border shoppers would also be likely to benefit, through increased access to foreign sellers and lower prices.

Financial Services

The TPP would expand market access, national treatment, and most-favored-nation benefits for U.S. financial services firms in the region. The Financial Services chapter would also address the supply of insurance through postal insurance entities, requiring that publicly owned postal companies compete on a commercial basis and comply with the same regulations that apply to private suppliers. This provision would increase the competitiveness of U.S. insurers in TPP partner countries where postal insurance entities exist, such as Japan, and likely to lead to increased sales by U.S.-owned affiliate firms. Additionally, TPP would expand the circumstances under which U.S. financial services firms can arbitrate disputes through the investor-state dispute settlement (ISDS) mechanism. These provisions would likely encourage additional U.S. investment in these markets. Model results from the Commission estimate that, through 2032, output for insurance and other financial services in the United States would increase by 0.1 percent, as demand for these services expand due in part to overall economic growth spurred by TPP.

However, stakeholders have widely criticized two aspects of the Financial Services chapter. First, compared with non-financial firms, which are covered by the E-Commerce chapter, financial services firms would not benefit from TPP provisions prohibiting forced localization of data. Second, under TPP, Malaysia would maintain its government screening mechanism for investment in financial services, which permits the Malaysian government to approve new investment based on an undefined standard of what is determined to be in the best interest of Malaysia.

Express Delivery Services

TPP would benefit the express delivery industry by stimulating the expansion of merchandise trade, including e-commerce shipments, resulting in higher demand for express delivery services. The TPP's Annex on Express Delivery Services (within the Cross-Border Trade in Services chapter) and the express delivery-related provisions in the Customs Administration and Trade Facilitation chapter provide greater liberalization and more transparency than in previous U.S. trade agreements, and would help to improve market access conditions for U.S. express

delivery firms. Other TPP provisions that would benefit express firms appear in the Competitiveness and Business Facilitation, Electronic Commerce, Investment, Small and Medium-Sized Enterprises, Regulatory Coherence, and Transparency and Anti-Corruption chapters. Among other benefits, these chapters would strengthen FTA disciplines on investment, Internet access, data privacy protection, supply chains, and regulatory transparency—all important areas for express delivery firms. They would also help Small and Medium-sized Enterprises (SMEs) engage more effectively in international trade; these firms are a growing customer segment of the express delivery industry.

Professional Services

Under TPP, five countries (Brunei, Malaysia, Chile, Japan, and New Zealand) would scale back their exceptions to open trade in professional services at least to some degree. For Brunei, there would be new openings in architectural, engineering, and related services; accounting services; and legal services. In Malaysia, there would be new liberalization for architecture and engineering; accounting, auditing, and bookkeeping; and legal services. Chile and Japan would liberalize their markets for legal services; New Zealand would see openings in integrated engineering, urban planning and landscape, and architectural services; and Singapore would liberalize architectural, engineering, and auditing services.

Assessment of Cross-cutting and Procedural Provisions and Other Provisions Addressing Rules and Nontariff Measures

The impact of TPP's other provisions on the U.S. economy is generally difficult to quantify. These provisions would likely improve the overall regulatory climate for trade and investment between the United States and the other TPP parties, particularly for new FTA partners. In many ways, these provisions work together to form a web of more open and transparent trade rules for the benefit of all firms in the TPP region.

Many of the TPP cross-cutting chapters are included in existing U.S. FTAs, including Customs Administration and Trade Facilitation, Sanitary and Phytosanitary Measures, Technical Barriers to Trade, Investment, Government Procurement, Competition, Intellectual Property Rights, Labor, and Environment. The TPP also contains several chapters in domains that have not been included in existing U.S. FTAs, at least as stand alone chapters, although some provisions of these chapters may have been included in existing U.S. FTAs. These chapters include Temporary Entry of Business Persons, State-owned Enterprises, Cooperation and Capacity Building, Competitiveness and Business Facilitation, Development, Small and Medium-sized Enterprises, and Regulatory Coherence. Several of the chapters are specifically focused on helping small and

medium-sized enterprises and firms in developing countries to benefit from the FTA. Particularly notable outcomes in these chapters are summarized below.

As represented at the Commission's hearing and in written submissions to the Commission, many observers are generally supportive of the provisions in these chapters. Some, however, expressed concerns that U.S. firms might not realize the intended benefits if the chapters were not effectively implemented and enforced.

Intellectual Property Rights

Full and effective implementation of the intellectual property rights (IPR or IPRs) provisions of TPP would likely benefit U.S. industries that rely on trademarks, patents, copyrights, trade secrets, and other IPRs by reducing their losses from infringement and increasing exports and foreign sales opportunities for their products and services. For example, representatives of U.S. manufacturing and semiconductor firms support new requirements for stronger trade secret protections to address the growing international problem of trade secret theft. Regulatory changes would likely be most substantial in those countries that have negotiated transition periods for compliance with the chapter's requirements: Brunei, Malaysia, Mexico, Peru, New Zealand, and Vietnam. Transition periods are longest in Vietnam and Peru, particularly for protections related to biologic products.

Opposition to the IPR provisions has largely focused on the protections applicable to biopharmaceuticals. Representatives of innovator companies stated that the test data provisions applicable to biologic products are not strong enough, while representatives of nongovernmental groups considered them too strict. Still others suggested that the provisions represent a reasonable compromise, given a substantial difference of opinion in TPP countries.

TPP countries have been improving their patent protections since the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) entered into force in 1995, as they have sought to meet the requirements of TRIPS, FTAs, and other initiatives. The Commission's econometric model, which is separate from the main CGE model, shows that receipts from the use of U.S. intellectual property in TPP countries were 11 percent higher in 2010 than they would have been had patent reforms not occurred. Moreover, U.S. IP receipts would be expected to increase further as patent reforms continue under TPP.

State-owned Enterprises

TPP would be the first U.S. FTA to include a separate chapter on state-owned enterprises (SOEs). Generally, observers have seen this chapter as a positive step towards assuring that SOEs compete fairly when engaged in commercial activities. Under the chapter, SOEs and

designated monopolies must “act in accordance with commercial considerations” in the sale and purchase of goods and services, and parties must give nondiscriminatory treatment to the enterprises, goods, and services of other TPP parties. The provisions of the chapter would apply anywhere a SOE operates in the free trade area, meaning that the rules would apply not only to SOEs operating in their home countries, but also to covered SOE investments in the territory of other TPP parties. The chapter would also prohibit parties from giving noncommercial assistance to SOEs that would adversely affect the interests of other TPP parties.

Investment

The TPP Investment chapter provides new protections for U.S. investors abroad, primarily in the five TPP parties with which the United States does not already have a FTA, so TPP could promote some new U.S. investment, particularly in Brunei, Japan, Malaysia, New Zealand, and Vietnam. Because the U.S. economy is already substantially open to foreign investment, it is unlikely that TPP would generate significant new investment flows into the United States. The Investment chapter’s Investor-State Dispute Settlement (ISDS) mechanism benefits U.S. investors in the five new TPP parties, but also in Australia; the U.S.-Australia FTA did not include ISDS. TPP includes several ISDS provisions that are new to existing U.S. FTAs, meant to clarify parties’ right to regulate and to increase the transparency of the ISDS arbitration process. Finally, parties would be allowed to exempt from the ISDS process any claims challenging a tobacco control measure.

Environment

Most observers agree that TPP goes further than any other major trade agreement to address environmental concerns. As with other U.S. FTAs concluded since 2007, the Environment chapter is fully subject to TPP’s dispute settlement process, although some observers have expressed concerns about whether the U.S. government would effectively enforce the chapter’s provisions. The binding commitments related to marine fisheries subsidies would represent the first time that most TPP parties made an internationally enforceable obligation to limit such subsidies. Other, nonbinding provisions new to the TPP Environment chapter, compared with existing U.S. FTAs, cover transitioning to a low-emissions environment, removing barriers to environmental goods and services, and linking the Environment chapter to the SPS chapter in an effort to combat invasive alien species.

Labor

The TPP includes several labor provisions not contained in any previous U.S. trade agreement. These include requirements that all parties maintain laws that govern health and safety at the workplace, regulate work hours, and provide for a minimum wage. TPP also extends the existing prohibition on weakening worker protections so that it would cover export processing zones and other trade zones, as well as a measure discouraging imports produced using forced labor, among others. In addition, TPP includes three separate bilateral side agreements on labor which require Brunei, Malaysia, and Vietnam to undertake certain labor reforms before the agreement can take effect between the United States and those countries. Despite these new provisions, labor unions and other observers have expressed the belief that the TPP labor provisions are inadequate and unlikely to be enforced, and thus would do little to improve labor conditions in TPP parties. TPP labor obligations would not require changes in U.S. law, so would likely have little effect on working conditions in the United States.

Technical Barriers to Trade (TBT)

The TBT provisions of the TPP Agreement would likely benefit U.S. firms investing in and exporting to TPP parties. Cross-cutting provisions would apply to all sectors of trade in goods, and would require open, transparent, stakeholder-based systems of standards-setting in the TPP countries. In addition to the cross-cutting provisions, the chapter contains seven sector-specific annexes detailing particular standards, technical requirements, and conformity assessment provisions. While some of TPP's TBT commitments have been included in existing U.S. FTAs, many provisions are entirely new for all TPP Parties.

Sanitary and Phytosanitary (SPS) Standards

The provisions of the TPP Agreement would require TPP parties to maintain modern, science-based sanitary and phytosanitary measures in TPP parties. Most provisions of the chapter are subject to dispute resolution. The SPS chapter clarifies and builds on provisions of the WTO's SPS Agreement with provisions that are entirely new for U.S. trade agreements. Most stakeholders have expressed support for the SPS provisions, but others have raised concerns related to consumer safety, the definition of "science" as used in the text, and the right of parties to legislate. Letter exchanges and parallel negotiations between the United States and individual TPP parties have already addressed specific outstanding SPS market access issues for U.S. beef, pork, and other products.

Literature Review

Aside from the current report, the only other study that analyzes the final provisions of TPP in order to assess the agreement's impact on the U.S. economy is an analysis by Peter Petri and Michael Plummer, published by the Peterson Institute in 2016. Table ES.9 compares the Commission's findings with that of Petri and Plummer. In general, Petri and Plummer report larger projected gains from TPP in U.S. real income and exports than do the Commission findings.

Table ES.9: Comparison of Commission findings with Petri and Plummer

Author	Year of analysis	Change in real income	
		(% of GDP)	Change in exports (%)
Commission	2032	0.2	1.0
Petri and Plummer	2030	0.5	9.1

Source: USITC estimates; Petri and Plummer, "The Economic Effects of the Trans-Pacific Partnership," 2016.

The Commission's simulation of the TPP Agreement differs from the simulation conducted by Petri and Plummer in four areas, and the different assumptions employed largely explain the difference in the final results. First, based on the Commission's industry expertise and its knowledge of particular factors affecting trade in specific sectors across the economy, the Commission's simulation was implemented at a more disaggregated sector level than the simulation in the Petri and Plummer analysis. As a result, the Commission's simulation includes economic conditions and TPP provisions which are sector-specific. Some examples are the preference of Japanese consumers for domestic beef meat, the limited available expansion capacity for Malaysian-approved Halal meat plants in the United States, the existing regime of import duty drawbacks in Vietnam, the potential impact of TPP rules of origin on Vietnamese trade, and the structure of the TPP Agreement's TRQ provisions. All of these factors are likely to limit the impact of certain TPP provisions on U.S. trade.

Second, the Commission quantified TPP's investment provisions at a more disaggregated sector level than did Petri and Plummer, taking into account particular aspects of each industry for each TPP country and assuming that regulations for U.S. FDI would not be affected by the TPP investment provisions if the United States already has a trade agreement with the partner country. As a result, the Commission's quantification of the agreement's investment provisions identified various degrees of changes in investment regulations at the sector level, ranging from no change for many sectors to significant change for just a few sectors. In contrast, Petri and Plummer estimated a single degree of investment liberalization across all industries for each TPP country and without excluding existing U.S. FTA partners, which produces larger estimated impacts of TPP's investment provisions.

Third, the Commission's simulations did not include any policy "spillover" effects. Petri and Plummer assumed that 20 percent of the liberalization of nontariff barriers under TPP would also apply to trade partners who are not TPP members. Such spillover effects may be a byproduct of the TPP Agreement, but they are not included in the provisions of TPP and are exceedingly difficult to quantify accurately. Thus, the Commission chose not to include them in the model. This factor was an important one in Petri and Plummer's overall results, and generated higher estimates of trade and real income changes than in the Commission's analysis.

Fourth, the Commission's simulation did not consider productivity differences at the firm level within a sector, while the Petri and Plummer simulation was based on a model of firm heterogeneity. Under such a model, reduction in foreign trade barriers can raise the average productivity of firms within a sector. In Petri and Plummer, this assumption leads to greater gains in U.S. trade and real income. The Commission has not used such a model in previous reports, and it was not feasible to develop such a model with the industry and country detail required for Commission analysis within the timeframe of this report.

The literature review presented in this report also discusses other studies that assess the economic impact of a hypothetical TPP, but in less detail, as the studies were conducted before the TPP negotiations were finished.

Chapter 1

Introduction

Purpose

This report examines the Trans-Pacific Partnership Agreement (TPP),⁹ a major trade agreement potentially linking the United States with 11 other parties: Australia, Brunei (Brunei), Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. Prepared by the U.S. International Trade Commission (Commission or USITC), the report assesses the likely impact of the TPP agreement on the U.S. economy, specific industry sectors, and U.S. consumers, as required by the Bipartisan Congressional Trade Priorities and Accountability Act of 2015.¹⁰ In particular, the statute requires the Commission to assess the likely impact of TPP on the U.S. economy as a whole and on specific industry sectors, including the impact it will have on the gross domestic product (GDP), exports, and imports; aggregate employment and employment opportunities; the production, employment, and competitive position of industries likely to be significantly affected by the TPP; and the interests of U.S. consumers.

The statute also requires the Commission to review available economic assessments of the agreement, including literature about any substantially equivalent proposed agreements. The Commission's report should describe the analytical methods used and conclusions drawn in this literature, and it should also discuss areas of consensus and divergence between the Commission's analyses and conclusions and those of other economic assessments reviewed.

Scope

The United States already has free trade agreements (FTAs) with 6 of the other 11 TPP parties: Australia, Canada, Chile, Mexico, Peru, and Singapore. The TPP would therefore result in five new FTA partners for the United States: Brunei, Japan, Malaysia, New Zealand, and Vietnam. The agreement is likely to affect most sectors of the U.S. economy either directly or indirectly. For example, the removal or reduction in the restrictiveness of a particular tariff or nontariff measure may not only affect the sector directly exposed to the liberalization, but it may also

⁹ USTR, Trans-Pacific Partnership Agreement (TPP), full text, <https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text>. All in-text citations to TPP articles, annexes, or notes are to this version.

¹⁰ On November 5, 2015, the U.S. International Trade Commission received a letter from the U.S. Trade Representative (USTR) requesting that the Commission provide a report to the President and Congress assessing the likely impact of the TPP Agreement under section 105(c) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (19 U.S.C. 4204(c)). See appendix A for the request letter from the USTR.

have indirect effects on upstream and downstream sectors.¹¹ This report will examine economy-wide effects of the TPP as well as selected sectoral effects, based on a quantitative analysis discussed further below. Per the statute, this report also includes qualitative discussion and analysis of the agreement's effects on selected industry sectors.

These sectors were selected based on different factors, including the extent of the sector's trade liberalization under the TPP, the importance of the sector in terms of trade with the TPP region, the apparent sensitivity of certain U.S. industries to increased trade, and industry and Commission views regarding potential sectoral effects. In total, over 20 industry sectors were analyzed and are included in this report. Agricultural sectors analyzed include dairy; sugar; beef; pork; poultry; grains; processed foods; fresh fruits, vegetables, and nuts; alcoholic beverages; and seafood. Manufacturing sectors analyzed include passenger vehicles; textiles and apparel; footwear; chemicals; and titanium metal. Services sectors analyzed include computer services; professional services; audiovisual services; express delivery; financial services, including banking and insurance; and telecommunications services. The report also includes analyses of the regulatory provisions of the TPP that would apply across sectors of the economy.

Analytical Approach

The main quantitative analysis used in this report is based on simulations from a dynamic computable general equilibrium (CGE) model of trade among the 12 TPP countries and the rest of the world.¹² The CGE model is based on the Global Trade Analysis Project (GTAP) model, an economy-wide CGE model of world trade specified at the sector level.¹³ This quantitative analysis is limited to certain aspects of the agreement, as explained below.

The simulation analysis provides effects for U.S. GDP; U.S. exports, imports, production, and consumption in the aggregate and by sector; and U.S. employment and wages by labor type (skilled vs. unskilled labor). Because of the dynamic nature of the analysis, the estimated effects capture the impact of the TPP Agreement over time from entry into force, thus differentiating the effects of immediate commitments from the effects of commitments over longer timeframes. The estimated effects also capture the reinforcing impact of the TPP Agreement on the growth of the U.S. economy during the agreement's period of implementation.

¹¹ An upstream sector (e.g., textiles) provides output that is used as an input by a downstream (e.g., apparel) sector.

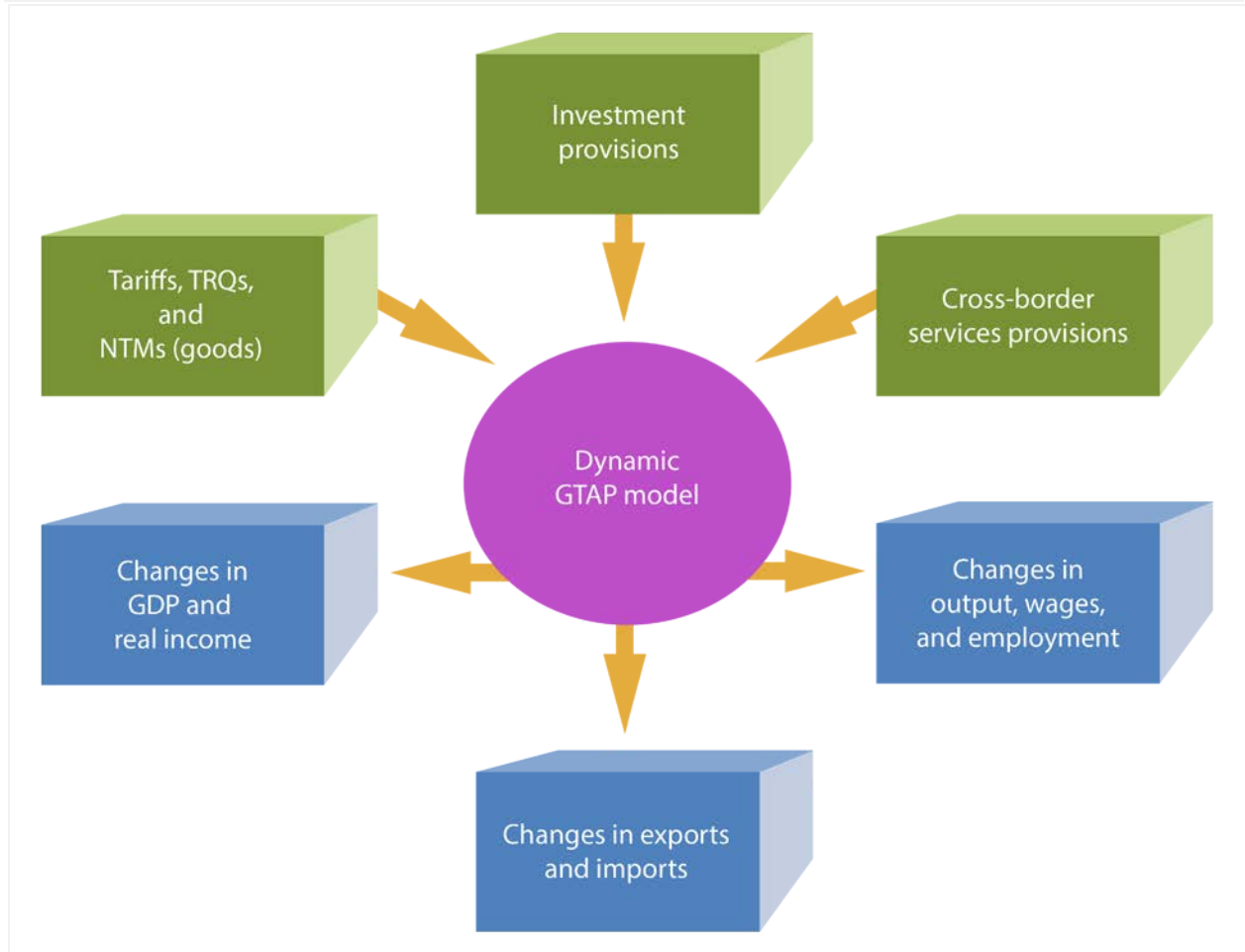
¹² Chapters 3, 4, and 5 present model results by sector for country groups, such as all TPP partners, or existing FTA partners in the TPP. Where warranted, additional detail on trade with specific partners is reported in the text.

¹³ The GTAP framework includes 57 sectors. Some of these sectors were further broken down, or disaggregated, while others were combined, to focus on sectors of interest. See chapter 2 and appendix G for more details.

When the Commission has assessed prospective FTAs in the past, it has used the CGE model to simulate the economy-wide and sectoral effects of the agreements regarding tariffs, tariff-rate quotas (TRQs), and selected nontariff measures (NTMs) for trade in goods.¹⁴ The current analysis assessing the impact of the TPP Agreement not only estimates the impact of tariffs, NTMs, and TRQs on goods, but also estimates (1) the effect of NTMs on cross-border trade for certain services and (2) the effect of restrictive measures affecting foreign direct investment (FDI). These new analytical extensions to the modeling framework draw on a variety of databases and economic analyses to estimate the existing barriers and the impact of the TPP on these barriers, based on the text of the agreement. Figure 1.1 shows how the TPP's provisions, once quantified, are integrated into the dynamic CGE model to obtain results on economic outcomes that take into account TPP liberalization in goods, services, and investment. The analysis in chapter 2 and technical appendix G explains the inputs into the model and the analytical framework in more detail.

¹⁴ Tariff-rates quotas (TRQs) are a type of tariff restraint, with a lower tariff applied to in-quota imports and a higher tariff applied to over-quota imports. Even though TRQs have a specified access or quota level, they are generally defined as tariff barriers. Nontariff measures (NTMs) are policy measures other than tariffs, such as sanitary and phytosanitary regulations, that may have an effect on international trade.

Figure 1.1: Modeling of liberalization in goods, services, and investment



Source: Compiled by USITC staff.

Certain chapters of the TPP Agreement contain provisions that are difficult to quantify, such as commitments on government procurement, competition, state-owned enterprises, and intellectual property. Nevertheless, these provisions can affect U.S. GDP, exports and imports, employment, production, and consumers, by reducing costs, increasing the variety of goods and services, or improving producers' competitiveness. The report therefore assesses the impact of such provisions using a qualitative approach. This approach contrasts the commitments in TPP to current practices and/or obligations under existing U.S. trade agreements with TPP parties in order to highlight the extent of the changes introduced by TPP. It also incorporates testimony presented during the Commission's public hearing on January 13–15, 2016; written submissions from interested parties; and staff interviews with industry

representatives.¹⁵ Such information is interwoven into most chapters of this report, complementing the report's quantitative assessments.

TPP Agreement Overview

TPP is a comprehensive agreement that covers trade in goods and services, rules of origin, trade remedies, customs facilitation, sanitary and phytosanitary measures, technical barriers to trade, foreign investment, intellectual property, government procurement, competition policy, and labor and environmental standards, among other areas. There are 30 chapters in the agreement, which are listed in table 1.1 along with the corresponding chapters where they are discussed in this report. The assessment in this report is based on a review of all 30 chapters, as well as various annexes and numerous side agreements that address bilateral trade issues between individual TPP parties.

The TPP Agreement includes several chapters that have not been included in previous U.S. bilateral FTAs. These address state-owned enterprises, temporary entry of businesspersons, cooperation and capacity building, competitiveness and business facilitation, development, small and medium-sized enterprises, and regulatory coherence.

¹⁵ See appendix C for the calendar of the public hearing. See appendix D for summaries of positions of interested parties provided for inclusion in this report.

Table 1.1: TPP chapters and annexes, and their coverage in the Commission report

TPP Chapter	Chapter in the report where primarily covered
1. Initial Provisions and General Definitions	Chapter 6
2. National Treatment and Market Access for Goods	Chapters 2, 3, and 4
3. Rules of Origin and Origin Procedures	Chapter 4
4. Textiles and Apparel Goods	Chapter 4
5. Customs Administration and Trade Facilitation	Chapter 6
6. Trade Remedies	Chapter 6
7. Sanitary and Phytosanitary Measures	Chapter 6
8. Technical Barriers to Trade	Chapter 6
9. Investment	Chapters 2 and 6
10. Cross-Border Trade in Services	Chapters 2 and 5
11. Financial Services	Chapter 5
12. Temporary Entry for Business Persons ^a	Chapter 6
13. Telecommunications	Chapter 5
14. Electronic Commerce	Chapter 5
15. Government Procurement	Chapter 6
16. Competition Policy	Chapter 6
17. State-Owned Enterprises and Designated Monopolies ^a	Chapter 6
18. Intellectual Property	Chapter 6
19. Labour	Chapter 6
20. Environment	Chapter 6
21. Cooperation and Capacity Building ^a	Chapter 6
22. Competitiveness and Business Facilitation ^a	Chapter 6
23. Development ^a	Chapter 6
24. Small and Medium-Sized Enterprises ^a	Chapter 6
25. Regulatory Coherence ^a	Chapter 6
26. Transparency and Anti-Corruption	Chapter 6
27. Administrative and Institutional Provisions	Chapter 6
28. Dispute Settlement	Chapter 6
29. Exceptions and General Provisions	Chapter 6
30. Final Provisions	Chapter 6
Annex I: Cross-Border Trade in Services and Investment Non-Conforming Measures	Chapters 2, 5, and 6
Annex II: Cross-Border Trade in Services and Investment Non-Conforming Measures	Chapters 2, 5, and 6
Annex III: Financial Services Non-Conforming Measures	Chapters 2 and 5
Annex IV: State-Owned Enterprises and Designated Monopolies Non-Conforming Measures	Chapter 6

Source: USTR, TPP full text.

^a Chapter not included in existing U.S. trade agreements.

In addition to the full text of the agreement, as shown in the table, TPP parties also signed a Joint Declaration of Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries, to address member exchange rate policies (box 1.1).

Box 1.1: Exchange rates, international trade, and exchange rate agreements among TPP members

Effects of exchange rate movements on trade

A change in a country's exchange rate vis-à-vis its trading partners can alter the relative price of exports and imports in that country, for both intermediate and final goods. For example, a 10 percent rise in the value of the U.S. dollar (an appreciation) could cause the price paid by importers of U.S. exports to increase by as much as 10 percent. At the same time, it would lower the price of imports into the United States by as much as 10 percent. Thus, a currency appreciation against a trading partner can have an effect similar to a combined import tariff and export subsidy across all imported and exported goods by the trading partner, absent the fiscal implications of tariff revenues and subsidies paid.

The extent to which prices respond to changes in exchange rates is known in the economic literature as pass-through. In general, the empirical literature concludes that exchange rate pass-through is not "complete" and that the percentage change in prices of a traded goods is typically lower than the percentage change in the exchange rate. This may reflect various factors, such as exporting firms that change their margins to offset the effects of the exchange rate change; firms that set their prices in the local currency of the importing country so that they do not fluctuate with the exchange rate, at least in the short run; and the extent of global supply chains, which leads to lower pass-through when production costs are denominated in different currencies.^a

Exchange rate agreements among TPP members

Separately, but upon the release of the TPP text, finance ministers of TPP member countries also released the Joint Declaration of Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries to promote cooperation and transparency surrounding members' exchange rate policies. The details of the declaration outline a set of rules under which members are called to (1) "commit to avoid unfair currency practices and refrain from competitive devaluation"; (2) "publicly report their foreign-exchange intervention and foreign reserves data, some for the first time"; and (3) have senior macroeconomic policy officials "consult regularly to address macroeconomic issues, including to engage on efforts to avoid unfair currency practices."^b

While the declaration has no enforcement mechanism to oblige countries to make policy changes if they violate its provisions, the declaration itself is binding, as (1) it becomes effective immediately upon the entry into force of the TPP; (2) it requires countries seeking accession to the TPP to join the declaration; and (3) it is consistent with countries' rights and obligations under the International Monetary Fund (IMF) Articles of Agreement.^c But because the declaration is not part of TPP, it is not enforceable under TPP dispute settlement procedures (Chapter 28).

Views on currency practices and their potential impacts under the TPP

In hearing statements, a number of witnesses expressed concerns that TPP countries might deliberately adjust the value of their respective currencies to gain a competitive advantage in export markets. Common points of concern included the lack of any provisions on currency issues in the TPP agreements, as well as the lack of an enforcement mechanism under the Joint Declaration for countries that may appear to be engaging in unfair currency practices. Their views, as summarized by each witness, can be found in appendix D.^d

^a Jabara, "How Do Exchange Rates Affect Import Prices?" 2009. Powers and Riker, "The Effect of Exchange Rates," 2015.

^b U.S. Treasury, "Joint Declaration of the Macroeconomic Policy Authorities," Fact Sheet, November 5, 2015.

^c U.S. Treasury, “Joint Declaration of the Macroeconomic Policy Authorities,” November 5, 2015. Brunei, Malaysia, Singapore, and Vietnam are granted special accommodations under the agreement that grant them extra time and relaxation of certain reporting requirements for data dissemination. All TPP countries are IMF member countries.

^d Parties mentioning currency issues in appendix D include Representatives DeLauro, Slaughter, DeFazio, and Lee; Representative Levin; the AFL-CIO Action Network; Americans Backing a Competitive Dollar; Citizens Trade Campaign; Coalition for a Prosperous America; Economic Policy Institute; Ideal Taxes; Teamsters; and United Steelworkers.

Existing Tariff Levels and Commitments

The focus of the Commission’s analysis of tariff commitments in TPP centers on countries with which the United States does not already have an FTA, as the bulk of tariff liberalization occurs within these countries. Some additional tariff and TRQ liberalizations were given to partners with which the United States already has an FTA. However, these additional liberalizations are small compared to the reductions made to the rates charged between the United States and countries with which the United States does not have an FTA.¹⁶

Table 1.2 summarizes the United States’ most-favored-nation (MFN)¹⁷ ad valorem tariff rates¹⁸ charged against imports from TPP parties with which the United States has no FTAs (Brunei, Japan, Malaysia, New Zealand, and Vietnam). This table shows that 39.5 percent of MFN lines have free (zero) rates of duty. Relatively few tariff lines are above 10 percent (about 9.6 percent of U.S. tariff lines).¹⁹

Table 1.2: U.S. MFN tariffs imposed on TPP partners with which the United States has no existing FTA, in 2010, by rate charged, percent of U.S. tariff lines

MFN ad valorem rate (percent)	Number of lines	Percent of total
0	3852	39.5
>0 to 5	2716	27.9
>5 to 10	2233	22.9
>10 to 25	825	8.5
>25 to 100	102	1.0
>100 to 500	12	0.1

Source: USTR, TPP full text; USITC calculations.

Note: Percentage are based on the total number of ad valorem tariff lines (91.8 percent of U.S. MFN tariff lines), and not the entire tariff schedule. If both percentage values and specific rates were included, percentage rates were used. Percentages may not add to 100 due to rounding.

¹⁶ On a trade-weighted basis, the largest non-TRQ tariff reduction given to U.S. exports and charged against U.S. imports is less than 0.2 percent at the sector level per the model in this report.

¹⁷ In the United States the MFN rate is the duty applied under normal trade relations or NTR status.

¹⁸ Ad valorem tariff rates refer to duties expressed as a percentage of the appraised customs value of the imported good. Other types of tariffs, such as specific tariffs, may be levied in other terms, such as dollars per ton.

¹⁹ Shares shown are out of the total number of ad valorem tariff lines (91.8 percent of U.S. MFN tariff lines), and not the entire tariff schedule. If both percentage values and specific rates were included, percentage rates were used.

Table 1.3 summarizes MFN ad valorem tariff rates charged against imports from the United States by partners with which the U.S. has no existing FTA. On average, 54.0 percent of tariff lines have free rates of duty, and the majority of tariff lines are 10 percent or less. Compared to the U.S. import tariffs, however, these countries have a higher frequency of tariff lines above 10 percent, particularly in Vietnam (36.7 percent of tariff lines) and Malaysia (23.5 percent).

Table 1.3: MFN tariffs applied on U.S exports by TPP partners with which the United States has no existing FTA, by rate charged, percent of tariff lines of respective schedule

MFN ad valorem rate (percent)	Brunei	Japan	Malaysia	New Zealand	Vietnam
0	75.8	42.6	60.9	58.0	32.6
>0 to 5	8.1	24.6	9.2	36.4	19.5
>5 to 10	1.2	21.5	6.4	5.6	11.1
>10 to 25	14.8	9.2	17.9	0.0	26.0
>25 to 100	^(a)	2.1	5.6	0.0	10.7
>100 to 500	0.0	^(a)	0.0	0.0	^(a)

Source: USTR, TPP full text; USITC calculations.

Note: Percentages are based on the total number of ad valorem tariff lines (98.5 percent of lines for Japan, more than 99 percent for other countries), and not the entire tariff schedule. If both percentage values and specific rates were included, percentage rates were used. Percentages may not add to 100 due to rounding.

^a Less than 0.05 percent.

Tariff Commitments Related to New FTA Partners

TPP will eliminate duties immediately on a wide range of goods traded among TPP partners, while eliminating duties on other goods over varying time horizons spanning as long as 30 years. TPP members make tariff commitments and give preferential TRQs multilaterally, bilaterally, or both. The tariff schedules of the United States and of all other TPP countries (including general notes and annexes) cover all goods.

Table 1.4 summarizes tariff commitments for the United States and TPP members with which the United States does not already have an FTA. Of all U.S. MFN tariff lines, 36.7 percent are already duty free, and, on average, 49.9 percent of remaining duties would be eliminated upon the agreement's entry into force.²⁰ On average, 99.5 percent of tariff lines would be duty free after 15 years, and 99.6 would be duty free after 30 years. U.S. exports to Brunei and New Zealand will be completely duty free within 15 years of the implementation of TPP. Only Japan and Vietnam do not fully eliminate tariffs on certain goods—namely certain rice, beef, and dairy products—during implementation.

²⁰ Shares are expressed as a percentage of each country's total tariff schedule (as opposed to just the lines that are ad valorem tariffs as in tables 1.2 and 1.3). This means that shares in the "Already zero" row differ from those in tables 1.2 and 1.3, because the ones in table 1.4 are shares relative to the entire schedule.

Table 1.4: Tariff commitments with TPP partners with which the United States has no existing FTA, percent of tariff lines of respective schedule

		Brunei	Japan	Malaysia	New Zealand	Vietnam
U.S. tariff lines applied on TPP partners	Already zero	36.7	36.7	36.7	36.7	36.7
	Eliminated at entry into force	90.7	83.9	89.7	87.7	78.8
	Eliminated after 15 years	100.0	99.2	99.8	99.0	99.6
	Eliminated after 30 years	100.0	99.8	99.8	99.0	99.7
	Subject to TRQs	0.0	0.2	0.2	1.0	0.3
TPP partner tariff lines applied on U.S. exports	Already zero	75.2	39.4	64.7	58.3	32.9
	Eliminated at entry into force	91.7	83.6	85.6	94.9	66.3
	Eliminated after 15 years	100.0	93.2	99.1	100.0	97.8
	Eliminated after 30 years	100.0	94.7	99.8	100.0	98.0
	Partially reduced or unchanged	0.0	3.5	0.0	0.0	0.1
	Subject to TRQs	0.0	1.8	0.2	0.0	1.9

Source: USTR, TPP full text; USITC calculations.

Note: Percentages are based on each country's total tariff lines (as opposed to just the lines that are ad valorem tariffs, as in tables 1.2 and 1.3). Some lines subject to TRQs are slated to be completely eliminated by the time the agreement is fully implemented.

Organization of the Report

The rest of this chapter provides an economic overview of the TPP region.²¹ Chapter 2 reports quantitative estimates of the likely impacts of the TPP on the U.S. economy as a whole and on broad sectors of the economy, taking into account trade and investment liberalization under the agreement. It also reviews relevant literature, including analyses of the economic effects of the proposed TPP agreement, as well as analyses of substantially similar agreements, and compares the Commission's findings with findings from the studies reviewed. Chapters 3, 4, and 5 present industry-specific assessments for selected agricultural, manufacturing, and services industry sectors, respectively, combining quantitative and qualitative analyses. Chapter 6 gives a qualitative assessment of other regulatory chapters of the agreement not quantified in this report.

TPP Regional Economic Overview

The Trans-Pacific Partnership Agreement encompasses 12 countries spread around the Pacific Rim (figure 1.2) that account for a large proportion of the world's economic activity, its trade in goods and services, and its international financial flows. The signatories of TPP are a varied group of countries ranging widely in size, development, and specializations. Geographically, Canada is the largest, while Singapore is the smallest. The population of the TPP countries exceeded 810 million people as of July 2015.²² The United States currently has free trade

²¹ See appendix F for country profiles for each of the TPP parties.

²² CIA, *World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html> (accessed December 15, 2015).

agreements with 6 of the other 11 signatory countries: Australia (2005), Canada (1989), Chile (2004), Mexico (1994), Peru (2009), and Singapore (2004).

Figure 1.2: TPP member countries



Source: Office of the United States Trade Representative (accessed December 15, 2015).

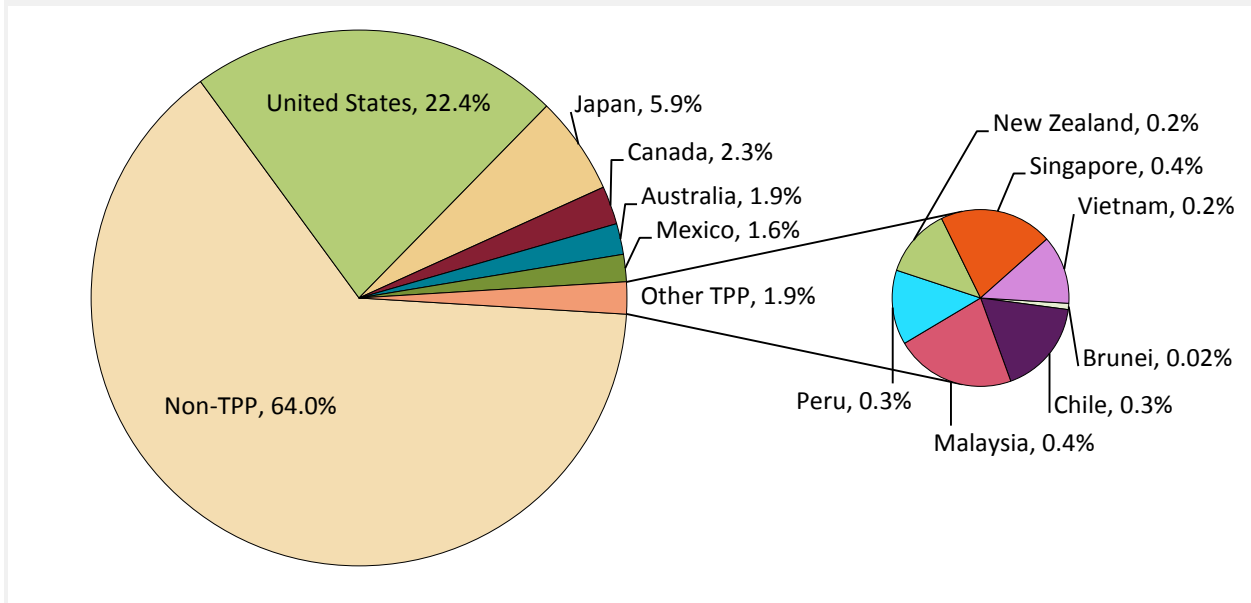
GDP

In total, signatory TPP countries' GDP in 2014 was valued at \$28.0 trillion. This represents 36.0 percent of the world's total economic activity in that year (figure 1.3). The United States accounted for the largest portion of this total (\$17.4 trillion), while Brunei accounted for the smallest (\$17.3 billion). The five TPP signatory countries with the largest GDPs in 2014 were the United States, Japan, Canada, Australia, and Mexico. These five countries represented nearly 95 percent of the TPP region's collective GDP in 2014, with the United States accounting for more than 62 percent of the total.

TPP countries' sectoral specializations also varied among signatories in 2014 (figure 1.4). Among TPP countries, Vietnam had the largest portion of its GDP—nearly 20 percent—attributable to agriculture. Malaysia is the TPP country in which manufacturing represented the largest share of GDP. Services represented a majority of all the TPP countries' economic activity except for Vietnam and Brunei, with the United States having the most services-based economy: services represented nearly four-fifths of U.S. GDP in 2014. Brunei's focus on petroleum products (included in the "other" category in figure 1.4) made it the only TPP country with a majority of

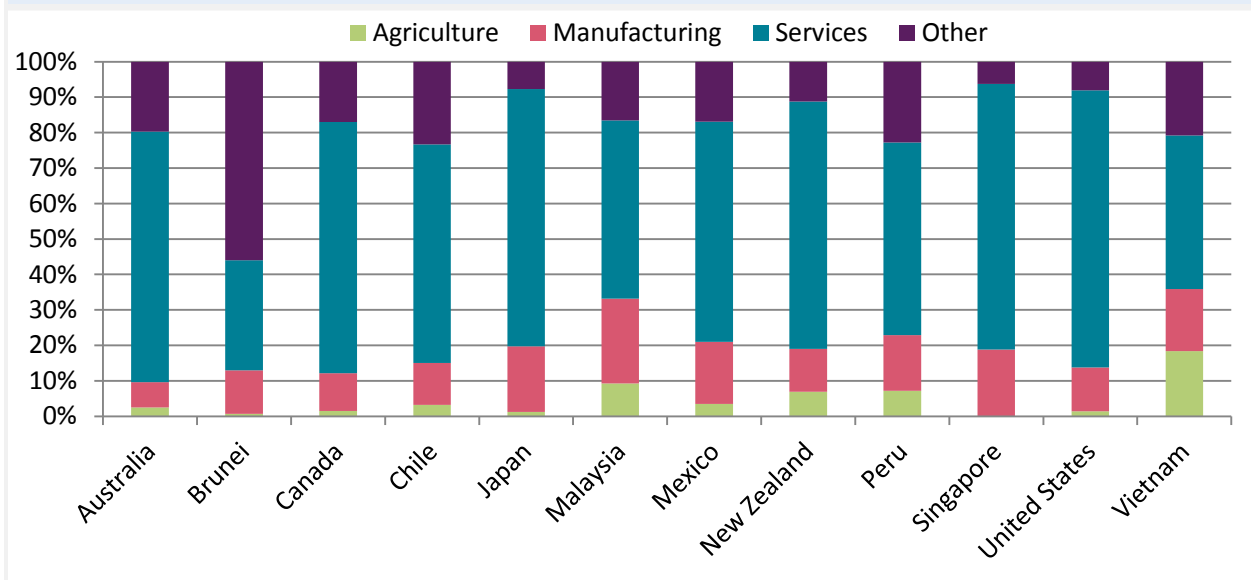
its economic activity attributable to industries other than agriculture, manufacturing, or services.²³

Figure 1.3: Shares of world GDP for TPP signatory countries, 2014



Source: World Bank, World Development Indicators (accessed January 20, 2016). Corresponds to [appendix table J.1](#).

Figure 1.4: Sectoral shares of TPP countries' GDP, by sector, 2013^a



Source: World Bank, World Development Indicators (accessed July 7, 2015). Corresponds to [appendix table J.2](#).

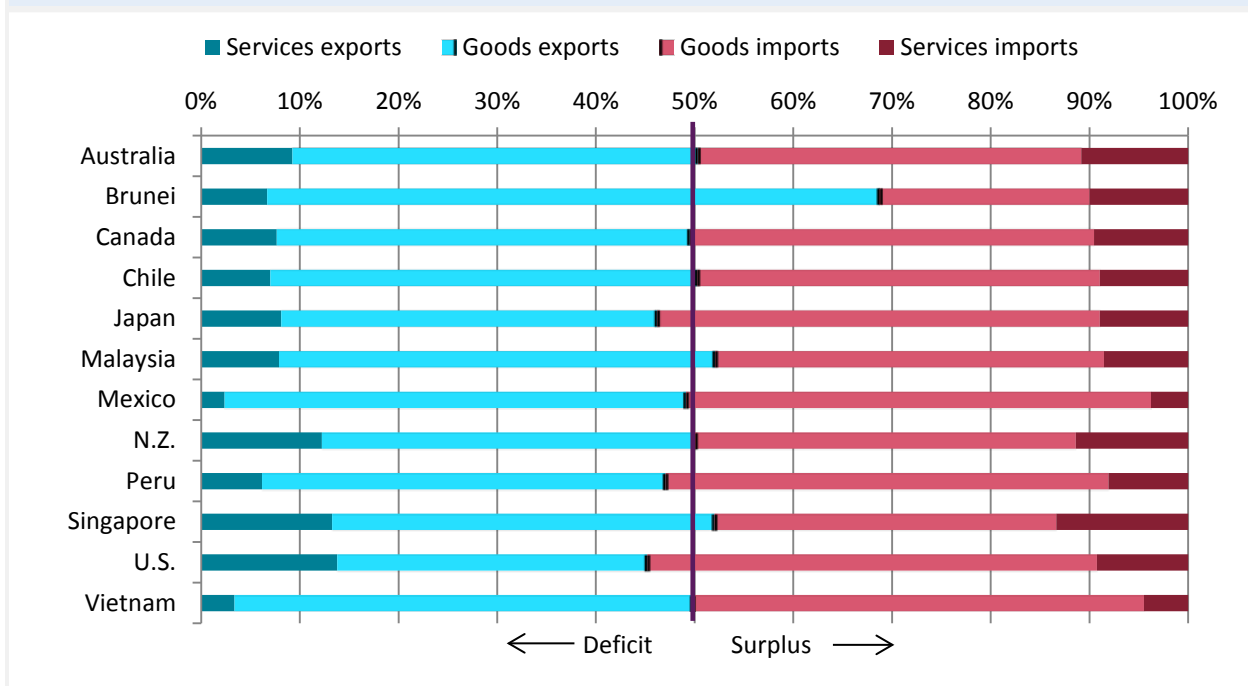
^a "Other" industries are defined as construction, mining (including petroleum products), electricity, gas, and water. Data for Canada and Peru are based on 2010 data and data for New Zealand are based on 2011 data.

²³ "Other" industries are defined as construction, mining (including petroleum products), electricity, gas, and water.

Trade in Goods and Services

In addition to variations in GDP, TPP countries vary considerably in their international trade patterns. Brunei, the smallest of the TPP countries by GDP, ran the largest trade surplus among TPP countries in 2014 as a percentage of its total trade, followed by Malaysia and Singapore (figure 1.5). The United States ran the largest trade deficit, both in absolute dollar value (\$494 billion) and relative to its total trade. Singapore’s imports of services accounted for a larger proportion of its total trade than those in any other TPP country (13.4 percent of total trade), whereas the United States had the largest share of services exports relative to its total trade (13.8 percent). Brunei had the largest share of trade attributable to goods exports (62.1 percent of total trade); Mexico, the largest share attributable to goods imports (47.1 percent).

Figure 1.5: Share of total trade of goods and services exports and imports, by partner, 2014^a



Source: UN, Comtrade (accessed January 8, 2016); USITC DataWeb/USDOD (accessed December 31, 2015); ASEAN, ASEANstats database (accessed December 14, 2015); UN, Service Trade Statistics Database (accessed December 14, 2015); OECD, OECD.Stat (accessed January 27, 2016); USDOD, BEA, table 2.2, “U.S. Trade in Services, by Type of Services and by Country or Affiliation,” October 15, 2015. Corresponds to [appendix table J.3](#).

Note: The distance between the black bars and the 50 percent line indicate the country’s total trade surplus or deficit. For example, Australian imports and exports were nearly balanced, whereas Brunei ran a trade surplus of approximately 18 percent.

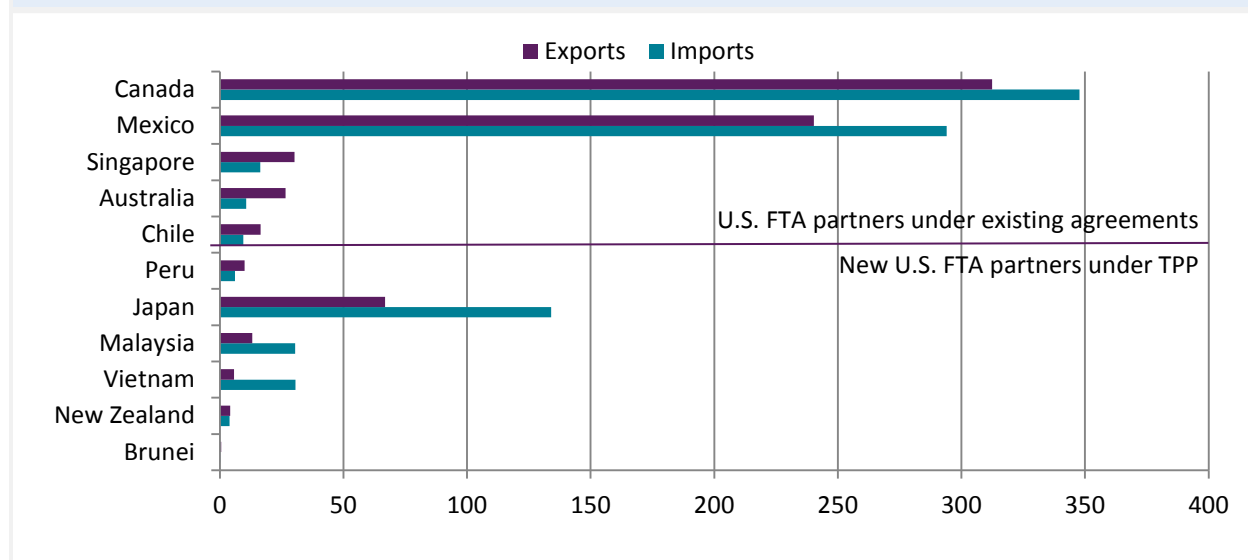
^a Services data for Japan and New Zealand are based on 2013 data.

Size of Trade in Goods

TPP countries accounted for 28 percent of world merchandise imports and 24 percent of world merchandise exports in 2014. More than two-fifths of TPP country trade is with other TPP countries. The United States is a partner in 6 of the 10 largest bilateral trade flows among TPP member countries. These include, in order of value of goods in 2014, trade flows between the United States and Canada, Mexico, Japan, Singapore, Malaysia, and Australia. The other four largest bilateral trade flows in 2014 consist of Malaysia-Singapore, Japan-Australia, Japan-Malaysia, and Japan-Singapore trade.

In 2014, the United States' largest TPP trading partners were Canada and Mexico. These three countries are the members of the North American Free Trade Agreement (NAFTA), which entered into force in 1994. The United States' next-largest trading partner among TPP signatories is Japan, with which the United States does not have a free trade agreement (figure 1.6). The United States maintained a trade surplus with four TPP countries—Singapore, Australia, Chile, and Peru—all of which have free trade agreements with the United States.

Figure 1.6: U.S. merchandise exports to and imports from TPP partners, 2014, billion \$



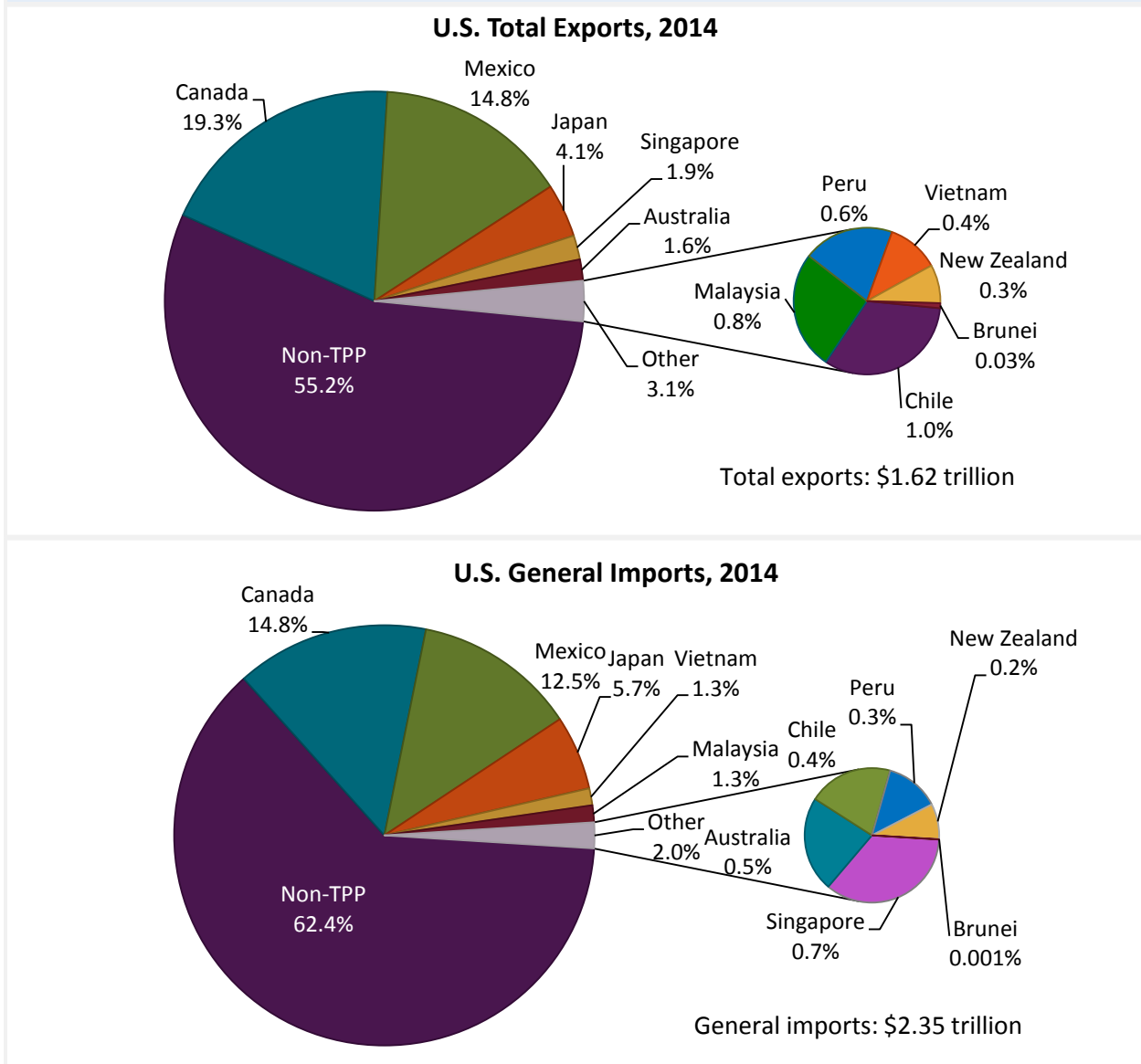
Source: USITC DataWeb/USDOC (accessed January 25, 2016). Corresponds to [appendix table J.4](#).

In total, TPP countries accounted for 44.8 percent of U.S. total exports and 37.6 percent of U.S. general imports in 2014.²⁴ Canada, Mexico, and Japan were three of the top four trading

²⁴ “General imports” measures the total physical arrivals of merchandise from foreign countries, whether such merchandise enters the U.S. customs territory immediately or is entered into bonded warehouses or a U.S. Foreign Trade Zone (FTZ) under Customs custody. “Total exports” measures the total physical movement of goods out of the United States to foreign countries whether such goods are exported from within the U.S. customs territory or from a Customs and Border Protection (Customs) bonded warehouse or a FTZ.

partners with the United States in 2014 (China was the first-ranked import source and third-ranked export destination). Singapore and Australia were the fourth- and fifth-ranked U.S. export destinations among TPP countries in 2014, whereas Vietnam and Malaysia were the fourth- and fifth-ranked sources for U.S. imports among TPP countries (figure 1.7).

Figure 1.7: U.S. total export destinations and import sources from TPP partners and the rest of the world, 2014



Source: USITC DataWeb/USDOC (accessed January 25, 2016). Corresponds to [appendix table J.5](#).

Sectoral Trade in Goods

TPP signatory countries typically did not specialize in one type of good in trading with other TPP signatories (table 1.5). Looking at a broad measure of trade—the 2-digit HS chapter—Japan's

exports to TPP countries were concentrated in two chapters (HS 85, electrical machinery, and HS 87, vehicles) to TPP partner countries, while those of others such as Canada and Peru were concentrated in as many as seven.²⁵ The United States fell into the midrange, with exports concentrated in five chapters; its largest intra-TPP export categories include those encompassing mineral fuels and electrical, mechanical, and transportation machinery (HS 27, 84, 85, 87, and 88). TPP countries' imports from other TPP signatories were even less concentrated, with between five and eight different categories represented in each country's largest intra-TPP import sector.

Similar export and import trends generally are apparent when examining a more detailed breakdown of trade categories (4-digit HTS headings). For example, U.S. goods classified under HTS headings 8800 (aircraft, spacecraft, and parts) and 2710 (non-crude petroleum products) were the ones that seven TPP partner countries imported the most (four countries for 8800 and three for 2710). The top import categories for the other four countries—Australia, Canada, Malaysia, and Vietnam—were motor vehicles (Australia, 7.5 percent of Australia's imports from the United States), imported parts for certain vehicles (Canada, 5.6 percent), and integrated circuits (Malaysia, 33.5 percent, and Vietnam, 6.9 percent). More details about each TPP partner country's top export and import categories, based on 4-digit HTS headings, are presented in appendix F.

Table 1.5: Largest intra-TPP partner country merchandise trade sector, by 2-digit HTS chapter, 2014

Importer	TPP Export Source											
	Aus.	Bru.	Can.	Chile	Jap.	Mal.	Mex.	N. Z.	Peru	Sing.	U. S.	Viet.
Australia	--			Cu								
Brunei		--										
Canada			--	Cu								
Chile				--								
Japan					--			Al				
Malaysia	Ni			Cu		--			Zn			
Mexico							--					

²⁵ The international Harmonized System (HS) of classifying internationally traded goods is administered by the World Customs Organization. The HS serves as the foundation for the import and export classification systems used in the United States. The United States' import classification system, the Harmonized Tariff Schedule (HTS) is administered by the Commission, whereas the U.S. export classification system, the Schedule B, is administered by the U.S. Census Bureau, Foreign Trade Division. Both the HTS and Schedule B rely on the international HS codes for their 4- and 6-digit headings and subheadings. Greater commodity detail is provided at the 4-digit and 6-digit levels than at the 2-digit (HS chapter) level. HTS and Schedule B subheadings will be the same for each importing country's import classification system.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Importer	TPP Export Source											
	Aus.	Bru.	Can.	Chile	Jap.	Mal.	Mex.	N. Z.	Peru	Sing.	U. S.	Viet.
New Zealand								--				
Peru									--			
Singapore				Cu						--		
United States				Cu							--	
Vietnam				Cu								--

Key:

HS 2 Meat and edible meat offal	HS 3 Fish and crustaceans, mollusks and aquatic inverteb.
HS 4 Dairy; eggs; honey; edible animal products	HS 8 Edible fruit and nuts
HS 10 Cereals	HS 12 Oilseeds, etc.; misc. grain, seed, fruit, plants, etc.
HS 15 Animal or vegetable fats, oils, or waxes	HS 23 Food industries residues and waste; animal feed
HS 26 Ores, slag, and ash	HS 27 Mineral fuel, oil, etc.; bituminous substances, etc.
HS 28 Inorg. chemicals, rare-earth metals, etc.	HS 29 Organic chemicals
HS 31 Fertilizers	HS 44 Wood and articles of wood; wood charcoal
HS 47 Wood pulp and paper waste	HS 61 Apparel articles and accessories, knit or crochet
HS 64 Footwear, gaiters, etc. and parts	HS 71 Pearls, precious stones and metals, etc.; coins
HS 72 Iron and steel	Cu HS 74 Copper and articles thereof
Ni HS 75 Nickel and articles thereof	Al HS 76 Aluminum and articles thereof
Zn HS 79 Zinc and articles thereof	HS 84 Computers, turbines, printers, valves, etc.; parts
HS 85 Elec mach., sound and TV equip.; parts	HS 87 Vehicles, except railway or tramway; parts
HS 88 Aircraft, spacecraft; parts	

Source: UN, Comtrade (accessed January 25, 2016).

Size and Share in Trade of Services

Trade in services in TPP countries is not as large as trade in merchandise, but it still plays a substantial role in total trade flows. Overall, TPP countries exported more than \$1.2 trillion in services and imported nearly \$1.1 trillion in services during 2013/14 (table 1.6).²⁶ The United States generated the highest values in total services trade, including more than half of all TPP countries' services exports to the world. The TPP countries with the next highest values in services trade with the world were Japan and Singapore, followed by Canada.

In terms of trade shares, the United States accounted for the majority of Canadian and Mexican exports and imports of services in 2014. Japan's services trade with the United States in 2013

²⁶ Data for 2014 are not available for Japan and New Zealand. Data presented represent the most recent data available (i.e., 2013) for these two countries.

was also robust, accounting for more of Japan’s intra-TPP services trade than all other TPP countries combined.

Table 1.6: TPP partner country services trade import and export values and shares attributable to the United States, other TPP countries, and non-TPP countries, 2013/14

	Trade with world		Share of exports to:			Share of imports from:		
	Exports	Imports	U.S.	Other TPP	Non-TPP	U.S.	Other TPP	Non-TPP
	Billion \$		Percent					
Australia	54.2	63.5	10.0	22.9	66.1	18.2	20.6	62
Brunei	1.1	1.7	(^a)	(^a)	(^a)	(^a)	(^a)	(^a)
Canada	86.6	107.7	55.6	6.3	38.1	57.5	6.5	36.1
Chile	12.5	15.9	9.0	12.5(lb)	78.5(ub)	23.0	6.5(lb)	70.5(ub)
Japan	147.0	162.3	24.8	17.4	57.8	30.2	10.8	59.0
Malaysia	41.9	45.3	6.8	(^a)	(^a)	4.0	(^a)	(^a)
Mexico	20.1	31.9	88.3	(^a)	(^a)	93.5	(^a)	(^a)
N. Zealand	13.5	12.6	12.1	36.1	58.0	16.0	43.8	44.5
Peru	5.8	7.6	(^a)	(^a)	(^a)	(^a)	(^a)	(^a)
Singapore	140.4	141.6	8.4	(^a)	(^a)	4.2	(^a)	(^a)
United States	710.6	477.4	(^a)	25.1(lb)	74.9(ub)	(^a)	20.5(lb)	79.5(ub)
Vietnam	10.9	14.5	(^a)	(^a)	(^a)	(^a)	(^a)	(^a)
TPP Total:	1,244.6	1,081.9	(^a)	(^a)	(^a)	(^a)	(^a)	(^a)
Rest of world	1,340.4	1,208.1	--	--	--	--	--	--
World	2,585.0	2,290.0	--	--	--	--	--	--

Source: ASEAN, ASEANstats database (accessed December 14, 2015) for value data for ASEAN members; USDOC, BEA, table 2.2, “U.S. Trade in Services, by Type of Service and Country or Affiliation,” October 15, 2015, for U.S. data; OECD, OECD.Stat (accessed January 27, 2016) and UN, Service Trade Statistics Database (accessed December 14, 2015) for other countries’ values and TPP country share data; WTO, “International Trade Statistics 2015” (accessed February 11, 2016).

Note: (lb) signifies a lower bound, and (ub) signifies an upper bound. These designations are used when data incorporating all TPP countries were not available. Data for 2013 are used when 2014 data were not available. Share data for Malaysia and Singapore are based on 2014 U.S. BEA and ASEAN data.

^a Data not available.

Sectoral Trade in Services

TPP countries varied considerably in the types of services that were exported and imported. The largest sectors were travel, transportation, and other business services, each accounting for at least 10 percent of total services trade for nearly all TPP countries. Some countries’ exports and imports were more heavily concentrated in certain services sectors, however. Tables 1.7 and 1.8 present the share of services sectors that accounted for more than 1 percent of each country’s total services exports and imports, respectively. The majority of five TPP countries’ services exports were concentrated in travel services (Australia, Malaysia, Mexico, Peru, and Vietnam). These countries typically are tourist destinations with less diversified services sectors. For other countries, such as Brunei, Chile, and Singapore, transportation services exports

accounted for a large share, although not a majority, of their services trade.²⁷ Imports of travel services represented the largest share of services category in countries like Australia, Brunei, and New Zealand, where per capita income is relatively high but consumption of other foreign services, such as transportation, is low.

Table 1.7: Largest services export categories, by TPP country, 2013/14

Service exported	Aus.	Bru.	Can.	Chil.	Jap.	Mal.	Mex.	N.Z.	Peru	Sing.	U.S.	Viet.
	Percent of services exports											
Manufacturing services	**	**	**	**	**	5.8	**	**	**	**	**	**
Maintenance/repair	**	**	**	**	**	**	**	**	**	5.7	3.2	**
Transportation	8.8	48.5	15.1	51.0	26.9	11.4	4.0	18.2	26.2	31.9	12.7	22.0
Travel	56.5	30.5	20.6	18.3	10.3	53.9	69.3	49.1	51.8	13.7	24.9	67.1
Telecom/computer/info	5.1	2.2	12.6	3.8	1.8	6.5	1.0	5.5	2.9	3.8	5.1	3.8
Construction	**	**	**	**	6.6	2.0	**	**	**	1.3	**	**
Insurance	**	1.4	2.0	2.6	**	1.1	13.9	**	6.9	2.8	2.5	**
Financial	2.6	**	5.6	**	3.1	**	**	4.1	1.2	14.6	12.3	1.6
Royalties/license fees	1.5	**	5.2	**	21.5	**	11.4	2.8	**	2.2	18.3	**
Other business services	16.3	17.3	33.6	23.4	27.8	16.8	**	13.8	8.3	23.4	18.2	2.7
Personal, cultural, recreation	2.7	**	2.8	**	**	**	**	4.5	**	**	**	**
Government	3.5	**	1.6	**	1.8	**	**	1.4	2.6	**	2.9	1.3
Other ^a	1.0	0.0	0.9	0.9	0.2	2.6	0.4	0.5	0.8	0.6	0.0	1.5

Source: UN, Service Trade Statistics Database (accessed December 14, 2015) for 2013 data for Australia, Chile, Canada, Japan, Mexico, New Zealand, and Peru ; ASEAN, ASEANstats database (accessed December 14, 2015) for 2014 data for Brunei, Malaysia, Singapore, and Vietnam; USDOC, BEA, table 2.2, "U.S. Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015.

^a "Other" includes data for services that accounted for less than 1 percent of service exports for that country in 2013/2014, and ** signifies that the service category in question accounted for less than 1 percent of service exports for that country or is not included in the data maintained by that country.

²⁷ Travel services are measured through foreign nationals' purchases of goods and services, such as food, lodging, and recreation, while traveling abroad. Transportation services cover sea, air, and land transportation for both passengers and freight, including pipelines and auxiliary services such as the operation of ports, when those services are supplied by residents of one country to residents of another. International air passenger fares are included in the transportation services category, rather than travel services. Exports and imports of transportation services are driven by the volume of merchandise trade, but are recorded according to the ownership of the transportation services provider. Countries such as the United States that import a large amount of foreign goods on foreign-owned ships, for example, will also import a large amount of transportation services (though these services may be provided by a third country). Conversely, countries like Singapore that export large amounts of transportation services may or may not also be exporters of the goods they are transporting.

Table 1.8: Largest services import categories, by TPP country, 2013/14

Service imported	Aus.	Bru.	Can.	Chil.	Jap.	Mal.	Mex.	N.Z.	Peru	Sing.	U.S.	Viet.
	Percent of services imports											
Transportation	23.1	31.4	20.7	48.1	28.9	28.1	39.8	25.7	38.0	27.8	19.7	53.8
Travel	40.3	34.4	32.0	12.6	13.5	27.3	28.6	30.9	21.0	16.9	23.2	14.9
Telecom/computer/info	3.0	1.2	5.2	4.7	3.9	6.8	**	6.5	6.3	5.2	7.0	1.9
Construction	**	**	**	**	4.6	5.9	**	**	**	**	**	7.3
Insurance	1.1	1.0	4.1	6.6	4.2	6.1	15.1	4.2	10.6	3.4	10.5	7.1
Financial	1.8	**	4.2	**	2.2	**	**	2.9	1.3	3.1	4.1	3.3
Royalties/license fees	5.6	**	10.7	9.2	11.0	3.2	4.6	7.6	2.8	15.7	8.8	3.9
Other business services	15.8	17.0	20.8	18.5	29.9	18.5	1.0	20.0	17.6	26.5	20.1	6.4
Personal, cultural, recreation	4.1	**	1.9	**	**	2.0	**	**	**	**	**	**
Government	5.2	13.9	**	**	1.1	**	8.8	1.0	2.1	**	5.1	1.3
Other ^a	0.0	1.2	1.4	0.2	1.5	2.1	2.1	1.2	0.4	1.5	1.6	0.1

Source: UN Service Trade (accessed December 14, 2015) for 2013 data for Australia, Chile, Canada, Japan, Mexico, New Zealand, and Peru; ASEANstats Database (accessed December 14, 2015) for 2014 data for Brunei, Malaysia, Singapore, and Vietnam; and BEA, table 2.2, "Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015.

^a "Other" includes data for all services that accounted for less than 1 percent of service imports for that country in 2013/2014, and ** signifies that the service category in question accounted for less than 1 percent of service exports for that country or is not included in the data maintained by that country.

Foreign Direct Investment

TPP countries hold \$9.6 trillion in total outward foreign direct investment (FDI) stock, and over \$8.6 trillion in inward FDI stock.²⁸ This accounts for 37.2 percent of the world's outward FDI and 33.1 percent of the world's inward-bound FDI. The largest net outward-investing countries were the United States and Japan, whereas the countries with the largest net stock of inward FDI were Singapore and Mexico (table 1.9).

Table 1.9: Value of inward-bound and outward-bound FDI in TPP countries, and shares accounted for by other TPP countries and the United States

Partner country	Stock of inward-facing FDI			Stock of outward-facing FDI		
	Value	Share accounted for by:		Value	Share accounted for by:	
		TPP	U.S.		TPP	U.S.
	Billion \$	Percent	Percent	Billion \$	Percent	Percent
Australia	564.6	43.0	23.7	443.5	40.7	25.2
Brunei	6.2	76.2	37.2	0.1	12.1	0.0
Canada	631.3	52.7	49.4	714.6	51.7	42.2
Chile	207.7	24.0	15.9	89.7	13.1	3.9
Japan	170.6	40.6	30.5	1,193.1	45.6	32.3
Malaysia	133.8	43.2	7.7	135.7	23.0	0.3
Mexico	338.0	55.1	47.9	131.2	37.6	33.5
New Zealand	76.8	74.2	7.9	18.7	82.2	16.8

²⁸ The OECD distinguishes between the two types of foreign direct investment stocks as follows: "The outward FDI stock is the value of the resident investors' equity in and net loans to enterprises in foreign economies. The inward FDI stock is the value of foreign investors' equity in and net loans to enterprises resident in the reporting economy."

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Stock of inward-facing FDI				Stock of outward-facing FDI		
Partner country	Share accounted for by:			Share accounted for by:		
	Value	TPP	U.S.	Value	TPP	U.S.
Peru	79.4	55.8	15.3	4.2	(^a)	(^a)
Singapore	912.3	54.6	37.9	576.4	21.8	5.2
United States	2,901.0	24.9	(^a)	4,920.7	20.6	(^a)
Vietnam	91.0	73.1	5.2	7.5	10.7	4.5
TPP total:	8,621.6	(^a)	(^a)	9,633.4	(^a)	(^a)
Rest of world	17,417.2	(^a)	(^a)	16,241.4	(^a)	(^a)
World:	26,038.8	(^a)	(^a)	25,874.8	(^a)	(^a)

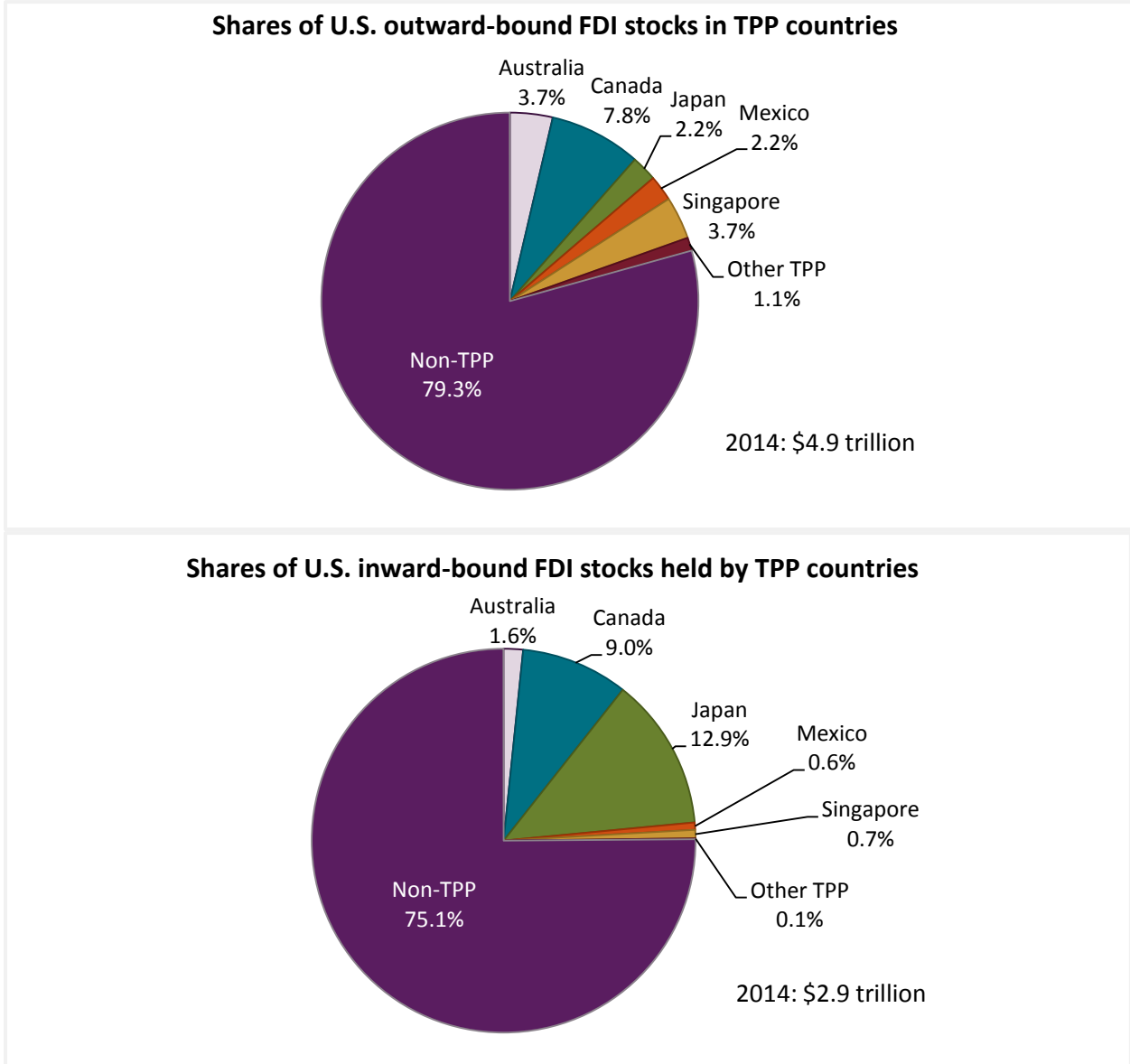
Source: UNCTAD, FDI/TNC Database (accessed December 10 and 18, 2015) for values except those for the United States, which come from BEA historical cost data, and for Brunei's and Vietnam's share data (based on 2012 shares); USDOC, BEA, "Direct Investment Positions for 2014: Country and Industry Detail," 2015 for U.S. historical cost values; IMF, Coordinated Direct Investment Survey (accessed December 28, 2015) for non-U.S. shares.

Note: FDI data are not available for all TPP countries. Therefore, shares data should be considered a lower bound.

^a Undetermined or unavailable data.

Globally, the stock of total U.S. inward FDI (\$2.9 trillion) is roughly three-fifths of the total outward FDI held by the United States (\$4.9 trillion). In other words, the size of U.S. investments abroad is substantially larger than the size of foreign investments in the United States. On the other hand, the share of U.S. inward FDI that originates in TPP countries (24.9 percent) is larger than the share of outward U.S. FDI that has TPP countries as its destination (20.6 percent). Overall, TPP countries account for over \$1 trillion of U.S. outward FDI stock. Among TPP countries, the largest destination for U.S. outward FDI is Canada (7.8 percent of total), followed by Australia and Singapore (3.7 percent each) (figure 1.8). The majority (87.8 percent) of U.S. FDI from TPP countries originates in Japan and Canada. The largest TPP investor in the United States is Japan, which accounts for 12.9 percent of total inward U.S. FDI stock.

Figure 1.8: Shares of outward-bound and inward-bound FDI stocks, by TPP country, 2014



Source: USDOC, BEA, "Direct Investment Positions for 2014: Country and Industry Detail," 2015 (accessed December 28, 2015). Corresponds to appendix table J.6.

Free Trade Agreements in the TPP Region

Among the TPP countries, there are a number of FTAs currently in force. Some are fully implemented, while others are still being phased in. Among the 66 country pairs within the TPP region, 42 country pairs trade under FTAs (table 1.10). The United States has FTAs with 6 of the 11 partners. Canada has the fewest FTAs with TPP countries (4), whereas Chile has FTAs with all 11 TPP countries. The earliest FTA for any of the TPP countries dates back to 1983 (Australia-New Zealand Closer Economic Relations Trade Agreement), while the most recent entered into effect in 2015 (Japan-Australia Economic Partnership Agreement).

Table 1.10: Country pairs in TPP with existing FTAs, year of entry into force

	Americas					Asia/Oceania					
	U.S.	Can.	Mex.	Chile	Peru	Aus.	Brunei	Japan	Mal.	N. Z.	Sing.
Canada	1989										
Mexico	1994	1994									
Chile	2004	1997	1999								
Peru	2009	2009	2012	2009							
Australia	2005			2009							
Brunei				2006		2010					
Japan			2005	2007	2012	2015	2008				
Malaysia				2012		2010	1992	2006			
New Zealand				2006		1983	2010		2010		
Singapore	2004			2006	2009	2010	1992	2002	1992	2001	
Vietnam				2014		2010	1995	2008	1995	2010	1995

Source: WTO, RTA-IS database (accessed February 11, 2016); World Bank, Global Preferential Trade Agreements Library (accessed February 11, 2016).

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Chapter 2

Quantitative Modeling Results

As noted in chapter 1, the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 requires the Commission to assess TPP's impact on U.S. real gross domestic product (GDP); exports and imports; aggregate employment and employment opportunities; and the production, employment, and competitive position of industries likely to be significantly affected by a trade agreement.

In response to this requirement, this chapter presents a quantitative analysis of the TPP Agreement using a dynamic computable general equilibrium (CGE) model. This model incorporates the U.S. economy's projected growth in labor, capital, and GDP from 2017 to 2047, when the agreement would be fully implemented, assuming a 2017 entry into force. Under that scenario, the majority of TPP's provisions would be phased in by 2032 (year 15). Most of the modeling results in this report refer to the impact of the agreement in that medium term or year 15.

This chapter goes further than the Commission's previous analyses of free trade agreements (FTAs), which estimated only the effects of liberalizing tariffs and nontariff measures (NTMs) on goods. The analysis in this chapter not only examines these effects, but also presents the effects of liberalization in services NTMs and in cross-border investment among member economies.

Model Results on the Effects of the TPP Agreement

This section presents the effects of the TPP Agreement on the U.S. economy. It first considers effects at the economy-wide level, followed by effects at the broad sector level, and finally at varying industry levels, as defined by the sectoral aggregates in the model. The presentation of industry results in this chapter is general. More specific discussions about selected industries, including modeling results, are included in subsequent chapters.

Economy-wide Effects

The Commission estimates that by 2032, the TPP Agreement would increase annual U.S. GDP in 2032 relative to the 2032 baseline by \$42.7 billion in 2017 dollars, or by 0.15 percent of total

U.S. GDP (table 2.1 and box 2.1).²⁹ By year 2047, U.S. real GDP would expand by \$67 billion, or by 0.18 percent, relative to the 2047 baseline value. The U.S. economic benefits of improved market access and investment conditions would be magnified over time through growth in the U.S. workforce and U.S. investment.

The Commission estimates that by 2032, TPP would expand U.S. employment by close to 128,000 full-time equivalents (FTEs) above the 2032 baseline, or about 0.07 percent of total U.S. employment.³⁰ By year 2047, employment would expand by nearly 174,000 FTEs, or 0.09 percent, relative to 2047 employment in the baseline. TPP would cause U.S. investment in capital goods to expand and, as a result, installed capital would expand by 0.18 percent by 2032. By year 2047, the capital stock would expand by 0.24, relative to the baseline in that year.

Table 2.1: Economy-wide effects of TPP: Changes relative to baseline in 2032 and 2047

	2032		2047	
	Billion \$	Percent	Billion \$	Percent
Real income	57.3	0.23	82.5	0.28
Real GDP	42.7	0.15	67.0	0.18
Employment (full time equivalents, thousands)	128.2	0.07	174.3	0.09
Capital stock	171.5	0.18	343.5	0.24

Source: USITC estimates.

Note: Dollar values are in 2017 prices.

The Commission also estimates that U.S. real income would increase by \$57.3 billion (or 0.23 percent of GDP) relative to the baseline in 2032. The change in real income summarizes growth in U.S. purchasing power, and can be interpreted as stating that TPP would provide annual benefits to U.S. consumers worth \$57.3 billion in 2017 dollars by 2032.³¹ By 2047, U.S. real income would increase by \$82.5 billion, or 0.28 percent, due to TPP.

The Commission model estimates that by 2032, U.S. exports to the TPP countries would increase by \$57.2 billion over the 2032 baseline, with the majority of these exports due to growth in exports to new FTA partners in the agreement (table 2.2). Total exports to the world would increase by \$27.2 billion, indicating that some of the additional U.S. exports to the TPP region would represent exports diverted away from non-TPP countries.

²⁹ For the purpose of the modeling analysis, an entry into force in 2017 is assumed. See box 2.1 for information on how to interpret the modeling results and appendix G for details on the construction of the baseline projection.

³⁰ Additional discussion of results related to employment and the U.S. trade balance can be found later in this chapter.

³¹ Real income includes both real GDP (which measures production and the allocative efficiency of resources in the domestic economy) and benefits realized through changes in international prices (“terms of trade” effects). As a welfare measure, a change in real income is often referred to as the “equivalent variation.”

Table 2.2: Effects of TPP on U.S. trade: Changes relative to baseline in 2032

	Exports		Imports	
	Billion \$	Percent	Billion \$	Percent
Trade with TPP partners	57.2	5.6	47.5	3.5
New FTA partners	34.6	18.7	23.4	10.4
Existing FTA partners	22.6	2.7	24.2	2.1
Trade with the world	27.2	1.0	48.9	1.1

Source: USITC estimates.

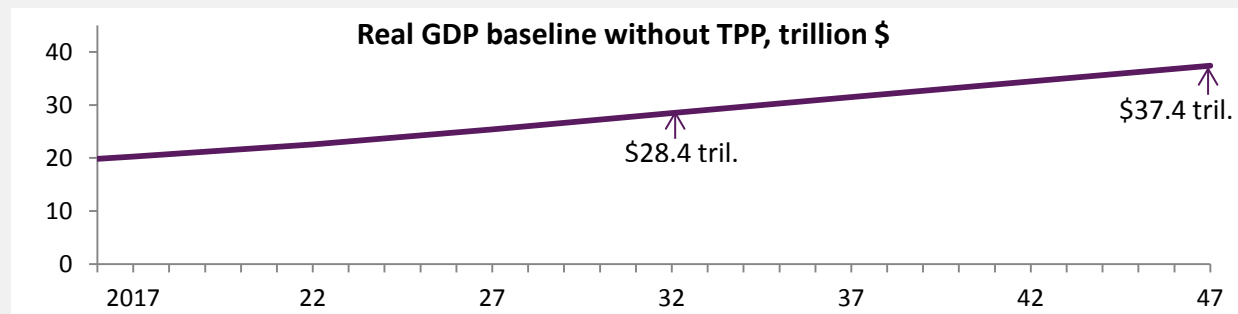
Note: Dollar values are in 2017 prices.

Meanwhile, U.S. imports from the TPP countries would increase by \$47.5 billion over the 2032 baseline. The percent increase in imports from new FTA partners would be five times that of imports from existing FTA partners. However, owing to the much higher pre-TPP trade flows with existing partners, existing partners' imports would increase slightly more than for new partners. U.S. imports from the world would increase by \$48.9 billion from the effects of TPP.

U.S. net exports (exports minus imports) with respect to the TPP parties would increase by \$9.6 billion. However, net exports to the world, or the aggregate U.S. trade balance, would decrease by \$21.7 billion. The results for the United States' aggregate trade balance, however, depend on model assumptions on the rate of saving versus investment, which are explained later in this chapter.

Box 2.1: Interpreting the Commission's modeling results

In its analysis of the TPP Agreement, the Commission first developed a baseline projection that reflects the potential evolution of the U.S. and global economies to 2047 in the absence of TPP. This baseline is based on economic and demographic projections for the 12 countries in TPP as well as major non-TPP trading partners. These projections are considered the baseline projection (i.e., the projection models the world with no TPP) for the 30 year period during which TPP is to be implemented. For example, the baseline projection estimates the U.S. real GDP (or the size of the U.S. economy) to be \$37.4 trillion in 2047; an increase of 88.2 percent over the \$19.9 trillion size of the GDP in 2017. The Commission then analyzes the potential impact of TPP relative to this projection of the world economy under the assumption of a TPP entry into force in 2017

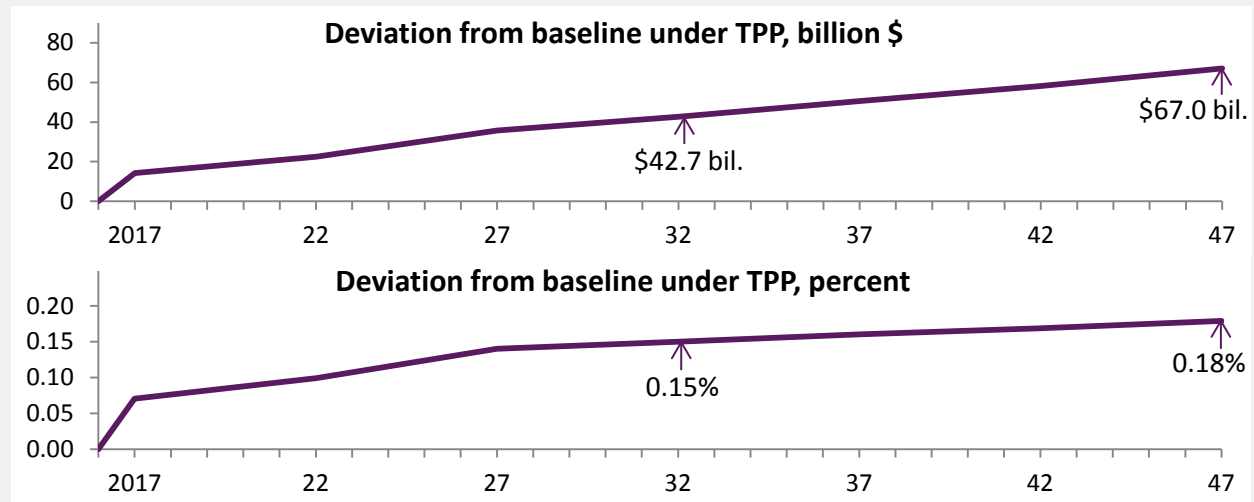


Source: USITC estimates.

Modeling results are expressed as changes from the baseline projection, either as dollar changes or as percentage changes, unless otherwise noted. For example, the Commission estimates that TPP would expand U.S. real GDP by \$42.7 billion relative to the baseline GDP projection of \$28.4 trillion in 2032

(i.e., 15 years into the agreement). Since the United States' projected GDP is \$28.4 trillion in 2032, the percentage deviation from the baseline due to TPP would be small (about a 0.15 percent increase).

The figure below shows baseline GDP up to the year 2047 (upper panel) and the deviations from the baseline during the period (lower panels), on a dollar and percentage basis. The majority of the effects on GDP are experienced early in the agreement by 2032 (year 15 of the agreement). By year 2047, or year 30, TPP would increase GDP by \$67 billion relative to the baseline (about a 0.18 percent increase). Most quantified effects in terms of output, employment, and trade, especially at the economy-wide level, would likewise be small in their impacts. Certain industry sectors, however, may exhibit more pronounced effects under the agreement, as shown in chapters 3, 4, and 5.



Source: USITC estimates.

Broad Sector-level Effects

While output and employment would increase in the overall economy due to TPP, this change would be driven by expansion in the agriculture and food sector and the services sector. In dollar terms, the output of the services sector would expand the most (\$42.3 billion) relative to its baseline volume in 2032 (table 2.3). In percentage terms, however, the output and employment of the agriculture and food sector would expand the most, by 0.5 percent. Meanwhile, output and employment in the manufacturing, natural resources, and energy sector would contract slightly under TPP, compared with the baseline. Trade barriers in this sector are already low, and larger liberalization in other sectors of the economy would likely drive a reallocation of resources away from these sectors and into other expanding sectors in the economy. At a more disaggregated level, however, certain industries in manufacturing would expand under TPP.

The Commission estimates that TPP would increase imports and exports for all broad sectors of the economy. U.S. exports of manufacturing, natural resources, and energy would expand the most in dollar terms, growing by \$15.2 billion relative to the baseline in 2032; however, agriculture and food exports would expand the most in percentage terms. Similarly, the largest expansion of U.S. imports in percentage terms would be for agriculture and food products

(1.5 percent). U.S. imports of manufacturing, natural resources, and energy would increase the most in dollar terms, by \$39.2 billion relative to the baseline.

The manufacturing sector would experience both a rise in imports and a decline in output. In some manufacturing sectors, such as titanium, the rise in imports would be due to demand for cheaper imports driven by lower U.S. tariffs. For the manufacturing sector as a whole, however, the model does not suggest that the rise in cheaper imports would be the main driver of the output decline. The CGE model assumes that U.S. aggregate output is equal to its productive capacity. It flows from this that greater liberalization in one sector will drive a reallocation of resources away from other sectors that experience less liberalization or where liberalization has already occurred. Hence, for the manufacturing sector as a whole, output would grow less rapidly relative to the baseline projection, as capital and workers move to services and agriculture, which in turn would raise demand for manufactured imports. As explained below, the model does not capture the costs associated with employment transition between sectors and temporary unemployment.

Table 2.3: Broad sector level effects of TPP on U.S. output, employment, and trade: Changes relative to baseline estimates in 2032

	Exports		Imports		Output		Employment
	Billion \$	Percent	Billion \$	Percent	Billion \$	Percent	Percent
Agriculture and food	7.2	2.6	2.7	1.5	10.0	0.5	0.5
Manufacturing, natural resources, and energy	15.2	0.9	39.2	1.1	-10.8	-0.1	-0.2
Services	4.8	0.6	7.0	1.2	42.3	0.1	0.1

Source: USITC estimates.

Note: Dollar values are in 2017 prices.

Industry-level Effects

Sectoral results of the modeling are shown in tables 2.4, 2.5, and 2.6. Many of these sectors are addressed in detail in chapters 3, 4, and 5, respectively, of this report. An overview of the results is presented here to provide a basis for understanding the range of sectoral results shown in the table. At its core, the TPP liberalization as modeled is driven by the reduction or removal of tariffs and nontariff barriers. Sectors benefiting from the most extensive liberalization measures tend to expand production and exports as they become relatively more competitive in the world economy: these are the direct effects of TPP. In turn, these direct effects trigger a cascade of indirect effects in the economies benefiting from liberalization, and spreading to other economies through trade and investment channels. Because of the “general equilibrium” nature of the model, sectors that benefit less from liberalization may shrink relative to sectors in which the effects of liberalization are more pronounced and baseline estimates as resources move to sectors with greater opportunities.

Although the model estimates that TPP liberalization will cause U.S. production to be lower in certain industry sectors relative to baseline, the Commission expects that U.S. production in all 56 sectors included in the model would increase on an absolute basis between 2017 and 2032, under both the baseline estimate and the provisions of the TPP. This expectation is incorporated in the TPP model and is based on sectoral growth projections informed from macroeconomic projections from the IMF, the OECD, and the ILO, as well as Commission expertise.

Consider, for example, the results in agriculture and food products (table 2.4). A number of subsectors would experience substantial expansion for U.S. exports under TPP, such as beef meat and dairy products (both discussed in chapter 3). U.S. beef exports would experience not only tariff reduction, but also substantial expansion in their tariff-rate quotas (TRQs) in certain TPP countries, which would allow for additional market access. The same would be generally true for dairy products. Looking at the upstream effects of this change, expansion of beef meat production would drive increased demand for cattle which, in turn, would lead to a contraction in live cattle exports and an expansion in U.S. cattle herds. The expanded cattle herds would generate more demand for feed from the corn and other grains sectors, which in turn would drive an expansion in these sectors and draw production from net exports of grains toward domestic use to ultimately produce beef meat.

Dairy products would follow the same pattern: as U.S. dairy producers would face falling tariffs and more generous TRQs overseas, the raw milk sector (grouped here under all other agriculture) would expand and draw with it higher volumes of corn and other grains for domestic feed. The other meats sector would follow the same pattern observed in beef meat and in dairy products. Because agriculture production requires land, of which only a fixed quantity is available in the model, expansion of meat, dairy, and related animal feed sectors would draw in land and lead to an attenuation or contraction of other agricultural sectors. Wheat and soybeans in particular would be adversely affected. Neither sector would experience substantial trade liberalization under TPP, while at the same time they would face higher land prices as liberalizing sectors absorb resources.

Meanwhile, beverages and tobacco products would experience a substantial reduction in the export tariffs faced by the industry. This change would result in export and output gains in this sector.

Table 2.4: Estimated effects of TPP on U.S. agricultural and food sectors: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Rice	-12.5	-0.3	15.3	1.6	-17.7	-0.1	0.0
Wheat	-1.5	0.0	18.2	1.5	-7.9	0.0	-0.7
Other grains	-5.5	-0.2	16.5	1.0	217.0	0.5	0.6
Corn grain	-31.3	-0.1	2.5	1.3	206.7	0.3	0.4
Fresh fruit, vegetables, and nuts	574.9	2.0	119.2	0.5	172.1	0.2	0.3
Soybeans	-419.4	-1.0	26.6	1.7	-406.9	-0.9	-0.9
Other oil seeds	-1.6	-0.1	40.8	2.7	52.8	0.3	0.4
All other agriculture	637.9	2.4	503.8	2.0	1,764.5	0.7	0.6
Cattle, sheep, goats, and horses	-3.0	-0.3	60.8	1.7	214.3	0.3	0.4
Hides and skins	115.1	0.8	35.3	2.6	141.9	0.3	0.4
Seafood	74.1	2.2	231.9	0.9	-51.5	-0.2	-0.2
Beef meat	876.1	8.4	419.0	5.7	614.6	0.5	0.4
Other meats	690.5	24.8	41.2	2.5	657.7	3.9	3.0
Pork meat products	219.3	1.9	94.4	4.4	180.3	0.3	0.3
Poultry meat prods	173.9	1.3	-16.6	-3.6	265.8	0.6	0.6
Soybean oil	27.7	1.3	2.8	3.3	54.1	0.7	0.6
Soybean meal	113.4	1.1	8.1	3.9	169.9	0.7	0.6
Dairy products	1,845.5	18.0	348.6	10.3	1,839.3	1.3	1.1
Sugar, sweeteners, and SCP	129.6	4.3	132.1	2.4	517.7	0.4	0.4
Processed foods	1,540.0	3.8	427.2	1.1	2,396.5	0.8	0.7
Beverages and tobacco products	683.9	3.7	206.2	0.7	1,033.9	0.4	0.3

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified; SCP = sugar-containing products.

Similarly, resources would flow to manufacturing sectors benefiting from greater liberalization (see table 2.5). Textiles, wearing apparel, leather products, and footwear would all experience substantial reductions of tariffs, both abroad and at home, yielding a mixed outcome. Imports and exports would uniformly rise relative to the baseline, though to varying degrees. Output of textiles and leather products would contract relative to the baseline, although output of footwear and wearing apparel would experience modest expansion relative to the baseline. In footwear and leather products, tariffs on U.S. exports would actually fall more than those on imports into the United States.³² Electronic equipment would experience only slight declines in average tariffs—0.03 on imports and 0.01 on exports. The U.S. industry would contract relative to the baseline estimate by a seemingly disproportionate 0.8 percent, with imports growing by \$5.3 billion and exports by only \$622 million. This pattern, however, reflects the global value chains present in electronic equipment—in particular, the role of services. Services are important inputs to electronic equipment production worldwide and would experience

³² Average tariffs on U.S. imports of footwear and leather products would fall by 0.60 and 1.85 percent, respectively, while average tariffs on U.S. exports would fall by 1.21 and 2.94 percent. The average tariffs represent trade weighted averages, using bilateral imports as weights.

liberalization among TPP parties under the agreement. Services liberalization would encourage expanded production in this sector, particularly in Mexico and Malaysia.

Table 2.5: Estimated effects of TPP on U.S. manufacturing, natural resources, and energy sectors: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Forestry	-305.3	-3.4	-1.6	-0.3	-286.6	-0.8	-1.3
Coal	-126.9	-0.5	13.5	1.0	-76.5	-0.1	-0.3
Oil	1,338.1	7.8	884.1	0.3	-486.1	-0.1	-0.3
Gas	1,384.0	5.3	1,415.4	6.1	-89.4	0.0	-0.1
Minerals and minerals products n.e.c.	441.7	1.1	509.3	1.0	18.0	0.0	0.0
Chemicals	1,944.1	0.7	5,283.4	1.3	-2,854.8	-0.3	-0.3
Textiles	256.6	1.3	869.4	1.6	-328.5	-0.4	-0.4
Wearing apparel	10.3	0.3	1,891.3	1.4	424.7	1.0	0.9
Leather products	59.5	6.0	439.2	2.0	-118.7	-1.5	-1.5
Footwear	137.7	12.2	1,103.6	2.7	29.8	0.5	0.8
Wood products	135.4	0.8	2,204.9	2.1	-1,539.7	-0.5	-0.6
Paper products, publishing	39.7	0.1	722.2	2.0	-32.3	0.0	0.0
Petroleum, coal products	1,023.8	0.7	518.8	0.4	2,931.5	0.2	0.2
Machinery and equipment	1,510.7	0.6	3,914.4	0.8	-1,683.6	-0.2	-0.2
Metals and metal products n.e.c.	1,159.1	0.7	3,191.6	1.4	-3,664.8	-0.4	-0.3
Titanium downstream products	-33.9	-1.1	115.4	14.2	-202.4	-1.2	-1.3
Passenger vehicles	1,953.9	1.9	2,371.7	0.8	1,628.3	0.3	0.3
Auto parts and trailers	1,219.8	1.2	3,039.2	1.6	-1,365.9	-0.3	-0.3
Other transportation equipment	2,074.1	1.3	3,016.8	2.1	80.1	0.0	0.0
Electronic equipment	622.4	0.8	5,323.0	0.9	-3,729.5	-0.8	-0.8
Instruments and medical devices	169.7	0.2	1,044.6	0.7	-641.1	-0.2	-0.3
Toys, sporting goods, and other manufacturers	149.3	0.7	1,282.1	0.8	-136.1	-0.3	-0.3
Electricity	26.1	3.1	83.9	2.0	1,088.7	0.2	0.0
Gas manufacture, distribution	0.0	3.4	0.0	1.6	175.1	0.1	0.0
Water	-2.5	-2.1	9.4	1.4	17.0	0.1	0.0

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

The estimated effects of the agreement on services sectors are shown in table 2.6. Most of these sectors are discussed in detail in chapter 5. Construction would experience modest expansion in output and imports, and a modest decline in exports. These changes would not be the result of direct liberalization, but of general equilibrium effects. Rising investment in the U.S. economy would drive increased demand for construction services and would increase

domestic output, draw in some imports, and cause domestic builders to shift modestly from serving export markets to focus more on domestic customers.

Table 2.6: Estimated effects of TPP on U.S. services sectors: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Construction	-186.4	-2.0	161.4	1.5	7,234.8	0.2	0.2
Wholesale and retail trade	848.7	2.5	542.4	1.2	7,447.5	0.1	0.1
Transportation, logistics, travel and tourism	-1,258.4	-1.1	1,770.5	1.5	-719.9	0.0	-0.1
Communications	877.7	2.8	306.4	1.2	2,845.6	0.2	0.1
Financial services n.e.c.	-12.1	0.0	787.8	1.1	1,520.0	0.1	0.1
Insurance	34.4	0.1	703.5	1.1	707.9	0.1	0.0
Business services n.e.c.	4,575.5	1.6	2,031.5	1.2	11,576.0	0.2	0.1
Recreational and other services	-687.8	-1.5	199.3	0.9	1,749.8	0.1	0.1
Public administration, defense, education, health	605.8	0.4	459.6	0.8	9,981.0	0.1	0.1

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

Analytical Framework

The Commission's analysis that quantifies the effects of implementing TPP is based on the CGE model developed and maintained by the Global Trade Analysis Project (GTAP). The GTAP model is an appropriate tool for analyzing the effects of trade agreements because it consists of a database with international trade flows and other macroeconomic information, social accounting matrixes that show how different segments of the economy are interlinked, and national income accounts data. As a multicountry model, it permits the assessment of TPP's impact on the U.S. economy and is a straightforward way to incorporate policy changes. It includes a number of supply and demand relationships and macroeconomic identities that lead to consistent estimates based on standard economic logic.

This section describes the modifications that the Commission made to the standard GTAP model to analyze TPP and the estimated policy changes the Commission introduced to assess the impact of implementing the agreement. The modeling approach extends previous work by including the effects of provisions in TPP's Investment chapter and the removal of certain NTMs that tend to act as barriers to trade in goods and services. Despite the benefits of CGE models, there are also limitations to the results generated by these models, as even the most state-of-the-art models are not able to analyze certain issues. For example, the GTAP model can estimate the change in employment across sectors as import competition increases in some sectors and export opportunities grow in others in response to changes in trade policy. However, the model does not capture the costs associated with employment transition

between sectors and temporary unemployment. A later discussion on employment in this chapter presents model assumptions and caveats related to the labor market.

Assessing the Impact of the Agreement

To assess the effects of TPP, the Commission first developed a baseline that simulates how the economies in the model would evolve in the future without TPP in place. This dynamic version of the GTAP model simulates the economy year by year, incorporating certain macroeconomic benchmarks as forecast by the U.S. Congressional Budget Office and several international organizations.³³ The baseline includes tariff schedules under most-favored-nation (MFN) treatment and existing FTAs among TPP members, and takes into account any expected changes in existing tariffs for this time period.³⁴ Next, policy changes emanating from the TPP Agreement are incorporated into the model, leading these economies to react to the TPP policy changes and showing a different path from the one reflected in the baseline simulation. TPP's estimated impact on the U.S. economy, in terms of changes in GDP, real income, employment, exports and imports, is obtained by comparing the baseline to the second simulation incorporating the TPP policy changes. In addition to the 12 TPP countries, China, Hong Kong, Indonesia, South Korea, Thailand, the European Union (EU), and a combined region identified as the rest of the world—for a total of 19 economies or regions—are represented in the model. The model also covers a total of 56 industry sectors.³⁵

The Commission analysis incorporates estimates of three different types of policy changes. First, it estimates the effects of removing or reducing tariffs, TRQs, and NTMs on trade in goods. Second, it estimates the effects of removing certain NTMs on services traded across borders. Third, it estimates the effects of provisions related to foreign investment. The next sections describe the approaches taken to model these different types of policy changes related to the agreement.

Modeling Provisions on Goods Trade

As in past Commission analyses of prospective FTAs, the main concerns addressed in modeling TPP's effects on trade in goods were tariffs and TRQs. The Commission assembled information about tariffs and TRQs as specified in the TPP text. Figure 2.1 shows the sectors with the largest

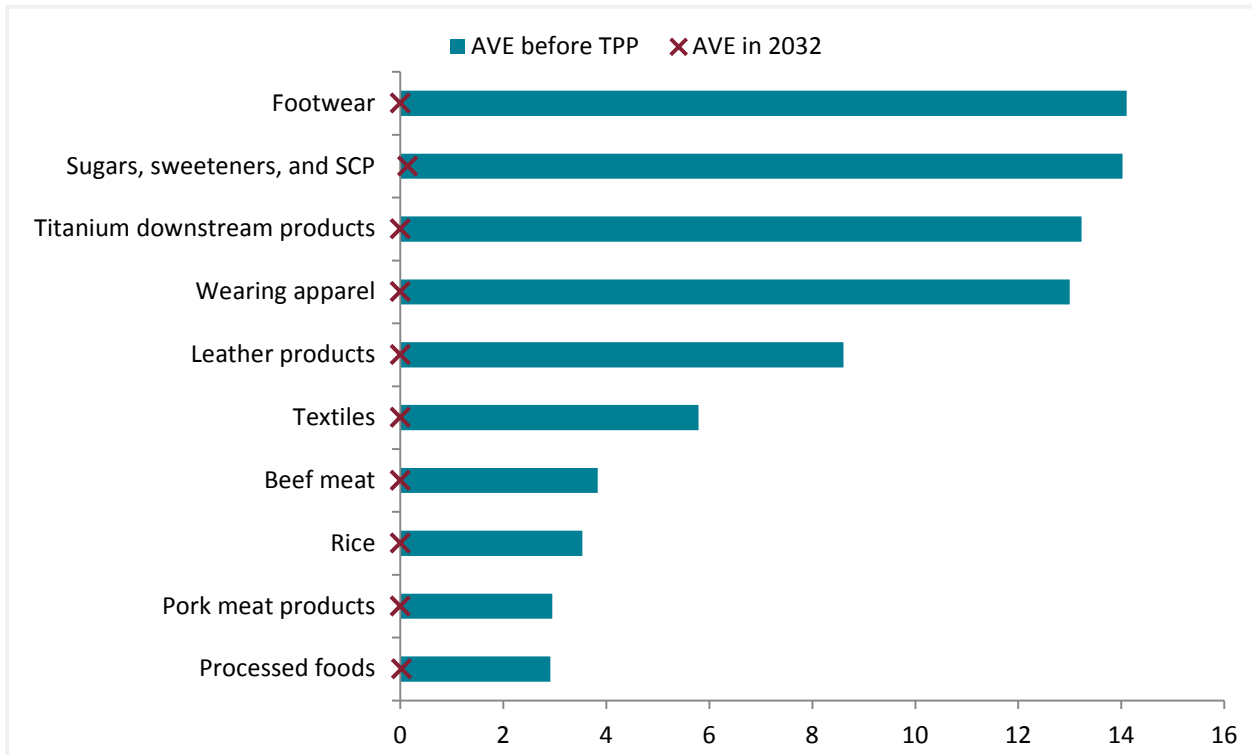
³³ See appendix G for details on the baseline.

³⁴ For example, the baseline incorporates tariff commitments under FTAs between TPP countries that have entered into force but have not yet been fully implemented.

³⁵ The standard GTAP database contains 57 sectors of goods and services. Some of the standard GTAP sectors were disaggregated, while others were combined, to best capture industries likely to be significantly affected by the TPP. Appendix G provides more detailed information about the model, including a list of all model sectors.

U.S. tariff reductions under TPP for parties that currently have no FTA with the United States.³⁶ For this category, U.S. import tariffs on certain footwear, sugars and sugar-containing products (SCP), and titanium downstream products would be reduced the most.

Figure 2.1: Sectors with the 10 largest U.S. tariff reductions under TPP for partners with which the United States has no existing FTAs, trade-weighted ad valorem rates



Source: USITC calculations; ITC, “Tariff Rates for 2016–2046 between TPP Member Countries,” 2016. Corresponds to [appendix table J.7](#).

Note: Does not include tariff lines subject to TRQs. TPP countries with which the United States has no existing FTAs are Brunei, Japan, Malaysia, New Zealand, and Vietnam. SCP = sugar-containing products.

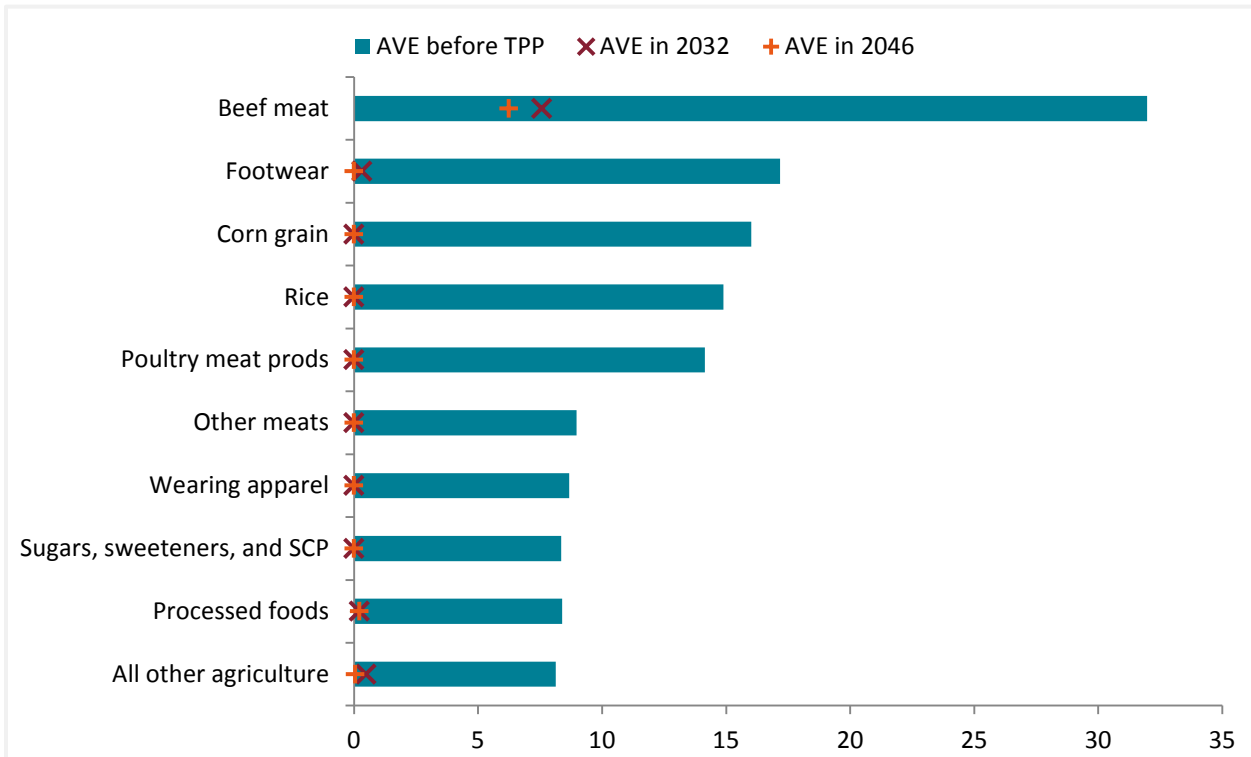
Figure 2.2 shows the largest tariff reductions on U.S. exports by TPP member countries with which the United States does not already have an FTA. Tariffs faced by U.S. exporters of beef, footwear, and corn grain would experience the largest tariff reductions by these TPP partners.

Under TPP, six countries (Canada, Japan, Mexico, Malaysia, the United States, and Vietnam) would be allowed to impose TRQs on imports from other TPP partners, bilaterally, multilaterally, or both. Most of these TRQs apply to food and agricultural products, although Vietnam imposes TRQs on passenger and other vehicles from all TPP partners. Table 2.7 shows sectors in which more than 50 percent of U.S. imports from TPP partners would be subject to

³⁶ While the TPP provides some additional tariff and TRQ advantages for parties with existing FTAs, the largest expected reductions in U.S. tariffs and TRQs are with TPP parties with which the United States has no existing FTA. Nevertheless, all tariff and TRQ changes under TPP are included in the TPP simulation and compared to the baseline.

TRQ measures under the agreement. This includes U.S. imports of beef, dairy, and sugar. Similarly, table 2.7 also shows TPP markets in which U.S. exports are most likely to face TRQs. Rice, wheat, and corn grain exports to Japan, passenger vehicles to Vietnam, and poultry meat to Canada and Malaysia are the sectors most affected by TRQ measures.³⁷

Figure 2.2: Sectors with the 10 largest tariff reductions on U.S. exports under TPP to partners with which the United States has no existing FTAs, trade-weighted ad valorem rates



Source: USITC calculations; ITC, “Tariff Rates for 2016–2046 between TPP Member Countries,” 2016. Corresponds to [appendix table J.8](#).

Note: Does not include tariff lines subject to TRQs. TPP countries with which the United States has no existing FTAs are Brunei, Japan, Malaysia, New Zealand, and Vietnam. SCP = sugar-containing products.

³⁷ Based on trade-weighted averages using 2012–14 trade statistics. Coverage is computed at the HS 6-digit level due to lack of availability of national tariff-line trade statistics.

Table 2.7: U.S. imports from TPP partners and U.S. exports to TPP partners where more than half of trade is subject to TRQ measures under TPP, by sector

	Sector	Partners affected or imposing TRQs
U.S. TRQs imposed on imports from TPP partners	Beef meat	Japan
	Dairy products	Canada
	Sugar, sweeteners, and SCP	Australia, Canada, Chile, Japan, New Zealand, Peru
TPP partner TRQs imposed on U.S. exports	Corn grain	Japan
	Dairy products	Japan, Canada
	Other meats	Canada
	Passenger vehicles	Vietnam
	Poultry meat products	Canada, Malaysia
	Rice	Japan
	Sugar, sweeteners, and SCP	Japan
	Wheat	Japan

Source: USITC calculations; ITC, “Tariff Rates for 2016–2046 between TPP Member Countries,” 2016.

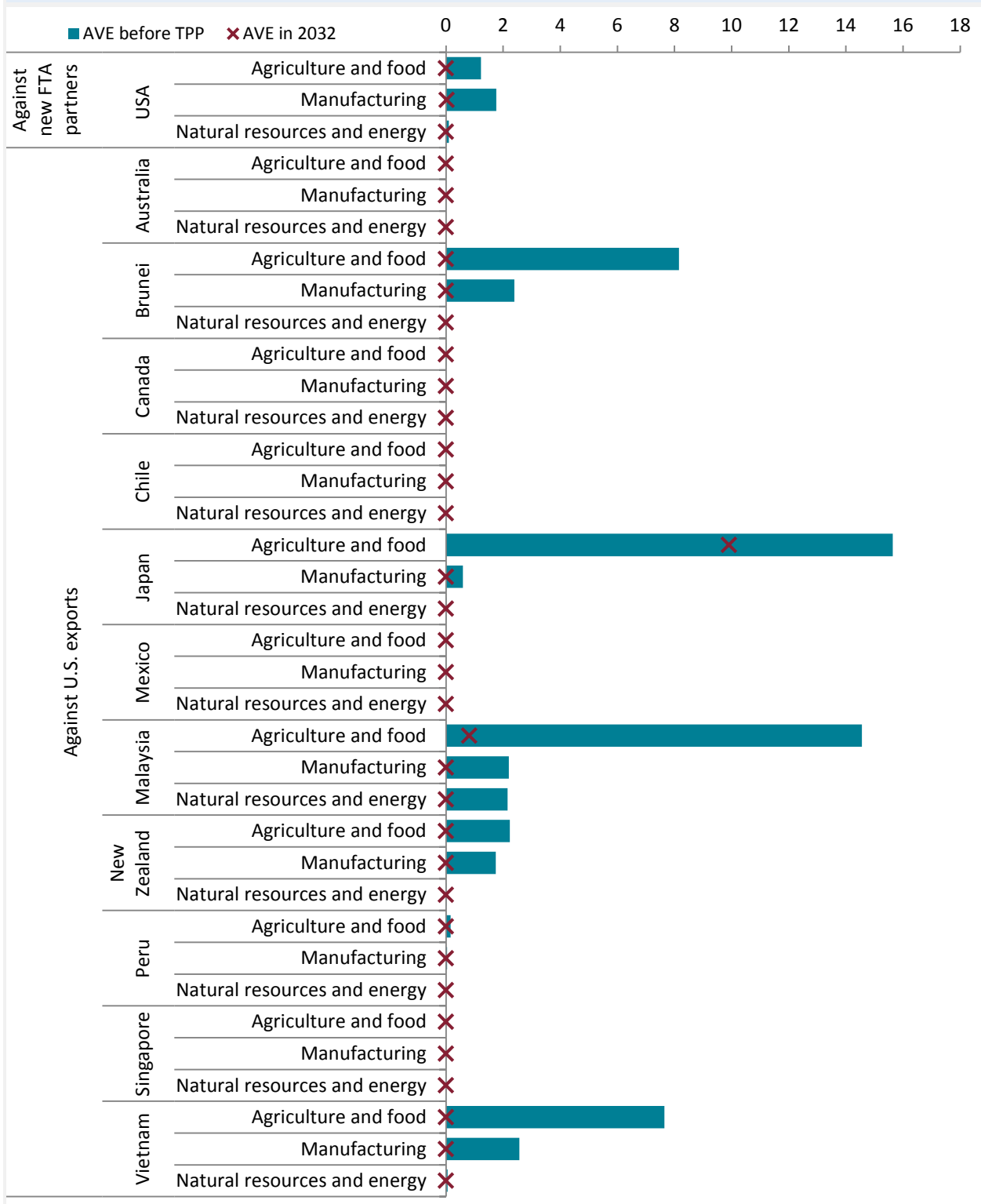
Note: Based on trade-weighted averages using 2012–14 trade statistics. TRQ coverage is calculated at the HS 6-digit level due to lack of availability of national tariff line-level trade statistics. SCP = sugar-containing products.

At the broad sector level (agriculture and food, manufacturing, and natural resources),³⁸ currently the United States affords low tariffs to imports from TPP countries with which it does not already have an FTA (figure 2.3). Those tariffs would be almost completely eliminated within 15 years after TPP enters into force.

On average, U.S. exports to TPP partners currently face tariffs that are higher than the ones TPP partner exports face in the United States. U.S. agricultural exports face the highest tariffs (notably in Japan, Canada, and Malaysia), followed by tariffs on manufactured goods. By 2032, these tariffs would be almost completely eliminated, with exceptions for U.S. agricultural exports to Japan and Malaysia.

³⁸ Services are not directly affected by tariffs.

Figure 2.3: Effectively applied tariffs for U.S. imports and tariffs applied by TPP partners against U.S. exports, percent



Source: USITC calculations; ITC, “Tariff Rates for 2016–2046 between TPP Member Countries,” 2016. Corresponds to [appendix table J.9](#).

Note: Does not include tariff lines subject to TRQs. Based on trade-weighted averages using 2012–14 trade statistics.

With regard to NTMs on goods, the model assumes that TPP would reduce customs inefficiencies (border frictions) among the parties in several ways. For example, TPP’s trade facilitation provisions would result in a small gain in efficiency (estimated at 1 percent) for all TPP countries. This increase is based on estimates in the literature of the effects of trade facilitation provisions on trade costs.³⁹ TPP provisions related to U.S. exports of vehicles and parts to Japan are believed to reduce existing NTMs that restrict exports to Japan. This impact was estimated by calculating the existing price gap for U.S. vehicle exports to Japan and assuming that the TPP provisions would reduce this gap by 50 percent.⁴⁰ This estimate takes into account bilateral letters between the United States and Japan on certain auto NTMs that would address some, but not all, auto NTMs in Japan.⁴¹ However, despite the overall liberalization, the model retains barriers restricting exports of beef and poultry to Malaysia because NTMs related to halal certification are not expected to change under TPP.⁴²

Modeling Provisions on Tradable Services

The TPP Agreement contains market access provisions that liberalize cross-border trade in services with TPP partners. These provisions appear in the TPP chapters on cross-border trade in services, financial services, and telecommunications. The Commission’s CGE model takes into consideration TPP’s major provisions affecting cross-border trade in services.⁴³ These can be grouped into three categories:

- Commitments to reduce or remove specific NTMs restricting trade in services, such as licensing or nationality requirements that discriminate against foreign providers;
- Adoption of a “negative list” approach for services liberalization in the agreement, meaning that current and future services not listed in TPP’s Annex of Non-Conforming Measures gain the full benefit of the related TPP provisions;⁴⁴ and

³⁹ In particular, a recent study on the Trade Facilitation Agreement (TFA) at the World Trade Organization found that implementing the TFA provisions would result in an average trade cost reduction of 0.9 percentage points for imports and 1.2 percentage points for exports. See Hillberry and Zhang, “Policy and Performance in Customs,” 2015.

⁴⁰ The estimate is based on unit values of U.S. vehicles sold in Japan relative to the unit values of similar U.S. vehicles sold in the rest of the world, calculated at the HS 6-digit level for passenger vehicles in HS 870322, 870323, and 870324. The estimated price gap in this category is 50 percent. For Malaysia, a gap of 10 percentage points is eliminated. For a description of the price gap estimation approach, see appendix J in USITC, *U.S.-Korea Free Trade Agreement*, 2007.

⁴¹ See the discussion on passenger vehicles in chapter 4.

⁴² See the discussion on beef and poultry in chapter 3.

⁴³ Services trade that is provided through a commercial presence in another party’s territory (“mode 3,” in the language of the WTO General Agreement on Trade in Services) is considered in the Commission’s analysis through the effects it has on foreign affiliate sales, described in the following section.

⁴⁴ For more discussion of the negative list approach, see chapter 5.

- Adoption of measures ensuring the ability to transmit data across borders and prohibiting data-localization measures (measures requiring data to be stored and/or processed only in-country).

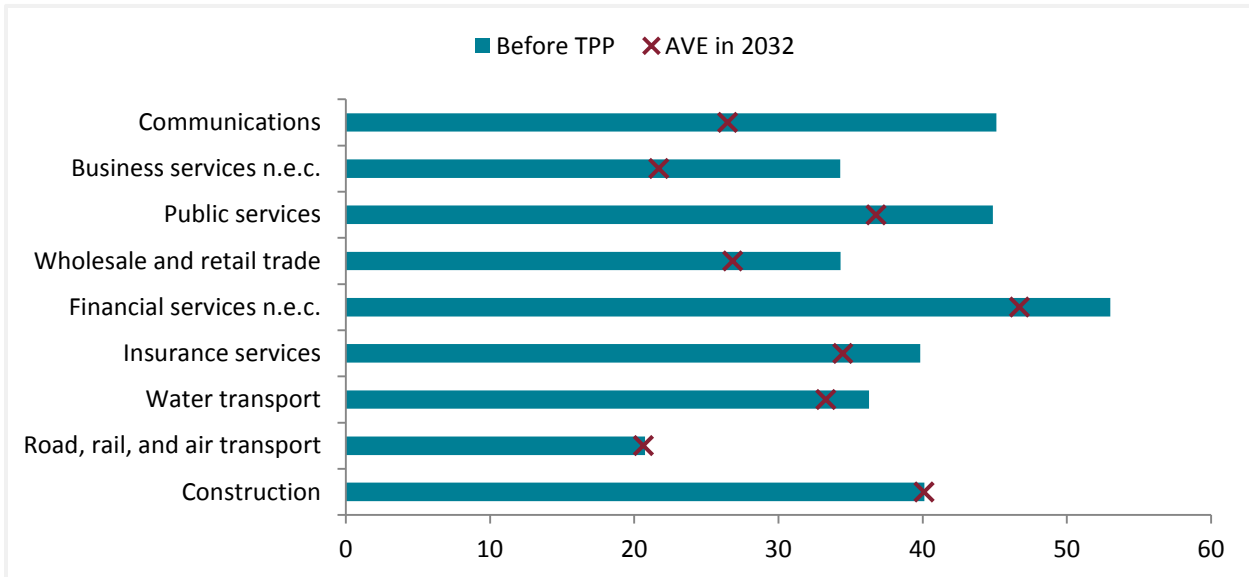
To gauge the magnitude of existing barriers to cross-border trade in services, the Commission estimated the ad valorem costs (defined as tariff equivalents) associated with cross-border services trade by country and by broad services sector.⁴⁵ The Commission then assessed the degree to which these tariff equivalents would be reduced by the three factors listed above under TPP. The first factor, the effect of specific NTM commitments, was assessed using service trade restrictiveness indexes (STRIs). The second factor, adoption of the negative list, generates larger reductions in tariff equivalents in sectors that are more innovative, since a decreasing share of services products would be subject to restrictions in these sectors over time. The third factor generates larger reductions in sectors that are more digitally intensive.⁴⁶ These three factors are weighted equally when calculating the effect of TPP on cross-border services trade.

The Commission estimates that communications, other business services, and public services would undergo the greatest reduction in service trade restrictiveness under TPP (figure 2.4). Relatively little reduction would take place in construction and transportation services by the time the agreement is fully implemented.

⁴⁵ The Commission updated estimates of tariff equivalents that had been produced by staff of the French research institute CEPII, using gravity model analysis. Gravity models relate bilateral trade between countries to various country characteristics, such as distance, the presence of a common language and/or border, and the size of the economies. See appendix G for details of the Commission's estimates.

⁴⁶ This approach is presented in more detail in appendix G.

Figure 2.4: Estimated ad valorem equivalents of services trade barriers, by broad service sector, percent



Source: USITC estimates. Corresponds to [appendix table J.10](#).

Modeling Provisions on Investment

TPP contains national treatment provisions that enable services firms to establish a commercial presence in TPP partner markets more easily.⁴⁷ These provisions are found in the TPP chapters on investment, financial services, and telecommunications. Investment provisions in TPP specify the rights of investors, establish rules to govern cross-border investment, and define an investor-state dispute settlement process. These provisions would lower barriers to U.S. investment, particularly in the five countries where the United States does not have an existing FTA. Less change is anticipated in inward U.S. investment, however, as the United States is already largely open to foreign investment. As with the chapter on cross-border trade in services, TPP’s chapter on investment employs a negative list, meaning that sectors not included in the Annexes of Non-Conforming Measures gain the full benefit of the investment-related TPP provisions. Certain benefits of the Investment chapter, as listed in the Annexes, are not accorded to TPP investors in all countries and sectors.⁴⁸

The analysis for this study followed a multistep procedure to model the effects of the investment provisions. The first step was to calculate how much TPP would relax restrictions on foreign direct investment (FDI), as measured by the OECD FDI Regulatory Restrictiveness Index (RRI). The Commission “rescored” the index for TPP countries in cases where TPP would lead to

⁴⁷ National treatment provisions include measures to ensure that foreign investors are treated as favorably as national ones.

⁴⁸ For a more detailed discussion of TPP investment provisions, see chapter 6.

reduced restrictiveness. Data were available for all TPP countries except for Brunei, Singapore, and Vietnam, for which initial values were imputed using values for similar economies.⁴⁹ The rescoring of the index takes into account the reform of certain industries in several countries stipulated by the Investment chapter of TPP, as well as the majority of the exemptions specified in TPP's Annexes. Based on the provisions of the agreement, Malaysia and New Zealand would have the greatest reductions in investment restrictiveness (table 2.8).⁵⁰

The second step was to calculate how lower investment restrictiveness would affect sales by foreign affiliates. The Commission used an econometric model to estimate the increase in sales by host country in individual sectors (for example, increased sales by U.S. affiliates in the media sector in Malaysia). To ensure that the benefits of TPP were not overstated, the Commission assumed that there would be no change in sales by U.S. affiliates in TPP countries with which the US has an existing FTA;⁵¹ however, affiliate sales by other TPP host countries may increase in these countries.⁵²

Table 2.8: Investment restrictions in TPP countries, average FDI Regulatory Restrictiveness Index (RRI)

Country	RRI in 2014	RRI after TPP	Change
Brunei	0.150	0.130	-0.021
Japan	0.052	0.051	-0.001
Malaysia	0.211	0.139	-0.072
New Zealand	0.240	0.161	-0.079
U.S.	0.089	0.074	-0.015
Vietnam	0.150	0.141	-0.010

Source: USITC estimates of changes under TPP; OECD, FDI Regulatory Restrictiveness Index (initial 2014 values).

Note: Higher values denote greater restrictiveness. RRI values are imputed for Brunei and Vietnam.

The final step is to determine the effects that these increases in affiliate sales in the United States and abroad would have on the U.S. economy. The Commission used the GTAP-FDI model to calculate changes in productivity for each sector in each TPP country due to the investment liberalization.⁵³ Finally, the estimated productivity gains were applied to the main dynamic GTAP model to provide estimates of the effects of the investment provisions of the TPP Agreement.

⁴⁹ See appendix G for more details on the data for and analysis of investment.

⁵⁰ The TPP would generate substantial reductions in RRI for Malaysia in the forestry and media sectors; New Zealand would experience a substantial RRI decline in communications sectors and moderate declines in numerous manufacturing and services sectors. See appendix G for RRI reductions in individual sectors for all TPP countries.

⁵¹ Unlike TPP, the U.S.-Australia FTA does not include investor-state dispute settlement provisions. But this is not a factor in the RRI, so the model assumes no change in the index for Australia relative to the United States.

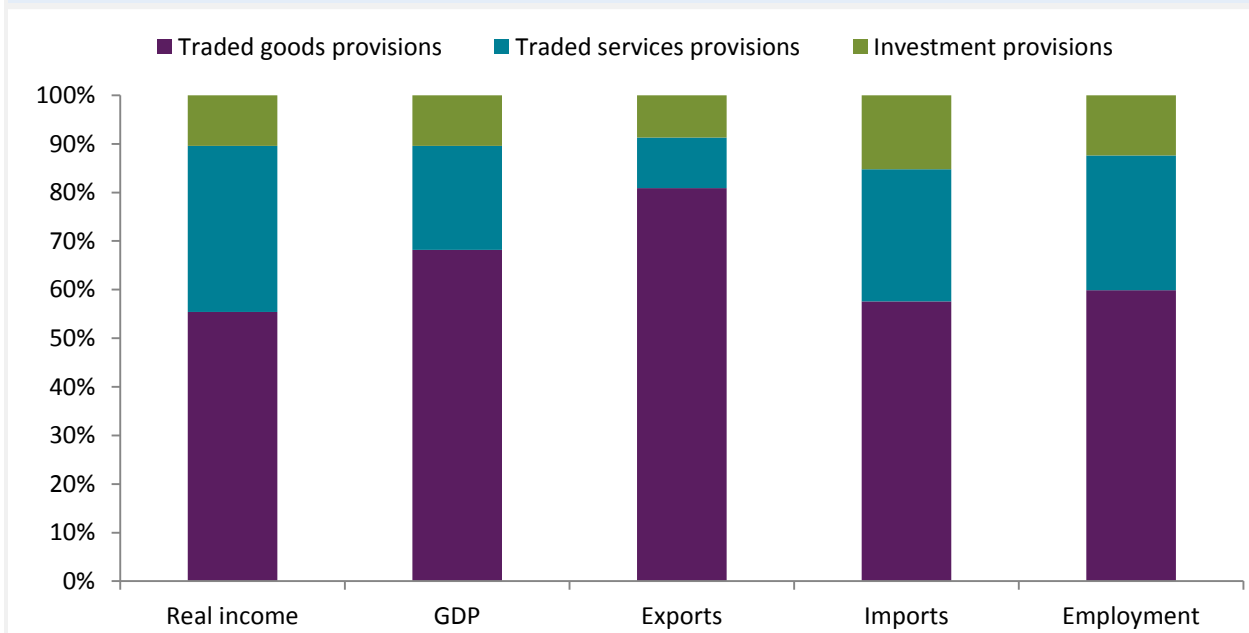
⁵² See appendix G.

⁵³ The CGE model used in this step is an extension of the standard GTAP model, which makes it possible to track both the size of foreign affiliates abroad and their response to policy changes. See appendix G and USITC, *Trade, Investment, and Industrial Policies in India*, 2014.

Decomposition of Effects by Agreement Provisions

Figure 2.5 decomposes, or breaks down, the dynamic, economy-wide real income, GDP, exports, imports, and employment effects of TPP according to the three groups of provisions modeled: those for traded goods, those for tradable (cross-border) services, and those for investment.⁵⁴ The results show that the provisions related to traded goods (tariff, TRQs, and NTMs) would contribute the largest share of the economy-wide gain from TPP in all five variables, followed by the quantified provisions on traded services. A substantial share of gains in real income (about 34 percent) would relate to services trade.

Figure 2.5: Decomposition of U.S. real income, GDP, trade, and employment gains, by modeled TPP provisions, percent



Source: USITC estimates. Corresponds to [appendix table J.11](#).

⁵⁴ The agreement contain provisions that are difficult to quantify, such as commitments on government procurement, competition, state-owned enterprises, and intellectual property that are not considered in the model. Nevertheless, these provisions can affect trade, output, employment, and consumers.

Contextualizing Model Results

Effects of TPP on the U.S. Labor Market

Economists, academics, and policy makers debate the effects of FTAs on the overall U.S. labor market. Some maintain that FTAs have a negligible effect on aggregate employment and a positive, yet small, effect on wages. Others express concern that FTAs cause declines in wages and employment, especially over the short run, and increased income inequality that persists over time.

Drawing from these concerns, some witnesses at the Commission’s hearing questioned the assumptions that are traditionally incorporated into models used to simulate the economic impact of the FTAs on the U.S. labor force—namely, that models assume no changes to aggregate employment. Witnesses also stated that the Commission’s analysis of TPP should address income distribution changes and unemployment resulting from the agreement.⁵⁵

This section discusses the economic theory of the impact that FTAs have on labor markets, the assumptions and limitations related to employment dynamics in the GTAP model, and the employment and wage estimates from the Commission model.

Economic Theory behind FTAs and Their Effects on Labor Markets

Economic theory suggests that trade liberalization can affect labor markets in complicated ways. FTAs remove barriers to cross-border trade and investment and increase economic integration between signatory countries, which shifts production patterns in those countries. The result is a shift in labor demand between industries within each country. In the short term, this shift in labor demand is likely to be reflected more in changes in wages and at least temporary job loss, as workers transition from import-competing sectors that are contracting into exporting industries that are expanding and paying higher wages as demand for workers increases. In the long run, aggregate employment moves toward full employment, as the transition to a new equilibrium moves toward completion, but the effects on different types of workers in certain industries can persist. The speed and economic cost of the transition can be affected by policies in place to compensate displaced workers and to ease their transitions into

⁵⁵ Appendix D contains written submissions from hearing witnesses. In their submissions, several interested parties discussed the modeling of labor and employment and the TPP, including Representative Sander Levin; Representatives DeLauro, Slaughter, DeFazio, and Lee; the AFL-CIO Action Network; Citizens Trade Campaign; Coalition for a Prosperous America; Communications Workers of America; Society of Professional Engineering Employees in Aerospace; and Teamsters.

new jobs—for example, through retraining.⁵⁶ Aggregate employment could also change such that some workers may be encouraged to enter or exit the labor force, or the number of hours worked by existing workers may increase or decrease.

Model Assumptions and Limitations Related to TPP's Impact on Labor and Employment

The model presented in this report quantifies the expected impact of TPP on the economy-wide level of employment, assuming that the aggregate labor supply expands when the economy-wide real wage rate rises or contracts when the real wage rate falls. This response is known as labor supply elasticity, which is expressed as the percentage change in the supply of labor driven by a 1 percent change in the real wage rate.⁵⁷ Model results show changes in aggregate and sectoral employment, though the model does not generate estimates of changes in the U.S. unemployment rate.

The GTAP model used in this report quantifies the broad implications of the agreement on U.S. employment and wages in the medium and long term. Thus, the model does not capture the employment and wage adjustments that may result from the changes in trade policy in the short run.⁵⁸ As a result, this model assumes that in the medium and long term workers immediately move between sectors of the economy and that they can do so without incurring any costs other than changes in their wages.

Similarly, the GTAP model used in this analysis does not capture TPP's impact on different types of workers by income level—though it does capture labor's share of income relative to other factors of production in the aggregate economy. The model assumes instead that all workers with the same skill level⁵⁹ receive the same wage, regardless of the industry in which they work. In contrast, academic literature suggests that changes in trade flows may have particular effects on workers' wages depending on the industry and even the particular firm that employs them.

⁵⁶ Recent research finds that this transition to the longer-term stage could take more time than previously believed. For more discussion, see Autor, Dorn, and Hanson, "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade," 2016.

⁵⁷ Through a review of government publications, academic journals, and working papers, the Commission found labor supply elasticities for nine TPP countries. Elasticities for developed economies ranged from 0.2 to 0.8; the Commission used the median of those elasticities—0.4—as the labor supply elasticity for all developed economies in the model. This is the same labor supply elasticity as the one calculated by the Congressional Budget Office for the United States. Labor supply elasticities for developing economies ranged from 0.3 to 0.6; the median of those ranges—0.44—was used for all developing countries in the model.

⁵⁸ For a discussion of the costs of labor transitions from the TPP, see Lawrence and Moran, "Adjustment and Income Distribution Impacts," 2016. For a discussion on the difficulties of modeling labor market transitions as a result of free trade agreements, see Riker and Swanson, "A Survey of Empirical Models of Labor Transitions," 2015.

⁵⁹ The model distinguishes between two types of labor, "skilled" and "unskilled." Skilled labor includes employment requiring long-term training or at least some college education. Unskilled labor includes employment requiring short-term training, a high school diploma, or less.

However, the model does show changes in labor’s share of income relative to capital, land, and natural resources at the economy-wide level.

Model Results Related to U.S. Employment and Wages

By 2032, the Commission estimates that TPP would increase employment in the United States by about 128,000 full-time equivalent jobs, and increase the real wage rate by about 0.19 percent (table 2.9).⁶⁰ In percentage terms, the rise in the wages of unskilled workers would be similar to the rise for skilled workers.

Table 2.9: Effect of TPP on U.S. employment and real wage rate: Changes relative to baseline in 2032, percent

	Employment	Real wage rate
Labor	0.07	0.19
Unskilled labor	0.07	0.18
Skilled labor	0.08	0.19

Source: USITC estimates.

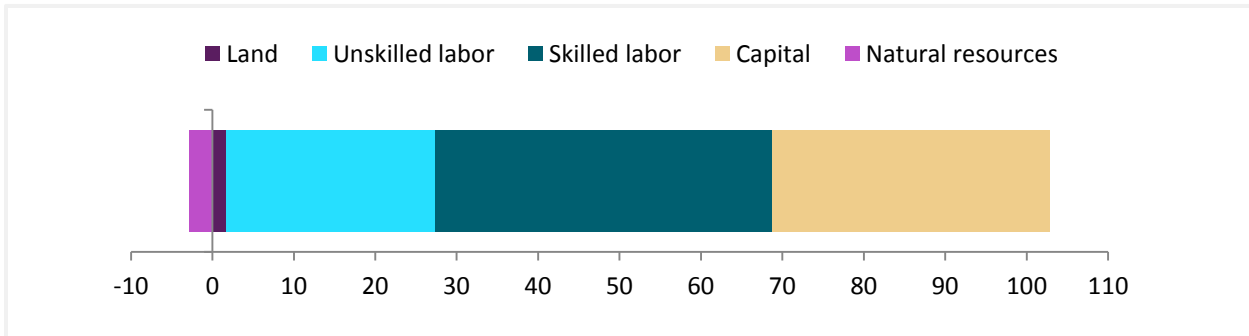
Growth in the aggregate U.S. economy can be broken down into the payments received by individual factors of production, such as labor and capital. Figure 2.6 decomposes the sources of the growth in nominal⁶¹ GDP attributable to TPP by 2032. Increases in labor income and return from capital investments would account for almost all the growth in nominal GDP. Labor would receive a larger share of the GDP gains than capital. Increases in income of skilled labor, in particular, would account for about 41 percent of GDP growth, while increases in income of unskilled labor would account for about 25 percent of GDP growth. Increases in capital rents would account for about 34 percent of GDP growth. While land rents would increase and have a small but positive contribution to GDP growth, returns to other natural resources, like mines and forests, would decline because of TPP.⁶²

⁶⁰ The real wage rate would rise by 0.18 percent for unskilled labor and by 0.19 percent for skilled labor. With a labor supply elasticity of 0.4, the 0.18–0.19 percent rise in real wages would lead to a rise in employment of 0.07–0.08 percent.

⁶¹ Not only the availability of labor and capital expand in the United States but also their prices, that is wages and capital rents, also expand.

⁶² Land is employed in agriculture and can move between agricultural sectors. Overall expansion in demand for U.S. agricultural goods pushes up returns to land. But non-land natural resources, necessary to the production of minerals, coal, oil, gas, and timber, and seafood, cannot easily move between natural resource-using sectors; for instance, most coal-producing land cannot be repurposed as oil-producing land. Income to natural resources, like income to labor and capital, is determined by the value of their marginal product. Liberalization would lead to a modest decline in demand for U.S. production in these sectors, depressing payments to natural resources.

Figure 2.6: Contribution to changes in nominal GDP in 2032 under TPP, including both price and quantity effects and excluding taxes and depreciation, percent



Source: USITC estimates.

Effects of TPP on the U.S. Trade Deficit

The effects of FTAs on the U.S. trade deficit are also widely debated.⁶³ Some policy makers, academics, and economists argue that FTAs help to reduce the trade deficit or have essentially no effect, while others argue that they have contributed to the worsening of the U.S. trade deficit, while others argue that they. The effect of a trade agreement on the U.S. trade deficit in the long run ultimately depends on how the agreement affects output, consumption, and investment in the United States.

This section discusses the economic theory and evidence describing this relationship and the GTAP model's assumptions and limitations surrounding trade balances.

FTA Impacts on Bilateral Trade Balances

Under most FTAs, tariff reductions for U.S. exports to FTA partner countries have been greater than U.S. tariff reductions for imports from FTA partners. This suggests that, holding all else constant, the U.S. bilateral trade balance with FTA partners should improve as the FTA is fully implemented.

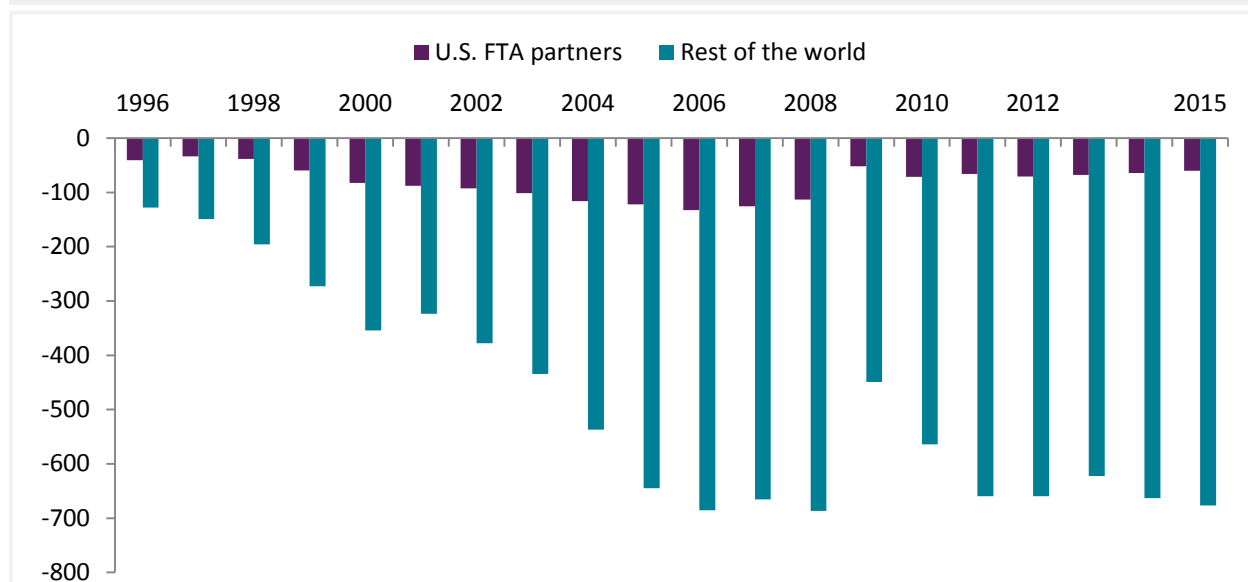
This effect on bilateral trade balances, however, is not readily apparent in aggregated trade statistics. The United States' merchandise trade balance with all FTA partners follows trends similar to those of its trade balance with non-FTA partners (figure 2.7).⁶⁴ In 2015, the United States had merchandise trade surpluses with 14 of its 20 FTA partners. These 14 are generally

⁶³ The discussion of the U.S. trade balance in this section uses the difference between total exports and general imports as the definition of the trade balance. For more discussion on the definition of the U.S. trade balance, see USITC, "A Note on U.S. Trade Statistics," 2014.

⁶⁴ Figure 2.7 shows bilateral merchandise trade balances and not bilateral trade balances (including both goods and services) because of the lack of bilateral services trade statistics for several U.S. FTA partners.

relatively small trading partners.⁶⁵ The United States had a merchandise trade deficit with the remaining 6 FTA partners—including some of its largest trading partners—resulting in an overall trade deficit with its FTA partners.

Figure 2.7: United States merchandise trade balance, 1996–2015, by partner type, billion dollars



Source: USITC DataWeb/USDOC (accessed on March 15, 2016). Corresponds to [appendix table J.12](#).

Many macroeconomic factors contribute to bilateral trade balances. One important factor is the economic structures of the FTA partners, such as their level of development or their relative ability to trade in goods and services of high value. Changes in the FTA partners' business cycles and in other macroeconomic conditions can likewise shape bilateral trade balances both in the short and the long term. The weight of these macroeconomic factors can have a much greater effect on bilateral trade balances than FTAs.

FTA Impacts on the Aggregate Trade Balance

The effect of an FTA on the United States' aggregate trade balance is different and perhaps more ambiguous than its effect on U.S. bilateral trade balances, since the effect is largely determined by the effect of the agreement on aggregate output, consumption, and investment. Under FTAs, the production of goods and services becomes more efficient as costs associated with doing business and trade costs go down. Greater efficiency increases national output, which raises national consumption and saving. Greater efficiency also makes the FTA parties a

⁶⁵ The FTA partners with which the U.S. had a bilateral merchandise trade surplus in 2015 were Australia, Bahrain, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Morocco, Oman, Panama, Peru, and Singapore. FTA partners with which the U.S. had a bilateral merchandise trade deficit were Canada, Israel, Jordan, South Korea, Mexico, and Nicaragua.

more attractive destination for domestic and international investors, raising aggregate investment.

The magnitude of these two effects determines the change in a country's aggregate trade balance. Because foreign capital can be used to finance consumption, if investment rises faster than national saving (defined as output minus consumption), an FTA party can spend more than it produces. Hence imports will rise faster than exports, causing that party's aggregate trade balance to decline.⁶⁶ Conversely, if national saving rises faster than investment, then the FTA party's aggregate trade balance increases.

For an economy as large and complex as the United States, it is difficult to estimate the effects of an FTA on the aggregate trade balance. TPP, although it is a large trade agreement by historical standards, is expected to have a relatively small effect on U.S. output, consumption, and investment (table 2.1). Because the effect on the aggregate trade balance is determined jointly by all of these factors, estimating the net effect of small, offsetting, and interrelated changes presents a challenge.

Model Assumptions and TPP Effects on the Trade Balance

The model used in this report allows bilateral trade balances to change as trade costs decline and production of goods and services becomes more efficient under TPP. The Commission estimates that the U.S. trade balance with TPP member countries would improve by \$9.6 billion by year 2032, relative to the baseline. Most of this improvement is accounted for by increased net exports to TPP parties with which the United States has no existing FTAs.

However, the GTAP model is not structured to account for the role of certain factors in influencing aggregate trade balances. The model assumes a constant rate of saving relative to GDP, while not imposing restrictions on foreign investors' perception of enhanced investment opportunities in the United States or other model regions over time. Yet foreign investors' response to such a positive perception can drive large increases in investment in the United States relative to savings and cause potentially large declines in the trade balance. In its analysis, the Commission imposes a restriction that the trade deficit to GDP ratio is fixed.⁶⁷ Under such a restriction, the Commission estimates that U.S. exports of goods and services to the world would expand by \$27.2 billion by 2032 due to TPP, while U.S. imports would expand

⁶⁶ National saving includes saving by households, businesses, and government. By the national income accounts identity, when domestic saving (output minus government and private consumption) is less than domestic investment, capital inflow from abroad must supplement the domestic saving so as to meet the needs of domestic investment. For a more in-depth discussion of national income accounts, see Mankiw, *Principles of Economics*, 2004, 117–19.

⁶⁷ While the U.S. trade balance has fluctuated significantly since 1980, its correlation with U.S. GDP is about 0.9, during the same period, which suggests a stable relationship between the trade balance and GDP.

by \$48.9 billion (table 2.2). Thus, the aggregate trade balance for the United States would decline by \$21.7 billion by 2032.

Literature Review and Comparison with Commission Findings

Overview

This section reviews the economic literature that is relevant to assessing the impact of the TPP Agreement on the United States, and it is divided in two parts. The first part compares the Commission’s model results with those of the literature that assesses the economy-wide impact of the actual, negotiated TPP Agreement on the U.S. economy. A 2016 article by Petri and Plummer is the only other study besides the current Commission report to do so.⁶⁸ Compared with this article, the Commission finds that TPP would have a smaller impact on U.S. real income (an increase of 0.23 percent of GDP, compared with 0.51 percent), and a smaller impact on U.S. exports (an increase of 1.0 percent compared with 9.1 percent). The differences between the two economic analyses are discussed in more detail below.

The second part of the literature review describes economic studies that assess a hypothetical TPP, (since they were conducted before the final text of the agreement was released) and estimate the potential impact of such an agreement on the U.S. economy. Given the differences between the hypothetical and the actual texts of the agreement, the findings of these studies are not directly comparable with the Commission’s results, but they are provided where available. The review focuses on studies that assess the impact of TPP on the U.S. economy and that assume a TPP agreement encompassing the final list of all 12 TPP parties. It only briefly examines studies that assume an alternate list of TPP parties or that assess the impact of TPP on other economies.

The estimates made by most of the economic analyses reviewed here are based on a computable general equilibrium (CGE) model of the global economy—a multicountry, multisector tool widely used to predict the expected economy-wide and sectoral effects of changes in trade policy. Examples of such changes include the reduction or removal of tariffs, of nontariff measures on goods and services, and of barriers to foreign direct investment. Most CGE models use a dataset provided by the Global Trade Analysis Project (GTAP).⁶⁹

⁶⁸ Petri and Plummer, “The Economic Effects of the Trans-Pacific Partnership,” 2016. A related study by the World Bank draws from the work of Petri and Plummer and reports similar results. See World Bank, “Potential Macroeconomic Implications,” 2016.

⁶⁹ For a more detailed description of the GTAP model, see chapter 2 and appendix G.

Literature Assessing the Negotiated TPP Compared with the Commission’s Analysis

Comparison of Principal Results

According to estimations from Petri and Plummer, under TPP, annual real income in the United States would increase by \$131 billion (0.51 percent of GDP) and U.S. annual exports would increase by \$357 billion (9.1 percent of expected U.S. exports), compared with baseline projections, by 2030. In comparison, the Commission estimates that TPP would increase annual real incomes in the United States by \$57.3 billion (0.23 percent of GDP) and that U.S. annual exports to the world would increase by \$27.2 billion (1.0 percent of expected exports), compared with baseline projections, by 2032.⁷⁰

With regard to employment effects, the analysis by Petri and Plummer assumes that TPP will not affect the total employment level or the trade balances of countries inside or outside of TPP. However, Petri and Plummer assume that there will be sectoral shifts in the labor market within the TPP economies, with zero net effect on aggregate employment. In contrast, the Commission model does permit changes in total employment. The Commission estimates that the TPP would lead to an increase of about 128,000 full-time equivalent workers (FTEs) in the United States by 2032, compared to the baseline projection (equal to 0.07 percent of the total U.S. labor force). Table 2.10 compares the key findings from both analyses.

Table 2.10: Summary of comparison between Petri and Plummer and Commission findings

	Petri and Plummer	Commission findings
Change in real income	0.51 percent of GDP	0.23 percent of GDP
Change in exports	9.1 percent of total exports	1.0 percent of total exports
Change in employment	No change in aggregate employment by assumption	128.2 (full time equivalent, thousands)
Model	Dynamic CGE model ^a	Dynamic GTAP model ^b
Type of liberalization experiment	Reduction of tariff, nontariff measures, and investment barriers	Reduction of tariff, nontariff measures, and investment barriers

^a The dynamic CGE model used by Petri and Plummer incorporates the feature of the heterogeneity of firms to analyze TPP’s welfare and income effects, based on changes in exports not only from activity by established exporters, but also from the entry of new exporting firms.

^b GTAP is a CGE model used to estimate the economy-wide impact of trade agreements.

Though the analysis by Petri and Plummer assumes that TPP will not affect total employment, their study does include results on the shifts in employment between sectors and the costs of this labor adjustment. Petri and Plummer show that TPP would facilitate a shift in U.S. resources from general manufacturing toward traded services and advanced manufacturing, both of which mainly employ skilled labor. Hence, the nominal wages of skilled workers in the

⁷⁰ The Commission analyzes TPP over a 15-year period, from 2017 to 2032.

United States, who make up 60 percent of the labor force, would rise more than those of unskilled workers (0.63 percent vs. 0.37 percent).

In a related study, Lawrence and Moran further analyze the costs related to labor adjustments under TPP using the results from Petri and Plummer.⁷¹ The authors take the estimates of the impact of the TPP on trade flows and the intersectoral reallocation of labor in the United States. Based on a series of “back end” calculations, they estimate that the upper bound for the annual displacement of workers due to TPP during the adjustment period would be 169,000 FTEs. The authors, however, argue that a large share of these displaced workers will be absorbed by rising employment in industries that are expected to expand due to increasing demand under TPP.⁷² Others will be absorbed through normal churn, and still others through natural attrition, such as retirements.

Detailed Comparison of the Models

The Commission’s simulation of the TPP Agreement differs from the simulation conducted by Petri and Plummer in four areas, and the different assumptions employed largely explain the difference in the final results. First, based on the Commission’s industry expertise and its knowledge with regard to particular factors affecting trade in specific sectors across the economy, the Commission’s simulation was implemented at a more disaggregated sector level than the simulation in the Petri and Plummer analysis. As a result, the Commission’s simulation includes economic conditions and TPP provisions which are sector-specific. Some examples are the preference of Japanese consumers for domestic beef meat, the limited available expansion capacity for Malaysian-approved Halal meat plants in the United States, the existing regime of import duty drawbacks in Vietnam, the potential impact of TPP rules of origin on Vietnamese trade, and the structure of the TPP Agreement’s TRQ provisions. All of these factors are likely to limit the impact of certain TPP provisions on U.S. trade.

Second, the Commission quantified TPP’s investment provisions at a more disaggregated sector level than did Petri and Plummer, taking into account particular aspects of each industry for each TPP country and assuming that regulations for U.S. FDI would not be affected by the TPP investment provisions if the United States already has a trade agreement with the partner country. As a result, the Commission’s quantification of the Agreement’s investment provisions identified various degrees of changes in investment regulations at the sector level, ranging from no change for many sectors to significant change for just a few sectors. In contrast, Petri and Plummer estimated a single degree of investment liberalization across all industries for each

⁷¹ Lawrence and Moran, “Adjustment and Income Distribution Impacts,” 2016.

⁷² According to the authors, under the TPP, U.S. employment in some industries is expected to rise as demand for their output from outside the United States increases. Also, some workers who would no longer be producing the goods and services displaced by imports may be reassigned to other activities within their firms.

TPP country and without excluding existing U.S. FTA partners, which produces larger estimated impacts of TPP's investment provisions.

Third, the Commission's simulations did not include any policy "spillover" effects. Petri and Plummer assumed that 20 percent of the liberalization of nontariff barriers under TPP would also apply to trade partners who are not TPP members. Such spillover effects may be a byproduct of the TPP Agreement, but they are not included in the provisions of TPP and are exceedingly difficult to accurately quantify. Thus, the Commission chose not to include them in the model. This factor was an important one in Petri and Plummer's overall results, and generated higher estimates of trade and real income changes than in the Commission's analysis.

Fourth, the Commission's simulation did not consider productivity differences at the firm level within a sector while the Petri and Plummer simulation was based on a model of firm heterogeneity. Under such a model, reduction in foreign trade barriers can raise the average productivity of firms within a sector. In Petri and Plummer, this assumption leads to greater gains in U.S. trade and real income. The Commission has not used such a model in previous reports, and it was not feasible to develop such a model with the industry and country detail required for Commission analysis in the timeframe of this report.

Petri and Plummer estimate the potential impact of TPP on the U.S. economy, as well as on other countries. The CGE model used in the study was developed by Zhai.⁷³ It uses the GTAP Version 9 dataset for 2011, covering 29 regions and 19 sectors. As noted above, the model recognizes the heterogeneity of firms within each country, showing increases in exports not only from existing exporters as a result of trade liberalization, but also from new firms which enter the market due to the change in trade policies.⁷⁴ In the model, agriculture, mining, and government services are assumed to exhibit perfect competition, while manufacturing and private services are characterized by monopolistic competition. Each sector with monopolistic competition consists of a continuum of firms that are differentiated by the varieties of goods they produce and by their productivity.

Petri and Plummer's model simulates the global economy from 2015 to 2030 under TPP, compared to a baseline without TPP in force. The study estimates actual tariff reductions as well as the reductions in NTMs on goods and services and in barriers to investment relative to this baseline. The authors assume that 75 percent of NTMs on goods and services should be

⁷³ Zhai, "Armington Meets Melitz," 2008.

⁷⁴ Unlike conventional CGE models, which only track changes in trade by established exporters (the intensive margin of trade), the CGE model used by Petri and Plummer incorporates the feature of the heterogeneity of firms. Such models analyze changes in exports not only by established exporters, but also from the entry of new exporting firms (the extensive margin of trade).

considered as barriers, and among those, only 50 percent of the NTMs applicable to services and 75 percent of those applicable to goods are “actionable.”⁷⁵ The actionable portion of initially estimated NTMs is therefore calculated as 56.3 percent for goods and 37.5 percent for services. To simulate the effects of trade policies, these barriers are then reduced in proportion to scores (from 0 to 100)⁷⁶ that represent different provisions of an agreement that addresses barriers in various goods and services sectors. Reductions in barriers to foreign direct investment (FDI) are calculated using a similar methodology.

The analysis also assumes that countries that are not TPP parties benefit at the rate of 20 percent from the NTM liberalizations that apply to TPP parties. This additional reduction of NTMs means that the United States, for example, as one of the TPP member countries, would reduce its NTMs towards non-TPP member countries at the rate of 20 percent of the NTM reduction it applies towards other TPP parties. This reduction would allow non-TPP member countries to gain additional access to the U.S. domestic market, leading to gains in income and welfare beyond those directly associated with the TPP Agreement.

In contrast, as discussed in more detail in chapter 2, the Commission uses a dynamic GTAP model⁷⁷ incorporating the changes in tariffs, tariff-rate quotas (TRQs), NTMs in goods and services, and investment barriers based on the provisions of TPP. The figures for changes to services barriers came from three sources. First, the Commission assessed TPP’s changes to specific services NTMs, as compared with the policies identified in the World Bank’s Service Trade Restrictiveness Index (STRI). Second, the Commission assigned a value to the negative list entries in TPP’s Cross-border Trade in Services chapter for each service sector.⁷⁸ Finally, the Commission estimated the reduction in trade costs expected to result from TPP’s provisions on cross-border data flows, as laid out in the Electronic Commerce chapter. To quantify the changes in barriers to investment, the Commission used the level of restrictiveness reported in the OECD FDI Regulatory Restrictiveness Index (RRI), and assigned new RRI values based on TPP provisions that reduced barriers to investment. For additional detail on the methodology, see chapter 2 and appendix G of this report.

⁷⁵ The “actionable” NTMs are those that could be reduced or eliminated if politically feasible.

⁷⁶ Reduction of the NTMs is calculated as a product of three factors: (1) scores of the agreement in 21 issue areas (labor, environment, technical barriers to trade, SPS measures, IPR, etc.); (2) policy weights that translate scores into reductions in different NTMs; (3) maximum reduction rates for each type of NTM. The score is a measure of how good the TPP trade agreement is compared to other existing trade agreements. The higher the score, the more the remaining “actionable” portion of the NTMs among TPP member countries would be reduced or eliminated by the TPP agreement.

⁷⁷ Unlike the firm heterogeneity models, the dynamic GTAP model used by the Commission study assumes perfect competition in all sectors.

⁷⁸ The value assigned to each sector was dependent on its level of innovation and whether the country had an existing FTA with the United States.

Literature Assessing a Hypothetical TPP

As discussed above, only the Commission’s analysis and the study by Petri and Plummer analyze the economy-wide effect of TPP based on the actual negotiated provisions of the agreement. However, there are a number of studies using either CGE models or another global econometric model to analyze the impact of a hypothetical TPP on the U.S. economy. These are studies conducted before the TPP Agreement was finalized, based on authors’ conjectures of what the final agreement would include. Most of these studies use a comparative static analysis,⁷⁹ and are summarized below. Table 2.11 summarizes the principal findings from these studies.

Table 2.11: Model, liberalization experiment, and aggregate results: Selected economic literature on the effect of a hypothetical TPP

	Capaldo and Izurieta	Kawasaki	Burfisher et al.	Rahman and Ara	Li and Whalley	Cheong and Tongzon
Model	UN Global Policy Model	GTAP version 8.1	GTAP version 8	GTAP version 8	CGE model differentiating between traded and non-tradable goods	Dynamic GTAP
Database, base year	N/A	GTAP, 2007	GTAP, 2014	GTAP, 2007	2011	GTAP, 2012
Type of liberalization experiment	Change in exports and imports from Petri, Plummer, and Zhai	Tariffs and NTMs	All Tariffs and TRQs	All Tariffs	Tariffs and NTMs	All tariffs
Change in U.S. GDP or welfare	-0.54 ^a	0.8 ^a	0 ^a	0 ^b	0.67 ^b	0 ^b

Source: Economic analyses of TPP agreement, as cited.

Note: N/A = not available.

^a Change in GDP (percent).

^b Change in welfare (percent of GDP).

In a 2016 paper, Capaldo and Izurieta use the United Nations Global Policy Model (GPM), a demand-driven, global econometric model, to analyze the macroeconomic impact of TPP on the final 12 parties to the agreement.⁸⁰ As noted in a 2014 paper by Cripps and Izurieta, the GPM model features a set of behavioral equations that estimate the variables on income and expenditure, exports and imports of primary and manufacturing goods and services, capital

⁷⁹ Comparative statics is the comparison of two different economic outcomes, before and after a change in an exogenous parameter (such as a trade policy), while holding all other economic variables constant. For example, in a comparative static CGE model, the national capital stock is fixed, and capital and labor can move across industries within a country as part of the process of adjustment. On the other hand, a dynamic CGE model, such as the one used by the Commission in the current analysis, allows for capital accumulation over time, often driven by increases in foreign direct investment, while preserving all the other features of a comparative static CGE model.

⁸⁰ Capaldo and Izurieta, “Trading Down,” 2016.

stock, private wealth and government debt, inflation, and employment.⁸¹ Unlike CGE models (such as GTAP) that are commonly used to analyze changes in trade policy, the GPM model does not include, explicitly or implicitly, variables such as tariffs, NTMs, or barriers affecting investment. Therefore, the GPM model is not normally suitable for assessing the economy-wide effects of changes in tariffs, tariff-equivalent NTMs, or investment barriers based on actual or hypothetical TPP provisions. For this reason, to reflect the TPP Agreement in the UN GPM model and generate macroeconomic results, Capaldo and Izurieta use estimates of TPP's expected trade changes from a 2012 study by Petri, Plummer, and Zhai based on a hypothetical TPP agreement between the existing 12-country TPP region plus South Korea (TPP13).⁸² Capaldo and Izurieta use the estimates obtained from Petri, Plummer, and Zhai related to the change in U.S. and global exports and imports from a simulation of TPP13 as model inputs for their GPM model, to analyze the macroeconomic impact of TPP on the U.S. and global economy. That is, Capaldo and Izurieta 2016 does not directly assess the impact of TPP's changes in tariffs and other trade barriers on the U.S. economy, as this model is not designed to conduct such analysis, thereby precluding an unambiguous interpretation of its results.

Capaldo and Izurieta find results that differ significantly from those of other studies reviewed here. It projects that the United States would suffer a net loss of GDP of 0.54 percent and job losses of about 450,000 FTEs by 2025 as a result of TPP. The principal reason that these estimates project such losses is that the GPM model does not differentiate between imports of intermediate and final goods. In the dynamic GTAP model used by the Commission, U.S. intermediate imports are assumed to be used in U.S. domestic production of goods, thereby contributing positively to U.S. domestic employment. In the UN GPM model, however, all imports are considered solely as final goods and therefore contribute only to domestic final demand.⁸³ Hence, in the analysis by Capaldo and Izurieta, increasing U.S. imports under the UN GPM model framework leads to a decline in U.S. domestic production, which leads to slower GDP growth which in turn decreases U.S. employment.⁸⁴

In a 2014 study, Kawasaki also uses a CGE model⁸⁵ to simulate both tariff and NTM reductions among the 12 TPP member countries (TPP12). The author estimates the impact of a hypothetical TPP on the U.S. economy and other member countries under the TPP12 scenario

⁸¹ Cripps and Izurieta, "The UN Global Policy Model," 2014.

⁸² Petri, Plummer, and Zhai, "The Trans-Pacific Partnership and Asia-Pacific Integration," 2012. The model, while not the analysis, is similar to that described for Petri and Plummer, "The Economic Effects of the Trans-Pacific Partnership," 2016.

⁸³ Cripps and Izurieta, "The UN Global Policy Model," 2014.

⁸⁴ The behavior equations underlying the GPM model show that employment is decided by the urbanization rate and GDP growth, and the estimation shows that GDP and lagged GDP growth lead to higher employment. See Cripps and Khurasee, "Global Policy Model, Version 3.0," 2010. Hence, the slower GDP growth projected by the GPM model under the TPP results in job losses.

⁸⁵ Kawasaki, "The Relative Significance of EPAs in Asia-Pacific," 2014. The author uses GTAP version 8.1 (2007) data.

with a comparative static GTAP model. This study assumes that tariffs are completely eliminated, and the NTM reductions in trade of goods and services are assumed to be 50 percent with spillover effects to third countries at 50 percent, which implies 25 percent NTM reductions for all non-TPP member economies.⁸⁶ Kawasaki anticipates that U.S. GDP would increase by 0.8 percent. The author also concludes that the majority of U.S. income gains (0.7 percentage point) would result from NTM reductions on goods and services rather than tariff removals. The main reason why U.S. income gain in Kawasaki's analysis is larger than in the Commission findings is that the former analyzes a hypothetical TPP and assumes much larger tariff and NTM reductions than the Commission analysis does.⁸⁷

Although most studies found by the Commission focus on analyzing aggregate macroeconomic changes, a 2014 report by Burfisher et al. of the U.S. Department of Agriculture estimates the impact of TPP on the United States and other member countries with particular emphasis on the agricultural sector.⁸⁸ Burfisher et al. use the GTAP comparative static model with the GTAP version 8 (2007) data, and updates the version 8 dataset to 2014 for the base year simulation analysis. The Burfisher et al. report simulates a full elimination of intra-TPP agricultural and nonagricultural tariffs and TRQs among the 12 TPP member countries. The simulation results indicate that tariff and TRQ elimination has minimal impact at the macroeconomic level, with no measurable change in U.S. real GDP by 2025, compared to the baseline simulation.

Burfisher et al. also addresses the percentage change in the value of U.S. agricultural exports and imports in 2025 under TPP, relative to the baseline. The report estimates that the value of U.S. agricultural exports to TPP partners in 2025 would be 5 percent (\$2.8 billion) higher under the TPP scenario than in the baseline. Broken down by agricultural product, the largest increase of exports in percentage change terms relative to the baseline would be in the dairy, meat, and cereals sectors, which would increase by 32.2 percent, 11.0 percent, and 6.9 percent, respectively, under TPP. The largest increase in the value of U.S. agricultural imports (in percentage terms) would be in the dairy and meat sectors, where they would increase by 20.5 percent and 3.0 percent, respectively.

By contrast with the results in Burfisher et al., the Commission's findings show that U.S. food and agricultural exports to TPP member countries would increase by 10.7 percent (\$11.1 billion) by 2032. The largest increases in exports (in percentage change terms) would be

⁸⁶ So countries outside TPP benefit at half the rate of countries inside the agreement. Kawasaki, "The Relative Significance of EPAs in Asia-Pacific," 2014, does not include reductions of investment barriers under TPP.

⁸⁷ In testimony before the Commission, Kawasaki specifically noted that since the reduction of tariffs in the actual TPP provisions is less than 100 percent, and the reduction of NTMs under the actual TPP provisions is also smaller than his study assumed, he expected that model results based on the final TPP provisions would show smaller effects. See USITC, hearing transcript, January 14, 2016, 630 (testimony of Kenichi Kawasaki, National Graduate Institute for Policy Studies).

⁸⁸ Burfisher et al., "Agriculture in the Trans-Pacific Partnership," 2014.

for other meat, dairy products, and hide and skins, which are estimated to increase by 54.9 percent, 37.0 percent, and 21.1 percent, respectively. The largest increase in U.S. agricultural imports (in percentage change terms) would be in dairy products and rice, which are estimated to increase by 31.2 percent and 14.9 percent, respectively. The Commission analysis finds a larger increase in total agricultural exports in part because the analysis incorporates NTM reductions as well as tariff and TRQ reductions. The Commission analysis quantifies the NTMs by assuming a 1 percent reduction in factor prices in the agricultural sector, equal to a 1 percent reduction of tariff, in the agricultural sector under TPP.

Rahman and Ara analyze the economy-wide impact of TPP on the United States and other member countries.⁸⁹ This study used a comparative static GTAP model and adopted Version 8 of the GTAP database for its analysis. The study assumes that all 12 TPP member countries completely eliminate import tariffs on each other's goods,⁹⁰ and the results indicate that U.S. welfare would increase by \$0.1 billion; U.S. exports would increase by 0.48 percent, while U.S. imports would increase by 0.28 percent.

Carrère, Grujovic, and Robert-Nicoud develop a multicountry, multisector trade model to analyze the employment and welfare effects of TPP.⁹¹ The authors compute the counterfactual changes in real wages, unemployment rates, and welfare due to TPP under the assumption that tariffs (and some nontariff barriers) in the agricultural and manufacturing sectors would be eliminated between all 12 TPP member countries. The authors project that the U.S. unemployment rate would decline by 0.25 percent, while U.S. real wages would increase by 0.05 percent and U.S. welfare would increase by 0.30 percent.

In their 2014 study, Li and Whalley analyze the impact of TPP on China and other potential TPP member economies, including the United States, using a CGE model.⁹² The authors use an 11-region Armington-type CGE model.⁹³ The 11 regions are China; the United States; the European Union; Japan; South Korea; Canada; Mexico; Australia and New Zealand; Chile and Peru; Brunei, Malaysia, Singapore, and Vietnam; and the rest of world. Each economy produces two goods (tradable and non-tradable goods) and has two factors (capital and labor). The tradable and non-tradable goods are treated as heterogeneous across economies. Capital and labor are

⁸⁹ Rahman and Ara, "TPP, TTIP and RCEP," 2015. This study also analyzed alternative simulation scenarios related to the effects of two other proposed FTAs, the Transatlantic Trade and Investment Partnership (TTIP) and the Regional Comprehensive Economic Partnership (RCEP), as well as the potential economy-wide impact for Southeast Asian countries if they join the TPP. The results are not relevant to the United States and hence are not reported here.

⁹⁰ This study did not quantify the reduction of NTMs and investment barriers.

⁹¹ Carrère, Grujovic, and Robert-Nicoud, "Trade and Frictional Unemployment in the Global Economy," 2015.

⁹² Li and Whalley, "China and the Trans-Pacific Partnership," 2014.

⁹³ An Armington-type CGE model features product differentiation, which means that when a country imports from a group of other countries/regions, the source country/region's imports are of different varieties than those from an alternative source.

treated as mobile between sectors but internationally immobile. The analysis captures endogenously determined trade imbalances by incorporating both current consumption and expected future incremental consumption from savings into the model. The model is calibrated using 2011 data.

Li and Whalley divide the trade costs into two parts: import tariffs and all other nontariff barriers. The trade costs are estimated using a gravity model. The import tariff data are from the World Trade Organization statistical database, and nontariff barriers (NTBs) are calculated using trade costs minus import tariffs. The authors consider three different scenarios: (1) elimination of all trade costs between member countries, which includes both tariffs and all other NTBs; (2) elimination of import tariffs and half (50 percent) of NTBs between member countries; (3) elimination of import tariffs between member countries only. The simulated results show that U.S. welfare would increase by 0.02 percent under only tariff elimination. However, U.S. welfare would increase by 0.27 percent with tariff elimination and 50 percent NTB elimination, and by 0.67 percent with full tariff and NTB elimination.⁹⁴

In a 2013 study, Cheong and Tongzon use a dynamic GTAP model to compute the economic impact of a 12-country TPP on the United States and other countries.⁹⁵ The study uses the GTAP version 8 database, which it updates to 2012 by including the existing U.S. free trade agreements for the 2007–12 period. The starting point of the simulation is 2013, and the impact is estimated annually and cumulatively through 2027. According to the simulation results, there would be no change to U.S. GDP by 2027 (U.S. GDP would increase by zero percent). The authors state that the United States does not gain under the TPP12 because Japan is one of the most competitive countries in the world, and under TPP, the United States would have to share its privileged position in the other NAFTA markets with Japan.

There are a number of other studies which analyze the economy-wide impact of a hypothetical TPP, assuming a different set of countries as parties to the agreement compared with the final 12 TPP parties. For instance, in a 2014 article, Li uses a dynamic CGE model to simulate the effect of TPP on 9 rather than 12 TPP member countries, under the scenario of complete tariff elimination.⁹⁶ The results show that U.S. real income would increase by 1.46 percent. In their 2012 paper, Itakura and Lee use a dynamic GTAP model to analyze the impact of TPP and the Free Trade Area of the Asia-Pacific (FTAAP) on all member countries.⁹⁷ Their simulation ranges from a 9-member TPP agreement over the period 2013–16, to a 13-member TPP over the

⁹⁴ Their study also considers an alternative scenario in which Japan is not part of TPP. Those results are not reported in this chapter.

⁹⁵ Cheong and Tongzon, “Comparing the Economic Impact of the Trans-Pacific Partnership and Regional Comprehensive Economic Partnership,” 2013.

⁹⁶ Li, “A General Equilibrium Analysis of the TPP,” 2014.

⁹⁷ Itakura and Lee, “Welfare Changes and Spectral Adjustments of Asia-Pacific Countries,” 2012.

period 2017–22, to a TPP including the complete FTAAP membership over the period 2023–30. The study estimated that U.S. welfare would increase by 0.2 percent by 2020, 0.4 percent by 2025, and 0.8 percent by 2030. These studies are not discussed in detail in this chapter because their simulation scenarios are very different from the actual negotiated TPP, and hence are not comparable to the Commission findings.

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Chapter 3

Food and Agricultural Products

Introduction

The TPP Agreement would increase U.S. exports and provide significant benefits for the U.S. agriculture sector, primarily through new market access in Japan, Vietnam, Malaysia, New Zealand, and Brunei—countries where the United States does not currently have free trade agreements.⁹⁸ Under TPP, the Commission’s model estimates that by 2032, U.S. agricultural exports would be \$7.2 billion higher than the baseline in the absence of TPP, while U.S. agricultural imports would be \$2.7 billion higher than the baseline estimate. The increase in export opportunities as a result of preferential market access to new TPP markets would be larger than the effect of increased imports resulting from the additional market access the United States would provide to TPP partners, as the new access granted by the United States is primarily in products that are not import sensitive or that already have low tariffs. If TPP is adopted, total U.S. agricultural output would rise by \$10.0 billion (0.5 percent) by 2032, relative to the baseline; this would be associated with 0.5 percent higher U.S. agricultural employment.

Many U.S. agricultural industries are currently at a competitive disadvantage in certain TPP markets due to tariff preferences provided through agreements already in force, such as the Japan-Australia Economic Partnership. While in some limited cases a tariff advantage currently enjoyed by the United States through FTAs would be eliminated, most in the U.S. agriculture sector view TPP as a critical advance, because it will eliminate numerous tariff advantages enjoyed by other TPP partners and, in the judgment of many observers, will level the playing field for U.S. exporters.⁹⁹

⁹⁸ Agricultural products discussed in this chapter are those that fall within the description of products covered by the WTO Agreement on Agriculture, part XIII, article 21, plus fish and fish products. These products are classified in the World Customs Organization’s Harmonized System (HS) in HS chapters 1 to 24, except for certain additional products in other HS chapters, such as milk proteins (HS chapter 35), hides, skins, and furs (HS chapters 41 and 43), wool (HS chapter 51), and cotton (HS chapter 52).

⁹⁹ For example, Chilean and Australian wine receive preferential tariff treatment in Japan due to trade agreements that are already in place. Through these agreements, tariffs on wine from both Chile and Australia have been reduced to 4.6 percent and 11.3 percent, respectively, compared to the 15 percent tariff that U.S. bottled wine faces. USITC, hearing transcript, February 14, 2016, 390, 443 (testimony of Kevin Kester, National Cattleman’s Beef Association); USITC, hearing transcript, February 14, 2016, 415 (testimony of Devry Boughner Vorwerk, Cargill); Wine Institute, written submission to the USITC, February 12, 2016, 2.

The TPP's effects on the agricultural sector stem primarily from market access provisions, such as reduced or eliminated tariffs or tariff-rate quotas (TRQs).¹⁰⁰ In addition, TPP's chapter on sanitary and phytosanitary (SPS) measures builds on the WTO's SPS Agreement, establishing rules to ensure that SPS measures are science- and risk-based and not being used to unjustifiably restrict trade. TPP's technical barriers to trade (TBT) chapter also includes annexes on wine and distilled spirits and on formulas for food products that lay out sector-specific commitments on issues such as labeling and proprietary information.¹⁰¹ Another set of TPP provisions impacting agriculture are those related to modern biotechnology.¹⁰² TPP is the first U.S.-signed agreement to include provisions specific to trade in both biotechnology products and modern biotechnology products (box 3.1).

In addition to reducing tariffs and accepting new SPS, TBT, and biotechnology provisions, TPP countries would commit to eliminating export subsidies on agricultural products sold in TPP markets. TPP countries also would collaborate on developing disciplines on exports by state trading enterprises, as well as export credits and insurance programs in the WTO, and would limit the timeframes allowed for food export restrictions by TPP members intended to respond to concerns about food security. The TPP also outlines procedures for the administration of TRQs. In the area of geographical indications (GIs), new due-process and transparency requirements were particularly important to the U.S. dairy sector.

Box 3.1: TPP's Modern Biotechnology Provisions

TPP is the first U.S. agreement to include provisions specific to trade in both biotechnology products and modern biotechnology products.^a The biotechnology provisions would likely directly benefit U.S. agribusinesses engaged in modern biotechnology products and technology, as well as U.S. farmers and firms using that technology to grow and export U.S. agricultural goods. The agreement would commit parties to provide transparency on government measures related to modern biotechnology trade, including lists of authorized modern biotechnology products, summaries of any risk or safety assessments, and documentation required for completing authorization applications. It would provide information-sharing procedures for parties to follow when the low-level presence (LLP) of biotech material is detected in a food or agricultural shipment. TPP would also establish a working group on products of modern biotechnology under the Committee on Agricultural Trade that would encourage information exchange and cooperation on trade-related matters.^b

¹⁰⁰ Tariff-rate quotas permit a specific quantity of an imported product to enter at a reduced tariff rate. Quantities that enter in excess of the quota quantity for that period are subject to higher duty rates, typically the WTO most-favored-nation rate.

¹⁰¹ The TBT chapter also includes an "Organic Products" annex that encourages TPP partners to exchange information related to organics, participate in technical exchanges, cooperate on international organics guidelines and standards, and expeditiously consider requests for recognition or equivalency of technical regulations related to organics.

¹⁰² In TPP Chapter 2, discussion of modern biotechnology applies to agricultural goods, as well as fish and fish products, but not medicines and medical products. Agriculture is defined as those items under the Uruguay Round Agreement, Article 2 of the *WTO Agreement on Agriculture*.

The Commission received markedly divided views regarding these provisions. Proponents generally stated that they would foster transparency while reaffirming member governments' rights to adopt science-based measures necessary to ensure food safety and animal and plant health.^c Proponents are encouraged by the establishment of a working group, a process for sharing information on risks and standards of LLP, and procedures for parties to follow when the LLP of a biotech material is detected in a shipment of agricultural commodities or food products.^d

Other stakeholders expressed concerns about TPP's provisions on modern biotechnology as they relate to food safety, the right to regulate, biotech labeling, and unintended consequences to the environment and biological systems, among other issues. These stakeholders expressed the fear that under TPP, biotech companies could challenge laws requiring preapproval or testing for contamination, thereby threatening farmers raising crops without genetically modified/engineered organisms (non-GMO/GEO crops). Biotech companies might also challenge popular, consumer-driven laws for GMO/GEO labeling.^e Other critics believe that the agreement sets a low standard for the use of scientific data in risk assessment.^f

^a "Modern biotechnology" is a new term in trade policy. As defined by TPP Article 2.21, the definition includes the application of *in vitro* nucleic acid techniques, including recombinant deoxyribonucleic acid (rDNA) and direct injection of nucleic acid into cells or organelles, or the fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombinant barriers and that are not techniques used in traditional breeding and selection.

^b TPP Article 2.29:9.

^c ATAC for Trade in Processed Foods, *Trans-Pacific Partnership Agreement*, December 3, 2015; Cargill, written testimony to the USITC, January 15, 2016.

^d U.S. Grains Council and the National Corn Growers Association, written submission to the USITC, February 15, 2016.

^e Farm and Ranch Freedom Alliance, written submission to the USITC, February 10, 2016.

^f Institute for Agriculture and Trade Policy, written submission to the USITC, February 16, 2016.

Overall, the U.S. agricultural sector has been supportive of the agreement, and there is particular optimism about potential new access to the Japanese and Vietnamese markets.¹⁰³ This chapter provides information on the effect of the TPP on the U.S. food and agricultural industries, as indicated by the Commission model, the public hearing and written submissions, and communication with industry representatives. The chapter first provides a brief overview of current trade patterns with TPP partners before turning to a summary of the provisions contained in the agriculture chapter of the TPP Agreement. Model results are presented for the agriculture sector as a whole. The chapter then turns to an analysis of effects by sector, focusing on the sectors for which effects are anticipated to be most significant and including an analysis of model results by sector where possible.

¹⁰³ Statement by Bob Stallman, president, American Farm Bureau Federation, "Regarding AFBF Support for TPP," December 16, 2015; USITC, hearing transcript, February 14, 2016, 399–402 (testimony of Stephen M. Sothman, U.S. Hide, Skin, and Leather Association); USITC, hearing transcript, February 14, 2016, 405–6 (testimony of Michael Brown, National Chicken Council); USITC, hearing transcript, February 14, 2016, 411–15 (testimony of Devry Boughner Vorwerk, Cargill).

Trade Overview

The United States has well-established trade relationships in food and agricultural products with many of the TPP countries. This is in part due to existing FTAs that have fostered integration with Canada, Mexico, Australia, Chile, Peru, and Singapore. Additionally, in the case of trade under the North American Free Trade Agreement (NAFTA) with Canada and Mexico, which accounts for the large majority of the United States' existing trade in food and agricultural products with TPP countries, the effect of the trade agreement is enhanced by the logistical advantages inherent in trading with bordering countries. These advantages are especially pronounced for food and agricultural products, which sometimes have a short shelf life or require specialized logistics, such as refrigeration.

In general, the most important U.S. agricultural trade flows with TPP countries fall into one of four categories: longstanding trade with Canada and Mexico, characterized by close proximity and deep integration; trade with other existing FTA partners; trade with Japan, an important consumer of U.S. food and agricultural exports and a potential expansion market for U.S. exports; and trade with other new TPP partners, which is already expanding rapidly and is likely to continue to grow, especially with Vietnam and Malaysia. Trade between the United States and its existing FTA partners accounts for the majority of the TPP total, and has already been liberalized under the prior agreements. U.S. imports from and exports to these countries generally face low or zero tariffs and fewer nontariff measures than with non-FTA partners. As a result, the major existing trade patterns described in this section do not always correspond closely to the sectors that are profiled in the sector-level effects section that follows. The sector sections focus on changes that are likely to happen under the TPP Agreement as well as new trade opportunities that it would create.

Exports

TPP partner countries consistently accounted for just over 40 percent of U.S. food and agricultural product exports annually between 2011 and 2015 (table 3.1). NAFTA partner countries accounted for about two-thirds of this trade. Among all TPP partners, exports to Vietnam and Chile grew the most quickly during the period, with their value rising about

40 percent. This growth occurred despite Vietnam’s high tariffs on a number of food and agricultural products, suggesting that U.S. exports to Vietnam in this sector may see continued expansion under TPP as Vietnamese incomes continue to rise.¹⁰⁴

Table 3.1: U.S. exports of food and agricultural products to TPP partners and the world, by country, 2011–15, million dollars

Country	2011	2012	2013	2014	2015
Canada	21,267.8	22,939.5	23,751.6	24,419.1	23,033.6
Mexico	18,600.1	19,176.9	18,422.4	19,710.7	17,980.8
Japan	15,445.5	14,768.1	13,414.9	14,346.1	12,425.7
Vietnam	1,707.3	1,702.1	2,208.4	2,443.3	2,384.4
Australia	1,376.2	1,478.7	1,599.0	1,730.2	1,603.8
Peru	887.5	632.1	804.3	1,260.3	1,121.5
Chile	587.5	717.5	926.4	885.0	841.6
Malaysia	1,007.0	886.6	1,037.3	960.0	834.0
Singapore	707.0	756.9	813.2	871.8	746.4
New Zealand	336.9	408.5	429.3	492.7	429.1
Brunei	5.0	5.4	5.7	5.5	4.8
All TPP	61,927.7	63,472.3	63,412.5	67,124.6	61,405.8
World	147,722.9	151,409.6	154,175.4	160,422.2	142,884.6

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

The United States exported a wide variety of food and agricultural products to TPP partner countries between 2011 and 2015. The largest export product category was processed foods, primarily to Canada, followed by corn and pork (table 3.2). Japan and Mexico were the largest TPP importers of U.S. corn.¹⁰⁵ Japan was also the most important destination for U.S. pork exports, followed by Mexico and Canada. Japan is an important market for U.S. exports because it generally offers high prices to producers and demands agricultural products that the United States can competitively supply. Significant export flows to other TPP partners with which the United States has no FTA include soybeans to Malaysia and Vietnam. Exports of soybeans to Vietnam more than doubled in value between 2011 and 2015, despite relatively low prices in 2015, as rising incomes in Vietnam led to greater demand for animal feed and its components as inputs for its livestock sector.

¹⁰⁴ Vietnam has high tariffs (between 15 and 40 percent) on food products intended for direct consumption, such as processed foods, but low tariffs on agricultural inputs such as soybeans, which have been a major U.S. export to Vietnam (Arita and Dyck, *Vietnam's Agri-Food Sector*, October 2014). Certain Vietnamese tariffs and potential benefits from their reduction or elimination are highlighted as relevant for particular commodities in the sections below.

¹⁰⁵ Japan and Mexico have large livestock sectors, and U.S. corn is an input into these industries.

Table 3.2: U.S. exports of food and agricultural products to TPP partners, by product group, 2011–15, million dollars

Product group	2011	2012	2013	2014	2015
Processed foods	12,482.3	13,768.2	14,289.3	14,625.1	14,128.9
Corn	6,867.3	5,875.2	4,039.1	5,977.9	5,122.4
Pork	3,961.7	4,188.0	4,165.0	4,539.0	3,802.5
Beef	3,089.5	3,231.2	3,550.8	3,802.0	3,283.4
Fresh fruit	3,135.1	3,453.1	3,553.7	3,451.0	3,162.2
Soybeans	3,017.3	3,644.8	3,151.4	3,504.1	3,058.6
Dairy	2,382.4	2,533.6	3,033.7	3,441.6	2,640.3
Nuts	1,333.0	1,650.0	2,010.4	2,190.0	2,321.5
Fresh vegetables	2,187.0	2,221.0	2,367.8	2,341.9	2,270.8
Seafood	1,994.2	1,988.6	2,001.1	2,145.2	2,160.9
Poultry	1,566.0	1,814.1	1,980.9	2,084.5	1,821.1
Alcoholic beverages	1,425.1	1,672.8	1,724.0	1,771.8	1,750.9
Wheat	3,151.3	2,480.1	2,467.9	2,204.8	1,695.6
Soybean meal	1,216.0	1,418.6	1,496.6	1,703.4	1,442.7
Other sweeteners	1,205.8	1,403.0	1,273.0	1,156.8	1,167.0
Cotton	1,578.4	877.2	1,051.5	1,013.2	1,159.2
Non-alcoholic beverages	821.0	904.4	983.0	1,035.0	1,103.7
Ethanol	954.9	976.2	995.4	1,019.1	810.2
Rice	847.3	789.5	807.8	784.7	752.8
All other	8,712.3	8,582.8	8,470.1	8,333.4	7,751.2
Total	61,927.7	63,472.3	63,412.5	67,124.6	61,405.8

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Imports

On average, TPP partner countries supplied 46.7 percent of total U.S. imports of food and agricultural products between 2011 and 2015 (table 3.3). Most of these imports were from Canada and Mexico, which together accounted for almost three-fourths of U.S. imports from TPP countries during the 2011–15 period. In addition to preferences under NAFTA, Canada and Mexico enjoy logistical advantages in shipping products to the United States due to their proximity, and the food supply chains of the three countries have become closely integrated as a result.¹⁰⁶

While trade with NAFTA partners accounted for a stable majority share of U.S. imports in 2011–15, imports from several of the other TPP countries grew quickly during this period. The value of imports of food and agricultural products from existing FTA partners Chile and Australia grew by 30 and 80 percent, respectively, between 2011 and 2015. The value of imports from Vietnam

¹⁰⁶ Zahniser et al., *NAFTA at 20*, February 2015. After accounting for inflation, NAFTA implementation resulted in a 233 percent increase between 1993 and 2013 in intraregional agricultural trade between the United States, Canada, and Mexico, with increased trade particularly pronounced in three sectors: grains and oilseeds, fruits and vegetables, and processed foods.

and New Zealand, countries with which the United States does not yet have an FTA, grew by 38 percent and 42 percent, respectively, over the same period (table 3.3).

Table 3.3: U.S. imports of food and agricultural products from TPP partners and the world, by country, 2011–15, million dollars

Country	2011	2012	2013	2014	2015
Canada	21,998.8	23,324.4	25,065.3	26,504.0	25,331.2
Mexico	17,110.1	17,698.3	19,051.6	20,938.8	22,757.4
Australia	2,406.1	2,709.0	2,789.4	3,937.1	4,329.7
Chile	3,291.2	3,513.2	4,284.9	4,471.3	4,294.1
Vietnam	2,273.7	2,421.4	2,763.5	3,355.8	3,140.4
New Zealand	2,118.7	2,360.5	2,313.0	2,752.7	3,011.7
Peru	1,524.7	1,477.6	1,552.4	1,917.0	1,958.0
Malaysia	2,593.4	2,075.3	1,689.9	1,735.7	1,290.6
Japan	782.1	808.9	799.2	817.1	852.9
Singapore	139.2	121.2	111.5	113.3	113.7
Brunei	0.0	0.0	1.8	1.7	0.3
All TPP	54,237.9	56,509.9	60,422.5	66,544.4	67,079.9
World	118,713.0	125,466.5	129,081.6	138,946.7	139,876.8

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Processed foods, seafood, fresh fruit and vegetables, beef, and alcoholic beverages accounted for nearly 70 percent of the total value of food and agricultural products that the United States imported from TPP countries in 2015 (table 3.4). Most processed foods imports came from Canada, followed by Mexico. Canada was also the largest supplier of seafood, followed by Chile and Vietnam. Fresh fruit was primarily sourced from Mexico and, to a lesser extent, Chile. Fresh vegetables were predominantly supplied by Mexico, with Canada a distant second. Beef imports came from Australia, Canada, and New Zealand, and alcoholic beverages were largely imported from Mexico.

Table 3.4: U.S. imports of food and agricultural products from TPP partners, by product group, 2011–15, million dollars

Product group	2011	2012	2013	2014	2015
Processed foods	11,593.7	11,788.4	12,326.6	12,832.9	13,453.0
Seafood	5,908.5	6,061.0	6,776.0	7,671.8	7,226.2
Fresh fruit	4,309.8	4,644.0	5,402.2	6,230.9	7,018.3
Fresh vegetables	5,522.2	5,554.2	6,348.3	6,445.3	6,584.0
Beef	2,754.6	3,302.5	3,351.5	5,133.6	6,064.9
Alcoholic beverages	4,287.3	4,558.1	4,737.1	5,470.8	5,783.9
Live animals	1,971.1	2,274.9	2,281.6	3,123.0	2,774.1
Other vegetable oils	2,125.5	2,032.9	1,777.5	1,792.7	1,692.9
Other sweeteners	1,342.1	1,430.7	1,542.8	1,637.6	1,611.0
Nuts	821.2	862.7	981.2	1,265.4	1,543.4
Pork	987.2	965.4	1,087.4	1,303.2	1,157.2
Dairy	821.8	978.9	859.5	1,019.4	1,047.9
Sugar	1,391.5	992.7	1,150.4	830.9	872.8
Palm oil	1,637.4	1,309.6	1,067.4	842.1	628.0
All other	8,764.0	9,754.0	10,733.2	10,944.8	9,622.1
Total	54,237.9	56,509.9	60,422.5	66,544.4	67,079.9

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Among TPP countries that are not U.S. FTA partners, the largest product flows were of beef and dairy products from New Zealand, seafood from Vietnam, and palm oil from Malaysia. New Zealand has generally received lower tariff rates than some of its competitors in the U.S. market for beef and dairy products because the amounts it has shipped have been below its TRQ limits.¹⁰⁷ Palm oil and seafood imports, meanwhile, are a result of low or zero U.S. most-favored-nation (MFN) rates that benefit globally competitive producers in Malaysia and Vietnam, respectively.¹⁰⁸

Overview of Agricultural Market Access Provisions

The United States and its 11 TPP partner countries would provide expanded agricultural market access through reduced or eliminated tariffs and expanded TRQs. The United States would allow limited new access for sensitive products, but would gain significant new access to previously protected markets in export-competitive sectors, including beef, pork, and dairy. While other provisions in TPP, such as those related to SPS (examined in chapter 6) and biotechnology (below), would likely affect trade in agricultural goods, liberalization through

¹⁰⁷ The exception is butter and butter oil, where U.S. TRQ limits are more restrictive for New Zealand. In general, New Zealand has oriented its dairy industry toward serving Asian markets rather than the United States; its exports to the United States are a fairly small share of its overall exports.

¹⁰⁸ Palm oil imports are duty free, and most seafood products have either no tariffs or very low tariffs.

expanded TRQs and tariff reductions would have the most immediate and direct impact on U.S. imports and exports.

The staging and speed of tariff liberalization provided by TPP partners varies depending on the product and country, but many tariffs that have historically been trade prohibitive would be eliminated. These tariff reductions would provide significant export opportunities for U.S. products, particularly in Japan and Vietnam, where the agricultural sectors are currently protected by high tariffs. However, not all tariffs would be eliminated. For sensitive products, such as rice and dairy, TPP would establish 13 new country-specific TRQs for the United States in Japan and 69 TRQs for all TPP countries in Canada, Vietnam, Japan, and Malaysia. Despite significant new market access for U.S. agricultural exporters, export growth in certain sectors, such as horticulture and meats, would still likely be restricted by SPS measures in particular markets.

Most U.S. agricultural imports from TPP partners either already enter duty-free or would do so as soon as the agreement enters into force.¹⁰⁹ The United States would eliminate tariffs upon TPP's entry into force mainly on non-sensitive agricultural sectors where tariffs are currently low, such as grains, oilseeds, and horticultural products, as well as on imported products that are not competitively produced in the partner country. For products that are sensitive to competition from imports, many tariffs will be eliminated gradually. Alternatively, new TRQs will be established for some goods, such as sugar and certain dairy products. The United States will create 37 new TRQs under TPP (table 3.5).

¹⁰⁹ Many agricultural products already enter the United States duty free because either the MFN rate is free or the tariff has already been eliminated under existing FTAs with TPP partners (i.e., Canada, Mexico, Chile, Australia, Peru, and Singapore).

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Table 3.5: U.S. tariff rate quotas to TPP members, metric tons (mt) except where noted

Quota code	Country	Quota name	Adm in	Year 1	Final year	Number of years	Permanent	Growth	Notes
CSQ-US1	Australia	Raw sugar	FCFS	60,500	60,500	na	y		Provides 14.7 percent of any volumes of raw sugar allocated above WTO commitments.
CSQ-US2	Australia	Raw and refined sugar and sugar containing products	FCFS	4,500	4,500	na	y		
CSQ-US3	Australia	Creams and ice cream (1,000 liters)	FCFS	10,356.5	na	na	y	6% pa	Reduced 3,880,500 liters from U.S.-AUS FTA. Perpetual growth. Ice cream duty free after 15 years.
CSQ-US4	Australia	Condensed milk	FCFS	695	na	na	y	6% pa	Reduced 5,000 mt from U.S.-AUS FTA. Perpetual growth.
CSQ-US5	Australia	Butter	FCFS	2,076	na	na	y	3% pa	No change from U.S.-AUS FTA. Perpetual growth.
CSQ-US6	Australia	Milk powders	FCFS	6,296	na	na	y	2% pa	Perpetual growth declines from U.S.-AUS FTA, from 4% to 2%.
CSQ-US7	Australia	Other dairy products	FCFS	2,847	na	na	y	6% pa	Duty-free infant formula volumes excluded starting year 15. Perpetual growth.
CSQ-US8	Australia	American and cheddar cheeses	FCFS	6,230	na	na	y	3% pa	Increased 4,500 mt from U.S.-AUS FTA. Perpetual growth.
CSQ-US9	Australia	Swiss-type, European-type and other cheeses	FCFS	14,762	na	na	y	5% pa	Increased 4,500 mt from U.S.-AUS FTA. Perpetual growth.
CSQ-US10	Canada	Cheese	FCFS	3,000	20,486	19	y	Fixed at yr 19	High value cheese packaged 10 kgs or less is duty-free and excluded from TRQ in year 10.
CSQ-US11	Canada	Skim milk powder	FCFS	2,000	17,622	19	y	Fixed at yr 19	
CSQ-US12	Canada	Whole milk powder	FCFS	667	4,552	19	y	Fixed at yr 19	
CSQ-US13	Canada	Dried yogurt, sour cream, whey, and products of milk constituents	FCFS	2,083	14,226	19	y	Fixed at yr 19	
CSQ-US14	Canada	Concentrated milk	FCFS	333	2,587	19	y	Fixed at yr 19	
CSQ-US15	Canada	Cream, sour cream, ice cream, and milk beverages (liters)	FCFS	1,416,667	9,673,793	19	y	Fixed at yr 19	
CSQ-US16	Canada	Butter and butter substitutes	FCFS	750	5,121	19	y	Fixed at yr 19	Package size requirement (over 55 pounds or more) for most of the TRQ volume.
CSQ-US17	Canada	Other dairy products	FCFS	1,250	8,536	19	y	Fixed at yr 19	Starting year 5, HS 1517.90.60 is duty free and volumes excluded from the TRQ.

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Quota code	Country	Quota name	Admin	Year 1	Final year	Number of years	Permanent	Growth	Notes
CSQ-US18	Canada	Sugar	FCFS	9,600	9,600	na	y		Provides 20 percent of any volumes of refined sugar allocated above WTO commitments.
CSQ-US19	Canada	Sugar-containing products	FCFS	9,600	9,600	na	y		
CSQ-US20	Chile	Sugar and sugar containing products	FCFS	0	0	na	y		Annual CSQ volumes are equal to Chile's trade surplus in these products. The SCQ adopts the access provided in U.S.-Chile FTA. The volume is currently zero because Chile traditionally runs a trade deficit in these products.
CSQ-US21	Japan	Beef	FCFS	3,000	6,250	15	n	250 mt pa	Unlimited in year 15.
CSQ-US22	Japan	Sugar and sugar containing products	FCFS	100	100	na	y		
CSQ-US23	Malaysia	Raw and refined sugar and sugar containing products	FCFS	500	500	na	y		
CSQ-US24	New Zealand	Cheese	FCFS	10,000	na	na	y	3% pa	Starting year 20, HS 0406.90.97 volumes excluded from the TRQ and duty-free.
CSQ-US25	New Zealand	Skim milk powder	FCFS	1,000	1,702	19	n	na	Unlimited duty-free access starting year 20.
CSQ-US26	New Zealand	Whole milk powder	FCFS	3,000	8,996	29	n		Unlimited duty free access starting year 30.
CSQ-US27	New Zealand	Concentrated milk	FCFS	1,000	na	na	y	3% pa	Perpetual growth.
CSQ-US28	New Zealand	Creams (liters)	FCFS	8,000,000	na	na	y	6% pa	Perpetual growth.
CSQ-US29	New Zealand	Butter and butter substitutes	FCFS	4,000	na	na	y	3% pa	Perpetual growth. 3,000 mt allocated to AMF, phased out starting year 15.
CSQ-US30	New Zealand	Organic butter	FCFS	500	na	na	y	3% pa	Perpetual growth.
CSQ-US31	New Zealand	Other dairy products	FCFS	5,500	na	na	y	5% pa	Perpetual growth.
CSQ-US32	Peru	Cheese	FCFS	5,527	13,684	9	n		Unlimited volumes starting in year 10.
CSQ-US33	Peru	Condensed and evaporated milk	FCFS	13,264	32,841	9	n		Unlimited volumes starting in year 10.
CSQ-US34	Peru	Processed dairy products	FCFS	3,897	6,905	7	n		Unlimited volumes starting in year 8.

Chapter 3: Food and Agricultural Products

Quota code	Country	Quota name	Admin	Year 1	Final year	Number of years	Permanent	Growth	Notes
CSQ – US35	Peru	Raw and refined sugar and sugar containing products	FCFS	10,260	11,520	na	y	180 mt pa	This CSQ adopts the access provided in U.S.-Peru FTA and does not provide new access. CSQ volume can be no larger than Peru's trade surplus in these products.
CSQ – US36	Peru	Raw and refined sugar and sugar containing products	FCFS	2,000	2,000	na	y		This CSQ adopts the access provided in U.S.-Peru FTA and does not provide new access.
CSQ – US37	Vietnam	Raw and refined sugar and sugar containing products	FCFS	1,500	1,500	na	y		

Source TPP Agreement, USTR, December 15, 2015.

Impact of TPP on U.S. Agriculture

As discussed in chapter 2, the modeling analysis begins by generating a projection of the global economy through 2032, with detailed projections for the 12 countries in the TPP and for major non-TPP trading partners. This projection provides a baseline against which the effects of policy changes from the TPP Agreement can be compared. The modeling includes three types of liberalization: removing or reducing tariffs and expanding TRQs, removing certain nontariff measures (NTMs) on goods and on traded (cross-border) services, and investment liberalizations that improve market access for U.S.-owned foreign affiliates. For agricultural sectors, investment liberalizations were generally not considered due to the prevalence of practical barriers (such as the varying suitability of the climate in TPP countries to certain crops) that limit what products can be produced on agricultural land. In some cases, there are also legal restrictions that limit the availability of land for agricultural investments.

Estimates of the effects of liberalizing trade in agriculture relative to the baseline changes expected to take place through 2032 are presented below. While the model simulates the dynamic market changes in the economy through 2032, the model also imposes important limitations on the growth of individual economies. In particular, it ensures that growth or contraction across all sectors within a country generates aggregate output equal to the productive capacity of that economy. As a result, output and employment in sectors with relatively less liberalization in the TPP may decline as sectors with greater growth opportunities expand. Specifically for agriculture, increases in the production of certain crops or livestock may crowd out, or reduce, production of other products that rely on similar types of land or other agricultural inputs.

The Commission's model estimates a significant increase in total trade in agriculture products and a slight increase in the U.S. agricultural output and employment through 2032, as compared to the baseline changes in the absence of TPP (table 3.6). If TPP is adopted, the model estimates that U.S. agricultural exports would increase by \$7.2 billion (2.6 percent) relative to the baseline, while total U.S. agricultural imports would increase by \$2.7 billion (1.5 percent). According to the model, U.S. agricultural output and employment would each increase by 0.5 percent relative to the baseline. Model results for selected food and agricultural sectors are presented below.

Table 3.6: Estimated effects of TPP on U.S. food and agricultural output, employment, and trade: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Agriculture and food (total)	7,226.9	2.6	2,733.9	1.5	10,014.9	0.5	0.5
Selected industry sectors:							
Sugar, sweeteners, and SCP ^a	129.6	4.3	132.1	2.4	517.7	0.4	0.4
Dairy products	1,845.5	18.0	348.6	10.3	1,839.3	1.3	1.1
Beef meat	876.1	8.4	419.0	5.7	614.6	0.5	0.4
Pork meat products	219.3	1.9	94.4	4.4	180.3	0.3	0.3
Poultry meat products	173.9	1.3	-16.6	-3.6	265.8	0.6	0.6
Rice	-12.5	-0.3	15.3	1.6	-17.7	-0.1	0.0
Wheat	-1.5	0.0	18.2	1.5	-7.9	0.0	-0.7
Corn grain	-31.3	-0.1	2.5	1.3	206.7	0.3	0.4
Processed foods	1,540.0	3.8	427.2	1.1	2,396.5	0.8	0.7
Fresh fruit, vegetables, and nuts	574.9	2.0	119.2	0.5	172.1	0.2	0.3
Seafood	74.1	2.2	231.9	0.9	-51.5	-0.2	-0.2

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

^a Sugar-containing products.

Sector-specific Analysis

The impact of the additional market access provided by TPP would vary by product due to the variety of factors shaping trade in those sectors, such as tariffs that restrict trade, an uneven playing field with other TPP countries that already have preferential access, or SPS measures that currently restrict trade regardless of tariff levels. The sectors analyzed below include products for which concessions are significant, products for which the United States is export competitive, and products for which demand is strong and/or growing. Because TPP is expected to benefit U.S. agriculture overall and in particular to increase exports, this section primarily focuses on exports for most sectors. In contrast, box 3.2 describes the effects of TPP on U.S. sugar imports.

Box 3.2: Access to the U.S. Sugar Market in TPP

Previous U.S. FTAs have provided varying degrees of access to the U.S. sugar market. Through TPP, the United States would provide 86,300 metric tons (mt) (or less than 1 percent of annual U.S. consumption) of access for raw sugar, refined sugar, and sugar-containing products through seven new country-specific TRQs. The United States would also eliminate certain tariffs on sugar and sugar-containing products. While the U.S.-Australia FTA provided no additional access to sugar for the U.S. market, Australia would receive more than 75 percent of the new access under TPP. In addition, in years when the U.S. Department of Agriculture (USDA) determines that there is a need to import additional raw sugar above the WTO minimum allocations, the United States would commit to permit Australia to supply 14.7 percent of any additional raw sugar that needs to be imported. Canada would also be allocated 20 percent of any additional refined sugar import needs.

The additional market access is unlikely to result in an overall increase of sugar in the U.S. market, because the total supply of sugar is restricted by the U.S. sugar program. Through a combination of measures—WTO and FTA TRQs for imported sugar, export limits on Mexican sugar established in line with the 2014 countervailing duty investigation suspension agreement, and marketing allotments for domestic producers—the total supply of sugar in the U.S. market is restricted to the country’s estimated annual total sugar use, as calculated by USDA. This program will not change with the adoption of TPP. Additional raw cane sugar from Australia and other TPP TRQ holders is likely to merely displace supplies from Mexico. In addition, because tariffs were eliminated only on sugar or sugar-containing products from countries that are not significant producers or exporters, the impact on the U.S. market is likely to be minimal.

The Commission received divided views on the market access for sugar provided in TPP. For example, the American Sugar Alliance preferred that no additional market access be provided through TPP, but has stated that it believes that the final agreement is acceptable because it does not undermine the U.S. sugar program or provide the excessive market access volumes initially requested by TPP partner countries.^a On the other hand, while the Sweeteners Users Association (SUA) generally supports trade agreements that move toward markets that, in its view, distort trade less, it stated that the access provided through TPP would be negligible and does little to liberalize sugar trade. SUA also stated that additional sugar access beyond that provided by TPP would have helped ensure more reasonably priced sugar and reliable supplies of raw sugar in the U.S. market for domestic cane sugar refiners that are operating at low levels of capacity utilization.^b

^a ASA, written submission to the USITC, February 12, 2016, 1–9.

^b USITC, hearing transcript, January 14, 2016, 426–31 (testimony of Tom Earley); SUA, written submission to USITC, January 22, 2016.

As noted, TPP would have an overall positive effect on U.S. agricultural trade, with exports to the world increasing more than imports relative to projected baseline levels of trade in 2032. The expansion in total U.S. exports would range widely across products (table 3.7). If TPP were enacted, U.S. exports of food and agricultural products to TPP countries would expand more by 2032 than U.S. exports of these products to the world: in that year, such exports to TPP countries would be \$11.1 billion higher than without TPP, compared to a \$7.2 billion increase in exports to all countries. This result reflects trade diversion of some U.S. exports from non-TPP members to the TPP region. By sector, the largest increases would be beef exports to Japan (\$840 million), dairy exports to Canada (\$1.2 billion) and Japan (\$534 million), processed foods to Japan (\$1.2 billion), and fresh fruits, vegetables, and nuts to Vietnam (\$721 million). By country, agricultural exports to Japan and Vietnam would account for much of the growth, increasing by \$3.6 billion and \$3.3 billion, respectively.

Chapter 3: Impact on Agricultural Sectors

Table 3.7: Estimated effects of TPP on U.S. food and agricultural product exports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Other existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Agriculture and food (total)	11,115.2	10.7	2,920.9	4.6	243.6	2.2	7,950.6	26.8	-3,888.3	-2.2	7,226.9	2.6
Selected industry sectors:												
Sugar, sweeteners, and SCP ^a	129.6	5.9	46.0	2.5	0.0	0.0	83.5	39.0	0.0	0.0	129.6	4.3
Dairy products	1,973.7	37.0	1,200.3	40.4	18.3	2.3	755.1	48.4	-128.1	-2.6	1,845.5	18.0
Beef meat	995.4	18.4	12.8	0.4	10.1	3.3	972.6	61.2	-119.3	-2.4	876.1	8.4
Pork meat products	386.8	5.0	116.4	2.8	16.0	2.0	254.4	9.2	-167.5	-4.2	219.3	1.9
Poultry meat products	588.4	15.7	150.6	5.7	105.6	17.5	332.2	70.2	-414.5	-4.2	173.9	1.3
Rice	81.5	6.9	-8.5	-1.1	3.7	2.8	86.3	27.6	-94.0	-3.0	-12.5	-0.3
Wheat	-46.5	-1.3	43.9	3.1	32.9	4.9	-123.3	-7.9	45.1	0.5	-1.5	0.0
Corn grain	133.2	1.4	57.5	1.3	-6.1	-0.4	81.8	2.4	-164.5	-1.3	-31.3	-0.1
Processed foods	1,915.9	9.1	96.8	0.7	36.2	1.1	1,782.9	39.3	-375.9	-1.9	1,540.0	3.8
Fresh fruit, vegetables, and nuts	990.3	8.3	-1.3	0.0	-3.2	-0.3	994.8	30.8	-415.4	-2.4	574.9	2.0
Seafood	115.7	8.7	0.3	0.0	0.5	1.4	114.9	26.5	-41.6	-2.0	74.1	2.2

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

^a Sugar-containing products.

Commission model results estimate that U.S. agricultural imports would increase by an additional \$2.7 billion (or 1.5 percent) by 2032, as compared to the baseline projection without TPP (table 3.8). Among the most significant import changes are increases in beef meat imports from New Zealand (\$437 million), processed foods from Mexico (\$400 million), and dairy imports from New Zealand (\$253 million) and Canada (\$119 million).

Table 3.8: Estimated effects of TPP on U.S. food and agricultural product imports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Other existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Agriculture and food (total)	2,023.6	2.1	323.8	0.5	207.6	1.4	1,492.3	12.8	710.4	0.9	2,733.9	1.5
Selected industry sectors:												
Sugar, sweeteners, and SCP ^a	132.1	3.6	74.8	2.2	57.3	30.6	0.0	0.0	0.0	0.0	132.1	2.4
Dairy products	369.1	31.2	114.6	46.2	0.1	0.2	254.3	29.8	-20.4	-0.9	348.6	10.3
Beef meat	437.9	6.4	-11.2	-0.3	6.8	0.4	442.3	27.7	-18.9	-4.4	419.0	5.7
Pork meat products	93.8	6.2	93.6	6.2	0.1	1.0	0.0	10.3	0.6	0.1	94.4	4.4
Poultry meat products	-18.9	-4.2	33.2	10.8	-52.2	-36.9	0.0	39.1	2.3	28.1	-16.6	-3.6
Rice	10.5	14.9	0.7	4.4	0.4	1.7	9.4	28.7	4.9	0.6	15.3	1.6
Wheat	19.1	1.6	19.1	1.6	0.0	4.4	0.0	11.1	-0.9	-3.3	18.2	1.5
Corn grain	2.1	1.5	2.0	1.5	0.1	1.6	0.0	7.5	0.4	0.7	2.5	1.3
Processed foods	-202.7	-1.0	-587.8	-3.5	111.3	5.7	273.7	23.2	629.9	3.3	427.2	1.1
Fresh fruit, vegetables, and nuts	132.7	0.7	52.9	0.4	16.1	0.4	63.6	6.4	-13.5	-0.3	119.2	0.5
Seafood	332.2	2.9	70.5	1.4	10.9	0.3	250.8	9.0	-100.3	-0.7	231.9	0.9

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

^a Sugar-containing products.

Dairy Products¹¹⁰

Assessment

In the aggregate, the Commission’s results show that the TPP Agreement would have a positive effect on U.S. dairy exports and a positive but more limited impact on U.S. dairy imports. Opportunities for added U.S. exports are likely in Canada for milk and milk powders, whey, butter and butter oil,¹¹¹ yogurt and other soft dairy products, infant formula, and cheese for ingredient use; in Japan, for cheese, whey, skim milk powder, and lactose; and in Vietnam, primarily for milk powders. But U.S. exporters would still face restrictive TRQs for certain products in large TPP markets such as Japan and Canada that would limit the growth of U.S. exports even after full TPP implementation.

On the import side, dairy producers in Australia, Canada, and New Zealand would be granted additional access to the U.S. market under TPP with new dairy TRQs.¹¹² With two exceptions—butter and butter oil, and whole milk powder—imported dairy products no longer routinely fill U.S. import TRQs.¹¹³ New TRQ volumes under TPP would not likely be filled, nor would TPP members be expected to significantly increase exports to the United States from current volumes. Canada and Peru are net importers of dairy products; exports to the United States from these two TPP members would be limited to niche products, such as artisan cheeses or condensed and evaporated milk. For reasons explained in more detail below, net dairy exporters Australia and New Zealand are also unlikely to ship significantly more dairy products to the United States if TPP is implemented. Overall, additional market access granted to TPP members in the U.S. market, largely through expanded TRQs, is unlikely to result in large volumes of additional dairy imports, except for butter and butter oil.

The Commission’s model estimates that U.S. producers’ output of dairy products would be about 1.3 percent higher in 2032 if TPP is adopted, compared to the baseline projection. U.S.

¹¹⁰ Dairy products include HS 0401 (milk and cream), 0402.10 (nonfat dry milk/skim milk powder), 0402.21 and 0402.29 (dry whole milk/whole milk powder), 0402.91 (evaporated milk), 0402.99 (sweetened condensed milk), 0403.10 (yogurt), 0403.90 (buttermilk), 0404.10 (whey and modified whey), 0404.90 (milk protein concentrates), 0405 (butter, dairy spreads, and butter fats and oils), 0406 (cheese), 1702.11 and 1702.19 (lactose), 1901.10 (infant formula), 2105.00 (ice cream), 3501.10 (casein), 3501.90 (caseinates), and 3502.20 (milk albumin).

¹¹¹ Butter oil is also known as anhydrous milkfat or anhydrous butter oil.

¹¹² Peru kept the same U.S. import TRQ volumes under TPP that applied under the U.S.-Peru TPA.

¹¹³ U.S. dairy import TRQs are typically only partially filled, with fill rates below 80 percent. The TRQs do not fill for many reasons. Exporters such as New Zealand produce dairy goods more suited to China and other Asian markets, such as whole milk powder, a product not demanded in high volumes in the United States. U.S. producers are also highly competitive in other products, such as skim milk powder, cheddar cheese, and whey; they price goods below the prices of competitive imports once transportation costs are taken into account. Even when producing dairy products in high demand in the United States, large volume exporter Australia does not fill U.S. TRQs with duty-free access for in-quota volumes. With its dairy market largely integrated with Australia’s, New Zealand exporters are also unlikely to fill TRQ volumes in the near term.

employment in the sector would grow roughly 1.1 percent relative to the baseline over the same period.¹¹⁴ If TPP is implemented, the model estimates that U.S. dairy exports to TPP member countries would increase \$2.0 billion relative to the baseline.¹¹⁵ Nearly all of the increase would be exported to Canada (\$1.2 billion) and Japan (\$534 million). Because of the close proximity of northern U.S. dairy-producing regions to Canadian consumers, U.S. dairy exports would capture most of Canada's additional TRQ access granted under TPP. The product mix of U.S. exports would likely be diverse—milk, cream, butter and butter oil, whey products, yogurt, cheese and cheese ingredients, and infant formula. The product mix of U.S. dairy exports to Japan would be more limited, primarily whey products, lactose, and cheese.

The Commission's models estimate that dairy imports from all TPP members would increase \$369 million after full implementation.¹¹⁶ All of the increased imports would come from New Zealand (\$253 million) and Canada (\$119 million). New Zealand's product mix would largely be high-protein powders, whey products, butter and butter oil, and casein. Canada's increased shipments to the United States would largely be whey products, and soft dairy products such as yogurt, ice cream, and buttermilk.¹¹⁷

U.S. dairy industry representatives noted two chapters in TPP related to NTMs as particularly important—the SPS chapter and the intellectual property chapter's geographical indication (GI) provisions. They generally stated that the TPP's SPS chapter goes beyond the SPS provisions of the WTO and would hold TPP members to higher standards for risk analysis and scientific data when imposing SPS measures on dairy imports. In addition, cooperative technical consultations would require members to discuss SPS problems quickly and provide recourse through TPP dispute settlement procedures. The TPP's GI provisions are viewed by the U.S. dairy industry as an important tool in establishing intellectual property rights for GIs and resolving future disputes among TPP members.¹¹⁸

¹¹⁴ While most TPP concessions would be phased in over 15 years or less, certain dairy concessions are phased in over a longer period. Thus, the trade effects for dairy products are slightly understated.

¹¹⁵ Commission model results indicate that trade diversion in U.S. exports would be limited. Total U.S. dairy exports would be about \$1.8 billion higher than the baseline estimate. U.S. dairy exports to TPP members would be about \$2.0 billion higher than the baseline and trade diversion from other U.S. trading partners would total -\$128 million, including from China, Indonesia, and Korea.

¹¹⁶ Commission modeling indicates that trade diversion in U.S. imports would be limited. Total U.S. dairy imports would be about \$349 million higher than the baseline. U.S. dairy imports from TPP members would be \$369 million higher and trade diversion from other U.S. trading partners would total -\$20 million.

¹¹⁷ The model does not estimate increases in U.S. imports from Australia.

¹¹⁸ National Milk Producers Federation and the U.S. Dairy Export Council, written submission to the USITC, December 22, 2015, 6-7.

Overview of U.S. Trade with TPP Partners

U.S. Imports

The United States imports small volumes of dairy products relative to domestic production, and roughly 35–40 percent come from TPP member countries (table 3.9).¹¹⁹ Most U.S. imports from TPP partners are high-value dairy powders from New Zealand, primarily milk protein concentrates and casein. NAFTA members Canada and Mexico export a wider variety of dairy products to the United States than other suppliers, including products (e.g., creams and yogurt) with high water content and, therefore, higher shipping costs than other dairy products.

Table 3.9: U.S. imports of dairy products from world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S imports from world	U.S. imports from TPP countries			
		All	New partners	NAFTA	Other existing FTA partners
Dairy products: total	2,667.1	975.6	683.1	187.7	104.8
Selected subproducts					
High value dairy powders (including Infant formula) ^a	1,063.4	669.4	615.0	6.8	47.5
Cheese ^b	1,237.0	89.4	27.7	47.0	14.7
Whey, modified whey, and lactose ^c	52.2	38.6	9.1	27.9	1.6
Butter, butter oils, and dairy spreads ^d	98.9	42.0	19.5	17.0	5.5

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

^a HS 0404.90, 1901.10, 3501.10, 3501.90, 3502.20.

^b HS 0406.

^c HS 0404.10, 1702.11, 1702.19.

^d HS 0405.10, 0405.20, 0405.90.

Market access for foreign dairy suppliers to the United States is subject to WTO import TRQs with prohibitively high over-quota tariffs. When the TRQs fill, imports represent roughly 1–7 percent of U.S. consumption, by quantity, on items such as nonfat dry milk/skim milk powder, cheddar cheese, or butter.¹²⁰ Other less-traded dairy products, such as milk protein concentrates (HS 0404.90), casein (HS 3501.10), and milk albumin (HS 3502.20), are not subject to TRQs and face low U.S. import tariffs even without the tariff reductions negotiated under TPP.

In recent years, U.S. dairy import TRQs have not filled.¹²¹ This is because U.S. prices for dairy products are generally the same as or lower than prices for similar goods in Asia (e.g., China and countries in the Association of Southeast Asian Nations, or ASEAN) and Oceania (Australia and

¹¹⁹ GTIS, Global Trade Atlas database (accessed February 4, 2016).

¹²⁰ USDA, FAS, *Dairy: World Markets and Trade*, December 2015; Dobson and Jesse, “Opening Up Global Dairy Trade,” April 2003, 4.

¹²¹ USDA, FAS, *Dairy Monthly Imports*, January 2016; USDA, FAS, *Dairy Monthly Imports*, January 2015; USDA, FAS, *Dairy Monthly Imports*, January 2014.

New Zealand). This is particularly true when transportation costs to the United States are taken into account.¹²² A recent exception is high U.S. prices for butter and butter oil (also known as anhydrous milkfat, or butter oil) during the hot summers of 2014 and 2015. Domestic prices spiked as U.S. creameries shipped their butterfat to ice cream manufacturers for higher profit margins rather than produce butter. As a result, the U.S. TRQs for imported butter and butter oil effectively filled in both years.¹²³

U.S. Exports

The United States exports about half of its traded dairy products to TPP member countries. Roughly 60 percent (\$1.9 billion) of U.S. dairy exports to TPP member countries are shipped to NAFTA countries, primarily skim milk powder (nonfat dry milk) and cheese. U.S. exports to new TPP partners are fairly evenly split by value between Japan, Vietnam, Malaysia, and New Zealand, but the product mix to the four countries is very different. Japan consumes large volumes of U.S. cheese, Vietnam and Malaysia import U.S. skim milk powder and whey, and New Zealand imports U.S. lactose as a manufactured food additive (table 3.10).

Table 3.10: U.S. exports of dairy products to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S exports to world	U.S exports to TPP countries			Other existing FTA partners
		All	New partners	NAFTA	
Dairy products: total	6,040.6	3,038.5	817.6	1,865.9	355.0
Selected subproducts					
Milk powders ^a	1,980.8	1,061.7	276.5	709.0	76.2
Cheese ^b	1,480.8	763.2	196.5	445.7	121.0
Whey, modified whey, and lactose ^c	1,183.8	540.1	237.5	206.8	95.9
High-value dairy powders (including infant formula) ^d	708.9	400.4	59.7	311.1	29.6

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

^a HS 0402.10, 0402.21, 0402.29.

^b HS 0406.

^c HS 0404.10, 1702.11, 1702.19.

^d HS 0404.90, 1901.10, 3501.10, 3501.90, 3502.20.

U.S. exports to large dairy-consuming TPP members Canada and Japan are heavily restricted by TRQs managed by the respective governments. For example, Japan is a major importer of butter to satisfy consumer demand for bakery goods in certain months of the year. Rather than allow market forces to determine import volumes and prices, the government's Agriculture and Livestock Industries Corporation (ALIC) imports butter through a tendering process when

¹²² GTIS, Global Trade Atlas database (accessed February 5, 2016); USDA, AMS, *Market News—Dairy*, CME Nonfat Dry Milk (NFD) and butter prices, and Oceania Skim Milk Powder (SMP) and butter prices (accessed February 5, 2016).

¹²³ USDA, FAS, *Dairy Monthly Imports*, January 2015.

domestic prices rise significantly.¹²⁴ Canada maintains a dairy supply management system based on planned domestic production, administered pricing, and import controls based on estimated dairy requirements calculated by the Canadian Dairy Commission.¹²⁵

Summary of TPP Provisions Affecting U.S. Imports

Concessions: U.S. Tariffs and Safeguards

Under the TPP, the United States would remove most tariffs on dairy products not subject to TRQs and would eliminate in-quota tariffs. Phase-in periods for tariff elimination differ by country and by product, but most tariffs are eliminated upon entry into force (EIF) of the agreement. Exceptions include imports from Japan, which have phase-in periods of 5–20 years, and Vietnam, with phase-in periods of 3 years (table 3.11). Most U.S. import tariffs on dairy products from TPP members with existing FTAs are already duty-free. However, certain products are subject to TRQs and safeguards, as discussed below.

Table 3.11: Dairy products: Selected U.S. concessions to TPP partners

Product	Australia	Canada	Japan	New Zealand	Peru	Vietnam	Other
Milk powders	In-quota tariffs as high as 17.5% eliminated immediately.	In-quota tariffs as high as 17.5% eliminated immediately.	In-quota tariffs as high as 17.5% eliminated in 10 or 15 years.	In-quota tariffs as high as 17.5% eliminated immediately.	In-quota tariffs as high as 17.5% eliminated immediately.	In-quota tariffs as high as 17.5% eliminated in 3 years or immediately.	Import tariffs for Brunei, Chile, Malaysia, Mexico, and Singapore eliminated immediately or no duty existed.
Cheese	In-quota tariffs as high as 25% eliminated immediately or in 20 years.	In-quota tariffs as high as 25% eliminated immediately.	In-quota tariffs as high as 25% eliminated in 5, 10, 15 or 20 years.	In-quota tariffs as high as 25% eliminated immediately.	In-quota tariffs as high as 25% eliminated immediately.	In-quota tariffs as high as 25% eliminated in 3 years or immediately.	Import tariffs for Brunei, Chile, Malaysia, Mexico, and Singapore eliminated immediately or no duty existed.

¹²⁴ USDA, FAS, *Japan: Dairy and Products Annual*, October 15, 2015, 6; ALIC, “What We Do,” October 15, 2015.

¹²⁵ USDA, FAS, *Canada: Dairy and Products Annual*, October 15, 2015, 7.

Product	Australia	Canada	Japan	New Zealand	Peru	Vietnam	Other
Whey, modified whey, and lactose	In-quota tariffs as high as 13% eliminated immediately or in 20 years.	In-quota tariffs as high as 13% eliminated immediately.	In-quota tariffs as high as 13% eliminated in 5, 10, or 15 years.	In-quota tariffs as high as 13% eliminated immediately.	In-quota tariffs as high as 13% eliminated immediately or in 21 years.	In-quota tariffs as high as 13% eliminated immediately, in 3 years, or in 10 years.	Import tariffs for Brunei, Chile, Malaysia, Mexico, and Singapore eliminated immediately or no duty existed.
Butter, butter oils, and dairy spreads	In-quota tariffs as high as 10% eliminated immediately (or 20 years for dairy spreads).	In-quota tariffs as high as 10% eliminated immediately.	In-quota tariffs as high as 10% eliminated in 10, 15, or 20 years.	In-quota tariffs as high as 10% eliminated immediately.	In-quota tariffs as high as 10% eliminated immediately.	In-quota tariffs as high as 10% eliminated in 3 years or immediately.	Import tariffs for Brunei, Chile, Malaysia, Mexico, and Singapore eliminated immediately or no duty existed.

Source: USTR, TPP full text, December 15, 2015.

All six country-specific U.S. agricultural safeguards negotiated under TPP are for dairy products—Swiss cheese and milk powders from Australia, cheddar-style cheese and whole milk powder from New Zealand, and condensed and evaporated milk and cheese from Peru. The volumes triggering the safeguards vary by product, but the safeguards trigger at ever-higher import volumes each year until they phase out entirely.¹²⁶ The two safeguards for Peru are in effect for 10 years; the safeguards for Australia and New Zealand last for 25 years for cheese and 35 years for powders. For Australia and New Zealand, the safeguard duty is calculated as a percentage of the MFN rate and decreases over the period for which each safeguard is in place. For Peru, the safeguard tariffs are calculated according to a complex formula, but like the other safeguards, they decrease over the period during which the safeguards are in effect. In general, the six country-specific safeguard trigger volumes would not initially be very large and could trigger in

¹²⁶ Swiss cheese imports from Australia trigger the U.S. safeguard at 800 mt; the safeguard trigger increases 3 percent annually until year 24. Milk powder imports from Australia trigger the safeguard at 700 mt beyond Australia's TRQ volume, with the trigger volume increasing 2 percent annually until year 35. Cheese imports from New Zealand trigger the safeguard at 4,000 mt in year 1 of the agreement, with the trigger volume rising to 10,000 mt in year 12, and increasing 3 percent annually after that time until year 24. Whole milk powder imports from New Zealand trigger the safeguard at 3,000 mt in year 1 of the agreement, with the trigger volume rising to 7,000 mt in year 12 and increasing 3 percent annually after that time until year 34. Volume triggers for the safeguards covering imports of condensed and evaporated milk and certain cheeses from Peru are 130 percent of the TRQ quantity for those goods.

an unusual year. The safeguards thus set a limit on U.S. dairy imports in the early years of the TPP Agreement.

Concessions—U.S. Tariff-rate Quotas

Under TPP, the United States would expand market access for dairy imports through TRQs for four parties—Australia, Canada, New Zealand, and Peru (table 3.12).

Australia: Australian dairy products have limited access to the United States under the bilateral FTA enacted in 2005. In the TPP Agreement, U.S. market access for Australia’s dairy products is best characterized as a reallocation of the market access already granted under the bilateral FTA. Australia and the United States agreed to reduce volumes of duty-free access for U.S. imports of Australian creams and ice cream, condensed milk, and milk powders in return for higher TRQ volumes of Australian cheddar cheese, European-type cheeses, and infant formula. Australia’s TRQ volume for U.S. imports of butter is unchanged from the bilateral FTA.

Canada: Under TPP, the United States would provide Canada with country-specific TRQs on a wide variety of dairy products, including cheese, skim milk powder, whole milk powder, butter and butter substitutes, milk proteins, and milk beverages.¹²⁷

New Zealand: Without a bilateral FTA with the United States, the New Zealand dairy industry currently uses U.S. dairy import TRQs established when the WTO was created in 1995. In the TPP Agreement, New Zealand would gain additional duty-free access to U.S. markets for most dairy products, but in particular large volumes of cheese, whole milk powder, creams, butter and butter oil, infant formula, and dairy ingredients. For most of these products, New Zealand already has significant TRQ access that goes unfilled. The exceptions are two quotas—butter and butter substitutes, and organic butter.

¹²⁷ The TPP agreement represents a departure for bilateral dairy trade between the United States and Canada. Under NAFTA, Canada and the United States mutually excluded dairy trade from any tariff reductions and additional market access. Outlaw et al., *NAFTA and U.S. Dairy Industry*, April 1994, 1.

Table 3.12: U.S. dairy tariff-rate quotas to TPP members, metric tons (mt) except where noted

Quota code	Country	Quota name	Admin	Year 1	Final year	Number		Permanent	Growth	Notes
						of years				
CSQ-US3	Australia (AUS)	Creams and ice cream (1,000 liters)	FCFS	10,356.5	15,172.5	6		yes	6% pa	Reduced 3,880,500 liters from U.S.-AUS FTA. Perpetual growth.
CSQ-US4	Australia	Condensed milk	FCFS	695	2,621	6		yes	6% pa	Reduced 5,000 mt from U.S.-AUS FTA. Perpetual growth.
CSQ-US5	Australia	Butter	FCFS	2,076	2,407	6		yes	3% pa	No change from U.S.-AUS FTA. Perpetual growth.
CSQ-US6	Australia	Milk powders	FCFS	6,296	7,652	6		yes	2% pa	Perpetual growth declines from U.S.-AUS FTA, from 4% to 2%.
CSQ-US7	Australia	Other dairy products	FCFS	2,847	3,811	6		yes	6% pa	Duty-free infant formula volumes excluded starting year 15. Perpetual growth.
CSQ-US8	Australia	American and cheddar cheeses	FCFS	6,230	6,506	6		yes	3% pa	Increased 4,500 mt from U.S.-AUS FTA. Perpetual growth.
CSQ-US9	Australia	Swiss-type, European-type and other cheeses	FCFS	14,762	17,597	6		yes	5% pa	Increased 4,500 mt from U.S.-AUS FTA. Perpetual growth.
CSQ – US10	Canada	Cheese	FCFS	3,000	20,486	19		yes	Fixed at yr 19	High value cheese packaged 10 kgs or less is duty-free and excluded from TRQ in year 10.
CSQ – US11	Canada	Skim milk powder	FCFS	2,000	17,622	19		yes	Fixed at yr 19	
CSQ – US12	Canada	Whole milk powder	FCFS	667	4,552	19		yes	Fixed at yr 19	
CSQ – US13	Canada	Dried yogurt, sour cream, whey, and products of milk constituents	FCFS	2,083	14,226	19		yes	Fixed at yr 19	
CSQ – US14	Canada	Concentrated milk	FCFS	333	2,587	19		yes	Fixed at yr 19	
CSQ – US15	Canada	Cream, sour cream, ice cream, and milk beverages (liters)	FCFS	1,416,667	9,673,793	19		yes	Fixed at yr 19	
CSQ – US16	Canada	Butter and butter substitutes	FCFS	750	5,121	19		yes	Fixed at yr 19	Package size requirement (over 55 pounds or more) for most of the TRQ volume.
CSQ – US17	Canada	Other dairy products	FCFS	1,250	8,536	19		yes	Fixed at yr 19	Starting year 5, HS 1517.90.60 is duty free and volumes excluded from the TRQ.

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Quota code	Country	Quota name	Admin	Year 1	Final year	Number of years	Permanent	Growth	Notes
CSQ – US24	New Zealand	Cheese	FCFS	10,000	34,049	30	yes	3% pa	Starting year 20, HS 0406.90.97 volumes excluded from the TRQ; duty-free starting year 23.
CSQ – US25	New Zealand	Skim milk powder	FCFS	1,000	1,702	19	no	na	Unlimited duty-free access starting year 20.
CSQ – US26	New Zealand	Whole milk powder	FCFS	3,000	8,996	30	no		Unlimited volume access starting year 30; Duty-free starting year 24.
CSQ – US27	New Zealand	Concentrated milk	FCFS	1,000	2,357	30	yes	3% pa	Perpetual growth.
CSQ – US28	New Zealand	Creams (liters)	FCFS	8,000,000	43,347,103	30	yes	6% pa	Perpetual growth.
CSQ – US29	New Zealand	Butter and butter substitutes	FCFS	4,000	21,503	30	yes	3% pa	Perpetual growth. 3,000 mt allocated to butter oil, phased out starting year 15.
CSQ – US30	New Zealand	Organic butter	FCFS	500	1,178	30	yes	3% pa	Perpetual growth.
CSQ – US31	New Zealand	Other dairy products	FCFS	5,500	22,639	30	yes	5% pa	Perpetual growth.
CSQ-US32	Peru	Cheese	FCFS	5,527	13,684	9	no		Unlimited volumes starting in year 10.
CSQ – US33	Peru	Condensed and evaporated milk	FCFS	13,264	32,841	9	no		Unlimited volumes starting in year 10.
CSQ – US34	Peru	Processed dairy products	FCFS	3,897	6,905	7	no		Unlimited volumes starting in year 8.

Source: USTR, TPP Agreement, December 15, 2015.

Note: "FCFS" means "first come, first served." "PA" means "per annum."

Estimated Effects of TPP on U.S. Dairy Imports

Additional market access granted to TPP members in the U.S. market, largely through expanded TRQs, is unlikely to result in additional dairy imports, except for butter and butter oil. The Commission model estimates that dairy imports from all TPP members would be \$369 million higher after full implementation, relative to the baseline. All of the increased imports would come from New Zealand (\$253 million) and Canada (\$119 million). New Zealand's product mix would largely be high-protein powders, whey products, butter and butter oil, and casein.¹²⁸ Canada's increased shipments to the United States would largely be whey products, and soft dairy products such as yogurt, ice cream, and buttermilk.

Several important factors lead to limited additional U.S. imports of dairy products under TPP. First, the cost of milk in Australia and New Zealand increasingly tracks U.S. milk costs, but transportation costs to the United States are significant (roughly \$200 per mt, though varying somewhat by product).¹²⁹ Therefore, dairy products imported from Australia and New Zealand face a cost disadvantage in the U.S. market but not in Asian markets closer to home. Second, U.S. prices for many dairy products, such as skim milk powder, whole milk powder, cheddar cheese, and mozzarella, are routinely lower than prices in Asia and Oceania, even accounting for differences in product specifications.¹³⁰ The result is that both Australia and New Zealand tend to ship only dairy products that U.S. companies underproduce in lieu of shipping higher-value goods for U.S. consumers, in accordance with the seasonal demand patterns described in the import overview above.

Third and most importantly, Australia and New Zealand have not filled most of their U.S. import TRQ volumes for the past three years, except for butter and butter oil in 2014 and 2015 and whole milk powder in 2015.¹³¹ Exporters from both countries leave millions of metric tons of quota unclaimed for skim milk powder, American-type cheese (e.g., cheddar), Italian-type cheese (e.g., mozzarella), and other dairy products. Even in the case of butter and butter oil, additional imports to the United States under TPP will not displace U.S.-produced goods because the demand for butter in the United States (and in high-priced export markets like Japan) outstrips supply.¹³² U.S. dairies skim off cream during the summer months and ship it to

¹²⁸ High-protein powders, casein, and some whey products from New Zealand are not subject to U.S. import TRQs.

¹²⁹ Hemme et al., "Milk Prices and Production Costs World Wide," October 5, 2015; Hemme et al., "Overview on Milk Prices and Production Costs," 2013; USITC estimate for transportation costs, based on GTIS trade data.

¹³⁰ Demand for dairy products in rapidly developing countries, particularly in Asia, accounts for the upward pressure on prices. USDA, AMS, CME and Oceania Dairy Prices (accessed January 22, 2016); AgWeb, "Asia's Growing Appetite for Meat, Milk Seen Driving Up Costs," July 1, 2015.

¹³¹ In the USITC analysis, if New Zealand fills its country-specific TRQ for a particular product but significant volumes of the TRQ remain unfilled which could be filled by any country, the TRQ for the product in question is considered unfilled. USDA, FAS, Dairy Monthly Imports, January 2016.

¹³² However, additional U.S. imports of butter and butter oil will likely lower U.S. prices during periods when prices peak, normally in the summer when the demand for ice cream is strongest.

domestic ice cream manufacturers for higher profits than they can realize producing butter. As for U.S. imports of whole milk powder from New Zealand and milk powders from Australia, U.S. safeguard volumes in the TPP Agreement would provide an effective barrier to import surges into the U.S. market if global prices change relative to prices in the United States.

Impact of Changes to U.S. Tariff-rate Quotas

Except for butter and butter oil, the impact of additional market access on the U.S. dairy industry is likely to be very small because the TRQs are unlikely to fill. Although Australia and New Zealand are large dairy producers and net exporters, production costs in both countries are similar to, or in some cases higher than, those of U.S. producers. Imports from both countries face significant transportation costs to the United States; Australia and New Zealand therefore face a cost disadvantage in the U.S. market compared to the closer Asian markets.¹³³ New Zealand, however, is likely to fill the new quota volumes of butter and butter oil, at least in the early years of the agreement. U.S. butter prices are normally far higher than global butter prices during the summer months because U.S. creameries sell their cream to domestic ice cream manufacturers rather than produce butter.¹³⁴ The price disparity made it profitable for a limited time in 2014 and 2015 for New Zealand producers to ship butter to the United States.

Canada and Peru are large net importers of dairy products.¹³⁵ As a result, additional exports to the United States from those countries due to expanded TRQs under TPP would likely be limited to niche products, such as artisan cheeses in the case of Canada or condensed and evaporated milk from Peru. U.S. imports of Canadian high-value cheeses would likely substitute for other U.S. imports from non-TPP countries.¹³⁶

Summary of TPP Provisions Affecting U.S. Exports

Under the TPP, U.S. trading partners without prior bilateral FTAs would remove import tariffs facing most commonly traded U.S. dairy products. Phase-in periods for tariff elimination differ by country and by product, but most in-quota tariffs are eliminated upon entry into force (table 3.13). Important TPP markets Japan and Canada would lower selected tariffs over long phase-in periods, but both countries would remain highly managed markets even after TPP implementation because their TRQs nearly always fill. For many dairy products not facing import TRQs, Japan would maintain non-zero duties after full implementation, such as ice

¹³³ Estimated by USITC to be roughly \$200 per metric ton, based on Global Trade Atlas, Informa's Dairy Markets, and other sources.

¹³⁴ Mulvany, "Butter Surges to 16-Year High," July 24, 2014.

¹³⁵ GTIS, Global Trade Atlas database (accessed January 22, 2016).

¹³⁶ Although Canada is a net importer of dairy products, it should be noted that there may be niche or specialized dairy products Canada would ship under the TPP agreement. This is particularly true of products intended for ingredient use in food manufacturing.

cream (HS 2105) at 7–10 percent. In addition, Japan also maintains safeguard volume measures for imports of whey protein concentrate and whey powder, which may hinder U.S. exports to Japan in the early years of TPP implementation until safeguard trigger volumes expand well beyond current export levels.

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Table 3.13: Dairy products: Selected TPP partner country concessions to the United States

Product	Australia	Canada	Chile	Japan	Malaysia	Peru	Vietnam	Other
Milk powders	No existing duties.	In-quota rates of either C\$0.0332/kg or 6.5% (depending on product specifications) eliminated immediately.	Tariffs of 6% eliminated in 8 years.	Tariffs, currently as high as 425 yen/kg, largely remain in effect. New TRQ volumes for TPP members are established.	Duties eliminated immediately.	No existing duties.	Tariffs, currently as high as 5%, eliminated in 3 years or immediately.	Import tariffs in Brunei and New Zealand immediately eliminated. Mexico and Singapore have no existing duties.
Cheese	Duties of A\$1.22/kg eliminated immediately.	In-quota rates of C\$0.0332/kg or C\$0.0284/kg eliminated immediately.	Tariffs of 6% eliminated either immediately or in 8 years.	Tariffs, currently as high as 40%, eliminated in 16 years.	Duties eliminated immediately.	Tariffs as high as 9% eliminated in 6 years.	Tariffs, currently as high as 10%, eliminated in 3–4 years or immediately.	Import tariffs in Brunei and New Zealand immediately eliminated. Mexico and Singapore have no existing duties.
Whey, modified whey, and lactose	No existing duties.	Whey: tariffs, currently as high as 11%, eliminated in 6 years. Lactose: duties of 6% eliminated immediately.	Whey and modified whey: tariffs of 6% eliminated in 8 years. Lactose: duties of 6% eliminated immediately.	Tariffs, currently as high as 30%, eliminated in 21 years, including safeguards. Lactose duties eliminated immediately.	Duties eliminated immediately.	Tariffs as high as 9% eliminated immediately.	No existing duties.	Import tariffs in Brunei and New Zealand immediately eliminated. Mexico and Singapore have no existing duties.
High-value dairy powders and infant formula	No existing duties.	Milk protein concentrates: in-quota rates of 3% eliminated immediately. Infant formula: duties of 6% or 9.5% eliminated immediately. Casein and caseinates: duties already eliminated. Milk albumin:	Duties of 6% eliminated immediately.	MPCs: Tariffs, currently as high as 35%, reduced to 9.8% in 6 years. Infant formula: tariffs, currently as high as 25%, eliminated in 6 years. Duties on casein, caseinate, and milk albumin containing whey protein	For most products, duties already eliminated. Milk albumin: duties of 5% eliminated immediately. Casein glues: tariffs of 25% eliminated in 3 years.	Casein and infant formula: duties already eliminated. Other products: tariffs as high as 9% eliminated immediately.	Milk protein concentrates: duties already eliminated. Infant formula: tariffs, currently as high as 10%, eliminated in 4 years. Casein and caseinates: tariffs of 10% eliminated in 3–4 years.	Import tariffs in Brunei and New Zealand immediately eliminated. Mexico and Singapore have no existing duties.

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Product	Australia	Canada	Chile	Japan	Malaysia	Peru	Vietnam	Other
		duties of 6.5% eliminated immediately.		eliminated immediately.				

Source: USTR, TPP Agreement, December 15, 2015.

Aside from the United States, only Canada, Japan, and Malaysia would create new TRQs for dairy products under the TPP Agreement (table 3.14). Canada agreed to a broad range of dairy TRQs covering most traded goods, but some of the TRQ volumes are quite small, such as 483 mt of mozzarella and prepared cheese.¹³⁷ Most of Japan's new TRQs under the TPP Agreement include all member countries, but the United States negotiated country-specific TRQs for processed cheese, whey in two forms, and whey permeate.¹³⁸ Malaysia created only three dairy TRQs under the TPP Agreement, all on fluid milk with varying percentages of fat content.

¹³⁷ Canada's dairy TRQs are not country-specific under the TPP agreement.

¹³⁸ For the TRQs on whey, volume safeguard triggers apply.

Table 3.14: Dairy tariff-rate quotas for TPP members, metric tons

Importing countries	Country	Quota name	Admin	Year 1	Final year	Number of years	Permanent	Growth	Notes
All TPP	Canada	Milk	FCFS	8,333	56,905	19	yes	Fixed at yr 19	85% in bulk for ingredient use; TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Cream	FCFS	500	734	14	yes	Fixed at yr 14	TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Skim milk powders	FCFS	1,250	11,014	19	yes	Fixed at yr 19	TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Milk powders	FCFS	1,000	1,138	14	yes	Fixed at yr 14	TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Cream powders	FCFS	100	114	14	yes	Fixed at yr 14	TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Concentrated milk	FCFS	333	2,587	19	yes	Fixed at yr 19	Only for retail sale; TRQ in calendar year basis.
All TPP	Canada	Yogurt and buttermilk	FCFS	1,000	7,762	19	yes	Fixed at yr 19	30% in bulk for ingredient use; TRQ in calendar year basis.
All TPP	Canada	Powdered buttermilk	FCFS	750	970	14	yes	Fixed at yr 14	TRQ in calendar year basis.
All TPP	Canada	Whey powder	FCFS	1,000	6,244	10	no		Duty free, quota free starting in year 11; TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Products consisting of natural milk constituents	FCFS	667	4,552	19	yes	Fixed at yr 19	TRQ in calendar year basis.
All TPP	Canada	Butter	FCFS	750	5,121	19	yes	Fixed at yr 19	85% in bulk for ingredient use; TRQ in dairy year basis (August 1–July 31).
All TPP	Canada	Industrial cheese	FCFS	1,329	9,076	19	yes	Fixed at yr 19	Only in bulk for ingredient use; TRQ in calendar year basis.
All TPP	Canada	Mozzarella and prepared cheese	FCFS	483	3,300	19	yes	Fixed at yr 19	TRQ in calendar year basis.
All TPP	Canada	Cheese of all types	FCFS	604	4,126	19	yes	Fixed at yr 19	TRQ in calendar year basis.
All TPP	Canada	Ice cream and mixes	FCFS	1,000	1,138	14	yes	Fixed at yr 14	TRQ in calendar year basis.
All TPP	Canada	Other dairy	FCFS	1,000	1,138	14	yes	Fixed at yr 14	HS 1517.90.22 imports not counted starting year 6; TRQ in calendar year basis.
All TPP	Japan	Fresh cheese for use as materials for shredded cheese	FCFS	See notes.			yes		Quota quantity equals Japan’s domestic production of natural cheese for use as materials for

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Importing countries	Country	Quota name	Admin	Year		Number of years	Permanent	Growth	Notes
				1	Final year				
All TPP	Japan	Butter	FCFS	39,341	45,898	12	yes	Fixed at yr 12	shredded cheese multiplied by 3.5. Whole milk equivalent metric tons, using conversion factors.
All TPP	Japan	Skim milk powder	FCFS	20,659	24,102	12	yes	Fixed at yr 12	Whole milk equivalent metric tons, using conversion factors.
All TPP	Japan	Milk powder and butter milk powder	FCFS	1,500	2,250	12	yes	Fixed at yr 12	Whole milk equivalent metric tons, using conversion factors.
All TPP	Japan	Milk powder	FCFS	20,000	60,000	12	yes	Fixed at yr 12	Whole milk equivalent metric tons, using conversion factors.
All TPP	Japan	Evaporated milk	FCFS	1,500	4,750	6	yes	Fixed at yr 6	
All TPP	Japan	Condensed milk	FCFS	750	750	1	yes	Fixed at yr 1	
USA	Japan	Processed cheese	FCFS	100	150	12	yes	Fixed at yr 12	
USA	Japan	Whey: mineral concentrate	FCFS	1,000	4,000	12	yes	Fixed at yr 12	Safeguards apply.
USA	Japan	Whey: prepared whey for infant formula	FCFS	3,000	3,000	1	yes	Fixed at yr 1	Safeguards apply.
USA	Japan	Whey permeate	FCFS	1,000	2,000	12	yes	Fixed at yr 12	Safeguards apply.
All TPP	Malaysia	Milk of fat content, by weight, not exceeding 1% (liters)	FCFS	300,000	300,000	1	yes	1% pa	
All TPP	Malaysia	Milk of fat content, by weight, exceeding 1% but not exceeding 6% (liters)	FCFS	2,000,000	2,000,000	1	yes	1% pa	
All TPP	Malaysia	Milk of fat content, by weight, exceeding 6% (liters)	FCFS	1,000,000	1,000,000	1	yes	1% pa	

Source: USTR, TPP Agreement, December 15, 2015.

Estimated Effects of TPP on U.S. Dairy Exports

On balance, U.S. dairy exporters would likely benefit from the TPP Agreement, even after accounting for additional market access granted to foreign competitors in the U.S. market. If TPP is implemented, the model estimates that U.S. dairy exports to TPP member countries would increase \$2.0 billion relative to the baseline. Nearly all of the increase would be exported to Canada (\$1.2 billion) and Japan (\$534 million). The product mix of U.S. exports to Canada would likely include milk, cream, butter and butter oil, whey products, yogurt, cheese and cheese ingredients, and infant formula. The product mix of U.S. dairy exports to Japan would primarily be whey products, lactose, and cheese.

The overall effect of TPP on U.S. dairy exports is complicated by U.S. bilateral FTAs already in place and other FTAs in Asia to which the United States is not a signatory. On the one hand, markets in which other TPP members have a large tariff advantage would now permit U.S. dairy exporters to compete on a more level playing field. For example, Australian dairy exports to Japan currently receive preferential market access treatment under the Japan-Australia Economic Partnership Agreement. Dairy products from Australia, New Zealand, and the ASEAN countries receive preferential tariff treatment from Malaysia and Vietnam under the ASEAN-Australia-New Zealand Free Trade Agreement. TPP would provide equivalent market access to U.S. dairy exports in those markets after phase-in periods.¹³⁹

On the other hand, U.S. dairy exports to certain TPP members currently enjoy a competitive advantage because the United States already has FTAs with these countries, while other TPP members do not. TPP would grant equivalent market access to competitors of U.S. dairy exports in those markets.¹⁴⁰ For example, under TPP, Australia and New Zealand would gain significant new TRQ volumes of duty-free market access in Mexico for milk powders, cheese, and butter. New competition for U.S. producers in established markets may partially offset trade gains secured for U.S. exporters in the TPP Agreement. But on balance, USITC model simulations indicate that more favorable market access under TPP in Japan, Canada, and to a lesser extent Vietnam will secure net trade gains for the U.S. dairy industry when the full agreement is implemented.

The case of Canada is of particular interest. As a result of the TPP negotiations, Canada agreed to open up its market for dairy imports from all TPP members through expanded TRQs. Much of the new volume is in products for which U.S. producers are very cost-competitive, including

¹³⁹ U.S. exporters would still likely face a competitive disadvantage against Australia and New Zealand because of higher transportation costs to Asian markets, but eliminating the tariff disadvantage through the TPP agreement would still allow more U.S. dairy exports to TPP members located in Asia. Rising demand for dairy products in fast-growing Asian markets requires more supply than Australia and New Zealand can produce. USDA, FAS, "Trans-Pacific Partnership Benefits to Agriculture: Dairy," October 20, 2015.

¹⁴⁰ USDA, FAS, "Trans-Pacific Partnership Benefits to Agriculture: Dairy," October 20, 2015.

skim milk powder and cheese for ingredient use. Canada's dairy TRQs under TPP also include liquid, fresh, and cultured dairy products with a high water content. These goods, including milk, cream, sour cream, yogurt, and buttermilk, are not particularly cost-competitive if shipped long distances. The proximity of the United States to the Canadian market would provide a distinct cost advantage to U.S. dairies producing these goods, giving them an opportunity to fill the overwhelming majority of the new Canadian dairy TRQ volumes under TPP.¹⁴¹

Summary of Views of Interested Parties

According to interested parties' submissions, TPP includes provisions that would make it less likely that U.S. dairy exports to TPP countries will face new SPS barriers lacking a scientific basis or proper risk assessment.¹⁴² The prehearing submission from the U.S. Dairy Export Council (USDEC) states that the TPP dispute resolution and SPS provisions are important steps toward improving the resolution of future SPS issues among TPP members.¹⁴³ The International Dairy Foods Association (IDFA) agrees with USDEC that TPP includes a new set of "WTO-plus" disciplines for SPS provisions that will be fully enforceable.¹⁴⁴ Fonterra (USA), Inc., a U.S.-based wholly owned subsidiary of the New Zealand cooperative Fonterra, stated in its submission that the TPP achieves notable success in adopting SPS provisions stronger than those applicable under the WTO's SPS agreement.¹⁴⁵

The other major NTM issue important to the U.S. dairy industry that is addressed in TPP is geographical indications (GIs), which are covered in the TPP's Intellectual Property chapter. While the GI text does not remove GIs from the TPP trade area, USDEC and IDFA stated that they are encouraged that it would create an improved set of tools to combat the use of GIs in the future to block U.S. exports from TPP members.¹⁴⁶ Fonterra (USA) also agrees that the TPP would be able to address the question of the use and protection of GIs as an intellectual property issue.¹⁴⁷ Lastly, IDFA noted that one of the benefits of TPP is that new member countries with major potential markets for U.S. dairy exports could join in a second tranche of the agreement at a future date.¹⁴⁸

¹⁴¹ *Cheese Reporter*, "Trans-Pacific Partnership Pact Concluded," October 9, 2015, 12, 14; *Cheese Reporter*, "US Dairy Industry Still Analyzing Impacts," January 15, 2016, 7.

¹⁴² U.S. dairy representative, email to USITC staff, December 9, 2015.

¹⁴³ USDEC, prehearing submission to the USITC, December 22, 2015, 5.

¹⁴⁴ IDFA, posthearing submission to the USITC, February 12, 2016, 3.

¹⁴⁵ Fonterra (USA), posthearing submission to the USITC, February 12, 2016, 3.

¹⁴⁶ National Milk Producers Federation and the U.S. Dairy Export Council, written submission to USITC, December 22, 2015, 6–7; IDFA, posthearing submission to the USITC, February 12, 2016, 3.

¹⁴⁷ Fonterra (USA), posthearing submission to the USITC, February 12, 2016, 3.

¹⁴⁸ IDFA, posthearing submission to the USITC, February 12, 2016, 4.

Beef

Assessment

Improved access under TPP would be expected to have a positive impact on U.S. beef exports and a moderate impact on U.S. beef imports. Most of the positive impact on exports would come from a reduction in Japan's tariffs on beef. Japan is currently the largest export market for U.S. beef, and Japan's 38.5 percent tariffs on fresh and frozen beef cuts would be reduced to 9 percent over 16 years. Importantly, the TPP would give U.S. beef producers market access parity with Australia, the largest supplier of imported beef in the Japanese beef market. When the Australia-Japan Economic Partnership Agreement entered into force in 2015, Australia gained preferential access to Japan's beef market. In 2016, Australia has a 7 percentage point tariff advantage over U.S. fresh beef exports and a 10 percentage point tariff advantage over U.S. frozen beef exports. This tariff advantage would widen over time if TPP is not implemented. Chile, Malaysia, Singapore, and Vietnam are also net beef importers, and lowering trade barriers would be expected to lead to an increase in U.S. exports to those countries as well.

While TPP would provide a net positive impact on exports, preferential access in certain markets for U.S. beef would be diminished. U.S. beef producers currently have preferential zero-duty access to the Canadian and Mexican markets, and this advantage would be eroded under the TPP as other TPP members, such as Australia and New Zealand, also gain zero-duty access.

The TPP is expected to have a more moderate impact on U.S. beef imports. TPP member countries that are major beef exporters already have access to the U.S. market that would not change significantly under the TPP, although one industry representative testified that tariff concessions and the TPP rules of origin would allow a significant increase in beef imports.¹⁴⁹ Imports of beef from Canada and Mexico are duty-free under NAFTA. Australia and New Zealand have country-specific quotas that they are not likely to exceed in the near future.¹⁵⁰ Australia, in particular, has decreased the size of its cattle herd following a prolonged drought. Additionally, as the U.S. cattle herd expands, U.S. beef prices are expected to decrease to levels closer to those in other major beef-consuming countries. Japan is also unlikely to significantly increase its beef exports to the United States under TPP, despite receiving a larger import

¹⁴⁹ USITC, hearing transcript, January 14, 2016, 392–94 (testimony of Bill Bullard, R-CALF USA).

¹⁵⁰ Additionally, in 2015, the U.S. cattle herd was in a rebuilding phase. Many beef cattle producers retained more cows and heifers for breeding purposes. The U.S. dollar had also appreciated against the currencies of many trading partners. As U.S. beef prices were relatively high, both Australia and New Zealand increased beef exports to the United States, and both countries effectively filled their quota volumes. Going forward, it is unlikely that these conditions will continue.

quota. Over the past six years, Japan’s global beef exports have averaged just 783 mt per year.¹⁵¹

The Commission’s model estimates indicate that overall U.S. beef exports would be about \$876 million (8.4 percent) higher in 2032 if TPP were implemented in 2017 than if it were not implemented, with most of the increase in exports under TPP going to Japan.¹⁵² U.S. beef exports to TPP partner countries would be almost \$1.0 billion higher, and exports to the rest of the world slightly lower. At the same time, U.S. beef imports would increase, primarily from New Zealand, by an estimated \$419 million (5.7 percent) over the baseline. Total U.S. production of beef would be expected to be about \$615 million higher (0.5 percent) over the baseline.

Overview of U.S. Trade with TPP Partners

The United States is a major beef exporter, with about half of its exports already destined for TPP partner countries (table 3.15). Japan is the single largest export market for U.S. beef, even though Japan imposes a 38.5 percent tariff on imports of fresh/chilled and frozen beef cuts. U.S. beef exports to Canada and Mexico are duty free under NAFTA, and Mexico and Canada were the third- and fourth-largest export markets for U.S. beef in 2014.¹⁵³ U.S. beef exporters also have preferential access to Peru’s market under the U.S.-Peru Trade Promotion Agreement.

Table 3.15: U.S. exports of beef to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S exports to world	U.S exports to TPP countries			Other existing FTA partners
		All	New FTA partners	NAFTA	
Beef: Total	6,387.1	3,545.4	1,437.9	1,999.8	107.7
Selected subproducts					
Boneless, fresh/chilled (020130)	2,688.6	2,104.6	686.6	1,358.0	60.0
Boneless, frozen (020230)	1,921.7	625.0	488.9	110.1	26.0

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Vietnam is a significant export market for U.S. beef, although U.S. beef exports to Vietnam have declined substantially since 2012, as Vietnam’s imports from other sources have increased. In

¹⁵¹ GTIS, Global Trade Atlas database (accessed December 16, 2015).

¹⁵² Under TPP, trade concessions would be phased in over a period of time. Most of these concessions would be phased in over 15 years or less. Therefore, model results are presented for production and trade effects under TPP in the year 2032. Estimates of the effects of liberalizing each sector are presented relative to the baseline estimates of production and trade in 2032, including the effects of anticipated changes in investment but without TPP. Japan’s concessions on beef would be phased in over 16 years. Therefore the predicted increase in exports to Japan in 2033 would be slightly higher.

¹⁵³ Mexico was the second-largest beef export market in terms of volume.

2014, Vietnam was the 20th-largest export market for U.S. beef, and exports were valued at over \$22 million. Vietnam recently updated its regulations to specify that all U.S. beef and edible beef offal products derived from cattle of any age are eligible for import.¹⁵⁴ Vietnam's MFN tariffs on most beef imports currently range from 15 to 31 percent, and they are 10 percent on edible beef offal and 34 percent on prepared or preserved beef products.

U.S. beef exports to Australia, Japan, Malaysia, New Zealand, Peru, Singapore, and Vietnam are constrained by measures other than tariffs. Several TPP countries maintain measures related to bovine spongiform encephalopathy ("mad cow disease") that exceed international guidelines,¹⁵⁵ including Australia, Japan, New Zealand, Peru, and Singapore.¹⁵⁶ U.S. beef exports to Malaysia are restricted by Malaysia's halal requirements, with only one U.S. beef producer approved to ship to Malaysia.¹⁵⁷ Vietnam requires increased inspections for some offal products, and requires that U.S. producers provide business proprietary information in order to be eligible to export to Vietnam.¹⁵⁸

U.S. imports of most fresh and chilled beef products are currently subject to a TRQ with an over-quota rate of 26.4 percent. Within-quota imports of processed beef products¹⁵⁹ are subject to a tariff of 4 percent for high-quality cuts and 10 percent for other cuts. Within-quota imports of fresh, chilled, or frozen beef other than processed products are subject to a tariff of 4.4 cents per kg.¹⁶⁰ U.S. beef imports from Canada and Mexico are free under NAFTA. U.S. beef imports from Australia, Japan, and New Zealand are subject to country-specific TRQs. There is also a TRQ for other countries or areas.

¹⁵⁴ USDA, FAS, "Export Requirements by Country: Vietnam" (accessed December 10, 2015). Previously, only beef from cattle less than 30 months of age was eligible for import. Further, in a side letter to the TPP, Vietnam reiterated that edible offal products are allowed to be imported. Governments of the United States and Vietnam, US-VN Letter Exchange on Offals, February 4, 2016.

¹⁵⁵ Bovine spongiform encephalopathy, or BSE, is a progressive and fatal neurological disease in cattle that has also been associated with variant Creutzfeldt-Jacob Disease (vCJD), a fatal disease in humans. Many countries have BSE-related restrictions on beef imports in order to control the risk of vCJD. Under the WTO's SPS agreement, such restrictions are permitted provided they are harmonized with international standards, or are based on scientific evidence and are non-discriminatory.

¹⁵⁶ Peru has reportedly agreed to relax its BSE-related restrictions and allow imports of U.S. beef from all federally inspected establishments in the future. U.S. government official, email to USITC staff, March 14, 2016.

¹⁵⁷ USTR, *2015 National Trade Estimate Report on Foreign Trade Barriers*, March 2015, 261–62.

¹⁵⁸ USTR, *2015 National Trade Estimate Report on Foreign Trade Barriers*, March 2015, 32, 209–10, 315, 353, 261–62, and 424.

¹⁵⁹ Processed products are "meats which have been ground or comminuted, diced or cut into sizes for stew meat or similar uses, rolled and skewered, or specially processed into fancy cuts, special shapes, or otherwise made ready for particular uses by the retail consumer." Additional U.S. Note 1 to the Harmonized Tariff Schedule of the United States.

¹⁶⁰ The beef TRQ does not cover imports of edible beef offal, or beef products that are salted, dried, or smoked, for which the general rate of duty is "Free," nor does it cover prepared or preserved beef products in Chapter 16 of the HS.

Summary of Provisions

Under the TPP, the United States and Canada would phase out TRQs and tariffs on beef imports from TPP member countries. Japan would reduce tariffs on fresh or frozen beef and phase out tariffs on processed beef products and some edible offal. Other member countries would phase out tariffs over 3 to 8 years. Additionally, the U.S. agricultural safeguard on beef imported from Australia would be suspended once TPP enters into force, and Japan would establish a TPP-specific safeguard for imports of fresh or frozen beef (table 3.16).¹⁶¹ Industry representatives consider it unlikely that Japan's safeguard mechanism would be triggered.¹⁶²

Under the TPP, U.S. tariffs on processed beef from most TPP member countries would be eliminated immediately. Over-quota imports from Australia would be duty free in 2022 under the U.S.-Australia FTA. Imports from Peru will be duty free in 2024, year 15 of the U.S.-Peru Trade Promotion Agreement, which took effect in 2009. Imports from Malaysia and New Zealand would be duty free in year 5 of the TPP Agreement, imports from Vietnam in year 3, and imports from Brunei, Chile, and Singapore upon entry into force of the agreement.¹⁶³ Japan's country-specific import quota volume would increase from 200 mt to 3,000 mt in year 1 of TPP; would increase annually, rising to 6,250 mt in year 14; and would be unlimited after year 15.

¹⁶¹ Governments of the United States and Australia, US-AU Letter Exchange re Recognition of FTA TRQs in TPP February 4, 2016; USTR, TPP full text, Appendix B-1 (Agricultural Safeguard Measures) to Schedule of Japan, December 15, 2015. Japan's beef safeguard applies to fresh and frozen muscle cuts of beef and head and cheek meat, but not to edible offal such as tongues or liver, and not to prepared or preserved products.

¹⁶² ATAC for Trade in Animal and Animal Products, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 7; National Cattlemen's Beef Association, post-hearing statement to the USITC, January 20, 2016. The initial safeguard trigger volume is set at 590,000 mt in year 1, or about 14 percent greater than Japan's applicable beef imports from all sources in 2014. The trigger volume increases annually.

¹⁶³ However, imports of beef into the United States from Brunei, Peru, Singapore, and Vietnam are not allowed due to SPS concerns. This situation is not expected to change immediately. USDA, FSIS, "Eligible Foreign Establishments" (accessed January 20, 2016).

Table 3.16: Beef: Selected U.S. and TPP partner tariff concessions

Product	U.S. concessions	TPP country concessions			
		Japan	Malaysia	Vietnam	Canada and Mexico
Beef	TRQ with over-quota rate of 26.4%, eliminated in 15 years. Japan's quota increased to 3,000 mt upon EIF, increases through year 14, and is unlimited thereafter.	Tariff on fresh, chilled, and frozen beef cut from 38.5% to 9% in 16 years.	All tariffs locked at 0% upon EIF	Tariffs, currently as high as 34%, eliminated in 3–8 years.	Canada to phase out TRQ and Mexico to phase out tariffs on beef from TPP member countries. Canada's over-quota rate reduced to zero over 11 years for Australia and 6 years for other TPP members. Mexico to phase out tariffs over up to 10 years.

Source: USTR, TPP full text, December 15, 2015.

U.S. beef exports to Australia, Canada, Chile, Mexico, and Singapore currently receive duty-free treatment under existing FTAs. Under the TPP, Japan would reduce tariffs on most beef imports from TPP member countries from 38.5 percent to 9 percent over 16 years. Tariffs of up to 50 percent on edible beef offal and prepared or preserved beef would be eliminated, with a phaseout period of up to 16 years. Vietnam would eliminate its tariffs on most beef cuts from TPP member countries over 3 years and those on edible beef offal and prepared or preserved products within 8 years. Brunei and New Zealand would eliminate tariffs on beef immediately, and Malaysia would lock in its currently applied tariffs of zero. Additionally, Canada would phase out its TRQ on beef imports, and Mexico would phase out its tariffs on beef imports from TPP member countries.

Estimated Effects of TPP on the U.S. Beef Sector

Overall U.S. beef exports are expected to grow substantially under the TPP, with most of the growth due to increased exports to Japan. In addition to concessions by Japan, U.S. beef exporters would benefit from tariff elimination by Malaysia and Vietnam. U.S. beef exports to Peru would be expected to increase somewhat, with or without TPP, as Peru's trade concessions under the U.S.-Peru Trade Promotion Agreement are phased in. U.S. exports to some countries, such as Canada and Mexico, are expected to increase only slightly relative to the 2012 baseline, as preferential tariff treatment for U.S. imports would be "watered down" by access granted to Australia and New Zealand. In addition to Canada and Mexico, the United States already has duty-free access to Australia, Chile, and Singapore under existing FTAs.

Japan is the largest market for U.S. exports of beef, and the United States is Japan's largest supplier of beef imports. On a volume basis, Japan consumes more imported beef than domestic beef. In fiscal year 2014 (April 1–March 31), imported beef accounted for 58 percent of beef marketed in Japan.¹⁶⁴

All of Japan's major suppliers of beef imports are TPP member countries: Australia, the United States, New Zealand, Canada, and Mexico. In 2014, imports from the United States accounted for more than one-third of Japan's total imports of fresh and frozen beef cuts, and more than one-half of Japan's imports of edible beef offal. U.S. beef and Australian grain-finished beef compete for market share in traditional dishes, while Australia's grass-finished beef largely competes with Japanese domestic beef from culled dairy cows for production of ground beef.¹⁶⁵ In 2014, nearly 30 percent of Australia's beef production was grain-finished, and just over half of Australia's beef exports to Japan were grain-finished.¹⁶⁶

¹⁶⁴ Government of Japan, ALIC, "Supply and Demand of Beef" (accessed November 18, 2015).

¹⁶⁵ Muhammad et al., "Tariff Reforms and the Competitiveness of U.S. Beef," January 2016, 4.

¹⁶⁶ Meat and Livestock Australia, "Australian Red Meat Exports to Japan" (accessed January 20, 2016).

When Australia and Japan implemented their Economic Partnership Agreement in January 2015, Australia gained preferential access to Japan's beef market, with tariffs on most beef products reduced over a period of up to 18 years. Without the new market access granted by Japan under the TPP, U.S. beef producers would be at a growing disadvantage relative to producers in Australia. U.S. parity with Australia in access to Japan's beef market is considered by some industry representatives to be the single greatest benefit to U.S. beef producers from TPP.¹⁶⁷ The Economic Research Service of the U.S. Department of Agriculture (USDA) estimates that, without the TPP, U.S. exports of beef to Japan would decline by \$105 million annually, or about 8 percent.¹⁶⁸

It is not likely that U.S. exports of beef to Malaysia would increase significantly under TPP, because exports to Malaysia are constrained by halal requirements. Malaysia requires that individual U.S. production facilities be inspected and certified as halal by Malaysian religious authorities before exporting beef to Malaysia. Malaysia's requirements for halal certification reportedly are more stringent than internationally recognized standards.¹⁶⁹ These requirements are not changed under the TPP. Further, the vast majority of Malaysia's beef imports are from India, Australia, New Zealand, or Brazil. Malaysia's imports from India are of buffalo or "carabeef," and beef exports from Australia, New Zealand, and Brazil are largely of grass-finished beef for which U.S. beef is not a close substitute.

U.S. exports of beef to Vietnam would likely increase, but would remain a small share of global beef exports to Vietnam. Vietnam is a net importer of beef, and Vietnam allows imports of all beef and beef products from U.S. cattle of any age. However, Vietnam is a member of the ASEAN-India Free Trade agreement.¹⁷⁰ Under this 2010 agreement, India, the largest global beef exporter, gained preferential access to the Vietnamese market. Tariffs on most of India's beef exports to Vietnam are to be phased out over 13 years and will be duty free in 2022. Australia and New Zealand have also enacted a trade agreement with ASEAN that entered into effect in 2010, and most beef exports from Australia and New Zealand will be duty free in 2018. U.S. beef exports to Vietnam have declined as these countries' exports to Vietnam have increased.¹⁷¹ As noted, India's exports are of buffalo or "carabeef," and beef exports from Australia and New Zealand are largely of grass-finished beef for which U.S. beef is not a close substitute. Thus U.S. beef exporters would be unlikely to capture a large share of this market.

¹⁶⁷ Industry representatives, interview by USITC staff, Washington, DC, November 18, 2015.

¹⁶⁸ Muhammad et al., "Tariff Reforms and the Competitiveness of U.S. Beef," January 2016, 18. The baseline for the USITC model incorporates Australian producers' preferential access to the Japanese beef market.

¹⁶⁹ USTR, *2015 National Trade Estimate Report*, March 2015, 261–62.

¹⁷⁰ The agreement on Trade in Goods under the Framework Agreement on Comprehensive Economic Cooperation between the Republic of India and the Association of Southeast Asian Nations, <http://commerce.gov.in/trade/ASEAN-India%20Trade%20in%20Goods%20Agreement.pdf>.

¹⁷¹ GTIS, Global Trade Atlas database (accessed December 16, 2015).

Model Results

According to the Commission's model estimates, most of the increase in U.S. beef exports under the TPP would be to Japan. U.S. beef exports to Japan in 2032, if the TPP entered into force in 2017, would be \$839 million, or more than 50 percent higher than the volume of exports without TPP.

Japan's concessions under the TPP would not only lower Japan's tariffs on U.S. beef exports to Japan, but, importantly, would eliminate preferential tariff treatment for Australia's beef exports to Japan.¹⁷² As a result, increased U.S. beef exports to Japan would displace some imports of beef from Australia. Japan's domestic beef production would also likely decline moderately. As noted, U.S. beef is not a close substitute for much of Japan's domestic beef production, but it is a close substitute for about half of Australia's beef exports to Japan.

Under TPP, Vietnam's tariffs of 15–20 percent on most beef cuts would be eliminated, and Vietnam's overall beef imports would be expected to increase modestly.¹⁷³ Exports of U.S. beef to Vietnam would be expected to increase by over 500 percent, but from a low base.¹⁷⁴ Importantly, TPP would also eliminate Vietnam's tariff preferences on imports of beef from India, Australia, and New Zealand. Imports of U.S. beef would displace imports from other sources. Nonetheless, elimination of tariff preferences for beef from India, Australia, and New Zealand would not completely reverse the recent decline in U.S. market share in Vietnam, as U.S. beef is not a close substitute for beef from these countries.

The Commission's model results indicate that U.S. beef imports would increase by about \$438 million (6.4 percent) over the baseline, with most of the additional imports coming from New Zealand. U.S. production would expand by about 0.5 percent in volume under the TPP. Production of both live animals and beef would increase. As a result, employment would rise by about 0.4 percent in both the beef sector and the live animal sector.

Summary of Views of Interested Parties

Most of the industry representatives that provided briefs or hearing testimony on the effects of TPP on the U.S. beef sector expressed support for the agreement. Other than the cross-cutting

¹⁷² As noted, Australia and Japan have entered into a trade agreement that would give Australia preferential access to Japan's beef market absent TPP.

¹⁷³ As noted, the model results are estimated with respect to a baseline that incorporates anticipated changes to 2032. Over time, increases in GDP and population would be expected to lead to increases in Vietnam's beef consumption, increasing the demand for imports, but these changes are estimated separately from the effects of TPP.

¹⁷⁴ In 2014, U.S. beef exports to Vietnam were valued at just over \$22 million, but as recently as 2012 were valued at over \$160 million.

measures of SPS restrictions and dispute settlement,¹⁷⁵ the comments specific to the beef sector focused on two topics: export opportunities in new FTA partner countries, most importantly by achieving parity with Australian producers in the Japanese beef market; and the impact of TPP on U.S. beef imports.

The North American Meat Institute (NAMI) and the National Cattlemen’s Beef Association (NCBA) asserted that tariff concessions by Japan and Vietnam would increase U.S. beef exports to these countries.¹⁷⁶ The American Farm Bureau Federation, NCBA, and NAMI highlighted the fact that TPP would enable U.S. producers to achieve parity with Australian producers in the Japanese market.¹⁷⁷ However, Ranchers-Cattlemen Action Legal Fund (R-CALF) asserted that estimates of increased exports to Japan were overstated because Japan is a mature beef market with declining demand, and that reductions in the Australian cattle herd would limit Australia’s ability to take advantage of tariff reductions under the Japan-Australia Economic Partnership Agreement.¹⁷⁸

Industry representatives were similarly divided over the impact that TPP would have on U.S. beef imports. NCBA and NAMI asserted that TPP would have little impact on U.S. beef imports because major suppliers to the market currently face low barriers.¹⁷⁹ R-CALF argued that TPP would encourage U.S. imports of beef (and cattle).¹⁸⁰

Aside from tariff treatment, TPP’s impact on U.S. beef exports would also depend on sanitary requirements and other restrictions. Most agricultural industry representatives at the Commission’s TPP hearing testified that the SPS and dispute settlement provisions of the TPP represented an important advancement over the WTO SPS Agreement, particularly the cooperative technical consultations and the dispute settlement mechanism.¹⁸¹ Not all agreed, however: another industry representative testified that the SPS and dispute settlement provisions of the TPP were a step backwards.¹⁸²

¹⁷⁵ These crosscutting measures are examined in chapter 6.

¹⁷⁶ USITC hearing transcript, January 14, 2015, 389 (Kevin Kester, NCBA), 399–401 (Stephen Sothmann, NAMI and US Hides, Skins, and Leather Association(USHSLA)); NAMI and USHSLA written submission to the USITC, February 8, 2016, 3-4; NCBA written submission to the USITC, January 20, 2016, 4.

¹⁷⁷ American Farm Bureau Federation, “Comments Regarding Effects of Trans-Pacific Partnership on the United States Agricultural Sector, 14; USITC hearing transcript, January 14, 2015 390 (Kevin Kester, NCBA), 399-400 (Stephen Sothmann, NAMI and USHSLA); NCBA written submission to the USITC, January 20, 2016, 9.

¹⁷⁸ USITC hearing transcript, January 14, 2015, 393, (Bill Bullard, R-CALF USA).

¹⁷⁹ NAMI and USHSLA written submission to the USITC, February 8, 2016, 5-7; NCBA written submission to the USITC, January 20, 2016, 6-8.

¹⁸⁰ USITC hearing transcript, January 14, 2015, 392-394, (Bill Bullard, R-CALF USA); R-CALF written submission to the USITC, January 28, 2016, 13-16.

¹⁸¹ USITC hearing transcript, January 14, 2015, 383 (Thomas Suber, NCBA), 403 (Stephen Sothmann, US Hides, Skins, and Leather Association), and 414 and 485 (Devry Boughner Vorwerk, Cargill).

¹⁸² USITC hearing transcript, January 14, 2015, 396-97 (Bill Bullard, R-CALF USA).

Pork

Assessment

Overall, the TPP would be expected to lead to an increase in U.S. pork exports, with little to no increase in U.S. imports. Most of the increase in exports would be expected to be to Japan, as Japan's concessions to its gate price system (described below) are phased in. Exports to New Zealand would also be expected to increase, as U.S. producers achieve market access parity with producers in Australia and gain a tariff advantage over producers in the EU.

The United States is a major pork exporter, and improved access under the TPP should allow U.S. pork producers to gain market share in the Japanese pork market. The TPP also prevents U.S. pork from being at a tariff disadvantage in New Zealand, Vietnam, and Malaysia vis-à-vis pork from Australia and ASEAN member countries. The United States currently has duty-free access to the pork markets of TPP partner countries Australia, Canada, Chile, Mexico, Peru, and Singapore. However, tariff concessions for all TPP members would increase competition for U.S. producers in Canada and Mexico, where they currently enjoy tariff advantages.

TPP would not be expected to significantly impact U.S. pork imports. Imports account for a small share of U.S. domestic consumption of pork, and are small relative to exports. Most U.S. pork imports are from Canada and Mexico, and are duty free under NAFTA. U.S. pork imports from Australia, Chile, Peru, and Singapore currently are also duty free under existing FTAs.

The Commission's model estimates indicate that total U.S. pork exports would be about \$219 million, or 1.9 percent higher in 2032, compared to the baseline estimate, if TPP were implemented in 2017, with most of the increase in exports to Japan.¹⁸³ U.S. pork exports to all TPP partner countries would increase by about \$387 million, but increased U.S. exports to TPP partners would be partly offset by lower U.S. exports to China, South Korea, and the rest of the world. Japan's increased pork imports from the United States would largely displace imports from the EU, plus some Japanese domestic production.

Overall annual U.S. pork production would be expected to grow by about \$180 million, or by 0.3 percent, relative to the baseline. The production increase would be expected to lead to an increase in sector employment of about 0.3 percent.

¹⁸³ Under TPP, trade concessions would be phased in over a period of time. Most of these concessions would be phased in over 15 years or less. Therefore, model results are presented for production and trade effects of the TPP in the year 2032. Estimates of the effects of liberalizing each sector are presented relative to the baseline estimates of production and trade in 2032, including the effects of anticipated changes in investment, but without TPP.

Overview of U.S. Trade with TPP Partners

Over two-thirds of U.S. pork exports are to TPP member countries, and about half of those, or one-third of total exports, are to Canada and Mexico, which are duty free under NAFTA. Mexico and Canada are the second-largest and third-largest U.S. export markets on a value basis (table 3.17). Japan is the largest export market for U.S. pork on a value basis, although exports to Mexico are greater in quantity. U.S. pork exports to Australia, Chile, Peru, and Singapore are also duty free under existing trade agreements. The TPP would improve tariff treatment for U.S. pork exports to Japan, Malaysia, New Zealand, and Vietnam. However, U.S. pork exports to Australia, Singapore, and Vietnam are currently restricted by SPS measures that are considered unnecessary by U.S. industry representatives.¹⁸⁴

Table 3.17: U.S. exports of pork to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S exports to world	U.S exports to TPP countries			Other existing FTA partners
		All	New partners	NAFTA	
Pork: Total	5,844.8	4,168.8	1,770.4	2,142.0	256.4
Selected subproducts					
Hams, shoulders, bone in, fresh or chilled (020312)	718.5	689.4	5.3	682.4	1.7
Pork nesoï, fresh or chilled (020319)	1,543.0	1,487.2	999.5	485.0	2.7
Pork nesoï, frozen (020329)	1,952.2	1,026.3	681.9	147.8	196.5

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Currently, Japan’s imports of most pork products, including muscle cuts and edible offal, are subject to the gate price system (box 3.3). Imports with a customs value below the “gate price” are assessed a specific tariff equal to the difference between the customs value and the gate price, plus a tariff equal to a percentage of the customs value (*ad valorem*). Imports with a customs value equal to or greater than the gate price are assessed the *ad valorem* tariff only. The per-kilogram gate price for carcasses and half carcasses is 393 yen (\$3.25). For most pork

¹⁸⁴ Sanitary measures are not directly addressed in the TPP agreement, but the agreement's Chapter 7 does provide for cooperative technical consultations if TPP members are unable to resolve disagreements over sanitary measures through existing mechanisms. At the Commission's TPP hearing on January 14, 2015, some industry representatives testified that the provision for cooperative technical consultations could be particularly important to U.S. agricultural exports. USITC, hearing transcript, February 14, 2016, 383 (Thomas Suber, NCBA), 403 (Stephen Sothmann, US Hides, Skins, and Leather Association), and 414 and 485 (Devry Boughner Vorwerk, Cargill). SPS measures are also subject to the dispute settlement mechanism of the TPP, though with a delay in some areas.

cuts, it is 524 yen (\$4.33); for dried/smoked and prepared products, 897.59 yen (\$7.42). The *ad valorem* tariff rates are 4.3 percent, 4.3 percent, and 8.5 percent, respectively.¹⁸⁵

Box 3.3: How Japan's Gate Price System Works

Japan's gate price system imposes a minimum price for pork imports. Tariff treatment depends on whether the average unit value of the shipment (per kilogram) is above or below the gate price. If the customs value is above the gate price, the assessed tariff is simply 4.3 percent *ad valorem* for carcasses and cuts, and 8.5 percent for dried/smoked or prepared products. If the customs value is below the gate price, then a specific tariff is applied that raises the value to the gate price, plus an additional 4.3 percent (or 8.5 percent) tariff. The maximum tariff that can be applied is limited only by the WTO bound rates of 361 yen/kg (\$2.98) for carcasses and half carcasses, 482 yen/kg (\$3.98) for most pork cuts, and 1,035 yen/kg (\$8.55) for prepared or preserved pork products.

The table below shows how this system penalizes imports of low-price pork products, using the example of boneless and bone-in cuts (the category most relevant to Japanese imports from the United States), which have a gate price of 524 yen/kg. In the example, picnic ham (a low-priced cut) is assessed a specific tariff of 224 yen/kg to raise the value to the gate price of 524 yen/kg, then an *ad valorem* tariff of 23 yen/kg (i.e., 4.3 percent of 524), for a total tariff of 247 yen/kg, or 82.3 percent *ad valorem* equivalent. The customs value of boneless loins (a high-priced cut) is above the gate price, so this import is assessed the 4.3 percent *ad valorem* tariff only.

Effect of gate price system on selected pork cuts (Gate price ¥524/kg)

Cut	Customs value (¥/kg)	Specific tariff (¥/kg)	Ad valorem tariff (¥/kg) ^a	Total tariff (¥/kg)	Landed value (¥/kg)	AVE (%)
Picnic ham	300	224	23	247	547	82.3
Sparerib	450	74	23	97	547	21.6
Boneless loin	600	NA	26	26	626	4.3

^a Add customs value to specific tariff, then multiply by 4.3 percent.

In practice, the gate price system limits but does not eliminate U.S. exports of low-priced pork cuts to Japan, because importers ship a mix of cuts so that the average unit customs value is at or slightly above the gate price.

Source: Government of Japan, Customs and Tariff Bureau, "Japan's Tariff Schedule as of January 15, 2015." http://www.customs.go.jp/english/tariff/2015_115/index.htm. Exchange rates from USDA, "Nominal Annual Country Exchange Rates" for 2015.

Malaysia's applied tariffs on pork products other than carcasses and half-carcasses are zero, but Malaysia imports very little pork. New Zealand imposes a 5 percent tariff on imports of fresh or

¹⁸⁵ Government of Japan, Customs and Tariff Bureau, "Japan's Tariff Schedule as of January 15, 2015." http://www.customs.go.jp/english/tariff/2015_115/index.htm. Exchange rates from USDA, "Nominal Annual Country Exchange Rates" for 2015.

frozen pork cuts. Vietnam imposes rates of up to 27 percent on fresh pork cuts and 15 percent on frozen pork.

Several sanitary measures that currently restrict U.S. pork exports are viewed by U.S. industry representatives as unjustified. Australia, for example, requires that U.S. pork be heat-treated before being marketed in Australia and requires that all solid waste from U.S. pork imports be treated as quarantine waste products, due to concerns over porcine reproductive and respiratory syndrome and post-weaning multisystemic wasting syndrome.¹⁸⁶ Singapore requires that U.S. pork be frozen or tested for trichinae, and maintains shelf-life requirements that are considered overly restrictive.¹⁸⁷ Vietnam requires increased inspections for shipments of “white offal,” and temporarily suspended approvals of new exporters of white offal.¹⁸⁸ Additionally, Vietnam requires that producers provide detailed information, including business proprietary information, on their facilities, in order to export to Vietnam.¹⁸⁹

Summary of Provisions

Currently, U.S. processed pork imports from countries with normal trade relations (MFN countries) are subject to a rate of 1.4 cents per kg (roughly 0.4 percent ad valorem equivalent in 2014). Fresh or frozen pork, other than processed, enters the United States duty free. Prepared pork imports are subject to rates of up to 6.4 percent. Under the TPP, pork imports from all TPP partner countries would become duty free upon entry into force.

As noted, U.S. pork exports to Australia, Canada, Chile, Mexico, Peru, and Singapore are currently duty free under existing trade agreements. The TPP would improve tariff treatment for U.S. pork exports to Japan, Malaysia, New Zealand, and Vietnam (table 3.18).

Table 3.18: Pork: Selected U.S. and TPP partner tariff concessions

Product	U.S. concessions	TPP country concessions			
		Japan	Malaysia	Vietnam	Other
Pork	Tariffs, currently as high as 6.4%, eliminated in 10 years.	Gate price-specific duty reductions on most fresh or frozen cuts from maximum of 482 yen/kg to maximum of 50 yen/kg in 10 years.	Most tariffs locked at zero. Expanded TRQ on carcasses unlimited after 15 years.	Tariffs, currently as high as 30%, eliminated in 5–10 years.	New Zealand tariffs of 5% eliminated in up to 2 years.

Source: USTR, TPP full text, December 15, 2015.

¹⁸⁶ USTR, *2015 National Trade Estimate Report*, March 2015, 32.

¹⁸⁷ *Ibid.*, 354.

¹⁸⁸ White offal consists of internal organs other than the heart, liver, and kidney.

¹⁸⁹ USTR, *2015 National Trade Estimate Report*, March 2015, 424.

The most significant improvement in access under TPP would be in exports to Japan. Under TPP, Japan's gate price system would be preserved, but the maximum duty that could be charged on products from TPP member countries would be substantially reduced. The maximum specific tariff for most pork cuts would fall to 125 yen per kg on entry into force, to 70 yen per kg in 5 years, and to 50 yen per kg after 10 years.¹⁹⁰ The ad valorem rate of 4.3 percent would also be reduced to 2.2 percent on entry into force and to zero over 10 years. The duty for dried/smoked and preserved products would be reduced immediately, based on the customs value, and would decline to zero in the 11th year after entry into force.¹⁹¹

Imports of ground seasoned pork and sausages are not subject to Japan's gate price system, but face ad valorem tariffs of 20 percent and 10 percent, respectively. Tariffs on these products from TPP members would be phased out over 6 years.¹⁹²

Malaysia's applied tariffs on most pork products are currently zero. The TPP would lock in these zero tariffs for imports from TPP member countries. Malaysia's imports of carcasses or half-carcasses are currently subject to a TRQ with an in-quota rate of 25 percent and an over-quota rate of 50 percent. The TPP would establish a separate TRQ for TPP member countries, with an in-quota rate of zero and the over-quota rate phased out over 15 years.

New Zealand currently imposes tariffs of 5 percent on fresh and frozen pork cuts and some prepared pork products. Tariffs on most pork products would be eliminated on entry into force of the agreement. The tariff on frozen boneless pork under HS 0203.29 would be phased out over 2 years. New Zealand is a net importer of pork, and in 2014, most of New Zealand's pork imports were of frozen boneless pork, predominately imported from the EU at the MFN rate. Other major suppliers are Canada and the United States.

Vietnam's import duties of 10 percent on edible pork offal would be phased out over 5 years. Duties of 15 percent on frozen pork and 14 percent on dried/smoked pork products would be phased out over 8 years. Duties of 27 percent on fresh pork and 22 percent on prepared pork products would be phased out over up to 10 years. Vietnam is currently a minor pork importer and is a net exporter. However, Vietnam is a significant pork consumer and a potential export market.¹⁹³

¹⁹⁰ Such pork cuts would include fresh, chilled, or frozen cuts of pork (other than carcasses or half-carcasses) under HS 0203.12, 0203.19, 0203.22, and 0203.29 (other than cuts of wild boar), and edible offal other than internal organs under HS 0206.30 and 0206.49 (other than that of wild boar).

¹⁹¹ The ad valorem rate of 8.5 percent on dried/smoked and preserved products with a customs value equal to or greater than the gate price will be reduced to 4.3 percent on implementation, and to zero over 11 years. The duty calculation under the gate price system is described in the TPP full text, Notes to Tariff Schedule of Japan, 5–6.

¹⁹² The effects of TPP on the production of and trade in these products are included in the "other meat products" sector.

¹⁹³ USDA, FAS, "Trans-Pacific Partnership: Benefits to U.S. Agriculture," November 30, 2015.

Estimated Effects of TPP on the U.S. Pork Sector

Tariff Concessions

According to the Commission’s model estimates, overall U.S. pork exports would likely be \$219.3 million higher under TPP, relative to the 2032 baseline. Most of the expected increase in U.S. pork exports under TPP would be to Japan. U.S. pork exports to Japan would be expected to increase by about \$210 million (7.8 percent) relative to the baseline. Japan is already the largest U.S. pork export market on a value basis, and the effects of Japan’s restrictive gate price system would erode significantly over time.¹⁹⁴ The United States is the largest supplier of imported pork to Japan. However, Canada and Mexico—also TPP member countries—are major suppliers as well. Tariff reductions under TPP would benefit all NAFTA partners. U.S. exports to New Zealand would likewise be expected to increase.

Japanese consumption of pork has been gradually increasing and, over the past five years (2010–14), Japan’s pork imports have increased as a share of overall pork consumption from 44 percent to 48 percent. Pork imports have increased more rapidly than beef imports, partly due to high global beef prices. Both of these factors are expected to moderate beginning in 2015, so Japanese imports of pork may slow.¹⁹⁵

Japan’s imports of fresh/chilled pork, frozen pork, and prepared pork largely serve different market segments. Most imported fresh/chilled pork is destined for the retail market and in-home consumption. In this segment, imports compete with Japanese domestic product. Most frozen pork imports are used to manufacture preserved or prepared products, with a smaller volume in the food service segment.¹⁹⁶

Most of Japan’s imports of fresh pork are from the United States and Canada, predominantly from the United States.¹⁹⁷ Tariff preferences under the TPP would be expected to benefit U.S. and Canadian exporters of fresh pork cuts for sales in the retail market, competing with Japanese domestic production. However, a comparison of “normal” retail prices shows that in FY 2014, the average price of imported pork loin was 61 percent of the price of Japanese

¹⁹⁴ However, trade gains for U.S. producers under TPP are reportedly threatened by increases in foreign government support for less efficient domestic producers. *Inside U.S. Trade*, “Expanded Japanese Subsidies Could Sap U.S. Pork,” January 7, 2016.

¹⁹⁵ USDA, FAS, *Japan: Livestock and Products Annual*, August 31, 2015, 9.

¹⁹⁶ *Ibid.*

¹⁹⁷ U.S. pork producers reportedly enjoy a logistical advantage over producers in countries, and are able to ship fresh/chilled pork to Japan swiftly enough that the pork does not have to be frozen. Industry representative, interview by USITC staff, November 18, 2015.

domestic pork loin, indicating that Japanese consumers perceived substantial differences between imported and domestic product.¹⁹⁸

As noted, most imports of frozen cuts of pork are used to produce prepared products. In fact, imports account for the vast majority of the pork that is processed into products such as sausage in Japan.¹⁹⁹ In FY 2014, over one-third of Japan's imported pork was used in the processing of other food products.²⁰⁰ Japan's major suppliers of frozen pork cuts are the EU, the United States, Mexico, and Canada. Tariff concessions on frozen cuts would therefore be expected to allow producers in Canada, Mexico, and the United States to capture market share from suppliers in the EU.²⁰¹

More than half of Japan's prepared pork imports are from the United States. Most of this is ground seasoned pork. Other TPP member countries and the EU supply a much smaller volume of such imports.²⁰² Under TPP, Japan's tariffs on prepared pork would be phased out over 6 years, while concessions on pork products subject to the gate price system would be phased in over 10 years. Relative gains in exports of prepared products versus frozen pork will depend on these schedules and global prices for pork relative to Japan's gate prices.²⁰³

Model results indicate that U.S. pork exports to New Zealand would increase by \$19.3 million under TPP (37.9 percent) relative to the baseline in 2032. Almost all pork consumed in New Zealand is imported. Major suppliers include the EU, the United States, Canada, and Australia. Like imports from the EU, the vast majority of New Zealand's imports from the United States are of frozen boneless pork (83 percent in 2014). Frozen boneless pork accounts for a somewhat smaller share of New Zealand's imports from Australia and Canada (65 percent and 68 percent, respectively, in 2014). U.S. producers would be expected to capture a somewhat

¹⁹⁸ Government of Japan, ALIC, "Pork Retail Price (National Average)" (accessed November 18, 2015).

¹⁹⁹ Reported model results for pork exports includes products such as seasoned ground pork but excludes sausages. Sausages are included in the "other meat products" sector. Model results indicate that U.S. exports of other meat products to Japan would increase by \$201 million under TPP.

²⁰⁰ Government of Japan, ALIC, "Meats for Processing" (accessed November 18, 2015).

²⁰¹ The EU is the largest non-TPP supplier of pork to Japan. The United States and the EU are also the largest suppliers of pork to China. Although much of China's pork imports are of edible offal, the United States and the EU also export large volumes of frozen pork cuts to China. Increased access to the Japanese market under TPP would be expected to cause U.S. exporters to shift some of this volume from China to Japan. EU suppliers might, in turn, shift some volume from Japan to China.

²⁰² Japan's other major supplier of prepared pork imports is China. However, prepared pork imports from the United States and China serve different segments of the Japanese market. Imports from the United States are largely of seasoned ground pork from hams or shoulders, and are used in Japan to produce sausage. Imports from China are largely produced from cuts other than the ham or shoulder and are used in specialized products in retail and food service. USDA, FAS, email to USITC staff, October 19, 2015.

²⁰³ An increase in global pork prices (or a devaluation of the Japanese yen) would lessen the impact of Japan's gate price system and favor imports of frozen cuts over prepared products, as occurred in 2014. USDA, FAS, *Japan: Livestock and Products Annual*, August 31, 2015, 10, note 6. A decline in global pork prices (or appreciation of the yen) would favor imports of prepared products.

larger share of this segment of the New Zealand pork market from EU pork producers as tariffs are phased out under TPP. TPP would also put U.S. suppliers on an equal footing with suppliers in Australia and ASEAN.

Phase-in Schedule of Provisions

U.S. exports of pork products subject to Japan's gate price system would likely not substantially increase immediately upon implementation. Although the maximum specific duty that could be assessed on most pork cuts would drop from 482 yen per kg to 125 yen per kg immediately upon entry into force, there would be little immediate change in the actual applied tariffs, and therefore little change in trade volume. As noted, Japan's gate price system will not be dismantled under the TPP, and the actual gate prices are unchanged. Under the gate price system, the specific duty is based on the average unit value of a shipment, not the price of individual items. Currently, U.S. exporters minimize the effects of the gate price system by shipping a mix of higher-value and lower-value products, so that the average unit value is above or very near the gate price. Following TPP's entry into force, U.S. exporters would likely still ship a mix of higher-value and lower-value cuts. A tariff of 125 yen per kg would be a significant share of the wholesale price of many pork cuts.²⁰⁴

The need to manipulate the product mix so that the average unit value is at or above the gate price would decrease as the maximum specific duty that can be charged declines (and as inflation and exchange rate changes impact the value of the yen). At some point, the lower maximum tariff facing U.S. pork exporters under the TPP should allow exporters to ship a mix of products in line with the demand for specific cuts in Japan, rather than manipulating product mix. This is expected to decrease costs, both for exporters, who currently have to combine shipments, and for importers, who have to distribute multiple products.²⁰⁵ However, these gains might be further delayed or partially offset by policy changes such as the proposed increase in Japanese government support for Japanese domestic pork producers.²⁰⁶

²⁰⁴ For instance, the Boston butt is a pork cut for which there is great demand in Japan. The average wholesale U.S. price of boneless butt, ¼ inch trim, at the beginning of 2016 was about \$1.10 per pound (fob plant). At current exchange rates, 125 yen per kg is a little over \$1.00 per kg, or just under 50¢ per pound. Oh and See, "Pork Preference for Consumers in China," 2012, 144; USDA, AMS, "Weekly National Carlot Meat Report," January 2, 2016, 4.

²⁰⁵ *Inside U.S. Trade*, "Vetter: U.S. Clarifying Japanese Pork Subsidy Program," February 12, 2016.

²⁰⁶ *Inside U.S. Trade*, "Expanded Japanese Subsidies Could Sap U.S.," January 7, 2016.

Poultry Meat Products²⁰⁷

Assessment

The TPP Agreement would likely result in a moderate increase in U.S. poultry meat exports and a small decrease in U.S. poultry meat imports. Elimination of duties on poultry meat imports in Japan should increase U.S. competitiveness in this large market. Increased access to the growing Vietnamese market should also benefit U.S. poultry exporters. The agreement would not alter the United States' relative competitive position in Mexico, the most important export market for U.S. poultry meat. The agreement would provide limited additional access to the Canadian import market, which is currently dominated by U.S. exports; however, direct access to the Canadian consumption market would continue to be limited by substantial over-quota duties. New TRQ access to the Malaysian market, however, would have little value to U.S. exporters because long-standing halal certification issues were not addressed under the TPP Agreement.

The Commission's model estimates that annual U.S. poultry meat exports to TPP member countries would be \$588 million (or 15.7 percent) greater than the baseline projection in 2032 with implementation of the agreement. Overall, however, the model results suggest that globally, U.S. poultry meat exports would only be \$174 million (1.3 percent) greater than the baseline in 2032 as U.S. exports diverted from China, Hong Kong, and the rest of the world, to supply exports to TPP countries, were valued at \$74 million, \$48 million, and \$267 million, respectively.²⁰⁸

As a result of these changes in trade, the model estimates that if TPP were adopted, U.S. poultry meat producers' output would be \$266 million, or 0.6 percent greater than the 2032 baseline projection. Similarly, employment in the poultry sector would be 0.6 percent greater.²⁰⁹

²⁰⁷ Poultry meat products includes trade classified under HS 0207, 160231, 160232, and 160239.

²⁰⁸ In those TPP markets that have domestic poultry industries, the structure of the Commission's model balances the impact of reduced tariffs on poultry meat with the impact of reduced tariffs on feed grains, oilseeds, and meals that would potentially reduce the cost of locally produced poultry meat.

²⁰⁹ Under TPP, trade concessions would be phased in over a period of time. Most concessions would be phased in over 15 years or less. Therefore, model results are presented for production and trade effects for the TPP in 2032, including the effects of anticipated changes in investment consistent with current projected conditions but without TPP implemented.

Overview of U.S. Trade with TPP Partners

The United States is the world's largest poultry meat producer and its second-largest poultry meat exporter.²¹⁰ More than 40 percent of all U.S. poultry exports were shipped to TPP partners during 2013–15 (table 3.19). Among TPP partners, 86 percent of U.S. exports were shipped to Mexico and Canada. Exports to Mexico (about \$1.1 billion) consisted primarily of fresh, chilled, and frozen chicken meat and offal (56 percent) and fresh, chilled, and frozen turkey meat and offal (29 percent). Canada's imports from the United States (\$579 million) consisted of 32 percent in-quota duty-free imports; about 20 percent was over-quota trade, while about 48 percent was largely classified as meat from spent fowl (exhausted egg-laying hens) under MFN and NAFTA duty-free tariff lines.²¹¹ Outside of the NAFTA partners, about half of the remaining U.S. exports to TPP countries (6.9 percent) were shipped to existing FTA partners Chile, Singapore, Peru, and Australia. The other half of non-NAFTA U.S. exports to TPP countries (6.8 percent) went to members without previous agreements with the United States, namely Japan, Malaysia, Vietnam, and Brunei.

Ninety-eight percent of U.S. poultry meat imports were supplied by TPP partners during 2013–15 (table 3.20). Canada accounted for 68 percent (\$283.5 million) of the imports, Chile for 26 percent (\$107.8 million), and Mexico for 3 percent (\$13.5 million). The bulk of U.S. imports from Canada are likely associated with Canada's re-export programs, discussed below.

Table 3.19: U.S. exports of poultry meat to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S exports to world	U.S exports to TPP countries			Other existing FTA partners
		All	New partners	NAFTA	
Poultry: Total	4,879.2	1,962.2	132.9	1,694.1	135.3
Selected subproducts					
Chicken cuts and offal, fresh, chilled or frozen (020713, 020714)	3,791.5	1,222.0	115.6	1,023.4	83.0
Turkey cuts and offal, fresh, chilled or frozen (020726, 020727)	487.3	346.2	5.8	332.7	7.7
Prepared or preserved chicken meat (160232)	307.8	226.9	4.3	195.5	27.2

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

²¹⁰ USDA, FAS, *Livestock and Poultry: World Markets and Trade*, October 2015, 18–19.

²¹¹ Nearly all over-quota trade is likely imported under various duty relief and re-export programs and thus is subject to zero or reduced duties. USDA, FAS, *Canada: Poultry and Poultry Products Annual 2015*, August 7, 2015, 8–12.

Table 3.20: U.S. imports of meat from world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S imports from world	U.S imports from TPP countries			
		All	New partners	NAFTA	Other existing FTA partners
Poultry : Total	355.4	346.9	-	269.3	77.6

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Tariff barriers in most TPP partner countries were relatively low and industry representatives reported that they were not prohibitive, with the exception of Canada’s over-quota duties.²¹² Thus, sanitary requirements are a major factor limiting U.S. poultry meat exports. U.S. poultry meat exports to Chile, Mexico, Peru, and Singapore have been mostly duty free, with low sanitary restrictions.²¹³ Sanitary restrictions in Australia and New Zealand allow only U.S. poultry meat that is canned, heat-processed, or cooked to be imported.²¹⁴ Japan’s rate of duty on U.S. poultry meat exports was 12 percent or less, while sanitary requirements allow U.S. exports of fresh, chilled, and frozen poultry meat.²¹⁵ Exports to Malaysia are restricted by the fact that no U.S. chicken plants have received Malaysian halal certification, rather than by Malaysia’s duties of up to 40 percent.²¹⁶ Vietnam generally allows imports of fresh, chilled, and frozen U.S. poultry products, although import duties are currently as high as 40 percent.²¹⁷

Canada’s chicken and turkey meat imports for domestic consumption are limited by TRQs and prohibitive over-quota duties designed to implement Canada’s strict supply control program.²¹⁸ In 2015, import permits were issued for 78,243 mt of chicken meat and 4,852 mt of turkey

²¹² Sumner, written testimony to the USITC, December 29, 2015, 5.

²¹³ Duty-free access for U.S. exports of bone-in chicken leg quarters are subject to a TRQ in Peru. The in-quota quantity for 2016 is 25,907 mt. USTR, United States-Peru Trade Promotion Agreement, Final Text, Appendix to Peru Tariff Schedule, <https://ustr.gov/trade-agreements/free-trade-agreements/peru-tpa/final-text> (accessed January 5, 2016). During 2009–14, Peru reported no imports from the United States under tariff lines subject to the TRQ; GTIS, Global Trade Atlas database (accessed February 5, 2015). Chile, Mexico, Peru, and Singapore currently maintain restrictions on U.S. poultry meat products originating from selected states and processed during specific time periods based on outbreaks of highly pathogenic avian influenza (HPAI) during 2015 and 2016. USDA, FSIS, “Export Requirements by Country” (accessed February 5, 2016).

²¹⁴ USDA, FSIS, “Export Requirements by Country” (accessed February 5, 2016).

²¹⁵ Japan also maintains restrictions on U.S. poultry meat products by state of origin and processing date, based on outbreaks of HPAI. USDA, FSIS, “Export Requirements by Country” (accessed February 5, 2016).

²¹⁶ Based on export competitiveness in Vietnam, the industry does not believe Malaysia’s 40 percent duties would be prohibitive. Nonetheless, only one U.S. turkey processing plant has been approved for exports to Malaysia. Sumner, written testimony to the USITC, December 29, 2015, 5.

²¹⁷ Vietnam also maintains selected restrictions on U.S. poultry meat exports based on state of origin and time processed in response to HPAI outbreaks in 2015 and 2016. USDA, FSIS, “Export Requirements by Country” (accessed February 8, 2016).

²¹⁸ Sumner, written testimony to the USITC, December 29, 2015, 5. U.S. exports of meat and edible offal from spent fowl (exhausted egg-laying hens), ducks, geese, and poultry other than chickens and turkeys have generally been duty free; Government of Canada, Canada Border Services Agency, Chapter-by-Chapter Customs Tariff, Chapter 2, “Meat and Edible Meat Offal,” <http://www.cbsa-asfc.gc.ca/trade-commerce/tariff-tarif/2016/html/tblmod-1-eng.html> (accessed February 16, 2016).

meat from all sources.²¹⁹ Additional imports are allowed under re-export programs. The Canadian government licenses additional duty-free over-quota imports under two re-export programs: (1) the Import for Re-Export Program (IREP) and (2) the Duties Relief Program (DRP).²²⁰ Poultry meat imported under these programs is processed into products that are then exported, primarily back to the United States.

U.S. duties on poultry meat have been low, ranging from 8.8 to 17.6 cents per kilogram, while duties actually paid represented an ad valorem equivalent of less than 1 percent during 2012–14.²²¹ Sanitary restrictions limit most poultry meat imports. Only Canada and Chile are approved to export fresh, chilled, and frozen poultry meat to the United States.²²² Imports from Australia and New Zealand are limited to ratite meat.²²³ Imports from Mexico are limited to re-exports of products containing poultry meat that originated in the United States or in a third country approved to export to the United States.²²⁴

Summary of Provisions

The TPP Agreement would continue the current duty-free access for U.S. poultry meat exports to Australia, Brunei, Chile, Mexico, Peru, and Singapore.²²⁵ The agreement would provide duty-free access for U.S. poultry meat exports to New Zealand on entry into force.²²⁶ Vietnam would provide duty-free access in 6 to 13 years.²²⁷ Detail for Canada, Malaysia, Japan, and the United States are provided below.

²¹⁹ Government of Canada, Global Affairs Canada, Export and Import Controls, Chicken and Chicken Products, Tariff Rate Quota Utilization Tables, 2015; Government of Canada, Global Affairs Canada, Export and Import Controls, Turkey and Turkey Products, Tariff Utilization Tables 2015, <http://www.international.gc.ca/controls-controles/prod/agri/chicken-poulet/index.aspx?lang=eng> (accessed February 12, 2016). The annual quantities for Canada’s poultry TRQs are the greater of its commitment under the WTO or under NAFTA. NAFTA calculations are based on a percentage of current or previous year’s domestic production. Government of Canada, Agriculture and Food Canada, Industry, Markets and Trade, “Canada’s Poultry Import Regime” (accessed January 26, 2016).

²²⁰ During 2012–14, imports under the IREP and DRP averaged 97,000 mt. Total chicken imports under IREP and DRP from 2008 through 2015 exceeded total imports subject to TRQs by about 114,000 mt. IREP and DRP programs favor U.S. suppliers because product from other sources (primarily Brazil) cannot be re-exported to the United States, and because once processed, most of this product returns to the United States. USDA, FAS, *Canada: Poultry and Poultry Products Annual 2015*, August 7, 2015, 8–12.

²²¹ USITC DataWeb/USDOC, February 22, 2016.

²²² USDA, FSIS, “Eligible Countries, Products, Foreign Establishments” (accessed February 8, 2016).

²²³ Ratites are large flightless birds; ratite meat is primarily sourced from ostriches, rheas, and emus. USDA, FSIS, “Eligible Countries, Products, Foreign Establishments” (accessed February 8, 2016).

²²⁴ USDA, FSIS, “Eligible Countries, Products, Foreign Establishments” (accessed February 8, 2016).

²²⁵ USTR, TPP full text.

²²⁶ *Ibid.*

²²⁷ *Ibid.*

Canada

The agreement would increase access for poultry meat to Canada, primarily based on new TPP-wide TRQs on chicken and turkey meat (table 3.21). However, growth in the duty-free quantity would end after year 19 of the agreement without any decrease in Canada’s prohibitive over-quota duties. Meat from spent fowl, ducks, geese, and other poultry would continue to enter Canada duty-free upon the entry into force of the agreement.²²⁸

Canada’s current prohibitive over-quota tariffs would be maintained: an ad valorem rate of 249 percent, but not less than CN\$3.78/kg, applies to bone-in chicken meat and offal, and not less than CN\$6.74/kg on boneless chicken meat and offal. Over-quota duty rates on turkey meat and offal are 165 percent, but not less than CN\$2.94/kg for bone-in product and not less than CN\$4.82 for boneless products.²²⁹

Table 3.21: Poultry: Selected U.S. and TPP partner tariff concessions

Product	U.S. concessions	TPP country concessions			
		Japan	Malaysia	Vietnam	Other
Poultry	Tariffs ranging from 8.8 to 17.6 cents/kg are generally eliminated upon EIF (see exceptions below).	Tariffs on fresh, chilled, and frozen meat and offal ranging from 3% to 11.9% are eliminated in 11 years or less; tariffs on prepared and preserved meat and offal of 6% are eliminated in 6 years or less.	TPP-wide TRQs on chicken meat and offal; in-quota tariffs are zero upon entry into force; over-quota tariffs are reduced from 40% to 20% over 16 years; initial in-quota quantities total 20,452 mt increasing at 1% annually.	Tariffs of 15–40% on poultry meat and offal are eliminated in 6 to 13 years; tariffs on live poultry are eliminated upon EIF.	Canada: TPP-wide TRQs for chicken and turkey meat; zero duty on in-quota items upon EIF; no reduction in over-quota tariffs.
	Imports from Japan and Vietnam face 5–10 year phase out on selected poultry items	U.S. exporters will gain preferential tariff advantage relative to exporters from Brazil and China; meanwhile, tariff disadvantages relative to preferences previously provided to Thai	U.S. exporters gain some preferential tariff advantage relative to China for chicken meat; meanwhile, other preferential tariff access provided to ASEAN members and China are offset	U.S. exporters gain some preferential tariff advantage relative to China for chicken meat; meanwhile, other preferential tariff access provided to ASEAN members and China are offset	Canada: TPP-wide TRQs increase duty-free access for chicken meat from 3,917 mt to 26,745 mt over 19 years; and duty-free access for turkey meat from 583 mt to 3,983 mt over 19 years.

²²⁸ Ibid.

²²⁹ Government of Canada, Canada Border Services Agency, Customs Tariff 2016, Chapter 2, “Meat and Edible Meat Offal,” <http://www.cbsa-asfc.gc.ca/trade-commerce/tariff-tarif/2016/html/00/ch02-eng.html> (accessed January 26, 2016).

Product	U.S. concessions	TPP country concessions			
		Japan	Malaysia	Vietnam	Other
		exporters will be eliminated.	and eliminated.	and eliminated.	

Source: USDA, FAS, Factsheets (accessed November 23, 2015) and USTR, TPP full text.

Malaysia

Malaysia would eliminate duties on poultry meat other than chicken immediately. Chicken meat would be subject to several perpetual TRQs and to over-quota tariff rates of 20 percent.²³⁰ Of the total TRQ quantity, 20,000 mt is allocated to frozen chicken cuts. The TRQs grow indefinitely at an annual rate of 1 percent.²³¹ After year 16, the 20 percent over-quota duty remains in place indefinitely.²³² The agreement did not address Malaysia’s restrictive halal certification requirements, which are the primary barrier to access to the Malaysian poultry meat market for all TPP partners.

Japan

Japan would eliminate all duties on poultry meat imports within 11 years.²³³ Nearly 97 percent of Japan’s total poultry imports (\$3.4 billion) are classified in two tariff lines, including prepared and preserved chicken meat and offal (62.3 percent) and frozen chicken cuts and edible offal (34.3 percent).²³⁴ Bone-in chicken legs constitute the largest and most competitive product type for U.S. exporters; the United States supplies 94 percent of Japan’s total import value of \$44 million in this category. TPP duties on bone-in chicken legs are reduced from 8.5 percent to zero over 11 years.²³⁵

United States

The United States would provide duty-free access upon entry into force to all TPP partners with the exception of Vietnam and Japan, for which selected poultry meat duties would be eliminated in 5 to 10 years.²³⁶ All U.S. tariff lines for Japan and Vietnam will be duty free within 10 years. Nearly 100 percent of U.S. poultry imports are currently sourced from countries that have duty-free access to the U.S. market via previously negotiated FTAs. During 2013–15, the value of U.S. poultry imports from Canada was \$283.5 million (68 percent of the U.S. total),

²³⁰ USTR, TPP full text.

²³¹ Ibid.

²³² Ibid.

²³³ Ibid.

²³⁴ GTIS, Global Trade Atlas database (accessed February 5, 2015).

²³⁵ USTR, TPP full text; GTIS, Global Trade Atlas database (accessed February 5, 2015).

²³⁶ USTR, TPP full text.

Chile (\$107.8 million, 26 percent), Mexico (\$13.5 million, 3 percent), and Israel (\$9.0 million, 2 percent).²³⁷

Estimated Effects of TPP on the U.S. Poultry Sector

The TPP Agreement is likely to have a positive, though moderate, impact on the growth of total U.S. poultry meat exports and poultry meat trade among TPP partners. Commission estimates (described in the country specific sections below) show that the agreement would increase the price-competitiveness of U.S. poultry meat exports. This would be especially important in Japan and Vietnam, where other suppliers have cost advantages related to labor and product mix.²³⁸ The agreement would provide additional access to the Canadian market, but could also provide additional opportunities for Canadian processors to re-export further processed U.S. poultry meat to other TPP partners. The Commission model estimates show that U.S. exports to Chile (\$94 million) and Mexico (\$87 million) would also be greater than the 2032 baseline.²³⁹

No other TPP partners are leading poultry meat exporters, so increased TPP-wide market access is unlikely to create more competition in TPP markets where U.S. suppliers currently enjoy preferential access from previous FTAs, or in the U.S. domestic market (see U.S. description below).

Though the agreement provides a new framework for addressing sanitary restrictions on poultry meat trade, a number of TPP partners, such as Australia and New Zealand, are likely to maintain strict sanitary restrictions on poultry meat imports from the United States as well as all other TPP partners. In addition, as noted earlier, the agreement did not address long-standing issues related to different halal certification requirements across countries that make compliance more costly and in some cases stop trade altogether.

Canada

Canadian poultry meat imports from the United States will increase moderately, because market access would likely increase to match the in-quota volume but continue to face prohibitive over-quota duties. The effect on the U.S. output is small because the value of the TRQ is small compared to total U.S. poultry meat exports to Canada and the world. U.S. exporters supplied nearly 87 percent of Canada's total poultry meat imports during 2013–15, as well as 73 percent of the value of in-quota imports. U.S. exporters are likely to supply a

²³⁷ In 2015, broiler meat imports represented about 10 percent of U.S. consumption. USDA, PSD Online (accessed May 12, 2016).

²³⁸ Sumner, written testimony to the USITC, December 29, 2015, 5.

²³⁹ In the Commission model's general equilibrium format, all poultry meat exports to Canada would be valued at the average cost of the entire basket of goods.

substantial share of in-quota access under TPP.²⁴⁰ Based on the average unit value of Canadian in-quota poultry meat imports during 2013–15, the additional TRQ access would be valued at nearly \$75 million—a 41 percent increase over 2013–15 in-quota imports.²⁴¹ Comparatively, the Commission model estimates that U.S. poultry exports to Canada would be \$63 million greater than the 2032 baseline.

These results are modest because nearly half of Canada’s imports of U.S. poultry meat currently enter Canada duty-free under MFN or NAFTA, much of this in the form of meat classified as being from spent fowl. Moreover, about 20 percent of Canada’s poultry meat imports were classified in over-quota tariff lines. As Canada’s over-quota duty rates are generally considered to be prohibitive, the bulk of these imports were likely subject to reduced or zero duties under tariff relief or re-export programs.

Japan

Reduced duties on U.S. poultry meat exports to Japan may increase the cost-competitiveness of U.S. poultry exports to Japan, especially relative to Brazil, currently Japan’s largest poultry meat supplier. Thus, the Commission’s model estimates that U.S. poultry meat exports to Japan would be \$197 million greater than otherwise relative to the 2032 baseline, the largest absolute gain among TPP partners.

Brazil dominates Japan’s imports of frozen chicken meat with a 90 percent import market share, despite import unit values that averaged \$539 per mt more than imports from the United States.²⁴² Brazil dominates Japan’s imports based on cost advantages that allow Brazilian processors to competitively supply specific product standards desired by Japanese consumers, such as hand-cut and hand-packed chicken parts.²⁴³ Reduced duties on U.S. frozen chicken meat would potentially make U.S. frozen chicken parts more competitive by increasing the margin between Brazilian and U.S. frozen chicken meat from \$539 per mt to \$869 per mt.²⁴⁴

²⁴⁰ GTIS, Global Trade Atlas database (accessed February 29, 2015).

²⁴¹ Average export unit value during 2012–14 for the selected tariff lines was \$2,753 per metric ton and included imports classified under USHTS 0207.11.9100, 0207.12.9100, 0207.13.9100, 0207.14.9110, 0207.14.9120, 0207.14.9130, 0207.14.9141, 0207.14.9149, 0207.14.9190, 0207.24.1100, 0207.24.9100, 0207.25.1100, 0207.25.9100, 0207.26.1000, 0207.27.1100, 0207.27.9100, 1602.32.1200, and 1602.32.9300. GTIS, Global Trade Atlas database (accessed February 29, 2015).

²⁴² Average import unit value and value market share for Japan's poultry meat imports classified under 020714 during 2012–14. GTIS, Global Trade Atlas database, (accessed February 29, 2015).

²⁴³ USITC, *Brazil: Competitive Factors in Brazil*, May 2012, 4-19.

²⁴⁴ Average import unit value and value market share for Japan's poultry meat imports classified under 020714 during 2012–14. GTIS, Global Trade Atlas database (accessed February 29, 2015).

Thailand and China dominate Japan’s imports of prepared and preserved chicken meat, supplying about 99 percent of the market value of these imports.²⁴⁵ Based on average import unit values during 2012–14, China supplied these products at \$1,665 per mt less than the United States, while imports from Thailand were priced at \$1,274 per mt less than imports from the United States. The TPP Agreement would offset Thai suppliers’ tariff advantage over U.S. suppliers, an advantage provided by the Japan-Thailand FTA.²⁴⁶ The agreement would also reduce China’s price advantage by about \$280 per mt.²⁴⁷

Malaysia

Malaysian concessions on poultry meat trade under the TPP Agreement are unlikely to benefit U.S. poultry meat exporters. While the 20,000-mt TRQ offered by Malaysia would be worth approximately \$26 million at average U.S. export unit values during 2012–14, this value is unlikely to be realized because Malaysian poultry imports are limited by Malaysia’s halal certification requirement. Only one U.S. turkey processing facility is halal certified to export to Malaysia, and halal certification requirements limit exports from nearly all TPP partners.²⁴⁸ The Commission’s model estimated no change in U.S. exports to Malaysia because it was assumed that halal certification would continue to be a nearly prohibitive barrier.

U.S. exporters currently ship halal-certified poultry meat products to other Muslim countries.²⁴⁹ The primary difference between Malaysian standards for halal certification and those of other countries is the degree to which facilities must be dedicated to halal slaughter and processing.²⁵⁰ Malaysia’s standards require that facilities for slaughter and processing be exclusively dedicated to Malaysian halal-certified products.²⁵¹ Most other countries only require that facilities be dedicated to halal production and processing during a specific time

²⁴⁵ Average market share during for Japan’s imports classified under HS 160232 during 2012–14. GTIS, Global Trade Atlas database (accessed February 29, 2015).

²⁴⁶ Government of Japan, Ministry of Foreign Affairs, Agreement between Japan and the Kingdom of Thailand for an Economic Partnership, Annex 1: Schedules in Relation to Article 18, <http://www.mofa.go.jp/region/asia-paci/thailand/epa0704/index.html> (accessed February 10, 2016).

²⁴⁷ Average import unit value and value market share for Japan's poultry meat imports classified under HS 160232 during 2012–14. GTIS, Global Trade Atlas database (accessed February 29, 2015).

²⁴⁸ Only three plants among all TPP partners are currently approved for exports to Malaysia. These include a U.S. turkey slaughter and processing facility, a further processing facility in Brunei, and an emu and ostrich processing facility in Australia. Government of Malaysia, Department of Veterinary Services, “List of Approved Plants and Abattoirs,” <http://www.dvs.gov.my/index.php/pages/view/299> (accessed February 11, 2016).

²⁴⁹ Sumner, written testimony to the USITC December 29, 2105, 5.

²⁵⁰ Industry representative, email correspondence with USITC staff, February 12, 2016.

²⁵¹ Malaysia implemented food product standard MS1500: 2009, setting guidelines for halal certification that go beyond internationally recognized halal standards contained in the Codex Alimentarius. The Malaysian standards require slaughter plants to maintain dedicated halal production facilities and ensure segregated storage and transportation facilities for halal and non-halal products. USTR, *2015 National Trade Estimate Report*, March 2015, 263.

period or production shift. Adoption of TPP will not change this situation, as the agreement specifically exempted halal certification from consideration under the SPS chapter.²⁵²

United States

The elimination of duties for poultry imports into the U.S. market is likely to have a limited effect on U.S. poultry imports. Ninety-eight percent of U.S. poultry imports are currently sourced from TPP-partner countries that have duty-free access from previous FTAs—Canada, Chile, and Mexico.²⁵³ The only other TPP partners currently eligible to export poultry products to the United States are Australia and New Zealand.²⁵⁴ Australia also has duty-free access to the U.S. market but has not supplied product to the U.S. market since 2009; during 2013–14, it was a net importer of poultry products. New Zealand is the primary supplier to Australia, but is only a small regional supplier.

The model estimates that U.S. poultry meat imports from TPP partners would be \$19 million (or 4.2 percent) less than the 2032 baseline projection with the agreement, and that total U.S. imports would be \$17 million (3.6 percent) less. This result was primarily driven by offsetting changes in poultry meat imports from Chile (\$52 million decrease), Canada (\$29 million increase), and Mexico (\$4 million increase).²⁵⁵ Note that imports from Canada and Mexico would likely consist of further processed items using U.S. poultry meat as an ingredient.

Vietnam

The TPP Agreement is likely to benefit U.S. poultry meat exports to Vietnam, as Vietnam's primary competing suppliers—Brazil and South Korea—are not TPP partners and do not otherwise have duty-free access. Overall, Vietnam's imports of fresh, chilled, and frozen poultry meat from 2009 through 2014 have been increasing at a compound annual rate of 8.7 percent.²⁵⁶ Since the growth rate for imports from the United States was only 6.7 percent, the U.S. share of imports fell from a peak of 82 percent in 2010 to a low of 55 percent in 2013. Meanwhile, the combined share of imports from Brazil and South Korea increased from 15 percent in 2010 to 39 percent in 2013.

Elimination of Vietnam's 20 percent duties on chicken cuts would likely provide U.S. suppliers with a substantial pricing advantage over Brazil and South Korea. The cost of Vietnam's imports

²⁵² USTR, TPP full text, chapter 7.

²⁵³ GTIS, Global Trade Atlas database, (accessed February 29, 2015).

²⁵⁴ USDA, FSIS, "Eligible Countries, Products, Foreign Establishments" (accessed January 29, 2016).

²⁵⁵ U.S. imports from Canada and Mexico tend to consist of further processed poultry meat that was originally imported from the United States. Imports from Canada are typically associated with Canada's re-export programs. Imports from Mexico must consist of poultry meat from the United States or third countries approved to export to the United States, as Mexican-origin poultry meat is not approved for export to the United States.

²⁵⁶ GTIS, Global Trade Atlas database, (accessed February 29, 2015).

from Brazil and the United States averaged nearly the same during 2013–14—\$1,713 and \$1,714 per mt, respectively—while imports from South Korea cost \$1,936 per mt. The 20 percent duty differential upon full implementation in 13 years would increase the U.S. cost advantage over Brazil to \$341 per mt and over South Korea, to \$633 per mt.

At current growth rates, the value of Vietnam’s poultry meat imports from all sources would near \$308 million within 13 years. If U.S. import market share were at its low of 55 percent, the Vietnam market would then be worth about \$170 million to U.S. poultry meat exporters, while the high import market share of 82 percent yields imports from the United States of about \$250 million. This represents an increase of \$109–\$192 million in Vietnam’s imports of U.S. poultry meat from the current level of about \$60 million. Commission modeling results show that U.S. poultry exports to Vietnam would be \$134 million higher than the 2032 baseline, within this range.

Estimated Effects from Other Sources

The American Farm Bureau Federation estimates that U.S. poultry meat exports would increase by 188.9 million pounds, or nearly 86,000 mt, as a result of the TPP Agreement.²⁵⁷ At an average export unit value of \$1,321 per mt, this quantity would be valued at \$113 million. The federation estimates that increased demand from exports would increase the wholesale price of broilers²⁵⁸ by \$1.40 per cwt (hundredweight), increasing the total value of U.S.-produced broilers by \$625 million.²⁵⁹

Summary of Views of Interested Parties

James Sumner provided written and oral testimony on behalf of the USA Poultry and Egg Export Council (USAPEEC) and the National Chicken Council (NCC).²⁶⁰ The National Turkey Federation and the United Egg Producers expressed agreement with the written testimony.²⁶¹ USAPEEC and the NCC endorse the TPP Agreement and voted with the majority of USDA’s Trade Policy Advisory Committee to recommend that Congress approve and pass legislation to implement the TPP Agreement.²⁶²

The USAPEEC-NCC assessment is that TPP provisions will only moderately improve the situation for U.S. poultry exports.²⁶³ Previous agreements set the terms of trade and liberalization

²⁵⁷ AFBF, Comments Regarding Effects of Trans-Pacific Partnership on the United States Agricultural Sector, 17.

²⁵⁸ Broilers are domestic chickens (*Gallus Domesticus*) bred and raised specifically for meat production.

²⁵⁹ AFBF, Comments Regarding Effects of Trans-Pacific Partnership on the United States Agricultural Sector, 17.

²⁶⁰ Sumner, written testimony to the USITC, December 29, 2015, 1.

²⁶¹ *Ibid.*, 2.

²⁶² *Ibid.*, 3.

²⁶³ *Ibid.*, 6.

schedules for trade with Chile, Mexico, and Peru and TPP does not change these agreements.²⁶⁴ USAPEEC identified significant tariff reductions in only 3 of the 11 TPP markets: Japan, Malaysia, and Vietnam. With regard to Vietnam, USAPEEC believes that U.S. exports will be very competitive, unless other restrictions are imposed.²⁶⁵ Japanese duties have generally been low, thus the industry foresees modest gains there.²⁶⁶ While reduced duties to New Zealand are welcome, the U.S. is not currently approved to export poultry to New Zealand.

The industry, however, voiced displeasure with the access provided by Malaysia and Canada under TPP. Providing extensive detail, USAPEEC-NCC contended that tariff reduction in Malaysia would not give any real market access to U.S. exporters because of unresolved issues with halal certification.²⁶⁷ The testimony also indicated that USAPEEC-NCC would not support additional countries being admitted to TPP (such as Indonesia) where similar halal certification issues exist.²⁶⁸ In addition, while the additional TRQ access to Canada is welcome, the USAPEEC-NCC testimony stated that the industry had made it clear from the beginning that its objective in these negotiations was to achieve free trade in poultry and egg products with Canada, asserting that the provisions fall far short of this goal.²⁶⁹

The testimony stated that USAPEEC and NCC are hopeful that the SPS provisions of TPP will help to eliminate trade disruptions based on animal health and technical regulatory issues.²⁷⁰ One example mentioned in the testimony of such an issue is the maximum residue levels (MRLs) allowed by Japan, which are far more stringent than U.S. MRLs.²⁷¹ Another example was SPS barriers related to animal health. According to the testimony, these can create great damage when HPAI is detected in regionally contained areas of the United States; importers may react by placing bans on imports from all areas of the country, including those not affected by the disease.²⁷²

²⁶⁴ *Ibid.*, 6.

²⁶⁵ Within the past year, Vietnam has threatened to launch an antidumping case against U.S. poultry imports. Sumner, written testimony to the USITC, December 29, 2015, 8.

²⁶⁶ Sumner, written testimony to the USITC, December 29, 2015, 6.

²⁶⁷ *Ibid.*, 6, 9–11.

²⁶⁸ *Ibid.*, 6, 9–11.

²⁶⁹ *Ibid.*, 12.

²⁷⁰ *Ibid.*, 7–8.

²⁷¹ *Ibid.*, 7–8.

²⁷² *Ibid.*, 7–8.

Grains

Assessment

Commission modeling estimates that while overall U.S. grain²⁷³ exports and production would increase between 2017 and 2032 with or without TPP, both would experience marginally lower gains if TPP were implemented than if it were not.²⁷⁴ The model estimates that adopting TPP would result in total U.S. grain exports being one-tenth of one percent lower in 2032 than in the baseline projection. This slight drop would result primarily from increased domestic demand for grain, especially for the production of meat and dairy products, which would see moderate increases in exports under TPP. Increased U.S. demand would also lead to slightly higher U.S. imports of grains if TPP were enacted in 2017, compared to the baseline projection. Implementing TPP would have mixed effects on grains production. U.S. production of many grains, including corn, would be higher in 2032 with TPP adopted. However, Commission modeling indicates that wheat production would be virtually unchanged, while the rice industry may experience slightly lower production under TPP. U.S. rice production is expected to be marginally lower under TPP than without it in response to lower exports. Exports would decline because the U.S. rice industry may find that gains in access to the Japanese market are more than offset by lost sales to Vietnam domestically and in Mexico, where the United States would lose its current tariff advantage over Vietnam.

While the impact on overall grain trade would be negligible, the Commission's modeling estimates that U.S. grain exports to TPP partners would increase slightly (1.3 percent) in 2032 under TPP. Gains would be concentrated in Vietnam (25.3 percent higher exports in 2032 with TPP enacted), largely because of tariff eliminations for wheat and corn. Overall grain exports to Japan would be lower under TPP, although combined corn and rice exports to Japan would be 3.2 percent higher, partly as a result of increased market access through the creation of additional rice TRQs.

Overview of U.S. Trade with TPP Partners

TPP members include some of the world's largest grain exporters and importers, especially of corn, wheat, and rice. The United States, Canada, and Australia are among the leading global exporters of grains,²⁷⁵ while Japan and Mexico are major importers.²⁷⁶ Corn and wheat are the

²⁷³ Grains are covered by HS chapter 10 and include corn, wheat, rice, rye, barley, and sorghum, among others.

²⁷⁴ Under TPP, trade concessions would be phased in over a period of time. Most of these concessions would be phased in over 15 years or less. Therefore, model results are presented for production and trade effects of the TPP in the year 2032. Estimates of the effects of liberalizing each sector are presented relative to the baseline estimates of production and trade in 2032, including the effects of anticipated changes in investment without TPP.

²⁷⁵ During 2012–14, the United States was the world's largest exporter of grains, accounting for about 21 percent of the value of all grain exports (HS chapter 10). Canada and Australia, the fourth- and fifth-largest exporters, each

two largest U.S. grain exports, but the United States is also a significant exporter of rice. About 40 percent of U.S. grain exports were shipped to TPP countries during 2013–15 (table 3.22). In that period, the majority—56.7 percent—of U.S. corn exports were to TPP partners. As a group, TPP partner countries were less significant destinations for wheat and rice, having received 26.8 percent and 37.8 percent of U.S. exports during 2013–15, respectively. The trade flows of grains between TPP countries vary by product based on competitive factors including price, product specifications, proximity advantages, and barriers to trade.

Table 3.22: U.S. exports of grains to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S exports to TPP countries				
	World	All	New partners	NAFTA	Other existing FTA partners
Grains: Total (10)	20,548.3	8,223.4	3,606.2	4,006.4	610.8
Selected subproducts					
Corn (excluding for seed) (100590)	8,529.6	4,837.0	2,256.8	2,294.4	285.8
Wheat (excluding for seed) (100119, 100199)	7,903.3	2,119.6	1,015.5	819.5	284.6
Rice (1006)	2,068.0	781.8	246.1	507.4	28.3

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

U.S. grains already enjoy duty-free access to most TPP countries, especially those that are current FTA partners.²⁷⁷ In addition, three new partners, Brunei, Malaysia, and New Zealand, have no MFN duties on all or most grains, including wheat and corn.²⁷⁸ The largest export markets for U.S. grains are Canada and Mexico, which received close to half of all U.S. grain exports to TPP countries during 2013–15. Mexico is one of the largest markets for U.S. corn, wheat, and rice, while Canada is a significant importer of U.S. corn.²⁷⁹ In addition to duty-free access under NAFTA, the United States has a shipping advantage to Canada and Mexico relative to other grain suppliers due to its proximity to these countries.

Despite importing a substantial volume of grain from the United States, Japan maintains the most notable barriers of any TPP partner country. Japan is the largest new partner market for

accounted for about 8 percent of global grain exports during that period. GTIS, Global Trade Atlas database (accessed January 20 and February 10, 2016).

²⁷⁶ Imports of grains (HS chapter 10) are less concentrated by import country than exports. Japan, the world's second-largest grains importer, accounted for 9 percent of global grain imports during 2012–14; Mexico, the fifth-largest importer globally, accounted for 5 percent. GTIS, Global Trade Atlas database (accessed January 20, 2016).

²⁷⁷ Under the U.S.-Peru TPA, Peru will eliminate tariffs on all corn under HS 1050.90 as of 2020. U.S.-Peru FTA, Annex 2.3, <https://ustr.gov/trade-agreements/free-trade-agreements/peru-tpa/final-text> (accessed February 25, 2016).

²⁷⁸ Less than 1 percent of U.S. grain (HS chapter 10) exports were to these three countries. During 2012–14, Brunei primarily imported grains from Thailand; Malaysia, from Argentina, Brazil, and Australia; and New Zealand, from Australia. GTIS, Global Trade Atlas database (accessed February 29, 2016).

²⁷⁹ Mexico and Canada are also the largest markets for U.S. barley, and Canada is the largest market for U.S. oats as well as a significant market for U.S. rice. GTIS, Global Trade Atlas database (accessed February 24, 2016).

U.S. exports, receiving over 90 percent of U.S. grain exports to “new partners” during 2013–15.²⁸⁰ Almost two-thirds of U.S. grain exports to Japan were of corn; 26 percent were of wheat.²⁸¹ Japan is one of the top markets for U.S. corn and rice.²⁸² U.S. corn, wheat, and rice exports to Japan are all subject to WTO TRQs. Japan’s corn TRQ does not appear to limit trade because in-quota shipments are duty free, and the in-quota quantity is adjusted annually based on expected feed and processing needs.²⁸³ However, many of Japan’s other WTO TRQs on grains, including those on wheat and rice, restrict trade volumes.²⁸⁴ The administration of the TRQs is also burdensome, as in-quota imports of wheat and rice are currently subject to markups, meaning that they are sold by the sole in-quota importer at prices substantially above import prices.²⁸⁵ Representatives from both the U.S. wheat and rice industries also stated that testing requirements for chemical residues are excessive and expensive.²⁸⁶ In addition, USTR found that Japan’s import and distribution regime restricts market access for U.S. table rice to Japanese consumers.²⁸⁷

Vietnam is a significant importer of corn and wheat,²⁸⁸ but the United States does not have duty-free access for the majority of its grain exports and is not one of Vietnam’s major suppliers. Vietnam primarily imports corn from more price-competitive, non-TPP countries,

²⁸⁰ Over 95 percent of U.S. corn and wheat exports to “new partners” were to Japan.

²⁸¹ GTIS, Global Trade Atlas database (accessed February 23 and 24, 2016).

²⁸² GTIS, Global Trade Atlas database (accessed February 24, 2016); USITC, *Rice: Global Competitiveness*, April 2015, 328–34.

²⁸³ USTR, TPP full text, annex 2-D (Japan Tariff Elimination Schedule). Japan is heavily reliant on corn imports for virtually all its corn. USDA, PSD Online (accessed February 17, 2016).

²⁸⁴ Japan also has TRQs on corn, barley and triticale. USTR, TPP full text, Annex 2-D.

²⁸⁵ USTR, *NTE Report*, 2015, 211; industry representatives, interviews by USITC staff, February 19 and 24, 2016.

Currently wheat, rice, and barley can be imported only by the Japanese government, specifically by the Ministry of Agriculture, Forestry and Fisheries (MAFF). MAFF, *Report of Agricultural Trade*, October 1999.

²⁸⁶ Reportedly, U.S. wheat and rice exporters are required to test for hundreds of chemicals—more than are approved for use in the United States—in order to obtain required insurance. This testing is redundant to that done by the Japanese government. Reportedly, the cost of the testing is a deterrent for smaller U.S. rice shipments. U.S. Wheat Associates, written submission to the USTR, June 11, 2013, 2; industry experts, telephone interview by USITC staff, February 19, 2016; industry representatives, interview by USITC staff, February 24, 2016.

²⁸⁷ USTR, *NTE Report*, 2015, 211. Japan’s rice imports from all countries are about 8 percent of both Japan’s production and its consumption. USDA, PSD Online (accessed February 17, 2016).

²⁸⁸ As a major producer of rice, Vietnam accounted for less than one-half of 1 percent of global rice imports. GTIS, Global Trade Atlas database (accessed February 24, 2016).

especially India and Brazil.²⁸⁹ Additionally, under the Australia-Vietnam Free Trade Agreement, Vietnam imports wheat and corn duty free from Australia.²⁹⁰

Summary of Provisions

Under TPP, U.S. grains would primarily benefit from provisions to reduce tariffs, afford additional market access under new TRQs, and revise the administration of TRQs. The major changes to U.S. market access for grains would originate primarily from Japan and, to a lesser extent, Vietnam (table 3.23). Under TPP, Vietnam would eliminate its tariffs on most grains, including corn and wheat, within the first five years, and on rice as soon as the TPP enters into force.

Table 3.23: Grains and milled grains: Selected U.S. and TPP partner tariff and TRQ concessions

Product	U.S. concessions	TPP country concessions		
		Japan	Malaysia	Vietnam ^a
Corn	Tariffs as high as 3.4% eliminated within 5 years.	In-quota duty as high as 3% eliminated upon EIF for corn for “other” uses; all other in-quota corn has no existing duty.	No existing duty.	Tariffs as high as 30% eliminated within 5 years. Current tariffs: - Popcorn: 30%. -Other corn: 5%.
Wheat	Tariffs as high as 2.8% eliminated upon EIF. Current tariffs: - Durum wheat: 0.65 cents/kg. - Seed wheat: 2.8%. - Other wheat: 0.35 cents/kg.	New U.S.-specific TRQ and changes to existing WTO TRQs. Feed wheat: WTO TRQ out-of-quota duty eliminated upon EIF. All other wheat: - U.S.-specific TRQ reaches maximum level of 150,000 mt in 7 years; in-quota imports are duty free but subject to markups. - Maximum markup on U.S. TRQ reduced by 45% over 9 years.	No existing duty.	Tariffs as high as 5% eliminated upon EIF.

²⁸⁹ During 2012–14, Vietnam imported 41 percent of its corn—primarily used for animal feed—from India, 31 percent from Brazil, and only 4 percent from the United States. Its corn purchasing decisions are driven by the price competitiveness of corn both from different suppliers and in comparison to other feed sources, including feed wheat, cassava, and rice. GTIS, Global Trade Atlas database (accessed December 14, 2015); USDA, *Vietnam: Grain and Feed Annual 2012*, April 2012; USDA, *Vietnam: Grain and Feed Annual*, May 5, 2015.

²⁹⁰ Australia has multiple competitive advantages in wheat exports to Vietnam over the United States, including (1) duty-free access as of January 2016; (2) using containers to ship wheat to Vietnam (as opposed to primarily using bulk cargo ships like the United States), which allows it to sell to a wider range of customers and to access shallower southern ports; and (3) faster shipping times. Industry experts, telephone interview by USITC staff, February 19, 2016; USDA, *Vietnam Grain and Feed Annual*, May 5, 2015; Government of Australia, Austrade.gov, “Agribusiness to Vietnam,” May 8, 2015.

Product	U.S. concessions	TPP country concessions		
		Japan	Malaysia	Vietnam ^a
Rice	Tariffs as high as 11.2% eliminated within 15 years. Tariffs on rice imports from Vietnam eliminated upon EIF.	New U.S.-specific TRQ, which reaches a maximum of 70,000 mt in 13 years. US-TRQ process includes using a sell-buy-sell mechanism and setting a stable markup level; in-quota imports are duty free but subject to markups.	Tariffs as high as 40% eliminated within 11 years. Current tariffs: -Paddy, brown, white, and broken rice: 40%. - Broken rice for feed: 15%.	Tariffs of 40% eliminated upon EIF.

Source: USTR, TPP full text, Annex 2-D; USDA, FAS, Factsheets: Rice (November 30, 2015), Wheat (October 28, 2015), and Corn (November 30, 2015).

Note: EIF = Entry into Force.

^a Vietnam does not impose MFN duties on seed grains for planting.

Many of Japan's TPP provisions for grains would not result in unrestricted access for imports, but rather potentially expanded access through new TRQs. These provisions would also result in some lower in-quota tariffs and adjustments to the administration of certain TRQs. Under TPP, Japan would establish additional country-specific TRQs, including for wheat from the United States, Canada, and Australia, and for rice from the United States and Australia.²⁹¹ Wheat under these TRQs would be subject to a lower maximum markup. Feed wheat will be given duty-free/quota-free access, essentially being removed from the existing WTO wheat TRQ.²⁹² A side letter states that Japan's TRQ for U.S. rice would be administered by the Japanese government through a modified simultaneous buy-sell (SBS) mechanism. This mechanism would be aimed at addressing certain administrative issues, including making the tender process more transparent and, if there are multiple years in which the quota does not fill, lowering the markup.²⁹³ However, only three types of importers may use the SBS mechanism, and only if the Japanese government determines that they have "sufficient capacity to handle rice": distributors (including wholesalers and retailers), manufacturers, and those in the food service industry.²⁹⁴

²⁹¹ The Australia TRQ is equal to 12 percent of the U.S.-specific quota. USTR, TPP full text, Annex 2-D.

²⁹² Japan's feed wheat imports from TPP partners would be supervised by Japan's Customs Administration but will take place outside of MAFF's SBS system. USTR, TPP full text, annex 2-D.

²⁹³ U.S.-Japan Letter Exchange on Operation of SBS Mechanism (accessed February 19, 2016).

²⁹⁴ These types of businesses are major purchasers of rice imports administered through SBS tenders, which account for a small portion of Japan's total rice imports (less than 2 percent in Japan Fiscal Year 2014, but potentially up to 15 percent). Japan's MAFF is the primary rice importer and the only entity eligible to import through Market Access (MA) tenders, which account for most of Japan's WTO TRQ. MA rice imports are mostly used for livestock feed, industrial use, or food aid, with a small portion for table rice. USDA, FAS, Japan Grain and Feed Annual, March 15, 2016, 23–26.

Estimated Effects of TPP on the U.S. Grains Sector

The Commission model shows that overall U.S. grains production would be slightly higher—by 0.3 percent in 2032, compared with the baseline estimate. The modeling estimates also indicated TPP would lower U.S. grain exports by one-tenth of 1 percent in 2032, primarily because of increased domestic grain demand. Demand would rise for U.S. grains—especially corn—as inputs, both for the meat and dairy industries, which use grain for feed, and for the processed foods industry, which includes milled grain products.²⁹⁵ Commission modeling estimates that exports of meat, dairy, and processed food products will all increase as a result of TPP. While U.S. grains exports to the world would be lower if TPP is adopted, exports to TPP countries, mainly Vietnam, would rise slightly (1.3 percent). That said, many major grain industry representatives have stated that they anticipate positive results from TPP and support the agreement.²⁹⁶

As noted above, Commission modeling shows that U.S. grain exports to Vietnam would see some limited growth upon full implementation of the TPP.²⁹⁷ The United States would primarily benefit from both a new tariff advantage for corn and wheat compared to non-TPP grain suppliers and from regaining some competitiveness relative to Australia, which already has duty-free access to the Vietnamese market.²⁹⁸ However, Vietnam arguably already has relatively low tariffs on wheat and feed corn, which would limit the impact of the tariff reductions.²⁹⁹ In the longer term, the U.S. industry expects to benefit from rising incomes and increasing demand for more processed food, baked goods, and meat in Vietnam, which would boost demand for wheat and corn.³⁰⁰

²⁹⁵ The U.S. grain industry would see additional increased sales because of higher domestic demand for grains for producing these products. The U.S. soybean industry would see a similar increase in domestic demand for feed use. This would also lead to higher U.S. soybean prices, making the United States less competitive in the global soybean market, and leading to reduced U.S. exports, particularly to China. See Meat, Dairy, and Processed Foods sections.

²⁹⁶ U.S. Grains Council Submission and National Corn Growers, written submission to the USITC, February 15, 2016; Cargill, written submission to the USITC, February 16, 2016; National Association of Wheat Growers, “National Wheat Organizations Support TPP Approval,” November 9, 2015.

²⁹⁷ U.S. rice exports will not expand to Vietnam because, despite eliminating the 40 percent tariff, Vietnam would remain a major rice producer and exporter, and its rice imports would remain negligible.

²⁹⁸ Australia would likely remain a major wheat and corn supplier to Vietnam, but the United States would regain equal duty treatment (Vietnam granted Australia zero-duty access for wheat and feed corn on January 1, 2016).

²⁹⁹ USDA, ERS, *Vietnam’s Agri-Food Sector*, October 2014. However, U.S. industry has stated that these tariffs can be significant because commodity grain trade, such as for wheat, is high volume-low margin. This means that even a 5 percent tariff can impact sales. Industry representatives, telephone interview by USITC staff, February 19, 2016. Reportedly, for corn in certain market conditions, a 5 percent tariff advantage would make the United States competitive with South American exports. Industry representative, email message to USITC staff, February 29, 2016.

³⁰⁰ Industry representatives, telephone interview by USITC staff, February 19, 2016; industry representative, email message to USITC staff, February 29, 2016.

For Japan, Commission modeling shows that U.S. wheat exports would be 17.4 percent lower in 2032 with TPP than without it.³⁰¹ Under TPP, Canadian wheat exports would gain more market share because of Canada's competitive advantage as a low-cost producer, especially of feed wheat, which would see the greatest tariff reductions. However, U.S. rice exports would be 23.0 percent higher in 2032, based on the expectation of maintaining current U.S. exports levels to Japan within the WTO TRQs while increasing exports under the new TPP TRQs.³⁰² U.S. corn exports would be 1.4 percent higher because the elimination of the in-quota corn tariff would cause increased imports from TPP partners, including the United States, at the expense of non-TPP suppliers.

Commission model results indicate that enacting TPP would be marginally more negative for rice exports, as losses in some TPP markets could exceed gains in others. The U.S. rice industry would face stronger competition in Mexico, a predominantly long grain rice market, and, to a lesser extent, within the United States. Under TPP, Mexico would eliminate 20 percent duties on white rice for all partner countries over 10 years in equal stages,³⁰³ removing the U.S. tariff advantage vis-à-vis Vietnam. Commission modeling estimates that this would lead to a 1.8 percent decline in exports of U.S. rice to Mexico.³⁰⁴ Additionally, U.S. duties on Vietnamese rice would be eliminated upon TPP's entry into force, creating more competition in the U.S. market as Vietnamese imports slightly increase their market share.³⁰⁵ Gains are expected, but not assured, in the Japanese market, which mostly imports medium grain rice (box 3.4). Currently, about 47 percent of Japan's rice imports under its WTO TRQ are from the United States.³⁰⁶ Under TPP, Japan would grant U.S. rice its own duty-free TRQ, with a maximum of 70,000 mt.³⁰⁷ However, U.S. rice entering Japan under the new TRQ would continue to be

³⁰¹ Commission model results show greater U.S. wheat exports to other markets nearly offsetting lower exports to Japan under TPP.

³⁰² Commission modeling was based on the expectation of all new TRQ access filling; however, some in the rice industry have expressed doubt that this will happen, especially in the long term. Industry representatives, interview by USITC staff, February 24, 2016. The out-of-quota duty on barley would also be eliminated for TPP members. USTR, TPP full text, Annex 2-D.

³⁰³ Duties on all other forms of rice will be eliminated upon entry into force. Other forms of rice covered by the HS at the 6-digit level are paddy, or rough rice (1006.10), brown rice (1006.20), and broken rice (1006.40).

³⁰⁴ USITC, *Rice: Global Competitiveness*, April 2015, 338–39.

³⁰⁵ Industry sources think this would likely result in a small negative impact on the U.S. domestic industry. USA Rice Federation, written submission to the USITC, February 16, 2016, 5. Commission modeling shows that U.S. Imports of rice from Vietnam would increase 28.7 percent in 2032 if TPP were enacted, albeit from a relatively small base. Any market share losses both in Mexico and domestically would primarily affect long-grain rice producers, who are concentrated in the U.S. South, especially Arkansas. Any gains in market access to Japan would primarily benefit medium-grain rice producers in California.

³⁰⁶ Based on the volume of imports during 2011–15. GTIS, Global Trade Atlas database (accessed February 25, 2016). Japan's WTO TRQ for rice is 682,000 mt (milled rice equivalent) and has prohibitively high over-quota tariffs. USITC, *Rice: Global Competitiveness*, April 2015, 71.

³⁰⁷ Under TPP, the TRQ for U.S. rice would initially be set at 50,000 mt and would grow to a maximum level of 70,000 mt by year 13. United States rice exports to Japan averaged about 208,834 mt during 2012–14. GTIS, Global Trade Atlas database (accessed January 20, 2016).

subject to a markup and to chemical testing, which U.S. industry has stated could deter some trade.³⁰⁸

Box 3.4: U.S. Rice and Market Access to Japan: Documented vs. Undocumented Commitments

The ultimate net impact of the TPP Agreement on the U.S. rice industry depends on actual access achieved in the Japanese market. A number of expected Japanese commitments, as understood by U.S. rice industry representatives, are not documented in the official TPP Agreement text or corresponding side letter. These include Japan reserving a majority of the new medium-grain rice access under the WTO TRQ for the United States and lowering the markup rate for the U.S. TRQ (see table in this box). Additionally, there is uncertainty as to the fill rate of the U.S. TRQ guaranteed by the Japanese government under TPP. Industry representatives are concerned that, unlike the WTO TRQ, Japan may regard the U.S. TRQ merely as providing Japan with an option to fully fill it or not.^a There is also the generally held assumption that exports under the U.S. TRQ would be new access over and above current levels of U.S. exports. Industry representatives are also concerned that, although the side letter included commitments to improve it, the SBS (simultaneous buy-sell) system could still deter shipments. The administration of the current SBS system resulted in only a 10 percent fill rate for 2015.

U.S. Rice: Japan’s Commitments

Commitments	Documented	Undocumented
TPP: U.S. TRQ		
Quantity	Up to 70,000 mt annually	
Markup	Drops 15% a year—for up to two years—if U.S. TRQ does not fill	Set at ¥22/kg (\$196/mt)
SBS System Administration	Changes to some functions	
WTO TRQ:		
Quantity	60,000 mt specifically allocated for imports of medium-grain rice used for processing	80 percent (48,000 mt) guaranteed to the United States

Sources: USTR, TPP full text, Annex 2-D; .S.-Japan Letter Exchange on Operation of SBS Mechanism (accessed February 19, 2016); USA Rice Federation, written submission to USITC, February 16, 2016.

Commission modeling assumed a maximum fill of the documented market access gains (e.g. 70,000 mt) under the TPP on top of current export levels for Japan which, while having a positive effect, did not fully counteract a slight negative impact on the overall U.S. rice industry.^b However, if Japan provides both documented and undocumented commitments, U.S. rice exports could gain 118,000 mt of new access, and TPP would likely result in a slight positive impact on the overall U.S. rice industry. On the other hand, if none of these additional commitments are met and the U.S. TRQ under TPP fill rate is only 10 percent (e.g. 7,000 mt) as it was in 2015, then TPP would have an even more negative impact on the U.S. rice industry. Exports and output could decline even further under any of these scenarios if the United States does not maintain its current market access levels. Industry representatives can envision a situation where, if TPP were enacted, they may initially receive both documented and undocumented access levels, but that over time access may be limited to only what is documented or below, due in part to an increasingly less functional SBS system.^c However, it is impossible to predict which of these scenarios will actually come to fruition.

³⁰⁸ Industry representatives, interview by USITC staff, February 24, 2016.

^a Reportedly the Japanese government believes that it is obligated to fill the WTO TRQ. U.S. industry representatives, interview by USITC staff, February 24, 2016.

^b Commission modeling also assumed lost U.S. sales to Vietnam domestically and in Mexico; and there is no indication that alternative scenarios could be expected in these markets.

^c U.S. industry representatives, interview by USITC staff, February 24, 2016.

Processed Foods

Assessment

The TPP Agreement would have a significant positive impact on both U.S. exports and imports of processed foods.³⁰⁹ Processed foods include both bulk and retail-ready branded food preparations, processed fruits and vegetables, and food products like coffee, cookies, and pet food. Averaging \$24.6 billion annually between 2013 and 2015,³¹⁰ this category is one of the largest baskets of U.S. agricultural exports, and the United States is a leading producer and exporter of these products, as well as a major importer. Most of the positive export impact under the TPP is likely to come from tariff reductions and removal in Japan and Vietnam, with some additional gains from the creation of new TRQs for processed grain products in Japan. In certain TPP markets, U.S. exporters would gain from the leveling of the playing field with other competitor countries that already have tariff preferences owing to existing FTAs. Extra benefits may accrue for some products from new TPP provisions regarding proprietary formulas for prepackaged foods and food additives.

TPP's impact on U.S. imports is likely to be smaller than on exports. Most U.S. imports of processed foods from TPP partners are from NAFTA partners Canada and Mexico and already face low or no tariffs. However, even a small percentage increase to the already sizable U.S. imports from these countries translates into significant import growth. Since other TPP partners are not significant exporters of processed foods, additional U.S. imports from new TPP partners resulting from tariff reductions and eliminations are expected to be smaller and likely consist of specialty food products.³¹¹

If TPP is adopted, Commission modeling estimates that U.S. exports of processed foods would be 3.8 percent higher in 2032 than they would be without TPP, and exports to TPP countries

³⁰⁹ Processed foods includes processed vegetables; processed fruits; fruit and vegetable juices; coffee and tea; milled grain products such as flour, pasta, and cereals; cocoa products; processed animal and pet food; egg albumin products; and other food preparations such as butter substitutes, coffee whiteners, and gelatin. These products are classified under HS 0710, 0711, 0712, 0811, 0812, 0814, 1101, 1102, 1103, 1104, 1105, 1106, 1108, 1109, 1802, 1803, 1804, 1805, 1902, 1903, 1904, 1905, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2101, 2102, 2103, 2104, 2209, 2302, 2309, and selected products classified under HS 0901, 0902, 1212, 1302, 1602, 1806, 2106, 2303, and 3502.

³¹⁰ GTIS, World Trade Atlas database (accessed February 17, 2016).

³¹¹ Processed foods containing dairy and sugar ingredients would continue to be subject to U.S. TRQs for dairy and sugar products under TPP.

even greater at 9.1 percent above the baseline. The largest gains for U.S. exports are expected in Japan and Vietnam. U.S. exports to both countries would be made up of a wide range of products. For Japan, leading exports would include grape juice concentrate, processed potatoes, and cookies, crackers, and biscuits; for Vietnam, processed potatoes and cookies, crackers, and biscuits. The Commission model estimates that U.S. imports of processed foods would be 1.1 percent above the baseline in 2032 with TPP. The greatest gains would be expected from Mexico and Japan.

Overview of U.S. Trade with TPP Partners

The United States is a global leader in both exports and imports of processed food products. Moreover, this category is one of the fastest-growing segments for U.S. agricultural trade.³¹² Between 2013 and 2015, U.S. exports of processed foods to TPP countries accounted for over half of total exports (table 3.24). Of these, more than three-quarters were to NAFTA partners. U.S. processed foods tend to be high-value, often branded, food ingredients and end products, and demand is strong in higher-income countries more adapted to the Western diet. New TPP partners accounted for just 15 percent of U.S. exports to TPP members, which are concentrated in Japan,³¹³ with much smaller shares to Malaysia and Vietnam. At \$4.9 billion in average annual exports between 2013 and 2015, the largest major export subcategory was processed fruits and vegetables, including juices. Major products in this category include raisins, processed potato products, and juice concentrates (particularly orange, cranberry, and grape); outside of NAFTA partners, these are shipped largely to Japan. Another important export subcategory, with \$4.7 billion in annual exports during 2013–15, is “food preparations, nesoi,”³¹⁴ a large basket category containing such varied products as food ingredients containing milk solids or sugar, butter substitutes, coffee whiteners, flavored syrups, fortified fruit juices, gelatins, and herbal teas.

Table 3.24: U.S. exports of selected processed foods to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S. exports to world	U.S. exports to TPP countries			
		All	New partners	NAFTA	Other existing FTA partners
Processed foods: total	24,621.3	14,347.8	2,193.3	10,935.5	1,219.0
Selected subproducts					
Bread, pastry, cakes, and biscuits (190590)	1,646.2	1,239.5	73.9	1,108.4	57.2
Sauces and condiments (210390)	1,051.2	621.3	39.1	515.9	66.3

³¹² ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 2.

³¹³ Despite its high tariffs, import demand in Japan is strong, and it is a leading consumer of U.S. processed food products, including branded products. Campbell Soup Company, written submission to the USITC, February 11, 2016.

³¹⁴ “Nesoi” means “not elsewhere specified or included.”

Product and selected subproducts (HS subheading)	U.S exports to world	U.S exports to TPP countries			
		All	New partners	NAFTA	Other existing FTA partners
Swelled and roasted cereals (190410)	516.3	404.2	2.5	394.0	7.7
Mixes and doughs (190120)	511.6	349.6	39.8	286.0	23.8
Soups and broths (210410)	439.7	367.2	17.6	342.1	7.5
Pasta (1902)	367.8	330.9	32.2	295.6	3.1
Food preparations, nesoi (210690)	4,674.9	2,187.1	382.4	1,544.4	260.2
Processed fruit	937.6	577.2	88.6	449.9	38.8
Processed vegetables	2,882.1	1,654.6	530.3	1,005.2	119.1
Juice	1,039.1	660.2	130.1	507.6	22.4
Pet food (2309)	2,790.4	1,482.3	329.7	979.1	173.5
Cocoa products	1,707.7	1,138.9	73.7	954.5	110.8
Coffee and tea	1,234.8	957.7	74.3	843.4	40.0
Milled grains	678.5	479.6	54.6	393.6	31.3

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Note: Nesoi = not elsewhere specified or included.

U.S. exporters of processed foods are highly competitive but face high tariffs in TPP countries, particularly on products containing dairy or sugar. Since U.S. trade with previous FTA partners is largely duty-free, the high tariffs are mainly found in new TPP partner markets. In Japan, these products face tariffs as high as 52.5 percent on flavored syrups, 21.3 percent on tomato juice, and 15 percent on cookies. In Vietnam, tariffs on U.S. processed foods run as high as 40 percent on processed vegetables and canned soups.

U.S. exporters of processed foods must deal with other impediments in addition to tariffs. Dairy and sugar containing processed foods face restrictive TRQs in Canada, while those with a base of wheat and rice are similarly restricted in Japan. Processed foods often face such technical barriers to trade (TBTs) as complicated labeling requirements that increase costs for U.S. exporters. Finally, a key competitive factor in many TPP markets for processed foods are the tariff preferences that U.S. competitors already have through bilateral FTAs, leaving the United States at a competitive disadvantage vis-à-vis these competitors.

Summary of Provisions

Market access provisions for processed foods under TPP include tariff elimination, both immediate and through phaseout periods, and some additional TRQ access into Japan (for wheat-based processed foods products) and Canada (for products containing dairy and sugar). Phaseout periods for tariff elimination range from immediate to 20 years (table 3.25). Although most of the key TPP provisions cover trade with countries with which the United States does not already have an FTA, Canada would grant some additional TRQ access to the United States under TPP, beyond its NAFTA commitments (discussed below). Of the non-FTA partners, based

on current trade and consumption trends, concessions for processed food in Japan and Vietnam are likely to be the most significant.

Nearly one-third of Japan’s tariff lines on processed foods would be granted immediate duty-free access, including certain processed fruits and vegetables, flavored waters without added sugar, roasted coffee, soups, and spices. Up to 75 percent of all U.S. processed foods exports, including frozen French fries, cookies, crackers and biscuits, would achieve duty-free access between years 4 and 21 of the agreement. However, new Japanese TRQs (affecting processed cheese, butter, and chocolate confectionary bars) only minimally expand access for processed foods.³¹⁵

Table 3.25: Processed foods: Selected U.S. and TPP partner tariff concessions

Product	U.S. concessions	TPP country concessions			
		Japan	Malaysia	Vietnam	New Zealand
Processed foods	Tariffs currently as high as 131% eliminated within 20 years. Some products are subject to dairy and sugar TRQs.	Some tariffs as high as 25.5% eliminated within 11 years; 4 new TRQs and 1 new U.S.-specific TRQ added. Sauces and flavored waters with added sugar: tariffs as high as 13.4% eliminated in 4 years. Cookies, crackers, biscuits: tariffs as high as 40% eliminated within 8 years. Rice products: Tariffs as high as 34% eliminated in 11 years. Uncooked spaghetti and macaroni: 30 yen/kg tariff (~30% AVE) reduced by 60% over 9 years. New TRQ added for processed wheat products. New TRQ for food preparations with wheat added. New U.S.-specific TRQ added for processed wheat products.	Tariffs as high as 25% eliminated within 16 years.	Tariffs as high as 55% eliminated within 12 years. Tariffs on cookies, crackers, biscuits, breads, and starches eliminated in 8 years.	Tariffs as high as 5% eliminated within 5 years.

Source: USTR, TPP full text, Annex 2-D. USDA, FAS, *Trans-Pacific Partnership Benefits to Agriculture: Processed Products*, October 28, 2015.

³¹⁵ ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership Agreement*, December 3, 2015.

Japan granted limited new TRQ access for processed products and food preparations with wheat; two are TPP-wide and one is U.S.-specific. The within-quota volume for the TPP-wide TRQ for swelled or roasted cereals and other food preparations begins at 7,500 mt and reaches 10,000 mt in 6 years. The TPP-wide TRQ for food products of flour begins at 15,000 mt and reaches 22,500 mt in 6 years. The U.S.-specific TRQ for mixes and doughs begins at 10,500 mt and reaches 12,000 mt in 6 years.³¹⁶ Processed food products containing dairy would gain some additional access in Canada through two TPP-wide TRQs, one for ice cream and mixes and the other for other dairy products, with each beginning at 1,000 mt and reaching 1,138 mt in 14 years.

In addition to tariff provisions, the TPP text includes an annex in the chapter on technical barriers to trade relevant to processed foods. Annex 8-F, which covers proprietary formulas for prepackaged foods and food additives, specifically relates to gathering information on proprietary formulas. It requires parties to limit the information requirements and to ensure the confidentiality of such formulas to protect legitimate commercial interests.

Estimated Effects of TPP on the U.S. Processed Foods Sector

Commission modeling estimates that the TPP Agreement would have a significant, positive impact on U.S. exports of processed foods.³¹⁷ Most of the positive impact is likely to come from tariff reductions and removals in Japan and Vietnam, and the creation of new TRQs in Japan. These countries do not have previous FTAs with the United States and therefore represent the main areas of export opportunity under TPP.

The modeling simulations show that total U.S. exports of processed foods would be 3.8 percent above the baseline in 2032 with the implementation of TPP. This gain in U.S. exports outweighs the corresponding boost in U.S. imports of processed foods of 1.1 percent. In turn, U.S. output of processed foods would be 0.8 percent greater and employment in the sector 0.7 percent larger than without TPP.

U.S. industry representatives have stated that the TPP has significant potential to increase U.S. processed foods exports due to market access openings stemming from reduced and eliminated tariffs, improved administration of newly established TRQs, and enhanced rules

³¹⁶ Two additional, and very limited, TPP-wide TRQs were granted by Japan. The first allows 100 mt of uncooked udon, somen, and soba noodles annually, while the second, for food preparations of barley, reaches 115 mt in 6 years.

³¹⁷ Commission modeling results do not further disaggregate based on specific processed food products such as potatoes, pasta, and others.

governing nontariff barriers.³¹⁸ In addition, U.S. processed foods exporters note that the TPP Agreement covers an important portion of the global supply chain for many product categories in the processed foods sector, with the potential for substantial further supply chain integration when additional countries join the TPP.³¹⁹ These same representatives expressed disappointment with the lack of more significant expansion of access for processed U.S. dairy products that would be highly competitive in the Canadian market and the minimal expansion of access for Canadian sugar to the United States, access to which they believe is critical to the competitiveness of U.S. processed foods.³²⁰

U.S. industry representatives also view the TBT chapter of the TPP favorably, including the annex on proprietary formulas for prepackaged foods and food additives. In their view, the chapter includes robust clarification language stipulating that traded products can undergo conformity assessment procedures only once before being sold in TPP markets.³²¹ In addition, U.S. industry representatives view favorably the SPS chapter, specifically the procedure for handling the detection of low-level presence of biotech material, as well as the enhanced SPS commitments for science-based regulations that are not more restrictive than necessary and a rapid response mechanism to resolve SPS issues at the border.³²² U.S. industry representatives, such as those for the U.S. pet food industry, believe such provisions would discourage arbitrary and unjustified barriers to U.S. exports.³²³

Effects of TPP on U.S. Exports of Processed Potatoes

For many processed foods, the elimination of high, and even moderate, tariffs would have positive effects on U.S. exports. Certain processed potato products face high to moderate tariffs in Japan and Vietnam, and their eventual elimination would result in the expansion of U.S. exports for these products.

U.S. annual exports of processed potato products were valued at more than \$1.3 billion during 2013–15.³²⁴ A large subset of this category is frozen potatoes, including French fries, a sector in which the United States competes with the EU and Canada in global markets. Other large

³¹⁸ ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership Agreement*, December 3, 2015; Pet Food Institute, written submission to the USITC, December 29, 2015; Campbell Soup Company, written submission to the USITC, February 11, 2016.

³¹⁹ ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership Agreement*, December 3, 2015.

³²⁰ *Ibid.*

³²¹ *Ibid.*

³²² ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership Agreement*, December 3, 2015; Pet Food Institute, written submission to the USITC, December 29, 2015.

³²³ For example, U.S. pet foods including poultry ingredients were reportedly subjected to unjustified trade restrictions related to avian influenza. USITC, hearing transcript, January 14, 2016, 435–36 (testimony of Peter Tabor, PFI).

³²⁴ GTIS, World Trade Atlas database (accessed February 17, 2015).

exporters, such as New Zealand and China, are seeking to expand market share in Asia. Tariffs on U.S. processed potatoes in TPP countries are primarily found in Japan and Vietnam. Japan presently places tariffs of 8.5 percent on frozen French fries (HS 2004.10) and up to 20 percent on other dehydrated potato products (HS 1105.20, 2005.20). Japan's TPP concessions for processed potatoes include full elimination in 11 years. Vietnam's tariffs, which range from 18 to 24 percent, would also eventually be eliminated under TPP. Representatives of the U.S. potato industry estimate that elimination of Japanese tariffs on French fries (HS 2004.10) and dehydrated potatoes (HS 2005.20) alone would increase the value of Japanese imports of each product by at least \$10 million annually.³²⁵ In light of rising demand and TPP tariff elimination, overall U.S. exports of frozen French fries to Vietnam would reach \$10 million (from a 2014 level of \$3.75 million) within 5 years.³²⁶

Effects of TPP on U.S. Exports of Grape Juice Concentrate

For certain U.S. processed foods exports, tariff elimination and/or reduction is significant because other TPP suppliers compete with U.S. exporters in TPP markets at a low tariff rate, or no tariff at all, owing to a previous FTA. Exporters in Australia, Chile, Malaysia, and Vietnam currently have a competitive advantage over their U.S. counterparts as a result of their existing FTAs with Japan. The U.S. tariff preference under TPP would allow U.S. exporters of grape juice concentrate to compete on even terms in the Japanese market.

The United States is a major producer and exporter of grape juice concentrate. U.S. exports were \$80.4 million in 2014, and the United States was the third leading global exporter of this product behind Argentina and the EU, accounting for about 16 percent of global trade that year.³²⁷ In Japan, the United States competes with Argentina, Chile, and Brazil, all highly cost-competitive producers and exporters.³²⁸ Total exports of grape juice concentrate from Chile, a TPP partner, were \$62.9 million in 2014, with \$14.9 million going to Japan. Chile's top three markets are South Korea, Japan, and Canada.

Current U.S. exports of grape juice concentrate to Japan are at a competitive disadvantage to those from Chile with respect to tariffs. Japan's FTA with Chile (completed in 2007) provides for the elimination of grape juice tariffs in a 15-year phaseout period ending in 2022. During this period, Chilean grape juice concentrate enters Japan at a preferential tariff, while U.S. grape

³²⁵ National Potato Council, 2016 National Trade Estimate Report on Foreign Trade Barriers, October 28, 2015, 18.

³²⁶ National Potato Council, written submission to the USITC, December 23, 2015.

³²⁷ GTIS, World Trade Atlas database (accessed January 19, 2016).

³²⁸ GTIS, World Trade Atlas database (accessed January 19, 2016); Welch Foods, Inc., written submission to USTR, June 7, 2013.

concentrate faces tariffs of 19–29.8 percent.³²⁹ Tariff elimination under the TPP will allow U.S. exporters to compete on even terms with Chile in the Japanese market and will give the United States a tariff advantage over Argentina, Japan’s largest supplier.

Welch Foods, Inc., estimates that the immediate tariff elimination on grape juice concentrate will translate into cost savings of about 20 percent. According to the company, these lower costs are likely to increase its exports of grape juice concentrate to Japan by up to 20 percent, increasing crop utilization in the United States and supporting U.S. employment on grape farms and throughout the U.S. grape juice concentrate supply chain.³³⁰

Fresh Fruits, Vegetables, and Nuts

Assessment

On balance, the TPP Agreement would have a positive impact on U.S. exports and a minimal impact on U.S. imports of fresh fruits, vegetables, and nuts. The United States is a competitive global producer and exporter of fresh produce and nuts, and U.S. exports would increase as tariffs decline. Select products in this sector, however, face SPS restrictions that will continue to hamper trade unless resolved by the TPP parties. U.S. exports of fresh fruits, vegetables, and nuts would benefit most from increased market access in Japan and Vietnam, where tariff reduction and elimination are most significant, and moderately in Malaysia, which already has lower tariffs on these products.

Overview of U.S. Trade with TPP Partners

The United States exports almost half of its fresh produce and nuts—worth \$7.9 billion—to TPP markets, with NAFTA partners accounting for the majority of U.S. exports (table 3.26). High tariffs on fresh nuts and produce, along with SPS measures on certain products, are key trade barriers currently inhibiting U.S. exports to non-FTA partners. These partners presently account for less than 10 percent of total U.S. exports. Of these, Japan is the largest export market for U.S. horticultural products, and demand for U.S. exports of fresh produce in Japan is already well established. Fresh fruits, vegetables, and nuts currently face high tariffs in new TPP markets—up to 40 percent—that inhibit U.S. exports. Some horticultural products also face extra-high seasonal tariffs designed to protect local production. Moreover, the United States competes in several TPP markets with other countries that already benefit from lower duties or

³²⁹ Most U.S. grape concentrate enters Japan under HS 2009.69.210 at a duty of 19.1 percent. Imports of this product become duty free immediately under TPP. Other grape juice concentrate tariff lines phase out to zero over 6- and 11-year periods.

³³⁰ Welch Foods, Inc., written submission to USTR, June 7, 2013.

no duties resulting from preexisting FTAs.³³¹ In addition to tariff barriers, fresh horticultural products are affected by SPS restrictions that can increase the cost of some U.S. products to the point where they effectively inhibit exports.³³²

Table 3.26: U.S. exports of fresh fruit, vegetables, and nuts to world and TPP partners, 2013–15 average, million dollars

Product and selected subproducts	U.S exports to world	U.S exports to TPP countries			
		All	New partners	NAFTA	Other existing FTA partners
Fresh fruit	5,603.1	3,389.0	654.8	2,484.8	249.3
Fresh vegetables	3,117.9	2,326.8	147.9	2,133.4	45.6
Nuts	8,792.8	2,174.0	797.7	1,212.9	163.3
Total	17,513.80	7,889.80	1,600.40	5,831.10	458.20

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Summary of Provisions

The U.S. fresh fruit, vegetable, and nut sectors would benefit from either immediate duty-free market access to new TPP partner economies or significant but gradual tariff reductions in these markets (table 3.27). Most fresh fruit, vegetable, and nut imports to the United States would be granted immediate duty-free treatment, but with current tariffs already low, effects would be moderate. For a select product, fresh oranges, TPP benefits could be offset by a safeguard mechanism. Under TPP, Japan has retained the right to apply safeguard duties to oranges—up to 28 percent—if total TPP import volume during the high season exceeds certain trigger points.³³³

Table 3.27: Fresh fruit, vegetables, and nuts: Selected U.S. and TPP partner tariff concessions

Product	U.S. concessions	TPP country concessions		
		Japan	Malaysia	Vietnam
Fresh fruits	Most fruits become duty free upon EIF; tariffs as high as	Most fruit becomes duty free on EIF. Tariffs as high as 32 percent (on citrus) or	5 percent tariffs on most non-tropical fruit eliminated on	Tariffs as high as 40 percent (on citrus) eliminated on EIF or

³³¹ Several TPP parties (Australia, Chile, Brunei, Mexico, Peru, and Malaysia) have already negotiated preferential bilateral tariff agreements with Japan, and Canada is currently negotiating one. Chile has also negotiated bilateral tariff agreements with Malaysia, Vietnam, New Zealand, Brunei, and Australia. Malaysia has negotiated bilateral tariff agreements with Australia and New Zealand. Due to the multilateral ASEAN-Australia-New Zealand FTA, the U.S. fresh produce and nut industries also face a competitive disadvantage in supplying horticultural products to Malaysia and Vietnam.

³³² These include import bans related to certain pests and diseases, maximum residue levels for pesticides, or stringent fumigation requirements.

³³³ Japan TPP, Appendix B-1, “Agricultural Safeguard Measures to Tariff Schedule of Japan,” states (a) 35,000 mt for year 1, except as provided in paragraph 5; (b) 37,000 mt for year 2; (c) 39,000 mt for year 3; (d) 41,000 mt for year 4; (e) 43,000 mt for year 5; (f) 45,000 mt for year 6; and (g) 47,000 mt for year 7. Although Japan’s recent imports of fresh oranges would not trigger the safeguard, a return to historical Japanese import levels could. For example, imports from the United States alone accounted for 97 percent of the quota trigger based on a recent high-shipment season (December 2012–March 2013).

Chapter 3: Food and Agricultural Products

Product	U.S. concessions	TPP country concessions		
		Japan	Malaysia	Vietnam
	29.8 percent (on dates, fresh cantaloupes) eliminated in 10 years or less.	17 percent (on apples) eliminated in 11 years or less.	EIF.	within 2–6 years.
		Fresh oranges (top U.S. exports in this category) have front-loaded duty reduction for low-season imports, extended low-season access, and safeguards imposed on fresh oranges during high-season transition period. All tariffs and safeguard mechanisms eliminated in 6–8 years.	Tariffs on melons and tropical fruits eliminated in 11 years.	15 percent tariffs on apples and grapes (top U.S. exports in this category) eliminated in 3 years.
Fresh vegetables	The majority of U.S. tariffs on fresh vegetables will end immediately. A few select tariffs expire in 20 years. U.S. tariffs on asparagus and mushrooms from Australia expire in 20 years.	Tariffs on fresh vegetables average less than 5 percent. The majority of those tariffs will be eliminated upon EIF.	Few import duties on fresh vegetables, and all tariffs will be eliminated upon EIF.	Tariffs on fresh produce average 15–20 percent. All will become duty free within 4 years.
Nuts	Most nuts become duty free upon EIF; tariffs as high as 22.4 percent are eliminated in 10 years or less. For peanuts and peanut products, over-quota rates of 131.8–163.8 percent are eliminated in 10 years or less. For Peru, staged tariff reductions remain the same as under the U.S.-Peru FTA.	Most nut tariffs (as high as 12 percent) are eliminated upon EIF; other tariffs as high as 23.8 percent are eliminated in 8 years or less. For peanuts, in-quota duty of 10 percent is eliminated upon EIF; over-quota duty eliminated in 8 years.	Most nuts have no existing duty; 5 percent tariff on raw peanuts eliminated upon EIF.	Tariffs as high as 34 percent eliminated in 6 years or less.

Source: USDA, FAS, Factsheets (accessed November 23, 2015).

Estimated Effects of TPP on the U.S. Fresh Fruit, Vegetables, and Nuts Sector

Many U.S. fresh fruit, vegetables, and nut exports would benefit from tariff reduction under the TPP, particularly exports to non-FTA partners. If TPP is adopted, Commission modeling estimates that total U.S. exports of fresh fruit, vegetables, and nuts would increase by \$574.9 million (2.0 percent) worldwide, while total U.S. imports of these commodities would increase by \$119.2 million (0.5 percent) by 2032, compared to the baseline. Most of the projected increase in fresh horticultural exports is due to increased exports to non-FTA partners. Under TPP, U.S. producers' output of fresh fruit, vegetables, and nuts are projected to be 0.2 percent higher in 2032, compared to the baseline. Employment in the sector tracks these output trends.

If TPP is enacted, Commission modeling estimates that U.S. fresh fruit, vegetable, and nut exports to all TPP member countries would increase by \$990.3 million, or 8.3 percent. The majority of the increase would be due to increased exports to Vietnam, valued at \$721 million, and Japan, \$274.9 million.

Immediate duty-free treatment for most fresh fruit and nuts from the United States would likely have the strongest impact on U.S. farmers along the West Coast and in the Southeast. Significant but gradual TPP tariff reductions would increase leading U.S. exports—citrus fruits, apples, and grapes—to Japan, Vietnam, and Malaysia. The domestic citrus industry would also likely benefit from the expansion of the low-season tariff window in Japan.³³⁴ TPP's immediate or gradual duty-free treatment for most U.S. nuts would benefit highly export-competitive almonds, pistachios, walnuts, and peanuts. TPP tariff reductions would have a moderate impact on U.S. exports of fresh vegetables because Japanese tariffs on these products are already low, averaging less than 5 percent. The gradual elimination of Vietnam's high tariffs on fresh vegetables could benefit the U.S. fresh vegetable industry in the future if Vietnam's economy continues to develop and expand.

Although tariff elimination is an important component of the TPP, partner countries' rules on SPS measures have a significant impact on the ability of U.S. producers to take advantage of reduced tariff levels. As a result, tariff reduction benefits may be tempered by longstanding SPS barriers, which may remain under TPP. The removal of SPS and technical barriers to fresh produce and nut trade would positively impact U.S. exports of these goods, but the effects of

³³⁴ Japan will expand the low-season tariff window by two months to encompass the period April–November.

these barriers are difficult to quantify. Several U.S. fresh horticultural exports face these types of barriers in TPP partner countries.³³⁵

Effects of SPS Measures on U.S. Apple Exports

In Japan, U.S. apple exports face both high tariffs and restrictive SPS measures. Indeed, although it is a globally competitive apple exporter, the U.S. industry has not exported apples to Japan since 2001 due to the high cost of compliance with Japan's strict phytosanitary import protocols for codling moth.³³⁶ Under TPP, U.S. apples would receive duty-free access to Japan's lucrative apple market within 11 years and a gradual reduction of the current 17 percent tariff. However, after more than 20 years the two countries have still not resolved Japan's SPS restrictions, and under TPP these would continue to impede access for apples.³³⁷ Compliance with Japan's current import protocol is costly and the required methyl bromide treatment deteriorates the quality of the treated fruit. The U.S. industry estimates that the Japanese apple export market could be worth \$143.4 million in the absence of Japan's SPS restrictions.³³⁸

Effects of SPS Measures on U.S. Fresh Potato Exports to Japan

While the TPP would reduce already low tariffs on fresh potato exports, TPP has not resolved persisting SPS issues that limit U.S. exports of potatoes in several ways. The United States is a large producer and competitive exporter of fresh potatoes, with U.S. exports reaching \$182 million in 2015.³³⁹ The vast majority of U.S. exports are to Canada and Mexico, with other important markets including South Korea, Japan, Taiwan, and Malaysia.

While U.S. exports to Japan only face a 4.5 percent tariff, significant nontariff measures govern this trade. For several decades Japan has largely prohibited fresh potato imports from the

³³⁵ The ability of U.S. producers to export certain fruits to Japan, including apples, cherries, plums, and nectarines, has involved protracted negotiations which preceded TPP. Japan still prohibits the importation of U.S. apricots and peaches (owing to concerns about codling moth) and U.S. pears (codling moth and fire blight). Although U.S. apples are technically permitted, the cost of complying with Japan's apple import protocols form a barrier to entry that effectively blocks U.S. apple exports. Similarly, while Japan permits imports of U.S. plums and nectarines, the United States has not exported either in years. USDA, ERS, *Japan: Fruit Policies in Japan*, April 2010. In addition, certain fresh vegetables are currently prohibited under Japan's quarantine law, including bell peppers, chilies, eggplant, potatoes, radishes, sweet potatoes, and yams. USDA, FAS, *Japan: Food and Agricultural Import Regulations and Standards-Narrative*, December 19, 2013. Other TPP partners also maintain SPS restrictions on produce. Australia currently prohibits imports of U.S. apricots and apples. Until recently, Australia also prohibited the importation of U.S. plums, peaches, nectarines, and is finalizing access for U.S. table grapes. Since 2010, New Zealand only allows stone fruit imports from the state of California. Mexico currently allows U.S. potatoes access to only within a 26-kilometer border zone. A lack of clarity in Vietnam's 2012 food safety regulations for horticultural products create uncertainty that inhibits U.S. trade flows in produce and nuts. USTR, *2015 NTE*, 2015.

³³⁶ Powers, "Benefits of TPP," December 2015.

³³⁷ Calvin and Krissoff, "Resolution of the US-Japan Apple Dispute," 2005.

³³⁸ Food Navigator, "Japanese-U.S. Apple Ban Illegal, Rules WTO," June 2005.

³³⁹ GTIS, World Trade Atlas database (accessed February 26, 2015).

United States, only allowing the United States to export fresh chipping potatoes destined for processing. Since Japan also prohibits the overland transportation of U.S. fresh potatoes, use of U.S. potatoes for chip production is limited to two Japanese potato chip facilities which are adjacent to ports. In addition, Japan's restrictive transportation protocols require fresh potatoes to be reloaded into smaller coastal vessels, increasing shipper costs while reducing potato quality. Further restrictions include a six-month import window (from February 1 through July 31) from a limited number of U.S. states.

Despite these obstacles, U.S. potato exports to Japan reached \$7.5 million in 2015.³⁴⁰ Without the restrictions, representatives of the U.S. potato industry estimate that the total value of the sales in Japan's fresh potato market (including fresh table stock and chipping potatoes) could increase by \$10 million the first year and \$50 million in three years.³⁴¹ The U.S. potato industry views the enhanced SPS provisions in the TPP as offering an additional avenue to pursue resolution of these nontariff measures.³⁴² At present, however, these barriers remain unresolved.

Alcoholic Beverages

Assessment

Through a combination of tariff elimination, an annex setting parameters for labeling requirements, and new protections for bourbon and Tennessee whiskey, TPP would expand U.S. exports of alcoholic beverages while having a minimal effect on U.S. imports. The elimination of tariffs through TPP in non-FTA partner countries, in particular Japan and Vietnam, is expected to boost U.S. exports of alcoholic beverages.³⁴³ One of the primary benefits of TPP to U.S. exporters would be the ability to compete on equal terms with other TPP countries that already have preferential access in certain markets that has enabled them to export significant volumes of these products. In addition, an addendum to the TPP's TBT chapter—"Annex 8-A: Wine and Distilled Spirits"—would establish parameters for labeling that would provide certainty and regulatory coherence for U.S. wine and spirits exports, reducing costs and likely leading to increased exports.³⁴⁴

Under TPP, U.S. tariffs on imports of all alcoholic beverages would be eliminated in 10 years or less. The impact is likely to be minimal, however, because products from Australia and Chile,

³⁴⁰ GTIS, World Trade Atlas database (accessed February 26, 2015).

³⁴¹ National Potato Council, written submission to the U.S. Trade Representative, October 28, 2015, 3.

³⁴² National Potato Council, written statement to the USITC, December 23, 2015.

³⁴³ The Commission's model does not disaggregate specific beverage types, such as alcoholic beverages, so an estimated impact of TPP on trade of alcoholic beverages is not available.

³⁴⁴ Wine Institute, written submission to USITC, February 12, 2016, 2; DISCUS, written submission to USITC, February 12, 2016, 3; industry representatives, telephone interviews by USITC staff, February 12 and 16, 2016.

two large global wine suppliers, already enter duty free through the U.S.-Australia and U.S.-Chile FTAs. In addition, the majority of wine imported from New Zealand currently enters the United States at very low tariff rates (6.3 cents/liter). The impact on spirits imports would also be minimal because new FTA TPP partners are not large suppliers to the U.S. market and most spirits already enter the United States tariff free.

Overview of U.S. Trade with TPP Partners

The United States is one of the world's largest exporters of alcoholic beverages. Between 2013 and 2015, TPP countries accounted for more than 40 percent of total U.S. alcoholic beverage exports (table 3.28), with NAFTA markets accounting for 65 percent of total exports to TPP countries. Japan is the third-largest export market for U.S. wine and the sixth-largest export market for U.S. spirits, and accounts for the majority of wine and spirits shipments to new FTA partner countries within TPP. Between 2013 and 2015, U.S. exports of wine and spirits to Japan averaged \$103 and \$104 million, respectively. Vietnam is also an important export market for both wine and spirits, and U.S. wine exports to Vietnam have risen rapidly, from \$5.7 million in 2010 to \$11.6 million in 2015. New TPP partner Malaysia has also been a growing market for U.S. wine exports, although demand is restricted by cultural practices limiting consumption of alcohol. U.S. beer exports are primarily destined for NAFTA markets, but two existing FTA partners, Chile and Australia, are also important export markets for this product.

U.S. exports of alcoholic beverages face high tariffs and technical barriers to trade in major export markets. For example, Vietnam's current tariff of 45 percent on whiskeys and Japan's 15 percent tariffs on bottled wine restrict U.S. exports to those markets. In addition, current labeling and certification requirements in export markets at a minimum add costs for U.S. producers, and have the potential to prevent trade altogether.

Table 3.28: U.S. exports of alcoholic beverages to world and TPP partners, average 2013–15, million dollars

Product and selected subproducts (HS subheading)	U.S exports to world	U.S exports to TPP countries			
		All	New partners	NAFTA	Other existing FTA partners
Alcoholic beverages: Total	3,825.0	1,748.9	268.2	1,221.3	259.4
Wine (2204): Total	1,46.1	570.0	110.0	442.1	17.9
Selected subproducts					
Sparkling wine (220410)	31.1	13.1	1.9	10.0	1.4
Other wine of fresh grapes, retail (220421)	1,188.6	512.5	86.2	411.8	14.5
Other wine of fresh grapes, bulk (220429)	247.4	44.0	21.9	20.2	1.9
Beer (2203): Total	556.9	376.2	9.5	298.7	68.0
Spirits (2208): Total	1,499.8	534.1	137.4	224.6	172.1
Selected subproducts					
Whiskies (220830)	1,078.8	308.8	103.2	63.6	142.1

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Summary of Provisions

Concessions Made by Key TPP Partners to the United States

The TPP Agreement would eliminate tariffs on alcoholic beverages in new markets where the United States does not have an FTA. Japan would eliminate all tariffs on wine products in 11 years or less. For bottled and semi-bulk wine, Japan currently charges a minimum duty of 67 yen (\$0.60) per liter for product with a value of 447 yen (\$3.97) per liter or less, or a 15 percent ad valorem tariff up to a maximum tariff of 125 (\$1.11) yen per liter.³⁴⁵ Japan will cut both the minimum duty and the 15 percent ad valorem duty by one-third as soon as the agreement enters into force, and then phase out the minimum duty in six years and the ad valorem duty in eight years. Japan's 45 yen (\$0.40) per liter tariff on bulk wine will be eliminated immediately at entry into force, and the 182 yen (\$1.62) per liter tariff on sparkling wine will be reduced by one-third at entry into force and eliminated in 8 years. Japanese tariffs on beer and most spirits are already zero, but the remaining tariffs on products such as sake will be eliminated in 11 years or less.

Malaysia, Vietnam, and New Zealand will also eliminate all existing tariffs on wine, spirits, and beer. In Malaysia, tariffs on wine, spirits, and beer will be eliminated in 16 years. Tariffs on wine, spirits, and beer in Vietnam are currently prohibitive, ranging from 35 percent on beer to 59 percent on wine. Vietnam will eliminate all tariffs on alcoholic beverages in 12 years. New Zealand will also eliminate a 5 percent tariff on U.S. liqueurs, vodka, gin, and wine at entry into force.

³⁴⁵ Tariff rates shown in U.S. dollars were calculated using the 2013–15 average exchange rate of \$1= ¥112.51.

Outside of tariff reductions, other provisions in TPP would provide additional benefits for the U.S. alcoholic beverage sector. As mentioned above, the “Wine and Distilled Spirits” annex to the TBT chapter sets parameters for labeling and certification requirements that would create transparency, regulatory coherence, and certainty for U.S. exporters.³⁴⁶ Provisions in the annex would, among others, eliminate most certificate requirements, ensure that the size of samples taken by customs to assess conformity is the minimum necessary, streamline labeling content including declarations of alcohol content, and make sure that descriptive (traditional) winemaking terms are not prohibited on labels.³⁴⁷ In addition to the immediate resolution of certain TBT issues, the annex establishes a framework for the region and any additional countries interested in joining TPP in the future. This is especially valuable for the U.S. wine and spirits sectors because TBT issues currently restrict trade in many other important export markets outside of the TPP region.³⁴⁸

In addition to this annex, TPP would also provide distinctive product recognition for “bourbon” and “Tennessee whiskey” through bilateral letter exchanges with Japan, Malaysia, Vietnam, and New Zealand. As a result, these countries will prohibit the sale of bourbon and Tennessee whiskey if it has not been produced in the United States and in accordance with U.S. regulations.³⁴⁹

Estimated Effects of TPP on the U.S. Alcoholic Beverage Sector

Tariff reductions granted by new FTA partner countries under TPP would significantly benefit U.S. exporters, primarily by allowing them to compete on even terms with other TPP countries that already have preferential access. The elimination of Japanese tariffs on wine is of particular importance because Chile and Australia, both large wine exporters, already receive preferential tariff treatment in Japan due to trade agreements that are already in place.³⁵⁰ Through these agreements, tariffs on wine from both Chile and Australia have already been reduced to 4.6 and 11.3 percent, respectively, compared to the 15 percent tariff that U.S. bottled wine faces.³⁵¹ Chilean wine will enter Japan duty-free in 2019; Australian wine, in 2022. Reduced tariffs through TPP would allow U.S. exporters to regain lost market share.³⁵² Similarly, wine exports

³⁴⁶ For more detailed information on the provisions in the Wine and Spirits Annex, see the discussion in chapter 6 on Technical Barriers to Trade.

³⁴⁷ The provision on wine labeling terminology is viewed as particularly important by U.S. industry because it would establish precedents in the region. While this provision is in force only if a country is not bound by a previous FTA, it is valuable because the EU, which has different labeling requirements covering traditional terms, is negotiating FTAs with certain TPP member countries.

³⁴⁸ Industry representatives, telephone interviews by USITC staff, February 12 and 16, 2016.

³⁴⁹ DISCUS, written submission to USITC, February 12, 2016, 3.

³⁵⁰ Wine Institute, written submission to USITC, February 12, 2016, 2.

³⁵¹ Japan Customs website, http://www.customs.go.jp/english/tariff/2016_1/index.htm (accessed February 12, 2016).

³⁵² Since 2007 when the Chile-Japan FTA entered into force, Chile's share of Japan's imports of bottled wine have increased from 4.2 percent to over 16 percent in 2015.

from New Zealand, Australia, and Chile also already receive preferential tariff treatment in Vietnam, a country with a trade-restrictive tariff on wine. The elimination of high tariffs on spirits in Vietnam is also expected to boost exports by lowering prices in a growing but cost-conscious market.

Certain provisions in the wine and spirits annex would eliminate labeling and certification requirements that currently restrict trade, such as certificates for production processes and raw materials and restrictions on affixing supplementary labels at the port of entry. In addition, by increasing the transparency and regulatory coherence of labeling requirements throughout the TPP countries, this annex is likely to reduce costs and risk for U.S. producers and allow increased U.S. exports over time.³⁵³

Summary of Views of Interested Parties

The Wine Institute supports TPP and has expressed the view that tariff reductions, in particular those that would level the playing field with Australian and Chilean exporters in Japan and Vietnam, will boost U.S. exports. In addition, the institute states that the TBT Chapter's annex on wine and spirits will benefit U.S. exporters.³⁵⁴

The Distilled Spirits Council of the United States supports TPP and in its written submission predicted that the tariff reductions, the wine and spirits annex, rules of origin provisions, and distinctive product recognitions for bourbon and Tennessee whiskey will help to expand U.S. exports to the TPP region.³⁵⁵

Seafood

Assessment

The United States is the world's third-largest producer of seafood captured from the wild,³⁵⁶ and many products of U.S. fisheries are in high demand—particularly in Asia, where seafood is widely consumed. The TPP Agreement may generate opportunities to export selected seafood products to TPP partners, particularly Japan and Vietnam. Seafood exports to TPP countries are expected to expand by an additional \$115.7 million (8.7 percent) by 2032 as compared to the baseline projection, if the TPP is implemented. As a share of existing trade, the TPP Agreement is expected to have a less significant effect on U.S. imports of seafood, because seafood

³⁵³ ATAC for Processed Foods Products, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 10; industry representatives, telephone interviews by USITC staff, February 12, 2016; DISCUS, written submission to the USITC, February 12, 2016.

³⁵⁴ Wine Institute, written submission to USITC, February 12, 2016, 2.

³⁵⁵ DISCUS, written submission to the USITC, February 12, 2016, 5.

³⁵⁶ FAO, *The State of World Fisheries*, 2014, 10.

products are a major import from TPP countries, and some of these partners—especially Canada, Vietnam, and Chile—are important sources of seafood in the U.S. market.³⁵⁷

Overview of U.S. Trade with TPP Partners

In addition to being the third-largest producer of wild-caught seafood, the United States is the world's fourth-largest exporter of such products.³⁵⁸ Between 2013 and 2015, TPP partners accounted for an average of 37 percent of U.S. exports of seafood (table 3.29). Of the exports to TPP countries, partners with which the United States does not already have an FTA accounted for a relatively high share—about 43 percent—due to strong demand for seafood in Asia. This demand is particularly strong in Japan, which is the third-largest global market for U.S. seafood exports and consumes large quantities of U.S.-produced fish roe and Alaska pollock in particular, along with many other types of fish. Vietnam is also emerging as an important market for U.S. seafood exports, particularly of shellfish; U.S. seafood exports to Vietnam grew more than fivefold between 2009 and 2015 to make Vietnam the 11th-largest importer of such products.³⁵⁹ The TPP Agreement is expected to generate new opportunities to export fish and seafood, largely to the new TPP partner countries.

Table 3.29: U.S. exports of fish and seafood to world and TPP partners, 2013–15 average, million dollars

Product and selected subproducts (HS subheading)	U.S. exports to world	U.S. exports to TPP countries			Other existing FTA partners
		All	New partners	NAFTA	
Fish and seafood: Total	5,732.0	2,102.4	894.2	1,117.6	90.6
Selected subproducts					
Shellfish (not processed) (0306, 0307)	1,429.3	614.2	146.5	446.6	21.2
Salmon ^a	841.5	323.3	58.1	234.3	30.9
Fish livers and roe (030290, 030390, 030520)	370.5	178.1	175.7	1.9	0.5

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

^a HS subheadings 030213–14, 030311–13, 030441, 030452, 030481, 030541, and 160411.

With its productive salmon fishery in Alaska, the United States is among the few global producers of Pacific salmon, generally preferred in the Japanese market over Atlantic salmon. Production of Pacific salmon in the United States was valued at \$616.7 million in 2014; over half of this production was sockeye salmon (also called red salmon). The United States was the fourth-largest exporter of salmon to Japan, after Chile, Norway, and Russia. The vast majority of these U.S. exports were of frozen sockeye salmon.

³⁵⁷ The effect of the agreement on U.S. imports is expected to be small because the market for such products is already mostly unrestricted. See the effects section for additional details.

³⁵⁸ GTIS, Global Trade Atlas database (accessed February 29, 2016).

³⁵⁹ GTIS, Global Trade Atlas database (accessed January 21, 2016).

The United States competes heavily with Chile in the Japanese salmon market. At present, Chile has an advantage because under its FTA with Japan, Japan reduced its tariff on Chilean exports of coho salmon (a Pacific salmon species, also called silver salmon) from the MFN rate of 3.5 percent to 0.6 percent.³⁶⁰ Coho salmon farming in Chile was established primarily to serve the Japanese market,³⁶¹ and the combination of increased Chilean production in recent years and preferential tariff treatment has meant that exports of salmon from Chile to Japan have expanded from less than \$2 million in 2011 to nearly \$592 million in 2015.³⁶²

Other important U.S. seafood products that are in demand in TPP partner countries include shellfish and fish livers and roe. Fresh and frozen shellfish are the single largest category of U.S. seafood exports, accounting for 24.9 percent of these exports on average between 2013 and 2015. Shellfish accounted for a large majority of U.S. seafood exports to Vietnam, a rapidly growing market for such products. The category of fish livers and roe includes specialty products that are in strong demand in Japan because they are used to prepare sushi and other dishes consumed heavily there. Japan accounts for nearly all U.S. exports of fish livers and roe to TPP countries, and nearly half of total U.S. exports of these products.

Summary of Provisions

The most significant TPP provisions for U.S. seafood exporters are the elimination of tariffs in Japan and Vietnam. Japan plans to eliminate tariffs on seafood products somewhat gradually upon entry of the TPP into force, with about two-thirds of seafood tariffs eliminated immediately and the remainder within 15 years. These tariffs are generally between 3.5 and 10.5 percent. Some of the products that face tariffs are those in which the United States has a competitive advantage, such as fish roes, which currently face duties between 3.5 and 10 percent; Alaska pollock, which is used to produce surimi, an important product in the Japanese market, and for which the tariff rate is generally 6 percent; and, to a lesser extent, salmon. Japanese salmon duties are already fairly low, usually 3.5 percent, and tariff elimination under TPP is not immediate for all types of Pacific salmon. Still, the elimination of Pacific salmon duties in Japan would generate immediate gains, since Japan plans to eliminate duties on frozen sockeye salmon (the most important salmon export for the United States) upon the TPP's entry into force. It would also generate longer-term gains as remaining Pacific salmon duties are eliminated either 6 or 11 years after entry into force. Elimination of these

³⁶⁰ Japan Customs website, http://www.customs.go.jp/english/tariff/2016_1/index.htm (accessed February 18, 2016).

³⁶¹ FAO, "Cultured Aquatic Species Information Programme" (accessed January 26, 2016).

³⁶² GTIS, Global Trade Atlas database (accessed February 17, 2016). While Chilean Pacific salmon is produced exclusively through aquaculture (i.e., fish farming), nearly all production of Pacific salmon in the United States is through wild capture, mostly in Alaska.

duties would allow the United States to compete better with Chile in the Japanese salmon market.

Vietnam plans to open its market substantially to seafood imports under TPP. Vietnam currently imposes high tariffs on most fish and seafood (generally between 15 and 30 percent), and 83 percent of these duties are eliminated upon entry into force.³⁶³ A more open Vietnamese market would create additional opportunities for U.S. seafood exporters, as Vietnam has already become an important destination in recent years.

Estimated Effects of TPP on the U.S. Seafood Sector

Commission modeling suggests that total imports of seafood from TPP partners would expand by \$332.2 million, or 2.9 percent, by 2032 over the baseline scenario without TPP. As some of these imports would displace imports from non-TPP countries, the effect on total U.S. seafood imports is smaller—these imports would grow by only 0.9 percent or \$231.9 million relative to the baseline projection. The TPP Agreement is expected to have a relatively small impact on U.S. seafood imports as a share of existing trade, despite the fact that seafood is the second-largest food product group imported from TPP countries, and the fact that TPP partners (mostly Canada, Vietnam, and Chile) supplied an average of 37 percent of U.S. seafood imports between 2011 and 2015. This is because U.S. tariffs on nearly all seafood products are already low or nonexistent.³⁶⁴

According to Commission modeling, the TPP is expected to generate an additional \$115.7 million in U.S. seafood exports to the TPP countries. While this is a relatively small increase in value, it represents a more significant impact on U.S. seafood exports in percentage terms, increasing them by about 8.7 percent, relative to the baseline estimate. The majority of additional exports would be to Japan and Vietnam. Exports to Japan would grow an additional 18 percent and to Vietnam, an additional 45 percent, over the baseline projection. The TPP is not expected to generate any significant changes in seafood trade with existing FTA partners, which have already largely eliminated tariffs on U.S. seafood. The effect on total U.S. seafood exports to the world would be more modest—the model estimates an increase of just 2.2 percent, with exports to the rest of the world decline slightly as more trade is diverted to TPP countries. This would likely still benefit U.S. seafood producers, as Japan is a particularly attractive market for seafood and may offer U.S. exporters the opportunity to receive higher prices or export a more profitable mix of products than they would without TPP.

³⁶³ Global Affairs Canada, “Opening Markets for Fish and Seafood,” October 2015.

³⁶⁴ One notable exception is the tariff on canned tuna, but that product is not heavily produced in any of the TPP countries at present. There are also antidumping duties in place on imports of shrimp and *pangasius* filets from Vietnam, which are expected to remain unchanged under the TPP agreement.

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Chapter 4

Manufactured Goods and Natural Resource and Energy Products³⁶⁵

Introduction

The TPP Agreement is likely to have a limited impact on U.S. production and trade of manufactured goods and natural resource and energy (MNRE) products. The U.S. manufacturing sector is already more liberalized than other sectors, such as agriculture and services, and duties are generally low. The value of dutiable U.S. MNRE imports from TPP partners in comparison to the size of total U.S. trade and production is small. The Commission expects that U.S. production in all sectors modeled will increase on an absolute basis over time. Model results indicate that TPP would result in an increase in exports of \$15.2 billion (0.9 percent) above the projected 2032 baseline, and an increase in imports of \$39.2 billion (1.1 percent) above the baseline. Output would be \$10.8 billion (0.1 percent) less than the projected 2032 baseline and employment 0.2 percent less. Given the gains projected in many of the agricultural and services industry sectors, this model feature results in the already more liberalized U.S. manufacturing sector generally projected to post less output growth with TPP than would be expected in its absence. Some individual industries (e.g., titanium metal) may experience more adverse impacts from TPP than other MNRE sectors, while others such as passenger vehicles may benefit from TPP.

This chapter will first provide a brief overview of U.S. trade and market access provisions. It will then examine in more depth five sectors for which there will be significant U.S. trade liberalization with the full implementation of TPP: (1) passenger vehicles; (2) textiles and apparel; (3) footwear; (4) chemicals; and (5) titanium metal. Finally, it briefly discusses several sectors that do not have significant U.S. tariffs, but for which TPP might have substantial implications.

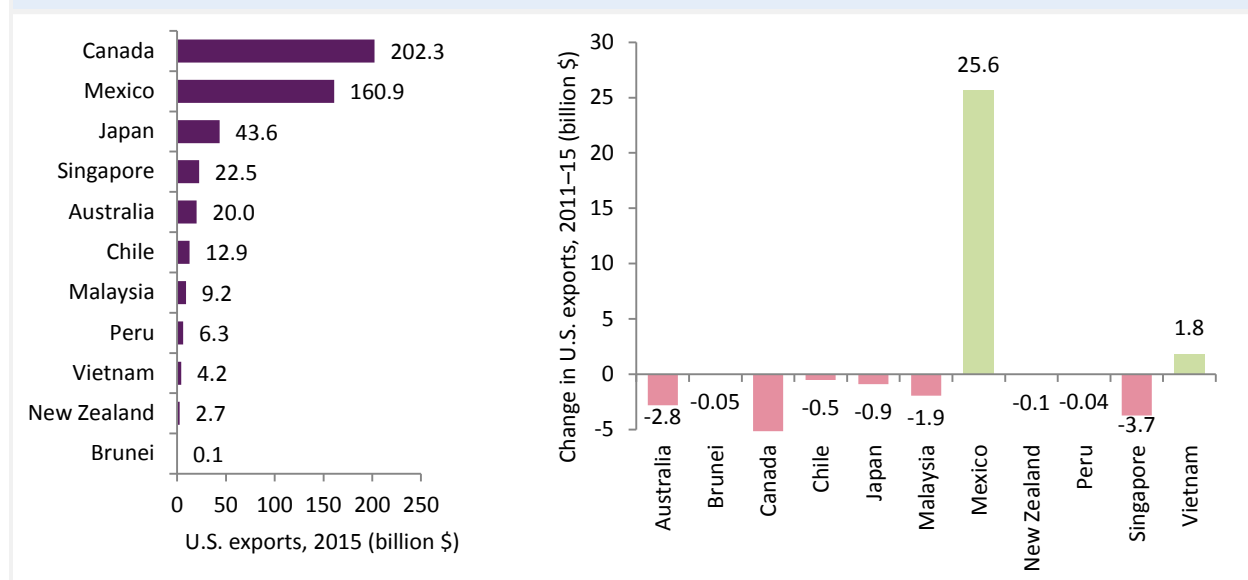
³⁶⁵ This chapter covers all U.S. trade in goods except agriculture, fish, and fish products (covered in chapter 3). In addition, while computers and electronic products are covered in this chapter, e-commerce and computer services are covered in chapter 5.

Trade Overview

U.S. Exports

U.S. MNRE exports to the 11 other TPP parties increased from \$472.4 billion to \$525.5 billion (11 percent) during 2011–14, then fell by 8 percent to \$484.5 billion in 2015—due, in part, to lower commodity prices. U.S. exports of these products to TPP parties accounted for 44 percent of U.S. exports in 2015. Canada and Mexico were the largest export markets in 2015, accounting for a combined 75 percent of U.S. exports to TPP parties (figure 4.1). Exports increased to two TPP parties, Mexico and Vietnam, during 2011–15.³⁶⁶

Figure 4.1: U.S. domestic exports to TPP parties, 2011–15



Source: USITC DataWeb/USDOC (accessed February 17, 2016). Corresponds to [appendix table J.13](#).

The MNRE category can be divided into durable products, nondurable products, and other MNRE products (table 4.1). U.S. exports of durable MNRE products³⁶⁷ to TPP parties grew by 7 percent during 2011–15, while exports of mining, forestry, and other MNRE products grew by 2 percent. Exports of nondurable goods, on the other hand, fell by 5 percent. In 2015, moreover, U.S. exports in all North American Industry Classification System (NAICS) industry

³⁶⁶ USITC DataWeb/USDOC (accessed February 17, 2016).

³⁶⁷ Durable goods are “those that can be stored or inventoried and that have an average life of at least 3 years”; nondurable goods “are all other commodities that can be stored or inventoried.” Seskin and Parker, “A Guide to the NIPA’s,” March 1998.

subsectors³⁶⁸ except transportation equipment declined from 2014 levels.³⁶⁹ The decrease in export values in 2015 was largely a result of strong dollars and lower prices due to the drop in oil and natural gas prices, which contributed to lower prices for downstream products such as petroleum products and chemicals.³⁷⁰

The leading export industry subsectors in 2015 were transportation equipment, chemicals, machinery, computer and electronic products, and petroleum and coal products.³⁷¹ The composition of U.S. exports to TPP members reflects the overall composition of U.S. exports and production.

Table 4.1: U.S. MNRE domestic exports, TPP parties, 2011–15, million dollars

	2011	2012	2013	2014	2015
Durable MNRE products					
Computer and electronic products	46,640	47,273	46,701	46,538	45,621
Electrical equipment, appliances, and component	18,303	20,090	20,560	25,834	24,692
Fabricated metal products, nesoi	19,848	21,883	22,695	24,024	22,681
Furniture and fixtures	2,883	3,335	3,319	3,335	3,105
Machinery, except electrical	60,989	67,436	61,751	60,368	55,587
Miscellaneous manufactured commodities	15,153	16,104	16,118	16,202	15,576
Nonmetallic mineral products	5,175	5,317	5,271	5,658	5,525
Primary metal manufacturing	26,107	25,939	25,637	26,199	22,461
Transportation equipment	93,828	106,135	107,936	111,067	113,404
Wood products	3,181	3,387	3,428	3,573	3,260
Subtotal durable MNRE products	292,107	316,898	313,418	322,799	311,910
Nondurable MNRE products					
Apparel and accessories	1,657	1,727	1,750	1,676	1,532
Chemicals	67,279	70,034	69,662	70,352	65,545
Leather and allied products	1,277	1,335	1,595	1,580	1,471
Paper	12,610	13,030	13,316	12,646	12,466
Petroleum and coal products	43,159	46,159	48,571	46,682	33,955
Plastics and rubber products	17,444	19,270	19,666	21,213	20,275
Printed matter and related products, nesoi	3,924	3,777	3,643	3,387	3,045
Textile mill products	1,775	1,919	1,969	1,971	1,854
Textiles and fabrics	3,918	4,090	4,339	4,638	4,502
Other	3	2	2	2	2
Subtotal nondurable MNRE products	153,047	161,344	164,514	164,146	144,646

³⁶⁸ NAICS industry subsectors are NAICS 3-digit numbers (e.g., 334: computer and electronic product manufacturing).

³⁶⁹ USITC DataWeb/USDOC (accessed February 17, 2016).

³⁷⁰ For many products, the quantity of exports increased in 2015 despite the drop in the value of exports. USITC DataWeb/USDOC (accessed February 17, 2016); Federal Reserve Bank of St. Louis website, "Trade Weighted U.S. Dollar Index: Major Currencies," <https://research.stlouisfed.org/fred2/series/DTWEXM> (accessed February 12, 2016); Hong, Musso, and Simons, "Oil-Price Shocks," May 2015; King, "Oil Slump," February 9, 2016; USDOL, "PPI Detailed Report," January 2016, 42–43.

³⁷¹ USITC DataWeb/USDOC (accessed February 10, 2016).

	2011	2012	2013	2014	2015
Mining, forestry, and other MNRE products					
Forestry products, nesoi	779	815	910	903	834
Minerals and ores	7,285	6,745	6,768	7,568	6,620
Oil and gas	9,796	9,177	13,731	22,962	14,638
Other MNRE products	9,393	7,849	6,772	7,169	5,835
Subtotal mining, forestry, and other MNRE products	27,253	24,586	28,181	38,603	27,927
Total MNRE products	472,408	502,828	506,112	525,548	484,483

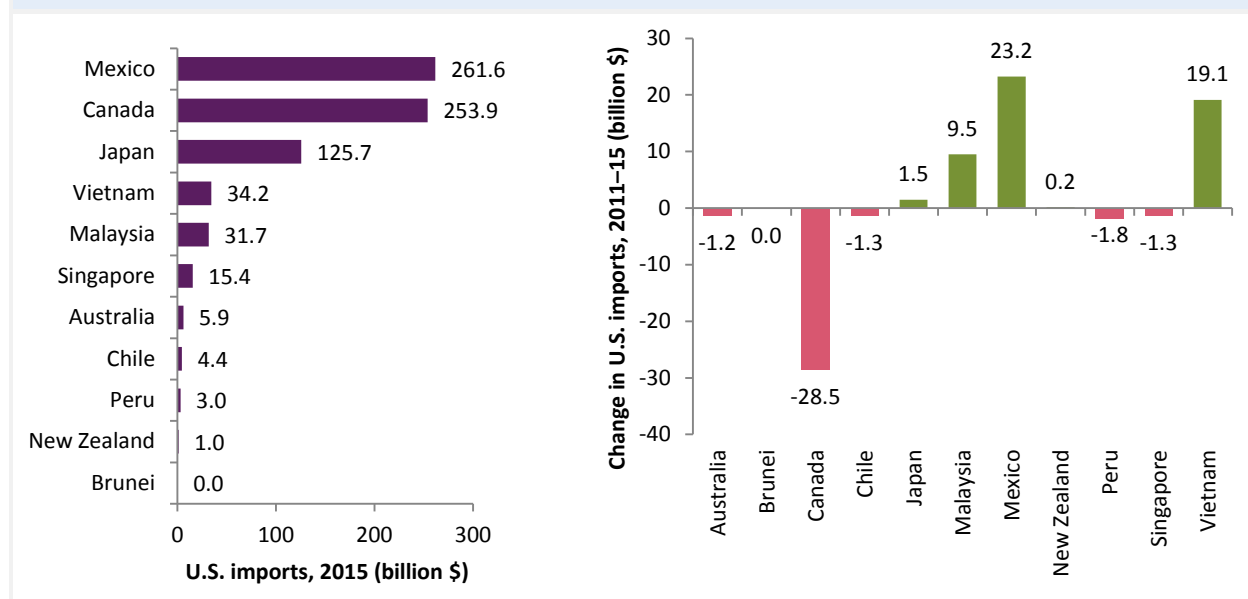
Source: USITC DataWeb/USDOC (accessed February 10, 2016).

Notes: Nondurable goods exclude most food, beverage, and tobacco products, which are included in the agriculture chapter. Other MNRE products include waste and scrap, used goods, goods returned to Canada, and special import provisions. Totals may not sum due to rounding. Nesoi = not elsewhere specified or included.

U.S. Imports

U.S. imports from TPP member countries increased from \$717.5 billion to \$736.9 billion (3 percent) during 2011–15, though 2015 imports were down 6 percent from the 2014 total of \$783.0 billion. The 2015 decline was primarily a result of a drop in the value of U.S. oil and gas imports, which fell by \$55.7 billion (46 percent). The three largest TPP sources of U.S. imports in 2015 were Mexico (35 percent), Canada (34 percent), and Japan (17 percent) (figure 4.2). However, imports from Vietnam (up 127 percent), Malaysia (up 43 percent), New Zealand (up 18 percent), and Mexico (up 10 percent) grew the most rapidly during 2011–15.³⁷²

Figure 4.2: U.S. imports for consumption from TPP partners, 2011–15



Source: USITC DataWeb/USDOC (accessed February 17, 2016). Corresponds to [appendix table J.14](#).

³⁷² USITC DataWeb/USDOC (accessed February 17, 2016).

In 2015, 19 percent of U.S. imports from TPP members were dutiable, up from 16 percent in 2011. This reflects an increase in imports from non-FTA partners like Vietnam and Japan as well as an increase in dutiable imports from Canada and Mexico.³⁷³ As a result, the trade-weighted average applied ad valorem duty rate³⁷⁴ from TPP members increased from 3.6 percent in 2011 to 4.1 percent in 2015 (table 4.2). However, there were wide variations in the trade-weighted average ad valorem duty rates on U.S. imports from TPP members, ranging from 0.6 percent for Canada to 14.6 percent for Vietnam.³⁷⁵

Table 4.2: U.S. imports for consumption, dutiable value, and duties collected, TPP parties, 2015

	Customs value (million \$)	Dutiable value (million \$)	Duties collected (million \$)	Trade-weighted average duty rate (percent)
Mexico	261,585.0	10,398.9	332.1	3.2
Canada	253,897.4	30,048.8	168.1	0.6
Japan	125,687.7	75,297.3	2,259.3	3.0
Vietnam	34,164.9	19,075.3	2,784.8	14.6
Malaysia	31,713.1	4,086.0	218.7	5.4
Singapore	15,438.8	836.2	27.5	3.3
Australia	5,882.0	276.4	9.2	3.3
Chile	4,444.8	120.8	3.2	2.7
Peru	3,012.0	230.7	3.1	1.3
New Zealand	1,047.4	231.7	7.5	3.2
Brunei	12.2	11.9	1.2	10.4
Total	736,885.3	140,614.1	5,814.6	4.1

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Note: Totals may not sum due to rounding. Nesoi = not elsewhere specified or included.

U.S. MNRE imports from TPP partners are dominated by a few products, with transportation equipment and computer and electronic products accounting for a combined 47 percent of imports in 2015 (table 4.3). However, apparel and accessories, transportation equipment (including passenger vehicles), and leather and allied products (including footwear) accounted for a combined 72 percent of duties collected.³⁷⁶

³⁷³ A significant portion of the increase in dutiable imports from Canada was oil and gas imports that likely did not meet rules of origin under NAFTA. Association of Corporate Counsel, "Exporting Canadian Oil and Gas: The Challenge of NAFTA Compliance," December 1, 2011.

³⁷⁴ Duties collected divided by dutiable value.

³⁷⁵ USITC DataWeb/USDOC (accessed February 10, 2016).

³⁷⁶ USITC DataWeb/USDOC (accessed February 17, 2016).

Table 4.3: U.S. imports for consumption, dutiable value, and duties collected, TPP parties, 2015

	Customs value (million \$)	Dutiable value (million \$)	Duties collected (million \$)	Trade- weighted average duty rate (percent)
Durable MNRE products				
Transportation equipment	227,812	54,074	1,380	2.6
Computer and electronic products	117,332	6,521	197	3.0
Machinery, except electrical	55,779	9,457	304	3.2
Primary metal manufacturing	37,841	753	44	5.8
Electrical equipment, appliances, and component	36,202	8,692	255	2.9
Fabricated metal products, nesoi	18,955	5,063	198	3.9
Miscellaneous manufactured commodities	18,016	2,068	76	3.7
Furniture and fixtures	10,237	48	3	5.9
Wood products	9,747	237	12	5.2
Nonmetallic mineral products	5,908	791	38	4.8
Subtotal durable MNRE products	537,830	87,705	2,508	2.9
Nondurable MNRE products				
Chemicals	49,996	4,278	223	5.2
Plastics and rubber products	16,644	3,847	155	4.0
Apparel and accessories	16,295	11,351	2,108	18.6
Petroleum and coal products	15,684	1,613	6	0.3
Paper	11,089	135	8	5.8
Leather and allied products	7,619	5,270	698	13.2
Textiles and fabrics	1,925	379	30	7.9
Textile mill products	1,693	524	36	6.9
Printed matter and related products, nesoi	1,608	1	0	4.3
Other	18	0	0	^a
Subtotal nondurable MNRE products	122,570	27,399	3,264	11.9
Mining, forestry, and other MNRE products				
Oil and gas	66,573	25,426	41	0.2
Minerals and ores	2,829	27	0	0.9
Forestry products, nesoi	213	0	0	a
Other MNRE products	6,870	58	1	2.6
Subtotal mining, forestry, and other MNRE products	76,485	25,510	43	0.2
Total MNRE products	736,885	140,614	5,815	4.1

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Notes: Nondurable goods exclude most food, beverage, and tobacco products, which are included in the agriculture chapter. Other MNRE products include waste and scrap, used goods, good returned from Canada, and special import provisions. Totals may not sum due to rounding. Nesoi = not elsewhere specified or included.

^a No dutiable items.

Overview of MNRE Market Access Provisions

The tariff reductions in TPP would likely have the strongest impact on U.S. trade in MNRE products, but a number of nontariff measures—such as provisions on national treatment, rules of origin, and remanufactured goods—would also have trade implications. This section covers provisions on national treatment and market access (TPP, Chapter 2) and rules of origin (TPP, Chapter 3). Other provisions in the agreement related to goods trade are covered in chapter 6 of this report, including customs administration and trade facilitation, technical barriers to trade, state-owned enterprises, government procurement, labor, environmental issues, investment, intellectual property protection, and regulatory coherence.

National Treatment, Market Access, and Rules of Origin

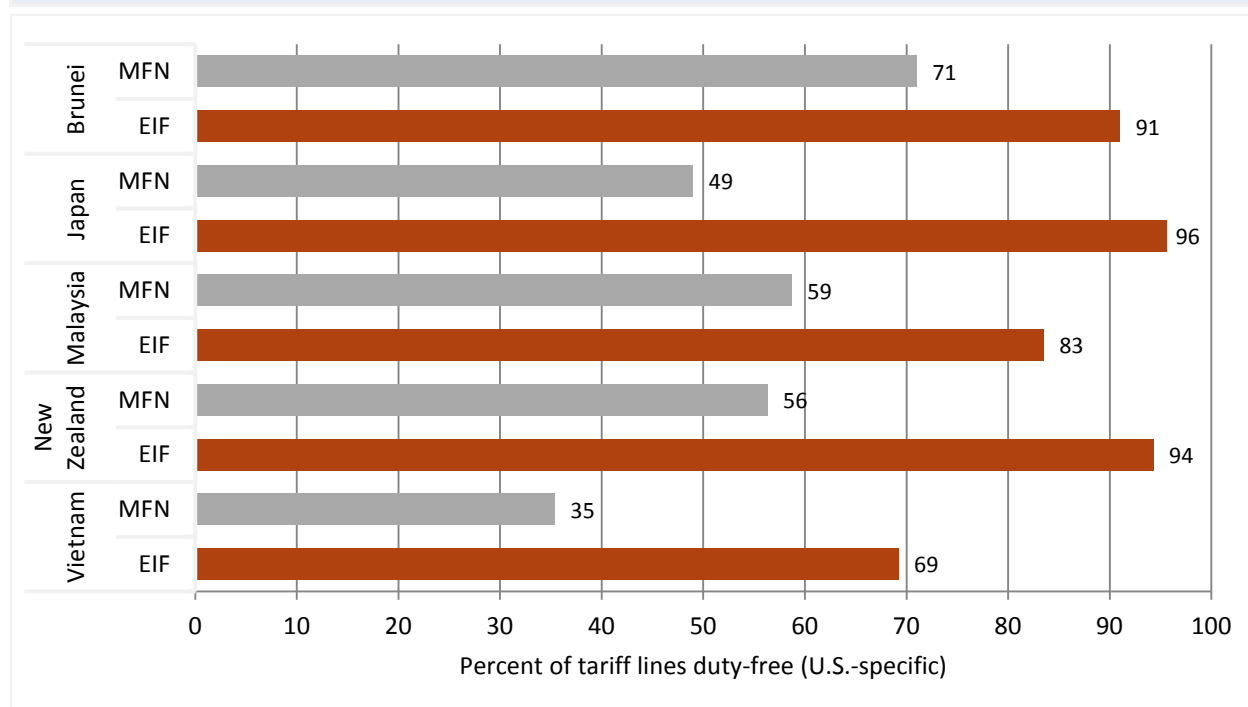
U.S. Tariff Commitments

The United States would eliminate duties on most imports of MNRE products as soon as the agreement enters into force, with the remaining tariffs eliminated over time (Annex 2-D: Tariff Commitments). Goods from non-FTA TPP parties currently enter duty free for about 39 percent of tariff lines under permanent normal trade relations rates. Upon entry into force (EIF), goods would enter duty free from these TPP parties under 84 to 91 percent of tariff lines. The initial import tariff reductions under TPP would, however, be less significant than might be indicated by simply adding up the number of affected tariff lines. For example, U.S. passenger vehicle imports from Japan, which would not be duty free on EIF, account for less than 10 tariff lines, but made up 29 percent of the value of 2015 U.S. imports from Japan.³⁷⁷

TPP Partner Tariff Commitments

TPP would lead to substantial reductions in tariff rates for U.S. exports to TPP parties, particularly those with which the United States does not already have a trade agreement (TPP, Annex 2-D: Tariff Commitments). For the five non-FTA partners in TPP combined, the share of tariff lines that are duty free for U.S. MNRE exports would increase from 53 percent to 86 percent upon EIF, with further tariff reductions phased in over time. Among TPP countries, substantial variation exists in the immediate extent of duty reductions from the agreement. For example, 96 percent of Japan's tariff lines would be duty free for U.S. exports upon EIF (figure 4.3). For Vietnam, a lower share of tariff lines—69 percent—would be duty free upon EIF. However, Vietnam has higher tariff rates, and the simple average tariff rate for duties that would be eliminated is 9.8 percent.

³⁷⁷ USITC DataWeb/USDOC (accessed February–March 2016).

Figure 4.3: Percent of tariff lines for U.S. exports to current non-FTA partners that are or will become duty free upon TPP entry into force, MNRE products

Source: TPP, chap. 2, Annex 2-D. Corresponds to [appendix table J.15](#).

Notes: MFN: most favored nation. EIF: entry into force of TPP. MFN rates are those listed in each country's tariff elimination schedule. Tariff lines that are duty free at the entry into force of the agreement only include MFN duty-free rates and those for which duties would be eliminated under TPP. EIF rates are specific to U.S. exports—rates of duty elimination may vary by country. For New Zealand, the analysis does not include the tariff lines for which duty rates apply for the good of which it is a part.

National Treatment

The agreement would require national treatment of goods (treatment equivalent to that given to domestic goods), in accordance with Article III of GATT 1994 (Article 2.3). TPP specifies that national treatment applies to regional (state-level) as well as central governments. For the United States, national treatment provisions would have significant implications for U.S. exports of natural gas. Natural gas, traded either via pipeline (in its natural state) or as a liquid (LNG) for movement in tankers, currently requires an export license approved by the U.S. Department of Energy, which is provided if the license is in the “public interest.” If the United States has an FTA with the export destination, the application is automatically deemed

consistent with the “public interest.”³⁷⁸ The United States currently gives automatic approval for LNG exports to 18 FTA partners, but non-FTA partners—such as Japan (the world’s largest LNG importer by volume)—require distinct permits.³⁷⁹ The implications of national treatment for LNG are considered at the end of this chapter.

Other Market Access Provisions

In addition to tariffs, the agreement would limit administrative fees and prohibit duties, taxes, and charges on exports that are inconsistent with those applied on goods sold in the domestic market (Articles 2.15 and 2.16). The agreement also would limit restrictions on the import or export of goods, and prohibit requirements to maintain a relationship with a local distributor as a condition of importing (Article 2.11). The agreement would further prohibit import licenses, except as allowed by the WTO Agreement on Import Licensing Procedures, and require TPP members to provide information that would increase the transparency of export and import licensing procedures (Articles 2.13 and 2.14). TPP would prohibit providing new import duty waivers or conditioning import licenses on performance requirements (Articles 2.1, 2.5, and 2.11).³⁸⁰

A provision in TPP on remanufactured goods³⁸¹ specifies that the same provisions on import and export restrictions that apply to goods trade also would apply to remanufactured goods, and specifies that any import restrictions on used goods would not apply to remanufactured goods. The agreement would allow countries to require that remanufactured goods be labeled as such and that they meet the same technical requirements as new goods (Article 2.12).³⁸² The

³⁷⁸ Of the countries with which the United States already has an FTA in effect, only South Korea is a major LNG importer. Chile, Mexico, and Singapore are FTA partners that import smaller volumes of LNG. Therefore, most companies seeking to export U.S.-produced LNG have applied for export approval to countries with which the United States does not yet have an FTA. Note that a non-FTA export approval need not specify a destination country; only sanctioned countries are prohibited from receiving the exports. Thus a non-FTA authorization is limited to an approved volume of LNG but not to a particular destination.

³⁷⁹ Companies can request short-term (less than two years) or long-term permits. U.S. Department of Energy website, <http://energy.gov/fe/services/natural-gas-regulation/how-obtain-authorization-import-andor-export-natural-gas-and-lng>.

³⁸⁰ Performance requirements are obligations such as a requirement that a certain level of domestically produced goods or services be exported or that domestic goods be used in order to receive benefits for their imports. Performance requirements related to investment are discussed in chapter 6. USTR, “National Treatment and Market Access for Goods” (accessed January 23, 2016).

³⁸¹ Remanufactured goods are not defined in the agreement. In a recent USITC study, these were defined as “non-agricultural goods that are entirely or partially comprised of parts that (i) have been obtained from the disassembly of used goods; and (ii) have been processed, cleaned, inspected, and tested to the extent necessary to ensure they have been restored to original working condition or better; and for which the remanufacturer has issued a warranty.” USITC, *Remanufactured Goods*, October 2012, xvi.

³⁸² For Vietnam, the provision specifying that restrictions on the imports of used goods does not apply to remanufactured goods does not take effect until 3 years after the entry into force of the agreement, and after that time does not apply to a list of goods specified in Annex 2-B to the chapter (Annex 2-B).

United States is the largest global producer and exporter of remanufactured goods, and the treatment of these products as used goods is a significant barrier to U.S. exports.³⁸³

TPP also has several provisions related to information technology products. First, TPP would require that members participate in the WTO Information Technology Agreement (TPP, Article 2.20).³⁸⁴ Second, the agreement would prohibit restrictions on the import and export of commercial cryptographic goods, and is the first U.S. trade agreement to incorporate such a provision (Article 2.11) (box 4.1).³⁸⁵ Third, the agreement further prohibits technical regulations and conformity assessment procedures³⁸⁶ that require the manufacturer or supplier to (1) provide access to the technology, production process, or other proprietary information, (2) have a local partner, or (3) incorporate a particular algorithm or cipher (Annex 8-B).

Box 4.1: Potential Impacts of TPP Provisions on Cryptographic Goods

Vietnam is the only TPP party that has attempted to place restrictions on the import of cryptographic goods.^a Vietnam's 2013 Draft Law on Information Security included a broad restriction on the import of "civic" cryptographic goods, including a ban on import and use of foreign encryption products (with a few exceptions).^b Although the 2013 draft law was put on hold for a couple of years, the Vietnamese National Assembly passed an updated law with similar import restrictions on November 19, 2015; the law is expected to take effect on July 1, 2016.^a

Commercial cryptographic goods provisions would have the potential to have a more significant long-term impact if extended to future trade agreements, according to U.S. industry representatives.^b They state that their value lies in preventing potential barriers, rather than breaking down existing trade barriers among TPP countries. SIA has identified China, India, and Russia as countries that currently have

³⁸³ Existing U.S. trade agreements with Australia, Chile, Peru, and Singapore contain provisions on remanufactured goods, though the scope of the coverage may differ from that in TPP. USITC, *Remanufactured Goods*, October 2012, xvii, 2-21.

³⁸⁴ Only three TPP members have not joined the Information Technology Agreement—Brunei, Chile, and Mexico. Brunei is required to participate a year after TPP enters into force, but the agreement specifies that the participation of Chile and Mexico is dependent on their domestic consultation procedures. Therefore, they have not made a firm commitment to join the agreement.

³⁸⁵ These are "any good implementing or incorporating cryptography, where the good is not designed or modified specifically for government use and is sold or otherwise made available to the public" (Article 2.11). These provisions would apply to a wide range of information and communications technology products, such as computers, mobile phones, video gaming consoles, and Internet routers. Currently, the majority of such products are sold commercially, and more than 90 percent of semiconductor products, according to a Semiconductor Industries Association (SIA) estimate, incorporate encryption. SIA, "Why Do We Need Encryption Rules?" September 2013; industry representative, telephone interview by USITC staff, December 11th, 2015; SIA, written submission to the USITC, January 22nd, 2016.

³⁸⁶ In addition to the encryption provisions discussed here, the agreement provides that a supplier's declarations of conformity are acceptable for ensuring that information technology equipment meets electromagnetic compatibility requirements. For telecommunications equipment, the agreement encourages members to implement the Asia-Pacific Economic Cooperation (APEC) Mutual Recognition Arrangement for Conformity Assessment of Telecommunications Equipment and the APEC Mutual Recognition Arrangement for Equivalence of Technical Requirements. USITC, hearing transcript, January 13, 2016, 331 (testimony of Ed Brzytwa, Information Technology Industry Council).

the most problematic restrictions on cryptographic goods. Industry representatives stated that the provisions in TPP set an important precedent for potential future entrants as well as other potential trade and investment agreements.

Sources: Crypto Law Survey, “Vietnam” (accessed February 9, 2016); SIA, “Why Do We Need Encryption Rules?” September 2013; SIA, written submission to the USITC, January 22nd, 2016; Industry representative, telephone interview by USITC staff, December 11, 2015; industry representative, telephone interview by USITC staff, December 14, 2015.

^a SIA, written submission to the USITC, January 22, 2016; SIA asserts that the Vietnamese law would be contrary to the TPP Agreement, and that the Vietnamese government will be required to amend the law significantly.

^b Vietnam’s semiconductor imports are growing rapidly, but it is not yet a top 10 export market for the United States. Vietnam’s semiconductor imports from the world increased from \$1.8 billion in 2010 to \$11.1 billion in 2014, while their semiconductor imports from the United States increased from \$87 million in 2010 (0.18 percent of U.S. semiconductor exports) to \$792 million in 2014 (1.9 percent); GTIS, Global Trade Atlas database (accessed February 24, 2016).

Rules of Origin

TPP’s negotiated rules of origin would establish the eligibility of each shipment for the tariff benefits accorded under the agreement, subject to proper documentation by the importer and verification by customs authorities (TPP Chapter 3).³⁸⁷ Shipments not meeting the rules of the agreement would continue to be charged normal trade relations duty rates, or any rates provided by another law or agreement of the parties.³⁸⁸ In addition, because many commitments in the agreement apply expressly to originating goods (discussed below) of the parties, the rules set parameters for the administration of customs procedures or other nontariff measures. The impact of each rule would be product- or industry-specific and will be discussed in the corresponding sections of this report, such as the passenger vehicle and textile and apparel sections below.

Like existing U.S. FTAs, TPP would accord benefits to three classes of goods (Article 3.2): (1) those “wholly obtained or produced” within one or more parties to the agreement; (2) those produced entirely in the region exclusively from originating materials; and (3) those produced entirely in the region while incorporating non-originating materials but complying with product-specific rules. In the first group, no non-member inputs are allowed; examples of covered goods are crops grown and harvested in TPP countries and naturally occurring minerals mined or

³⁸⁷ TPP’s rules of origin chapter includes four annexes and an appendix. Annex A to the chapter provides for a transition period in which certain parties may continue to request a certification of origin from a “competent authority” of an approved exporter under stated procedures. Annex B sets out the minimum data requirements for a certification of origin serving as the basis of a claim under the TPP. Annex C lists exceptions to the de minimis rules, all of them relating to agricultural products, so that certain goods containing larger quantities of third-country content cannot obtain benefits of the agreement. Annex D lays out the product-specific rules for each HS provision, and an appendix lists additional requirements for certain automotive goods.

³⁸⁸ A Committee on Rules of Origin and Origin Procedures is established to consider matters arising under the chapter, provide for its administration, and consider changes or modifications based on technology and production or on the HS.

taken within their territories. Article 3.3(e) adds aquaculture goods to the list of wholly originating goods found in earlier FTAs.³⁸⁹

The second class of eligible goods, those produced entirely from originating materials, contemplates two processing stages within the TPP region. These articles may incorporate both TPP and third-country materials, if the latter are first processed into intermediate originating components that are then used to produce originating end products. An example of the second case would be a manufactured product such as a gearbox, where some of the gears were manufactured in the TPP region using steel from outside of the region and all other parts were wholly produced within the region.

The third class of eligible goods involves the assembly or processing within the TPP member countries of materials—whether originating or non-TPP—in a way allowed by the product-specific (or HS line-specific) rules enumerated in TPP Annex 3-D. Only the non-TPP inputs must comply with these product-specific rules. The product-specific rules applied to this third class of goods generally involve either (1) changes of tariff classification (specified for each HS category) that result from manufacturing or processing, or (2) regional value content (RVC) criteria computed under specified formulas. The RVC levels set a threshold that seeks to ensure sufficient contribution from within the region, while recognizing that non-originating materials may be needed to produce the final good.³⁹⁰ For example, as discussed in more detail below, passenger vehicle engines must meet a minimum RVC level of 45 percent to qualify for duty reductions under TPP, meaning that 45 percent of the value of the engine originates within the TPP region.

The enforcement and verification procedures available to an importing party under TPP are enumerated in more detail and with more procedural steps and time limits than in any existing U.S. FTA. For example, information from the exporter, producer, or importer to establish a good's eligibility must be accepted by the importing party, so documentation is not limited to that supplied by the importer. The host government must be given notice of verification activities and allowed to assist and, if possible under its domestic law, to participate in site visits. Written requests for information or for a visit must be made to the firms involved under very detailed procedures, and specific time limits for responses to requests for information are set out.

³⁸⁹ Article 3.1 defines aquaculture as the farming of aquatic organisms, including fish, mollusks, crustaceans, other aquatic invertebrates and aquatic plants from seed stock such as eggs, fry, fingerlings or larvae, by intervention in the rearing or growth processes to enhance production such as regular stocking, feeding or protection from predators.

³⁹⁰ As with other U.S. FTAs, TPP would set up a separate net cost method of computing RVC for automotive goods, but TPP also would add a new focused value method relating to specific non-originating materials.

Impact of TPP on U.S. Production and Trade of MNRE Products

TPP would likely result in an increase in trade with TPP partners, but a negative impact on the overall growth of the sector. U.S. MNRE output and employment would grow less than the projected baseline, according to the Commission's model results. Commission estimates indicate that TPP would result in an increase in exports of \$15.2 billion (0.9 percent) above the projected 2032 baseline, and an increase in imports of \$39.2 billion (1.1 percent) above the baseline (box 4.2 and table 4.4), with some of the increase in trade with TPP partners offset by lower trade (compared to the baseline estimates) with non-TPP partners (tables 4.5 and 4.6). Output would be \$10.8 billion (0.1 percent) less than the projected 2032 baseline and employment 0.2 percent lower than the baseline projection. The impact of TPP on output of both manufactured goods³⁹¹ and natural resource and energy products would be small, though there would be a slight increase (less than 0.05 percent) in output of natural resources. As discussed below, the limited impact of TPP on output growth in these sectors reflects the existing, relatively low trade barriers and the assumption that U.S. aggregate output equals productive capacity. However, there are individual sectors (e.g., titanium) that would likely experience more significant impacts.

Box 4.2: TPP Modeling Approach

As discussed in chapter 2, the Commission's modeling analysis began by generating a projection of the global economy through 2032, with detailed forecasts for the 12 countries in TPP, including the United States, and for major non-TPP trading partners. This projection provided a baseline against which the effects of policy changes from the TPP Agreement could be compared. The modeling included three types of liberalization: removing or reducing tariffs and tariff-rate quotas (TRQs), removing certain nontariff measures (NTMs) on goods and on traded (cross-border) services, and investment liberalizations that improve market access for U.S.-owned foreign affiliates.

In this report, estimates of the effects of liberalizing each sector are presented relative to the baseline changes expected to take place through 2032. For example, U.S. producers' output of natural resources and energy products are projected to grow 21.13 percent between 2017 and 2032 in the absence of TPP. TPP is estimated to increase U.S. output of natural resources and energy products by about \$342 million or 0.02 percent (rounded to 0.0 percent in table 4.4), for an overall increase of approximately 21.15 percent through 2032.

The Commission's model assumes that growth or contraction across all sectors within a country generates aggregate output equal to the productive capacity of that economy. In TPP, many of the agricultural and services industry sectors experience greater liberalization abroad than do manufacturing sectors. As these sectors expand and absorb resources in the United States, the already

³⁹¹ Manufacturing in this chapter does not include the production of food, beverage, and tobacco products, and other goods which are included in chapter 3 of this report. Minerals and mineral products are included in the manufacturing total.

more liberalized U.S. manufacturing sector is generally projected to post lower output growth and lower employment growth with TPP than would be expected in its absence. As explained in chapter 2 of this report, the model does not capture the costs associated with employment transition and temporary unemployment.

The Commission's estimates of the impact of TPP on individual sectors may also be moderated by limitations on the number of industry-specific variables in the model and the composition of the sectors. The model includes some industry-specific features, such as elasticities of substitution between similar products from different origins, but it is difficult to capture all of the factors affecting competitiveness in the model parameters. Some U.S. MNRE sectors in the model may be more competitive than other sectors. For example, a competitive U.S. industry sector (e.g., instruments and medical devices) is not fully differentiated from a less competitive sector. The model results, therefore, may understate potential gains for instruments and medical devices and overstate the gains for a less competitive industry. Similarly, some manufacturers receive substantial revenue from the sale of services and may benefit from services liberalization, but some of these gains may be reflected in services model results presented in chapter 5 rather than in manufacturing estimates.^a

^a Model results for natural resources do include some related services (specifically, electricity production, collection, and distribution; gas manufacture and distribution; and water collection, purification, and distribution). Services and provisions related to services are discussed in chapter 5.

Table 4.4: Estimated effects of TPP on U.S. output, employment, and trade: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Manufacturing and natural resources and energy	15,187.5	0.9	39,245.4	1.1	-10,843.0	-0.1	-0.2
Manufacturing	12,873.9	0.8	36,840.7	1.1	-11,185.1	-0.1	-0.2
Natural resources and energy	2,313.6	3.0	2,404.7	0.7	342.1	0.0	-0.2
Selected industry sectors							
Chemicals	1,944.1	0.7	5,283.4	1.3	-2,854.8	-0.3	-0.3
Textiles	256.6	1.3	869.4	1.6	-328.5	-0.4	-0.4
Wearing apparel	10.3	0.3	1,891.3	1.4	424.7	1.0	0.9
Footwear	137.7	12.2	1,103.6	2.7	29.8	0.5	0.8
Titanium downstream products	-33.9	-1.1	115.4	14.2	-202.4	-1.2	-1.3
Passenger vehicles	1,953.9	1.9	2,371.7	0.8	1,628.3	0.3	0.3
Auto parts and trailers	1,219.8	1.2	3,039.2	1.6	-1,365.9	-0.3	-0.3
Total (selected sectors above)	5,488.5	1.0	14,674.0	1.3	-2,668.9	-0.1	-0.2
Other manufacturing and NRE	9,699.0	0.9	24,571.4	1.0	-8,174.0	-0.1	-0.2

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. Percentages and values are determined in the projected 2032 economy. Dollar values may not match the value produced by applying percentage changes in this table to current values in the 2015 economy. Totals may not sum due to rounding. Manufacturing does not include the production of food, beverage and tobacco products and other goods that are within the WTO definition of agriculture and are covered in chapter 3. Minerals and mineral products are included in the manufacturing total.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Table 4.5: Estimated effects of TPP on U.S. exports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Manufacturing and natural resources and energy	29,484.8	3.9	12,406.4	2.2	2,356.8	2.1	14,721.6	16.2	-14,297.3	-1.6	15,187.5	0.9
Manufacturing	26,405.1	3.7	10,025.4	1.9	2,343.9	2.1	14,035.8	17.4	-13,531.2	-1.6	12,873.9	0.8
Natural resources and energy	3,079.7	6.5	2,381.1	6.5	12.8	2.5	685.8	6.6	-766.1	-2.6	2,313.6	3.0
Selected industry sectors												
Chemicals	5,457.2	3.6	2,089.4	1.8	493.6	2.7	2,874.2	21.2	-3,513.1	-2.4	1,944.1	0.7
Textiles	551.7	5.2	232.2	2.5	28.4	3.6	291.1	48.9	-295.0	-3.1	256.6	1.3
Wearing apparel	27.9	1.1	-69.7	-3.3	9.4	5.8	88.2	44.0	-17.6	-1.2	10.3	0.3
Footwear	135.0	23.6	-4.1	-1.6	-5.9	-9.7	145.0	55.4	2.6	0.5	137.7	12.2
Titanium downstream products	47.3	7.1	11.1	3.5	1.7	2.6	34.5	12.0	-81.2	-3.4	-33.9	-1.1
Passenger vehicles	3,054.0	6.0	106.3	0.3	8.7	0.1	2,939.0	151.8	-1,100.1	-2.1	1,953.9	1.9
Auto parts and trailers	1,702.1	2.1	1,378.5	1.9	71.3	1.7	252.3	16.3	-482.3	-2.5	1,219.8	1.2
Total (selected sectors above)	10,975.2	3.7	3,743.7	1.5	607.2	2.0	6,624.4	36.0	-5,486.7	-2.3	5,488.5	1.0
Other Manufacturing and NRE	18,509.6	3.9	8,662.8	2.7	1,749.6	2.2	8,097.2	11.2	-8,810.6	-1.4	9,699.0	0.9

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. Percentages and values are determined in the projected 2032 economy. Dollar values may not match the value produced by applying percentage changes in this table to current values in the 2015 economy. Totals may not sum due to rounding. Manufacturing does not include the production of food, beverage and tobacco products and other goods that are within the WTO definition of agriculture and are covered in chapter 3. Minerals and mineral products are included in the manufacturing total.

The small impact of TPP on U.S. production and trade reflects the relatively small size of dutiable U.S. MNRE imports from TPP partners in comparison to the size of total U.S. trade and production. While imports from TPP members accounted for 37 percent of U.S. imports in 2015, dutiable imports from TPP members accounted for only 7 percent of U.S. imports from the world. Dutiable imports are even smaller when compared to U.S. production and the U.S. market. For example, dutiable imports of durable goods from TPP members totaled \$87.7 billion in 2015 and, as with MNRE imports overall, accounted for only 7 percent of U.S. imports of durable goods (dutiable and duty-free) from all countries in 2015. In comparison, U.S. shipments of durable goods totaled \$2.9 trillion (including exports), and dutiable imports from TPP members accounted for only 2 percent of the \$3.9 trillion U.S. market for durable goods.³⁹² Similarly, on the export side, 75 percent of U.S. exports to TPP members are to NAFTA FTA partners Canada and Mexico alone (see figure 4.1).

³⁹² U.S. Census, "Advance Report," January 28, 2016, 2; USITC DataWeb/USDOC (accessed February 17, 2016).

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Table 4.6: Estimated effects of TPP on U.S. imports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Existing FTAparters		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Manufacturing and natural resources and energy	43,449.6	3.7	20,666.0	2.2	1,062.4	2.6	21,721.3	11.3	-4,204.2	-0.2	39,245.4	1.1
Manufacturing	40,133.1	4.4	17,398.5	2.5	1,022.9	2.5	21,711.7	11.3	-3,292.4	-0.1	36,840.7	1.1
Natural resources and energy	3,316.5	1.2	3,267.4	1.2	39.5	4.9	9.6	3.1	-911.9	-1.6	2,404.7	0.7
Selected industry sectors												
Chemicals	6,202.8	6.8	2,712.7	4.1	339.6	2.7	3,150.5	22.7	-919.4	-0.3	5,283.4	1.3
Textiles	786.0	14.7	183.8	4.6	4.8	5.3	597.4	46.4	83.4	0.2	869.4	1.6
Wearing apparel	7,355.1	25.0	11.7	0.2	2.2	0.2	7,341.3	35.2	-5,463.8	-5.1	1,891.3	1.4
Footwear	1,551.9	23.4	93.6	13.4	0.3	4.6	1,458.0	24.6	-448.3	-1.3	1,103.6	2.7
Titanium downstream products	202.1	109.7	-4.2	-10.2	-1.7	-10.7	208.1	164.1	-86.8	-13.8	115.4	14.2
Passenger vehicles	933.8	0.5	806.4	0.6	2.7	1.8	124.8	0.3	1,437.9	1.4	2,371.7	0.8
Auto parts and trailers	3,830.3	3.9	2,887.4	3.3	8.1	2.7	934.7	8.7	-791.1	-0.8	3,039.2	1.6
Total (selected sectors above)	20,862.0	5.1	6,691.4	2.2	355.9	2.5	13,814.7	15.6	-6,188.0	-0.9	14,674.0	1.3
Other manufacturing and NRE	22,587.7	2.9	13,974.6	2.2	706.5	2.6	7,906.6	7.6	1,983.7	0.1	24,571.4	1.0

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. Percentages and values determined in the projected 2032 economy. Dollar values may not match the value produced by applying percentage changes in this table to current values in the 2015 economy. Totals may not sum due to rounding. Manufacturing does not include the production of food, beverage and tobacco products and other goods that are within the WTO definition of agriculture and are covered in chapter 3. Minerals and mineral products are included in the manufacturing total.

Sector-specific Analyses

The impact of TPP will vary significantly by sector, as noted above. Five sectors were selected for additional analysis in this study: (1) passenger vehicles; (2) textiles and apparel; (3) footwear; (4) chemicals; and (5) titanium metal. The sectors were chosen based primarily on the relatively high U.S. tariff rates or high value of duties collected on imports of sectoral goods.³⁹³ Other factors influencing the choice of sectors included the potential impact of TPP on U.S. sectoral production and trade, the existence of nontariff barriers that may impact U.S. sectoral trade, and the extent to which specific provisions of the agreement (such as rules of origin) may affect sectoral trade.

In addition, issues in four other sectors—aerospace, motorcycles, crude petroleum, and liquefied natural gas—were chosen for brief discussion. While U.S. tariffs are low for goods in these sectors, other TPP-related considerations (e.g., national treatment for LNG exports) are of interest in this context. This section appears at the end of the chapter.

Passenger Vehicles³⁹⁴

Assessment

The Commission's modeling estimates that U.S. passenger vehicle exports to TPP countries would likely rise significantly as a result of TPP, but would be offset by a decline in exports to non-TPP countries. Overall U.S. passenger vehicle exports would increase by more than 2 percent (\$2.9 billion), and parts exports would increase by 1.5 percent (\$2.1 billion) by year 30, relative to the baseline estimate. In the short term, a decrease in U.S. passenger vehicle exports is possible, since U.S. passenger vehicles would face increased competition in Canada (a major market for U.S. passenger vehicles) from other TPP countries before those countries lowered their tariffs on U.S. exports. Competition from Japan is particularly important: in year 6 of the agreement Japan would gain tariff-free access to Canada, which the United States already has under NAFTA. At the same time, tariffs on U.S. exports of these goods to Vietnam and Malaysia remain until year 13. By year 15, however, economic effects simulations suggest that U.S. passenger vehicle exports would increase due to reductions of tariffs and nontariff barriers on U.S. passenger vehicle exports in Malaysia and Vietnam, and reduction of nontariff barriers in Japan (table 4.7). Many in the U.S. industry, however, consider increased access to the Japanese market unlikely in practice, and the Commission presents alternative estimated

³⁹³ In the case of passenger vehicles, U.S. tariffs are lower than the other sectors discussed here, but the high value of imports results in passenger vehicles being one of the sectors with the highest levels of duties collected from TPP parties.

³⁹⁴ Passenger vehicles are cars, sport-utility vehicles, minivans, and light trucks included in HS 8703.22, 8703.23, 8703.24, 8703.31, 8703.32, 8703.90, 8704.21, and 8704.31.

effects in box 4.5 to reflect this view. The tendency of manufacturers to build passenger vehicles and source many of the parts for those vehicles in the same region that the vehicles are sold would likely reduce the impact of the agreement on imports and exports.³⁹⁵

Once the agreement has been fully implemented in 2047, USITC model results indicate that U.S. passenger vehicle imports (primarily from Japan) would likely increase by nearly \$4.3 billion, over the predicted baseline. Parts imports, primarily from Mexico, would increase by a similar amount. Exports of vehicles (primarily to Japan and Vietnam) would increase by nearly \$2.9 billion. The expected increases in trade account for only a small percent of U.S. passenger vehicles and parts trade.

Table 4.7: Estimated effects of TPP on U.S. output, employment, and trade of passenger vehicles and parts: Changes relative to baseline in 2032 and 2047

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Passenger vehicles							
15 years	1,954	1.9	2,372	0.8	1,628	0.3	0.3
30 years	2,899	2.2	4,272	1.1	1,429	0.2	0.2
Parts							
15 years	1,220	1.2	3,039	1.4	-1,366	-0.3	-0.3
30 years	2,062	1.5	4,516	1.5	-1,394	-0.2	-0.3

Source: USITC estimates. Estimates for year 15 are shown above to match results in other sector analyses. Year 15 includes all tariff and nontariff changes from the agreement directly affecting passenger vehicles and parts except for the removal of tariffs on U.S. imports of passenger vehicles from Japan.

Note: Percentages and values determined in the projected 2032 and 2047 economies. Dollar values may not match the value produced by applying percentage changes in this table to current values in the 2015 economy.

Overview of U.S. Trade with TPP partners

The United States was the world's third-largest exporter of passenger vehicles in 2015, and the largest single-country importer (box 4.3).³⁹⁶ In 2015, the United States exported nearly \$63 billion in passenger vehicles (table 4.8). Canada was by far the top destination for U.S. passenger vehicle exports, with nearly a third of U.S. passenger vehicle exports by value sent there. The European Union (EU) and China were the next two highest export destinations by value.

³⁹⁵ For example, many vehicles sold by Japanese manufacturers in the United States are made in North America with high levels of North American content. Klier and Rubenstein, *Who Really Made Your Car?* 2008, 136; Hill et al., "Contribution of the Automotive Industry," January 2015, 8; Coffin, *Passenger Vehicle Industry and Trade Summary*, 2013, 4.

³⁹⁶ GTIS, Global Trade Atlas database (accessed March 25, 2016).

Box 4.3: U.S. Industry and Employment

From 2013 to 2015, U.S. passenger vehicle production increased from 10.9 million to 11.8 million units (table below). The stronger U.S. economy contributed to growth in passenger vehicle sales from 15.5 million units in 2013 to 17.5 million units in 2015, a U.S. record for annual passenger vehicle sales.

U.S. passenger vehicle sales, production, and employment, 2013–15

	2013	2014	2015
U.S. sales (millions of units)	15.5	16.4	17.5
U.S. production (millions of units)	10.9	11.4	11.8
U.S.-headquartered producers (millions of units)	5.9	6.2	6.4
Japanese-headquartered producers (millions of units)	3.6	3.8	3.8
Other (millions of units)	1.4	1.4	1.5
U.S. passenger vehicle employment (thousands)	155.7	167.1	173.3
U.S. motor vehicle parts and bodies employment (thousands)	508.7	537.0	560.4

Source: Ward's Automotive Reports, "North America Vehicle Production Summary," January 25, 2016, 8; Binder, *Ward's Automotive Yearbook*, 2012–15; BLS, "Employment, Hours, and Earnings" from the Current Employment Statistics survey (accessed April 11, 2016).

Note: numbers may not sum due to rounding.

U.S. passenger vehicle production is primarily made up of large cars and trucks destined for the domestic market. The *Wall Street Journal* estimates that 18 percent of passenger vehicles produced in the United States were exported in 2014. According to estimates by the Bureau of Labor Statistics, 173,000 people were employed in passenger vehicle manufacturing in 2015. This was an increase of nearly 20,000 workers from 2013, but a decline from the early to mid-2000s when over 200,000 workers were employed in this industry.

Most major global passenger vehicle manufacturers produce and sell in North America for the U.S. market, which is the second-largest single-country market (behind China) in the world. The U.S. market purchases a higher share of light pickup trucks, large cars, and SUVs than other markets.

Sources: Binder, *Ward's Automotive Yearbook*, 2015; Binder, *Ward's Automotive Yearbook*, 2012; Lutz, "U.S. Auto Exports Hit Record in 2014," February 6, 2015; BLS, "Employment, Hours, and Earnings" from the Current Employment Statistics survey (accessed April 11, 2016).

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Table 4.8: U.S. passenger vehicle domestic exports, 2013–15, million dollars

U.S. exports	2013	2014	2015
TPP			
Canada	21,403	22,577	21,356
Mexico	4,197	4,190	3,544
Australia	1,460	1,917	1,695
Japan	655	647	569
Chile	623	469	406
New Zealand	103	200	185
Peru	130	143	136
Vietnam	38	74	104
Singapore	11	11	7
Malaysia	3	7	8
Brunei	6	5	5
Total TPP	28,630	30,241	28,016
ROW			
EU	8,133	9,204	9,649
China	8,502	11,109	9,118
Other	19,906	18,679	15,911
Total ROW	36,541	38,992	34,678
Total	65,171	69,234	62,694

Source: USITC DataWeb/USDOC (accessed February 24, 2016).

Note: ROW = rest of world.

The United States imported over \$181 billion in vehicles in 2015 (table 4.9). Nearly two-thirds of these vehicles came from three TPP partner countries (Canada, Japan, and Mexico). The EU and South Korea were two other major suppliers of passenger vehicles to the U.S. market.

Table 4.9: U.S. passenger vehicle imports, 2013–15, million dollars

	2013	2014	2015
TPP			
Canada	43,594	43,180	42,550
Mexico	31,446	34,801	38,058
Japan	37,772	33,891	35,765
Other TPP	159	164	146
Total TPP	112,971	112,036	116,519
ROW			
EU	36,549	39,598	45,332
South Korea	12,147	14,577	17,278
Other	3,147	1,604	2,058
Total ROW	51,843	55,779	64,668
Total	164,813	167,815	181,186

Source: USITC DataWeb/USDOC (accessed February 24, 2016).

Note: ROW = rest of world.

Summary of Provisions

For passenger vehicles, the most important provisions in the agreement are tariff reductions, product-specific rules of origin (ROOs), specific appendixes on ROOs, and bilateral agreements with Japan and Malaysia. These provisions remove tariffs on U.S. imports of passenger vehicles and parts, and tariff and nontariff barriers to U.S. exports. In addition, for a vehicle to be considered originating, the agreement's ROOs require a level of regional value content (RVC) that is lower than the level required by NAFTA, but higher than the level required by most other U.S. trade agreements. However, as noted above, vehicle manufacturers tend to build vehicles in the region they are sold, and buy most parts in the same region where the vehicle is built, limiting the impact of the agreement on North American supply chains.³⁹⁷

Rules of Origin

The ROOs for passenger vehicles under TPP would be simpler and easier for passenger vehicle manufacturers to meet than NAFTA ROOs.³⁹⁸ Under the TPP ROOs for passenger vehicles, no change in tariff classification is required as long as the vehicle has an RVC of at least 45 percent using the net cost method or 55 percent using the build-down method.³⁹⁹

Under the TPP ROOs for vehicle parts, the RVC may be calculated using the net cost, build-up,⁴⁰⁰ or build-down methods. For parts classified in HS heading 8708, for example, the net cost and build-up RVC requirement ranges between 35 and 45 percent. The comparable RVC requirement for passenger vehicle engines is 45 percent.⁴⁰¹ The RVC requirement for parts and engines under the build-down method is higher, ranging between 45 and 55 percent.

To meet the RVC requirement for certain passenger vehicle parts,⁴⁰² materials from non-TPP countries used in their production must undergo one or more specified production operations

³⁹⁷ Industry representative, telephone interview by USITC staff, January 28, 2016; industry representative, telephone interview by USITC staff, January 29, 2016.

³⁹⁸ USITC, hearing transcript, January 13, 2016, 180 (testimony of Celeste Drake, AFL-CIO); academic professional, telephone interview by USITC staff, January 27, 2016.

³⁹⁹ TPP, Annex 3-D, 87.02-87.05. Build-down "calculates the RVC by subtracting the value of the non-originating merchandise (VNM) from the adjusted value (AV) of the finished product. The adjusted value includes all costs, profit, general expenses, parts and materials, labor, shipping, marketing, and packing." Net cost "captures only the costs involved in manufacturing, including factory labor, materials, and direct overhead. Other costs, such as sales promotion, marketing, royalties, and profit, are excluded from the calculation." CRS, *International Trade: Rules of Origin*, June 24, 2015, 9–10.

⁴⁰⁰ Build-up method RVC is calculated by "adding together the value of all of the regional inputs (e.g., costs, general expenses, parts, materials, labor, shipping, marketing, and packing)," then dividing that by the adjusted value of the good to get the RVC. CRS, *International Trade: Rules of Origin*, June 24, 2015, 9.

⁴⁰¹ Engines for passenger vehicles are classified in HS subheadings 8407.33, 8407.34, and 8408.20. TPP, Annex 3-D, Product-Specific Rules of Origin.

⁴⁰² Identified in TPP, Annex 3-D, Table C, Appendix 1, including certain engines, chassis, and other motor vehicle parts of HS heading 8708.

(e.g., complex assembly, extrusion)⁴⁰³ in one or more TPP countries to be considered originating. Furthermore, the value of these materials can be counted as originating content only when their value does not exceed the 5 or 10 percent threshold specific to each part.⁴⁰⁴

If a part has a high enough RVC to count as originating, then the full value of the part can be counted for the RVC of the vehicle. Further, some parts may be counted as originating (and thus included in the RVC) if they have undergone one or more of the aforementioned production processes in one or more TPP countries.⁴⁰⁵

The originating content required for vehicles to receive duty-free treatment under TPP is significantly lower than that for NAFTA, which requires 62.5 percent originating content, but higher than other trade agreements that include the United States, such as the U.S.-Korea FTA (KORUS), which required only 35 percent originating content (table 4.10). One industry representative estimated that differences in calculation methods between NAFTA and TPP reduce the gap in RVC between the two agreements to 8 percent.⁴⁰⁶ However, some observers have argued that Appendix 1 to TPP's Annex 3-D may reduce the value of RVC required for a vehicle to qualify as originating, so that a vehicle could qualify for TPP treatment with less than 45 percent of the content of the vehicle coming from a TPP country. This could occur if some of the non-originating content underwent one of the processes allowed for in the appendix.⁴⁰⁷

⁴⁰³ TPP, Annex 3-D, Table B, Appendix 1.

⁴⁰⁴ TPP, Annex 3-D, Table C, Appendix 1; Nuthall, "Trans-Pacific Pact Clears the Way," November 17, 2015.

⁴⁰⁵ Parts included in this rule are toughened safety glass, laminated safety glass, bodies for the motor vehicles of headings 8701-8705, bumpers, body stampings and door assemblies, and drive axles with differential (whether or not provided with other transmission). For the specific HS subheadings and thresholds included, see TPP, Annex 3-D, Appendix 1; Nuthall, "Trans-Pacific Pact Clears the Way," November 17, 2015.

⁴⁰⁶ Essentially, an RVC of 53 percent under TPP rules would result in the same RVC as a 62.5 percent rule under NAFTA rules. This is because all of the parts not included on the tracing list under NAFTA could be imported parts, but they would still count as originating for purposes of the RVC calculation. Industry representative, telephone interview by USITC staff, January 27, 2016; U.S. Congress, House, Committee on Ways and Means, *TPP Issue Analysis: Trade*, January 8, 2016, 11.

⁴⁰⁷ USITC, hearing transcript, January 13, 2016, 180 (testimony of Celeste Drake, AFL-CIO); academic professional, telephone interview by USITC staff, January 27, 2016.

Table 4.10: Comparison of rules of origin for passenger vehicles in trade agreements

Agreement	Methods for calculating RVC	RVC requirement
TPP	Net cost	45 percent
	Build-down	55 percent
NAFTA	Net cost with “tracing” and “deemed originating”	62.5 percent (translates to 53 percent if calculated under the ROOs for other FTAs)
KORUS	Net cost	35 percent
	Build-down	55 percent

Sources: U.S. Congress, House, Committee on Ways and Means, *TPP Issue Analysis: Trade*, January 8, 2016; U.S.-Korea Free Trade Agreement (KORUS), Annex 6-A, Specific Rules of Origin; North American Free Trade Agreement (NAFTA), Chapter 4, Rules of Origin, Article 403, Automotive Goods; TPP, Annex 3-A, Product-Specific Rules of Origin.

The differences in the ROOs between TPP and NAFTA could affect U.S. parts producers in two ways. First, the TPP ROOs could lead to lower U.S. content in vehicles produced in the United States and exported to NAFTA countries, as the RVC required under TPP is lower than that under NAFTA.⁴⁰⁸ However, the vast majority of U.S. production is destined for the U.S. market, so U.S. manufacturers would be unlikely to significantly modify their supply chains to gain tariff savings on the smaller share of the vehicles they produce and export to TPP countries. Second, the TPP rules could lead to lower U.S. content in vehicles produced in NAFTA countries and exported to the United States, again due to the difference in ROOs between TPP and NAFTA.⁴⁰⁹ Since a significant percentage, or even the majority, of vehicles produced in Canada and Mexico are destined for the U.S. market, it is possible that some U.S. exports of parts to those countries could be affected by the TPP ROOs.

Tariff Reductions

Under TPP, the United States would agree to remove tariffs on passenger vehicle imports. For countries that already had a trade agreement with the United States, all passenger vehicle imports would be duty free upon EIF, since they already receive duty-free treatment based on their earlier trade agreement with the United States. For four of the five new partners—Brunei, Malaysia, New Zealand, and Vietnam—tariffs on passenger vehicle imports would be reduced in 10 annual stages and become duty free on January 1 of year 10 of the agreement (table 4.11). For the fifth new partner, Japan, tariffs on U.S. imports of passenger vehicles would be phased out over a longer period: 25 years for cars and sport-utility vehicles, and 30 years for pickup trucks and work vans.⁴¹⁰ Eighty percent of tariffs on parts originating from Japan would be

⁴⁰⁸ Academic professional, telephone interview by USITC staff, January 27, 2016.

⁴⁰⁹ Ibid.

⁴¹⁰ TPP, Annex 2-D U.S. Tariff-Elimination Schedule.

eliminated upon EIF, and all tariffs on parts originating from Japan would be removed by year 15.⁴¹¹

Table 4.11: U.S. tariff concessions for TPP countries

Type of vehicles	Subheadings	MFN rate	Phase-out period with Japan	Phase-out period for other countries without an FTA with the United States
Cars, sport-utility vehicles, minivans	8703.22, 8703.23, 8703.24, 8703.31, 8703.32, 8703.33, 8703.90	2.5 percent	Tariff unchanged during years 1–14, then drops to zero in 3 steps from years 15 to year 25	Reduced in 10 annual stages, duty free on January 1 of year 10
Pickup trucks and work vans	8704.21, 8704.31	25 percent	Tariff remains until year 29, when it drops to zero	Reduced in 10 annual stages, duty free on January 1 of year 10

Source: TPP, Annex 2-D, U.S. Tariff-Elimination Schedule.

Note: For existing U.S. FTA partners, tariffs have already been eliminated.

U.S.-made passenger vehicles already enter most TPP markets (including Japan) duty free, but Malaysia and Vietnam agreed to remove substantial tariffs under TPP. Malaysia agreed to eliminate its tariffs on passenger vehicles, but tariffs for some types of fully assembled passenger vehicles would not be completely eliminated until year 13 of the agreement (table 4.12).⁴¹² Malaysia would eliminate its tariffs on most automotive parts on EIF. Vietnam agreed to eliminate its passenger vehicle tariffs by year 13 and its tariffs on automotive parts by year 11 of the agreement.⁴¹³

⁴¹¹ U.S. Congress, House, Committee on Ways and Means, *TPP Issue Analysis: Trade*, January 8, 2016, 7.

⁴¹² TPP, Annex 2-D, Malaysia Tariff-Elimination Schedule.

⁴¹³ *Ibid.*

Table 4.12: Malaysia and Vietnam passenger vehicle and parts: current tariffs and staging

Country	Product	Tariff	Staging
Malaysia	Passenger vehicles (CKD)	10 percent ^a	Eliminated in either 3 or 6 annual stages depending on engine size.
Malaysia	Passenger vehicles (CBU)	30 percent	Tariffs eliminated in 6, 11, or 13 annual stages depending on engine size.
Malaysia	Engines	0 percent (compression ignition); 5 percent (spark ignition)	Immediately on EIF.
Malaysia	Other parts	0 to 30 percent	Immediately on EIF.
Vietnam	Passenger vehicles (CKD)	0	No change.
Vietnam	Passenger vehicles (CBU)	70 percent	Tariffs remain in place for 1 to 5 years (depending on vehicle size and type), then are cut in annual stages until free of duty effective January 1 of year 13.
Vietnam	Engines	25 to 30 percent	Eliminated in annual stages over 8 years.
Vietnam	Other parts	3 to 27 percent	Eliminated in annual stages from 4 to 11 years.

Source: TPP, Annex 2-D, Viet-Nam Tariff-Elimination Schedule and General Notes to Tariff Schedule; TPP, Annex 2-D, Malaysia Tariff-Elimination Schedule and General Notes to Tariff Schedule.

Note: CKD = completely knocked down (disassembled); CBU = completely built up.

^a CKD vehicles for the transport of goods from Malaysia (i.e., trucks and work vans) are free of duty.

U.S.-Japan Bilateral Agreements

Japan and the United States negotiated several bilateral agreements that could have a significant impact on U.S.-Japan passenger vehicle trade. First, Japan and the United States agreed to a separate appendix on motor vehicles (TPP, U.S. Appendix D, Motor Vehicle Trade, see box 4.4). The appendix could reduce the impact of a number of Japanese nontariff measures on U.S. passenger vehicle exports to Japan: it would improve the regulatory development process, remove some unnecessary regulations through post-implementation review, and provide additional protections and safeguards. The appendix also details modifications to the TPP safeguard measure that could protect the U.S. market from a significant increase in vehicle imports from Japan.

Two other Japanese concessions should also have a positive impact on U.S. passenger vehicle exports to Japan. When first accepted into TPP negotiations, Japan agreed to expand its Preferential Handling Procedure (PHP) from 2,000 units per model to 5,000 units per model.⁴¹⁴ This increases the number of vehicles per model each manufacturer can send to Japan without undergoing Japan's unique set of emissions and safety examinations. Second, in a side letter

⁴¹⁴ The PHP is a simplified conformity assessment procedure for small-volume vehicle imports. TPP, Appendix D, "Appendix between Japan and the United States on Motor Vehicle Trade."

between Japan and the United States, Japan agreed to recognize seven U.S. safety standards as no less stringent than Japan's requirements.⁴¹⁵

Box 4.4: Summary of TPP, U.S. Appendix D, Motor Vehicle Trade^a

Development of regulations

- *Publication of regulations:* Parties must wait at least 12 months between the publication of a technical regulation or conformity assessment and the date on which compliance is required.
- *Informal advisory councils:* Japan would ensure that the informal advisory councils used by Japan to develop regulations operate transparently, and that relevant information is shared with any and all interested companies.
- *Post-implementation review:* Japan and the United States would agree to periodically conduct post-implementation reviews of significant regulations that affect motor vehicles.
- *Transparent development of new regulations:* Japan and the United States would ensure transparent development of new regulations, including 12 months' advance notice, and public posting of information on regulations in development when such information is supplied to a nongovernmental expert or interested person.
- *Regulating new products:* Japan and the United States agree not to delay import of a new product merely because it is new, and thus not expressly allowed.
- *Treatment of Preferential Handling Procedure (PHP):* This provision would prevent modifications to the PHP that unnecessarily increase the burden for importers. Japan would also agree that any financial incentives offered for motor vehicle purchase, including tax incentives, would include vehicles imported under the PHP.

Zoning: Would make zoning of service and repair facilities transparent and non-discriminatory.

Safeguard: Would create a transitional safeguard that is different from other trade remedy safeguards because it can be used multiple times over the course of the tariff reduction period, for no more than two years.⁴¹⁶

Special accelerated dispute settlement: Would be a mechanism available for any actual or proposed measure by either country that affects motor vehicles. If a complainant's tariffs have not been reduced, then a "delay remedy" can be used. Or if tariffs have already been reduced, then they can be "snapped back" in response to a disputable policy measure. The benefit for the complainant is calculated using a proportional calculation so that it is roughly equivalent to the level of its imports from the respondent.^b

Expedited consultation provision: Would allow for consultation on regulations, as well as rumored regulations.

⁴¹⁵ TPP, Japan-U.S. Letter on Safety Regulations for Motor Vehicles (accessed January 4, 2016), <https://ustr.gov/sites/default/files/TPP-Final-Text-JP-to-US-Letter-on-Safety-Regulations-for-Motor-Vehicles.pdf>.

⁴¹⁶ The transitional safeguard can be extended for an additional two years.

Special bilateral committee: Would create a formal committee that would meet to help resolve any issues that arise related to U.S.-Japan motor vehicle trade.

Source: TPP, Japan-U.S. Letter on Safety Regulations for Motor Vehicles, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-JP-Letter-Exchange-on-Certain-Auto-NTMs.pdf>; TPP, Appendix to Annex 2-D, Appendix, “Motor Vehicle Trade.”

^a This is an appendix to TPP’s Annex 2-D, “Motor Vehicle Trade,” also titled “Japan Appendix D-1 Appendix between Japan and the United States on Motor Vehicle Trade.”

^b The calculation of benefits is the sum of the level of benefits of equivalent effect and the level of benefits of equivalent effect multiplied by the ratio of the four-year average of complainant imports from the respondent divided by respondent imports from the complainant.

U.S.-Malaysia Bilateral Agreement

The United States and Malaysia agreed to a side letter on automotive nontariff barriers, which may reduce nontariff barriers to U.S. passenger vehicle exports. Such barriers have previously limited U.S. exports to Malaysia. Under this side letter, Malaysia would agree to:

- participate in the Asia-Pacific Economic Cooperation’s Auto Dialogue work program;
- consider whether U.S. safety and emissions standards are acceptable alternatives for complying with Malaysian regulations;
- increase transparency in the creation of regulations and standards related to excise taxes;
- not provide excise tax credits for export performance or local content beginning on January 1, 2021;
- not restrict imports of new U.S. motor vehicles through quotas, import licenses, or additional charges; and
- accept transaction values submitted by importers for customs valuation.⁴¹⁷

Estimated Effects of TPP on the Passenger Vehicle Sector

Impact on U.S. Exports

While large percentage increases in U.S. passenger vehicle exports to Malaysia, Vietnam, and Japan would likely occur in the long run due to the reduction in tariff and nontariff barriers under TPP, they would likely not represent a significant increase in total U.S. passenger vehicle exports. Although these three countries are the only significant TPP consumers of passenger vehicles that do not have a free-trade agreement with the United States, they currently account for a relatively low share of U.S. exports. According to one industry source, U.S.-headquartered manufacturers expect a larger increase in sales by U.S. companies producing in the region (e.g.,

⁴¹⁷ TPP, US-MY, Letter Exchange on Auto Imports. <https://ustr.gov/sites/default/files/TPP-Final-Text-US-MY-Letter-Exchange-on-Auto-Imports.pdf>.

increased Vietnamese production, as well as exports from non-TPP countries like Thailand) than of vehicles exported from the United States.⁴¹⁸

In the short run, as noted earlier, U.S. exports may actually decrease, as competitors gain duty-free access to a major U.S. vehicle export destination (Canada) before Malaysian and Vietnamese tariffs on vehicles are removed. Industry sources and public statements both indicate concern that without enforceable currency manipulation provisions, future Japanese currency devaluation could eliminate any access to Japan gained through reduction of nontariff barriers.⁴¹⁹

According to Commission model estimates, total U.S. exports of passenger vehicles are expected to increase by \$2.9 billion as a result of TPP upon full implementation of the agreement (year 30). This includes an increase of \$3.9 billion in exports to new FTA partners (primarily Japan and Vietnam), partially offset by a decline of \$1.2 billion in U.S. exports to non-TPP countries (table 4.13).

Table 4.13: Estimated effects of TPP on U.S. exports of passenger vehicles and parts: Changes relative to baseline in year 15 (2032) and year 30 (full implementation, 2047)

	Export change, year 15		Export change, year 30	
	Million \$	Percent	Million \$	Percent
Passenger Vehicles				
TPP				
NAFTA partners	106	0.3	152	0.3
Other FTA partners	9	0.1	-23	-0.2
New partners	2,939	151.8	3,932	160.4
All TPP countries	3,054	6.0	4,060	5.7
ROW	-1,100	-2.1	-1,162	-1.9
All countries	1,954	1.9	2,899	2.2
Parts				
TPP				
NAFTA partners	1,379	1.9	2,179	2.1
Other FTA partners	71	1.7	69	1.1
New partners	252	16.3	347	24.0
All TPP countries	1,702	2.1	2,595	2.3
ROW	-482	-2.5	-533	-2.5
All countries	1,220	1.2	2,062	1.5

Source: USITC estimates. Estimates for year 15 are shown above to match results in other sector analyses. Year 15 includes all tariff and nontariff changes from the agreement directly affecting passenger vehicles and parts, except for the removal of tariffs on U.S. imports of passenger vehicles from Japan.

Note: Percentages and values determined in the projected 2032 and 2047 economies. Dollar values may not match the value produced by applying percentage changes in this table to current values in the 2015 economy. ROW = rest of world.

⁴¹⁸ Industry representative, telephone interview by USITC staff, October 26, 2015.

⁴¹⁹ Biegun, written testimony to the USITC, January 16, 2016, 4–5; USITC, hearing transcript, January 13, 2016, 157–58 (testimony of Josh Nassar, UAW).

U.S. automotive parts exports to TPP countries are expected to increase by \$2.1 billion, with a \$2.2 billion increase in exports to NAFTA countries partially offset by a \$533 million decline in exports to non-TPP countries.

TPP member countries' acceptance of U.S. safety and emissions standards is an important part of the agreement for U.S. manufacturers. Current requirements to meet different standards for smaller markets like Malaysia and Vietnam may make it too expensive on a per-unit basis for a U.S. manufacturer to provide a broad range of vehicles at competitive prices in those countries, likely reducing U.S. exports to those markets. One U.S. manufacturer expressed concern that potential U.S. export growth could be diminished if more countries without FTAs with the United States joined the agreement, but were not required to accept U.S. vehicle safety and emissions standards.⁴²⁰ U.S.-headquartered vehicle manufacturers would be particularly affected by non-acceptance of these standards, as many countries, including Malaysia and Vietnam, have standards based on those developed for Europe by the United Nations Economic Commission for Europe (UNECE). Widespread acceptance of UNECE standards makes it less expensive for manufacturers producing in countries (like those in the EU) with similar standards to export vehicles to countries that also accept UNECE standards.⁴²¹

Japan

Although USITC estimated effects indicate that U.S. exports to Japan could potentially increase by \$2.2 billion (149 percent) as a result of TPP, any increased export volume would likely represent only a small share of total U.S. passenger vehicle exports. However, market factors (such as a declining market or consumer preferences) or nontariff barriers may limit any increase (see box 4.5). Japan is the largest TPP passenger vehicle market outside the United States, but imports relatively few passenger vehicles. Japan's vehicle sales in 2015 totaled 5.6 million; of which 5.1 million of those sales were vehicles produced in Japan by Japanese-headquartered manufacturers.⁴²²

⁴²⁰ Industry representative, interview by USITC staff, Washington, DC, January 21, 2016.

⁴²¹ The United States uses its own safety and emissions standards—the Federal Motor Vehicle Safety Standards (FMVSS) for safety and the Corporate Average Fuel Economy (CAFE) Standards for emissions. While these standards tend to be similar to UNECE standards, some testing requirements and standards are different. U.S. manufacturers often have to complete additional testing and certification in order to export into markets that use UNECE standards. Biegun, written testimony to the USITC, January 13, 2016, 6; CRS, *U.S. and EU Motor Vehicle Standards*, February 18, 2014, 2; industry representative, interview by USITC staff, Washington, DC, January 20, 2016.

⁴²² Binder, *Ward's Automotive Yearbook 2015*, "Asia Vehicle Sales by Country and Company," 2015.

Box 4.5: Alternative Estimated Effects of U.S. Passenger Vehicle Exports to Japan

Many in the U.S. passenger vehicle industry believe that Japan will not allow a significant increase in passenger vehicle imports to occur. Thus, in contrast to the main simulation, which includes a 50 percent ad-valorem equivalent reduction to Japanese nontariff barriers, the Commission ran a simulation where Japan's nontariff barriers to U.S. passenger vehicle exports do not decline. This simulation indicates that as a result of TPP, U.S. passenger vehicle exports to Japan would decline by \$297 million, and total U.S. passenger vehicle exports would decline by \$84 million, relative to the model's baseline estimates.

Sources: USITC estimated effects; ITAC-2, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 6–7; Biegun, written testimony to the USITC, January 16, 2016, 4–5.

Although Japan has no tariffs on passenger vehicles, a number of nontariff barriers were reported in 2014 (table 4.14). Many of them are addressed in one of TPP's bilateral agreements between the United States and Japan, or in one of the side letters.

Table 4.14: List of reported Japanese nontariff barriers to vehicle imports, and TPP actions

Regulatory barrier	Explanation	TPP action
Remote keyless entry (RKE) and tire pressure management system (TPMS) radio frequency/power	RKE and TPMS signal strength requires certification and ID marking by the supplier.	No specific action
Daytime running lamps (DRL)	Japan does not allow DRL, forcing manufacturers to disable DRL for vehicles sold in Japan.	No specific action
Exterior noise	Japan has unique acceleration, proximity, and cruise-by noise tests and standards.	No specific action
Exhaust emissions, fuel economy, and safety	Japan requires a unique emission and fuel economy test mode that differs from the two major test modes available around the world.	Japan agreed that U.S. vehicles shall be deemed to comply with Japanese safety standards if they meet a U.S. standard that is no less stringent than the Japanese one. The United States and Japan agreed to cooperate bilaterally to harmonize safety and environmental standards.
Occupant protection	Japan requires two crash tests—one UN Economic Commission for Europe (UNECE) test and one Federal Motor Vehicle Safety Standard test—a unique configuration.	Japan agreed that U.S. vehicles shall be deemed to comply with Japanese safety standards if they meet a U.S. standard that is no less stringent than the Japanese one.
Explosives law	Limits use of explosives and gun powder in automotive applications (excepting airbags and seatbelt pre-tensioners).	No specific action
High-pressure gas safety law	Japan's safety law for high-pressure gas makes it very difficult to import	Japan agreed to permit the import of any motor vehicle

Regulatory barrier	Explanation	TPP action
	hydrogen inflators for airbags and hydrogen tanks for fuel cell vehicles.	part necessary to repair a U.S.-originating vehicle that was deemed to comply with the Road Vehicle Transport Act on imports (including if it used U.S. standards that were deemed no less stringent).
Auto taxes and tax incentives	Japan applies nine auto-related taxes on the acquisition, ownership, and running of a passenger vehicle, with several taxes disproportionately impacting imported vehicles.	No specific action
Auto-related tax incentives	Some tax incentives exclude vehicles certified under Japan's Preferential Handling Procedure (PHP), a small volume import program often used by U.S. automakers.	Japan agreed to not adopt or apply PHP and relevant regulations in such a way that vehicles imported under it are ineligible for any financial incentives offered by the central government.
Distribution outlets and service centers	Acquiring land within approved zoning areas is often difficult, as is receiving approval from the Ministry of Land, Infrastructure, Transport and Tourism to establish a new service/repair center.	Both parties agreed to apply any laws or regulations related to zoning and applicable to the establishment of distribution or repair facilities for motor vehicles in a transparent and non-discriminatory way.

Source: AAPC, written submission to the USTR, June 9, 2013; TPP, US-JP Letter on Safety Regulations for Motor Vehicles, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-JP-Letter-Exchange-on-Certain-Auto-NTMs.pdf>.

Canada

While the United States already has tariff-free access to Canada via NAFTA, U.S. passenger vehicle exports to Canada would likely be lower than the baseline estimate, because Canada would remove its 6.1 percent tariff on vehicle imports from other TPP countries by year 5 of the agreement. Canada was the top U.S. export market for passenger vehicles in 2014, representing 33 percent (\$22.6 billion) of U.S. passenger vehicle exports.⁴²³ With other TPP countries, particularly Japan, gaining tariff-free access to Canada, the relative cost of Japanese vehicles compared to U.S. vehicles will likely decline, according to Commission simulations. As a result, Canadian imports of vehicles from Japan would likely increase from the \$2.4 billion total seen in 2014,⁴²⁴ potentially cutting into the volume of U.S. exports to Canada. This decline in U.S. exports to Canada would be due to Japanese-brand manufacturers exporting more Japan-

⁴²³ USITC DataWeb/USDOC (accessed November 6, 2015).

⁴²⁴ GTIS, Global Trade Atlas database (accessed November 6, 2015).

produced vehicles to Canada, or (to a lesser extent) choosing to export vehicles from Japan to Canada that were previously exported from the United States.⁴²⁵

Malaysia

Although Malaysia is not currently a major market for U.S. passenger vehicle exports, tariff-free access and liberalization of nontariff measures, such as excise taxes tied to local content and quotas,⁴²⁶ may lead to a significant increase in U.S. passenger vehicle exports to Malaysia. However, any increase is not expected to significantly affect total U.S. passenger vehicle exports because Malaysia is a relatively small market, with only 670,000 units sold in 2014.⁴²⁷ In 2014, for example, U.S. passenger vehicle exports to Malaysia totaled \$7.4 million (452 units).⁴²⁸

According to Malaysian import data, the United States was the 15th-largest supplier of passenger vehicles to Malaysia in 2014.⁴²⁹ In 2014, U.S.-headquartered manufacturers sold 16,000 vehicles in Malaysia, accounting for 2 percent of the Malaysian market, but many of them are either produced from kits⁴³⁰ in Malaysia or imported from within the region (primarily Thailand).⁴³¹ Malaysian and Japanese companies account for 47 and 42 percent, respectively, of Malaysian vehicle sales.⁴³²

Tax incentives for local content, import quotas, and negotiated taxable values have severely limited the competitiveness of imports in the Malaysian passenger vehicle market.⁴³³ While imported and domestically produced vehicles are taxed the same in Malaysia, vehicles assembled in Malaysia receive tax credits that reduce their tax burden by as much as 50 percent compared to imported vehicles.⁴³⁴ Further, Malaysia has used a system of “approved permits” to limit the number of vehicles imported to 10 percent of the total market. Also, the taxable base value of imported vehicles is reportedly not based on the transaction

⁴²⁵ Industry representative, telephone interview by USITC staff, February 4, 2016.

⁴²⁶ *Ibid.*, November 4, 2015.

⁴²⁷ Binder, *Ward's Automotive Yearbook 2015*, “Asia Sales,” 2015.

⁴²⁸ USITC DataWeb/USDOC (accessed November 6, 2015).

⁴²⁹ Malaysian data only credits the United States with supplying the Malaysian market with 84 units of passenger vehicles worth \$1.8 million in 2014. GTIS, Global Trade Atlas database (accessed January 14, 2016).

⁴³⁰ A kit contains the parts needed to assemble a vehicle. These kits of vehicles are often referred to as “completely knocked down” or CKD in the trade literature. Vehicles are often imported as kits due to government import regulations offering a significantly lower tariff for imports of kits, than for fully assembled or “completely built up (CBU)” vehicles.

⁴³¹ Industry representative, telephone interview by USITC staff, November 4, 2015; GTIS, Global Trade Atlas database (accessed February 11, 2016); Binder, *Ward's Automotive Yearbook 2015*, “Asia Vehicle Sales by Country and Company,” 2015.

⁴³² Binder, *Ward's Automotive Yearbook 2015*, “Asia Vehicle Sales by Country and Company,” 2015.

⁴³³ AAPC, written submission to the U.S. Trade Representative, November 22, 2010.

⁴³⁴ Swire, “Malaysia Confirms U-Turn on Vehicle Excise Tax Cut,” January 21, 2014.

cost of the vehicle, but rather on the value negotiated by the manufacturer and the Malaysian government.⁴³⁵

Through tariff elimination and liberalization agreed to in a side letter with the United States, the Malaysian market likely would be more open to imports from the United States and production by U.S.-headquartered manufacturers. Nonetheless, although Malaysia agreed to consider whether meeting U.S. safety and emission standards could be an acceptable alternative to complying with Malaysian regulations, the U.S. industry is concerned that Malaysia may not accept U.S. standards.⁴³⁶ Modifying vehicles for current Malaysian standards increases the cost per vehicle of manufacturing for the Malaysian market, reducing profit margins.⁴³⁷

Vietnam

While tariff-free access would likely lead to a significant percentage increase in U.S. passenger vehicle exports to Vietnam, it would not be significant relative to total U.S. passenger vehicle exports. With total vehicle sales of only 135,000 units in 2014, Vietnam is not a major passenger vehicle market. In 2014, the United States was Vietnam's fifth-largest supplier of passenger vehicle imports. Vietnam imported \$33 million (926 units) of such vehicles from the United States,⁴³⁸ and U.S.-headquartered manufacturers sold over 19,000 units in Vietnam in 2014. These sales, which included vehicles produced outside the United States by U.S.-headquartered manufacturers, represented 14 percent of Vietnamese vehicle sales, behind only Japanese (54 percent) and South Korean (19 percent) manufacturers.⁴³⁹ In order to encourage domestic assembly, Vietnam has no tariffs on vehicles imported in kits, but maintains a 70 percent tariff on assembled vehicles, which would be removed for TPP partners as part of the agreement.⁴⁴⁰

U.S. Parts Exports

According to estimated effects from Commission simulations, U.S. parts exports would increase slightly and production would decline slightly as a result of TPP. Similar to the scenario for passenger vehicles, U.S. parts exports to Canada could be negatively affected by Canada's elimination of parts tariffs for all TPP countries, particularly Japan. Canada would remove tariffs

⁴³⁵ AAPC, written submission to the U.S. Trade Representative, November 22, 2010.

⁴³⁶ TPP, US-MY Letter Exchange on Auto Imports, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-MY-Letter-Exchange-on-Auto-Imports.pdf>; Biegun, written submission to the USITC, January 16, 2016, 6–7; ITAC-2, *The Trans-Pacific Partnership Agreement*, December 2, 2015; industry representative, interview by USITC staff, Washington, DC, January 21, 2016; industry representative, telephone interview by USITC staff, January 28, 2016.

⁴³⁷ Industry representative, interview by USITC staff, Washington, DC, January 21, 2016.

⁴³⁸ GTIS, Global Trade Atlas database (accessed January 14, 2016).

⁴³⁹ Binder, *Ward's Automotive Yearbook 2015*, "Asia Vehicle Sales by Country and Company," 2015.

⁴⁴⁰ The kits are also known as completely knocked down, or CKD. Already assembled vehicles are also known as completely built up, or CBU.

of 6–8.5 percent on passenger vehicle parts imports from all TPP countries upon entry into force, potentially reducing any cost advantage of U.S. parts exports. Further, those parts that Japanese manufacturers already import from Japan will now count towards the RVC necessary to export from Canada or Mexico to the United States, which may impact the level of U.S. inputs used. The difference in the RVC required by TPP compared to NAFTA could lead vehicle producers in Canada or Mexico to source parts from low-cost countries outside of TPP.⁴⁴¹

According to Commission estimates, however, U.S. parts exports to NAFTA would increase, likely due to increased demand for parts in those countries due to increased vehicle output.

Any negative impact on U.S. parts exports to Canada and Mexico is likely mitigated by the strong tendency of most vehicle manufacturers to source their parts within a day's drive of the plant to reduce logistics costs, avoid the impacts of a shifting currency, and help maintain low inventories.⁴⁴² Most passenger vehicle assembly plants operate on a just-in-time basis, so a supplier using parts imported from outside the NAFTA region may need to warehouse parts close to an assembly plant (increasing the cost of the parts).⁴⁴³ If, however, the price difference between parts produced in the NAFTA region compared to outside the region were significant enough, a supplier might be willing to source outside the region.⁴⁴⁴

Industry sources indicate that two factors tend to affect the likelihood a part could be imported from outside the region. First, parts that are relatively delicate tend to be produced closer to the assembly plant (e.g., seat assemblies tend to be assembled within an hour's drive of an assembly plant), while those that are less likely to be damaged during transport can be produced farther away.⁴⁴⁵ A second factor affecting the likelihood of a part being imported from outside the region is the labor intensity of the product. U.S. parts production tends to be more cost-competitive for parts with lower labor intensity.⁴⁴⁶

Impact on U.S. Imports

In the short term, U.S. imports of passenger vehicles would likely not be significantly affected by TPP, as the staged tariff eliminations on U.S. imports of passenger vehicles do not begin until year 15. In the long run, U.S. imports of vehicles would likely increase once tariffs on imports from Japan are removed. Japan would likely be the leading beneficiary of the tariff elimination,

⁴⁴¹ Academic professional, telephone interview by USITC staff, January 27, 2016.

⁴⁴² Walsh, "Analysts: Trans-Pacific Partnership Unlikely to Have Major Impact," October 11, 2015.

⁴⁴³ Academic professional, telephone interview by USITC staff, January 27, 2016.

⁴⁴⁴ Industry representative, interview by USITC staff, Washington, DC, November 4, 2016; academic professional, telephone interview by USITC staff, January 27, 2016.

⁴⁴⁵ Klier and Rubenstein, *Who Really Made Your Car?* 2008, 159; industry representative, telephone interview by USITC staff, February 4, 2016.

⁴⁴⁶ Industry representatives, telephone interview by USITC staff, February 4, 2016.

since Japan is the largest passenger vehicle manufacturer other than the United States in TPP. However, U.S. passenger vehicle parts suppliers may be affected sooner, as tariffs on parts are removed earlier.

According to model estimates, U.S. passenger vehicle imports would increase by \$4.3 billion above the baseline upon full implementation of the agreement (table 4.15). Imports from Japan would increase by \$1.6 billion, and imports from NAFTA partners would increase by \$1.8 billion, making up the majority of the increase. Parts imports would increase by \$4.5 billion, with imports from NAFTA partners increasing by \$5.5 billion. That increase would be partially offset by declines in imports from non-TPP countries.

Table 4.15: Estimated effects of TPP on U.S. imports of passenger vehicles and parts: Changes relative to baseline in year 15 (2032) and year 30 (full implementation, 2047)

	Import change, year 15		Import change, year 30	
	Million \$	Percent	Million \$	Percent
Passenger vehicles				
TPP				
NAFTA partners	806	0.6	1,789	0.8
Other FTA partners	3	1.8	2	5.7
New partners	125	0.3	1,612	3.9
All TPP countries	994	0.5	3,403	1.3
ROW	1,438	1.4	869	0.6
All countries	2,372	0.8	4,272	1.1
Parts				
TPP				
NAFTA partners	2,887	3.3	5,484	4.6
Other FTA partners	8	2.7	4	1.5
New partners	935	8.7	621	5.7
All TPP countries	3,830	3.9	6,110	4.6
ROW	-791	-0.8	-1,593	-0.9
All countries	3,039	1.6	4,516	1.5

Source: USITC estimates. Estimates for year 15 are shown above to match results in other sector analyses. Year 15 includes all tariff and nontariff changes from the agreement directly affecting passenger vehicles and parts, except for the removal of tariffs on U.S. imports of passenger vehicles from Japan.

Note: Percentages and values determined in the projected 2032 and 2047 economies. Dollar values may not match the value produced by applying percentage changes in this table to current values in the 2015 economy. ROW = rest of world. Certain groupings may not sum to their parent groupings due to rounding.

Japan

In the long run, Japan is likely the largest beneficiary of the removal of U.S. passenger vehicle tariffs, as it was the fourth-largest manufacturer of passenger vehicles in the world (behind China, the EU, and the United States) and the largest supplier of U.S. passenger vehicle imports outside of North America in 2014.⁴⁴⁷ An increase in imports from Japan could displace some U.S. production, but it could also displace imports from other countries that already have tariff-

⁴⁴⁷ OICA, "Production Statistics" (accessed March 16, 2015); USITC DataWeb/USDOC (accessed March 16, 2015).

free access to the U.S. market (e.g., Canada, Mexico, or South Korea) or are not a part of TPP (e.g., the EU). However, Japanese manufacturers have invested billions of dollars in assembly plants in North America, with most of those vehicles destined for North American markets, particularly the United States. Also, large Japanese manufacturers primarily import two types of vehicles from Japan into the U.S. market: luxury vehicles and vehicles meant to make up a temporary gap between high U.S. consumer demand and North American production of that model.⁴⁴⁸

The removal of the 25 percent tariff on pickup trucks and other vehicles for the transport of goods is unlikely to have a major impact on U.S. imports of pickup trucks. Assembly plants located in the United States and Mexico supply virtually all of the U.S. market for these vehicles, and this likely would not change under TPP. The United States is the world's largest market for such vehicles, and passenger vehicle manufacturers tend to locate their assembly plants close to their largest markets to take the greatest advantage of economies of scale.⁴⁴⁹ Further, U.S. consumers tend to prefer larger pickup trucks with more high-end features than those sold in other markets.⁴⁵⁰ It is possible that removal of the 25 percent tariff would lead to an increase in the availability of relatively niche pickup trucks, but these trucks are unlikely to have the sales volume in the United States necessary to locate production in North America.⁴⁵¹

Other Countries

Vietnam and Malaysia are the only other vehicle producers in TPP without existing U.S. FTAs. It is unlikely, though, that they would significantly increase vehicle exports to the United States, because of distance, differences in consumer preferences between U.S. and Southeast Asian consumers, and safety and emissions standards.⁴⁵² Malaysia exported less than 10 passenger vehicles to the United States in 2014, and appears to primarily produce vehicles for its domestic market.⁴⁵³ While Vietnam is not currently a large producer, industry sources have indicated that U.S. imports from Vietnam could increase somewhat.⁴⁵⁴

⁴⁴⁸ Industry representative, telephone interview by USITC staff, February 4, 2016; industry representative, telephone interview by USITC staff, February 25, 2015.

⁴⁴⁹ For example, the majority of U.S. vehicle sales by non-U.S. manufacturers are of vehicles manufactured in the United States. Bozzella, written testimony to the USITC, January 22, 2016, 5; Coffin, *Passenger Vehicles*, 2013, 4.

⁴⁵⁰ Industry representative, telephone interview by USITC staff, January 28, 2016.

⁴⁵¹ Examples of such niche products include the Ford Ranger and the Toyota Hilux. Beene, "After 'Chicken Tax,' a Flood of Foreign Trucks?" June 29, 2015, 1.

⁴⁵² Industry representative, interview by USITC staff, Washington, DC, January 21, 2016.

⁴⁵³ GTIS, Global Trade Atlas database (accessed July 14, 2015); OICA (accessed January 21, 2015).

⁴⁵⁴ Industry representative, telephone interview by USITC staff, February 4, 2016; industry representative, interview by USITC staff, Washington, DC, January 21, 2016.

U.S. Parts Imports

U.S. imports of parts for passenger vehicles could significantly increase soon after the implementation of the agreement, but distance and transportation costs would likely limit the effect of TPP to low-volume parts and parts of certain product categories. While most parts for passenger vehicles produced in the United States tend to be manufactured within a day's drive of production, removal of tariffs reduces the cost difference between imported parts and locally produced parts, which could boost U.S. imports.⁴⁵⁵ Thus, the main driver of the increase in parts imports is actually the predicted increase in U.S. vehicle production.

Summary of Views of Interested Parties

Union and academic professionals are concerned that the relatively low RVC requirement in ROOs will decrease the U.S. content in vehicles traded in TPP compared to NAFTA, but other industry sources tend to support TPP ROOs. The AFL-CIO recommended an RVC in TPP that was significantly higher than NAFTA, and is concerned that with more countries in TPP and an RVC requirement below NAFTA's, U.S. parts producers will be negatively affected and non-TPP members will benefit.⁴⁵⁶ The UAW, which represents workers in the auto industry and other industries, agreed that the low RVC in TPP could put U.S. production and employment at risk.⁴⁵⁷ An academic source shared the UAW and AFL-CIO's concerns, and pointed out that the RVC change would happen immediately upon entry into force of the agreement.⁴⁵⁸ However, one industry source argued that the relatively low RVC was necessary because some parts not commonly used in the United States, like small diesel engines and manual transmissions, tend not to be produced domestically. Manual transmissions and diesel engines are more commonly used in other TPP countries, and a higher RVC in TPP could prevent U.S.-built small manual-shift diesel-engine vehicles (for example) from qualifying as originating for the purpose of exporting to other TPP countries.⁴⁵⁹ In its report, the International Trade Advisory Council (ITAC) on Automotive Equipment and Capital Goods (ITAC-2) stated that most committee members support the level of RVC in TPP, but some are concerned the RVC is not strong enough.⁴⁶⁰

Many in the U.S. auto industry do not believe TPP would cause significant increases in U.S. passenger vehicle exports to Japan. A Ford Motor Company official stated that Ford does not expect a significant increase in brand sales or vehicle exports from the United States to Japan because of alleged continued Japanese currency manipulation and nontariff barriers that limit

⁴⁵⁵ Klier and Rubenstein, *Who Really Made Your Car? 2008*, 136; industry representative, interview by USITC staff, Washington, DC, January 21, 2016; industry representative, telephone interview by USITC staff, January 28, 2016.

⁴⁵⁶ AFL-CIO, written submission to the USITC, January 13, 2016, 39–42.

⁴⁵⁷ Nassar, written submission to the USITC, December 23, 2015, 5.

⁴⁵⁸ Academic professional, telephone interview by USITC staff, January 27, 2016.

⁴⁵⁹ Industry representative, telephone interview by USITC staff, January 28, 2016.

⁴⁶⁰ ITAC-2, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 4, 6–7.

non-Japanese sellers to a small portion of the Japanese market.⁴⁶¹ Ford also announced that it planned to stop selling vehicles in Japan because it saw “no path to profitability.”⁴⁶² Members of ITAC-2 also believe “these commitments will not lead to a substantially larger U.S. presence in the Japanese motor vehicle market,” although they believe the commitments would result in some improvements.⁴⁶³

The trade association Global Automakers supports the inclusion of provisions in the TPP Customs Administration and Trade Facilitation chapter that encourage modernization of customs practices throughout the TPP region. Global Automakers asserts that quicker processing and simpler and more transparent documentation requirements will make it easier for U.S. manufacturers to access TPP markets. Global Automakers also states that facilitative and transparent procedures required in this chapter will ensure that goods are treated fairly by customs officials, and reduce conflicts of interest in customs administration.⁴⁶⁴

According to U.S. industry representatives, the most significant issue that is not included in TPP is currency manipulation. In its submission, Ford describes currency manipulation as “the 21st century trade barrier facing American manufacturers,” and claims that without a binding agreement limiting a country’s ability to manipulate its currency, gains and concessions on market access and other reforms are at risk.⁴⁶⁵ This view is supported in public statements by the UAW, the United Steelworkers (USW), and AFL-CIO.⁴⁶⁶ A different industry source argued that currency manipulation is less of an issue than it was in the past, and stated that entry into the Japanese market is difficult because it is an extremely competitive market that is shrinking, with established domestic players.⁴⁶⁷ In its submission to the USITC, Global Automakers⁴⁶⁸ supports the approach to currency taken by TPP parties, asserting that one reason it is preferable is that “it avoids commitments that could restrict U.S. options aimed at achieving economic growth.”⁴⁶⁹

A recent study conducted by the minority staff of the U.S. House of Representatives Committee on Ways and Means noted that TPP also does not restrict “duty drawback” provisions, which allow a country to refund a tariff on an imported good if the good is used as an input for a

⁴⁶¹ Biegun, written testimony to the USITC, January 16, 2016, 4–5.

⁴⁶² Spring and Tajitsu, “Facing Weak Market Share,” January 25, 2016.

⁴⁶³ ITAC-2, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 6–7.

⁴⁶⁴ Bozzella, written testimony to the USITC, January 22, 2016, 4.

⁴⁶⁵ Biegun, written submission to the USITC, January 16, 2016, 2.

⁴⁶⁶ Nassar, written testimony submitted to the USITC, December 23, 2015, 4–5; Gerard, written testimony to the USITC, December 29, 2015, 6–7; Drake, written submission to the USITC, December 29, 2016, 13, 19.

⁴⁶⁷ Industry representative, telephone interview by USITC staff, January 29, 2016.

⁴⁶⁸ The Association of Global Automakers represents international motor vehicle manufacturers, original equipment suppliers, and other automotive-related trade associations. Bozzella, written testimony to the USITC, January 22, 2016, 1.

⁴⁶⁹ Bozzella, written testimony to the USITC, January 22, 2016, 4.

product that is then exported. Such provisions were restricted in NAFTA, so the lack of restriction in TPP may create an additional incentive for producers in Mexico, which offers duty drawbacks outside of NAFTA, to source products from a non-TPP country.⁴⁷⁰

Textiles and Apparel⁴⁷¹

Assessment

The largest changes in textiles and apparel trade from TPP would likely occur in U.S. imports of apparel. The Commission's model projects that U.S. demand for both imported and domestically produced apparel would increase over the 2032 baseline. The modeling results estimate that TPP would result in a 1.4 percent (\$1.9 billion) increase in U.S. imports of apparel over the 2032 baseline (i.e., expected level of imports in 2032 without TPP), and a 0.3 percent (\$10 million) increase in U.S. exports. Imports of apparel would be expected to grow most significantly from Vietnam, the second-largest supplier to the United States, while those from China, the largest U.S. apparel supplier, would be expected to decline.⁴⁷²

The Commission's model results indicate that U.S. output and employment in the apparel sector also would increase slightly (by 1.0 percent and 0.9 percent, respectively), over the 2032 projected baseline. High-end, niche products, replenishment or quick turnaround products, and other items that generally do not compete with imports are among the types of products being produced domestically. Examples of such products include those that require customized, often smaller orders, such as sports team uniforms, test market products or reorders, and fast-fashion items.

The Commission's model results for textiles (non-apparel) estimate that TPP would result in U.S. exports that are 1.3 percent (\$257 million) higher than the baseline estimate, and imports that are 1.6 percent (\$869 million) higher, compared with the 2032 baseline. The model estimates that output and employment in the textiles sector would be slightly lower compared with the 2032 baseline (by 0.4 percent each).

⁴⁷⁰ U.S. Congress, House, Committee on Ways and Means, *TPP Issue Analysis: Trade*, January 8, 2016, 12.

⁴⁷¹ Provisions on textiles and apparel are mainly covered in TPP's chapter 4. The chapter covers all the textile articles and apparel covered in HTS chapters 50–63 (excluding raw cotton, wool, and vegetable fibers, which are considered agricultural products). TPP chapter 4 also includes a number of other products that are classified in other HTS chapters (outside of chapters 50–63), including certain travel goods, handbags, and similar products (HTS chapter 42); umbrellas (HTS chapter 66); glass fibers and articles thereof (HTS chapter 70); and pillows, quilts, and similar articles (HTS chapter 94). The focus of this analysis is on the textile and apparel articles covered in HTS chapters 50–63, unless specifically noted. For a complete list of the HTS subheadings covered by Chapter 4 of TPP, see TPP, Chapter 4, Article 4.1, and Annex 4-A, Textiles and Apparel Product-Specific Rules of Origin.

⁴⁷² The Commission's modeling accounts for the TPP ROOs for textiles and apparel as they apply to Vietnam's exports of textiles and apparel. See appendix G for additional details.

Overview of U.S. Trade with TPP Partners⁴⁷³

U.S. exports of textiles and apparel to TPP countries totaled \$7.9 billion in 2015, down by 2 percent from 2013 levels (table 4.16). In 2015, U.S. exports of textiles and apparel to TPP countries accounted for 54 percent of total U.S. textile and apparel exports to the world (\$14.7 billion) (table 4.17). Roughly 22 percent of domestic shipments of textiles and apparel were exported in 2015 (box 4.6). Textiles accounted for most of the value of U.S. exports of such products to TPP countries (81 percent or \$6.4 billion).⁴⁷⁴ Within the TPP countries, the current FTA partners accounted for the vast majority of U.S. textile and apparel exports (94 percent) in 2015; Mexico and Canada were the largest markets for U.S. exports to TPP countries for both textiles (91 percent) and apparel (80 percent) that year. Japan was the largest destination for U.S. exports to non-FTA TPP countries, accounting for 3 percent of U.S. textile exports and 11 percent of U.S. apparel exports to TPP countries.

Table 4.16: U.S. exports of textiles and apparel to the TPP region, 2013–15, million dollars

	2013	2014	2015
Textiles and apparel	8,059	8,284	7,887
Textiles	6,309	6,609	6,356
Apparel	1,750	1,676	1,532

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Note: Trade data are based on NAICS 313, 314, and 315, excluding certain animal hair and vegetable fibers (e.g., raw wool and cotton waste).

⁴⁷³ Unless otherwise noted, trade data in this section based on USITC DataWeb/USDOC (accessed February 17, 2016). Trade data are based on NAICS 313, 314, and 315, excluding certain animal hair and vegetable fibers (e.g., raw wool and cotton waste).

⁴⁷⁴ These include textiles (yarns and fabrics) and textile products (e.g., sheets, towels, tents, etc.) covered in NAICS 313 and 314.

Table 4.17: U.S. domestic exports of textiles and apparel to the world, the TPP region, and TPP countries, 2013–15, million dollars

Country	2013	2014	2015
TPP non-FTA partners	595	554	468
Brunei	1	(^a)	1
Japan	462	400	336
Malaysia	37	42	23
New Zealand	56	56	49
Vietnam	39	55	60
TPP FTA partners	7,464	7,731	7,419
Australia	226	208	212
Canada	3,190	3,251	3,044
Chile	98	84	84
Mexico	3,803	4,045	3,943
Peru	66	63	63
Singapore	81	80	72
TPP total	8,059	8,284	7,887
ROW	6,815	6,971	6,783
World	14,874	15,255	14,670

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Notes: ROW = rest of world. Trade data are based on NAICS 313, 314, and 315, excluding certain animal hair and vegetable fibers (e.g., raw wool and cotton waste).

^a Less than \$500,000.

Box 4.6: U.S. Textile and Apparel Industry

Domestic shipments of textiles and apparel totaled \$67.9 billion in 2015, up 10 percent from 2009, but still below the pre-recession level of \$77.8 billion in 2008. Textile mills output (e.g., yarns, threads, and fabrics) accounted for 45 percent of the value of domestic shipments of textiles and apparel in 2015. Textile product mills (e.g., home furnishings and other miscellaneous textile articles) accounted for another 34 percent of the total, and apparel manufacturing accounted for the remainder. During 2013–15 U.S. textile mill shipments declined by 2 percent to \$30.8 billion, while textile product mill shipments grew by 2 percent to \$23.2 billion. U.S. shipments of apparel hit an all-time low in 2013 at \$12.3 billion, but subsequently increased to \$13.9 billion in 2015 as brands and retailers increased domestic sourcing in part to diversify their supply.

In 2015, employment in the textile and apparel industry totaled 369,500 jobs, down 11 percent (48,000 jobs) from 2009. However, at least some of the decline may be attributed to gains in labor productivity, which increased during the period for all three sectors (textile mills, textile product mills products, and apparel manufacturing). The BLS labor productivity index (2007 = 100) for textile mills increased from 98.7 in 2009 to 107.2 in 2015; for miscellaneous textile products, from 89.2 to 102.4; and for apparel, from 80.1 to 89.3.

Sources: U.S. Census, Manufacturers' Shipments, Inventories, and Orders, Historical Data, "Shipments" (accessed February 19, 2016); USDOL, BLS, "Employment, Hours, and Earnings" (accessed February 19, 2016); USDOL, BLS, "Annual Index of Labor Productivity" (accessed April 15, 2016); Lu, "2015 U.S. Fashion Industry Benchmarking Study," June 2015.

Note: Data for North American Industrial Classification System (NAICS) 313 (textile mills), 314 (textile product mills), and 315 (apparel manufacturing).

U.S. imports of textiles and apparel from TPP countries totaled \$19.9 billion in 2015, accounting for 17 percent of total U.S. textile and apparel imports from the world (\$118.5 billion) (tables 4.18 and 4.19). Apparel accounted for most of the value of U.S. imports from TPP countries (82 percent or \$16.3 billion). Within TPP countries, Vietnam accounted for the largest share of U.S. textile and apparel imports (\$11.1 billion or 56 percent of TPP imports), nearly all of which consisted of apparel. The current FTA partners accounted for 39 percent (\$7.7 billion) of U.S. textile and apparel imports from TPP partner countries in 2015.

Table 4.18: U.S. imports of textiles and apparel from the TPP region, 2013–15, million dollars

	2013	2014	2015
Textiles and apparel	17,332	18,775	19,913
Textiles	3,413	3,569	3,618
Apparel	13,919	15,205	16,295

Source: USITC DataWeb/USDOC (February 17, 2016).

Notes: Totals may not sum due to rounding. Trade data are based on NAICS 313, 314, and 315, excluding certain animal hair and vegetable fibers (e.g., raw wool and cotton waste).

Table 4.19: U.S. imports of textiles and apparel from the world, TPP region, and TPP countries, 2013–15, million dollars

	2013	2014	2015
TPP non-FTA partners	9,704	10,937	12,222
Brunei	4	4	6
Japan	518	519	536
Malaysia	546	558	569
New Zealand	30	30	30
Vietnam	8,606	9,825	11,081
TPP FTA partners	7,628	7,838	7,691
Australia	24	37	46
Canada	1,811	1,855	1,860
Chile	15	18	17
Mexico	5,099	5,249	5,132
Peru	646	658	622
Singapore	33	22	14
TPP total	17,332	18,775	19,913
ROW	93,167	95,454	98,592
Total	110,498	114,229	118,505

Source: USITC DataWeb/USDOC (accessed February 17, 2016).

Note: ROW = rest of world. Totals may not sum due to rounding. Trade data are based on NAICS 313, 314, and 315, excluding certain animal hair and vegetable fibers (e.g., raw wool and cotton waste).

Summary of Provisions

Market Access

All textile and apparel duties would be eventually eliminated under TPP. Over 70 percent of the U.S. textile and apparel 8-digit rate lines would be free of duty upon entry into force (EIF) (table 4.20). These lines are estimated to account for about 28 percent of dutiable imports from TPP countries in 2015.⁴⁷⁵ Some of the top categories of imports of apparel from Vietnam, such as certain cotton and manmade fiber sweaters, manmade fiber dresses, and manmade fiber water-resistant anoraks (jackets), would be free of duty upon EIF. The duty rates for an additional 7 percent of the 8-digit textile and apparel subheadings would be phased out in equal stages over 5 years. The products in tariff lines subject to the 5-year staging category accounted for only 3 percent of total dutiable imports from TPP countries in 2015.⁴⁷⁶ These include a variety of products, including certain cotton yarns and baby garments. For most of the remaining textile and apparel items, which accounted for about 69 percent of dutiable imports in 2015,⁴⁷⁷ the duty rate would be cut on EIF by 35 or 50 percent (depending on the product) and then remain in place for 10 to 12 years. A few items have an additional duty reduction of 15 percent on January 1 of year 6.

Table 4.20: U.S. tariff phaseout schedule for textiles and apparel, by 8-digit HTS subheading

Staging category	Description of staging	Number of 8-digit subheadings in chapters 50–63 (excluding natural fibers)	Number of 8-digit subheadings for apparel (chapters 61 and 62)
EIF	Duties eliminated upon entry into force.	1116	422
B5	Duties eliminated in 5 annual stages, duty free, effective January 1 of year 5.	113	55
US6	Duties reduced by 35 percent upon entry into force and remain at that rate until December 31 of year 10. Goods are duty free effective January 1 of year 11.	19	18
US7	Duties reduced by 35 percent upon EIF and remain at that rate until December 31 of year 12. Goods are duty free effective January 1 of year 13.	11	8
US8	Duties reduced by 35 percent upon EIF and remain at	14	7

⁴⁷⁵ Based on USITC DataWeb/USDOC (accessed February 18, 2016). The data are estimated because a few 8-digit subheadings have more than one staging category, and the split does not always match 10-digit statistical breakouts. In addition, the U.S. staging category is not the same for all TPP countries for a few products. For example, the category “men’s and boys’ shirts of cotton” (6110.20.20) is split between “dress shirts” and other shirts. Dress shirts are duty free on EIF for Vietnam and Malaysia; for all other TPP countries, dress shirts are not duty free until year 13. Men's dress shirts of cotton are defined to include HTS statistical suffixes 6205.20.2016; 6205.20.2021; 6205.20.2026; and 6205.20.2031, plus shirts that are otherwise classified under 6205.20.20 that meet certain other criteria.

⁴⁷⁶ USITC DataWeb/USDOC (accessed February 18, 2016).

⁴⁷⁷ USITC DataWeb/USDOC (accessed February 18, 2016). The data are estimated because a few 8-digit subheadings have more than one staging category, and the split does not match 10-digit statistical suffixes.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Staging category	Description of staging	Number of 8-digit subheadings in chapters 50–63 (excluding natural fibers)	Number of 8-digit subheadings for apparel (chapters 61 and 62)
	that rate until December 31 of year 5. On January 1 of year 6, the duties are reduced by an additional 15 percent of the base rate and remain at that rate until year 10. Goods are duty free effective January 1 of year 11.		
US9	Duties reduced by 35 percent upon EIF and remain at that rate until December 31 of year six. On January 1 of year seven the duties are reduced an additional 15 percent of the base rate and remain at that rate until year 12. Goods are duty free effective January 1 of year 13.	14	7
US9	Duties reduced by 35 percent upon EIF and remain at that rate until December 31 of year six. On January 1 of year seven the duties are reduced an additional 15 percent of the base rate and remain at that rate until year 12. Goods are duty free effective January 1 of year 13.	14	7
US10	Duties reduced by 50 percent upon EIF and remain at that rate until December 31 of year ten. Goods are duty free effective January 1 of year 11.	112	27
US11	Duties reduced by 50 percent upon EIF and remain at that rate until December 31 of year twelve. Goods are duty free effective January 1 of year 13.	141	36

Notes: A few 8-digit subheadings are split for the purpose of the tariff phase, in which case they are counted twice if they have different phaseout schedules. Changes on EIF cover some rate lines that have an NTR tariff rate of zero.

U.S. industry sources indicated that the products considered most sensitive to imports from TPP countries, particularly Vietnam, received the longer staging (duties remain in place for 10 or 12 years).⁴⁷⁸ According to the National Council of Textile Organizations (NCTO), these included products that account for a large share of U.S. imports from Dominican Republic-Central America Free Trade Agreement (CAFTA-DR) partners and other key Western Hemisphere partners, which are important customers to the U.S. textile industry.⁴⁷⁹ For knit apparel in the longer staging categories (e.g., t-shirts and cotton and manmade fiber knit pants),⁴⁸⁰ the duty remains in place for 10 years. For woven apparel in the longer staging categories (e.g., cotton and manmade fiber trousers and men’s wool suits),⁴⁸¹ the duty remains in place for 12 years. Numerous textile finished goods and intermediate products also fall into longer staging categories. These include some cotton, wool, and manmade fiber yarns, certain cotton and

⁴⁷⁸ NCTO, written submission to the USITC, February 16, 2016, 3; industry representatives, telephone interviews by USITC staff, January 14 and 18, 2016.

⁴⁷⁹ NCTO, written submission to the USITC, February 16, 2016, 3.

⁴⁸⁰ Includes staging categories US6, US8, and US10 (table 4.20).

⁴⁸¹ Includes staging categories US7, US9, and US11 (table 4.20).

manmade fiber woven fabrics, tire cord, certain knit fabrics, and certain home furnishings, such as table and bed linens.

U.S. exporters already have duty-free market access to six of the TPP parties under existing U.S. FTAs. For the non-FTA TPP countries, most of the duties would go to zero upon EIF. For example, Japan would eliminate nearly all of its duties on imports of textiles and apparel upon EIF. For some apparel items, Japan would phase out the duties in 11 equal annual stages. Similarly, virtually all of Malaysia's tariffs would be eliminated upon EIF, with tariffs on the remaining few items eliminated in 6 equal annual stages. With a few exceptions, nearly all of Vietnam's tariffs on textiles and apparel would also go to zero upon EIF. The most notable exception is used clothing (HS 6309.00), for which duties would be phased out over 16 years. For Brunei, most textile and apparel products would be free upon EIF.

Rules of Origin

Similar to most other U.S. agreements, TPP would apply yarn-forward tariff shift ROOs to most textile and apparel goods. For example, in order for a garment to qualify for preferential treatment under the agreement, production of specified yarns and fabrics used in the garment, as well as the cutting and sewing, must occur in the United States and/or other TPP countries.⁴⁸² Notable exceptions to these rules apply to brassieres and certain baby garments; for these products, fabrics must be cut or knit to shape and sewn in the TPP countries in order to qualify. In addition, there is a cut-and-sew tariff shift rule for apparel in chapters 61 and 62 made from certain fabrics, including coated or impregnated fabrics classified in chapter 59 and silk fabrics classified in chapter 50. The agreement also requires that cotton, manmade fiber filament, and manmade staple fiber sewing thread⁴⁸³ used in all apparel and made-up textile articles (HTS chapters 61–63) and narrow elastic fabrics (from the yarn stage forward) used in all apparel (HTS chapters 61 and 62) be “formed and finished” in the TPP countries. A notable flexibility to the yarn-forward rule is the “short supply” list, which allows the use of certain inputs used in textile and apparel products that are considered to be in short supply⁴⁸⁴ in the TPP countries (box 4.7).

⁴⁸² The tariff shift rule for goods in chapters 61, 62, and 63 applies only to the component of the good (garment or made-up article) that determines the tariff classification of the good, i.e., the “essential character” component.

⁴⁸³ Includes certain manmade filament yarns used as sewing thread.

⁴⁸⁴ A negotiated list of fibers, yarns, and fabrics that are deemed not to be available from producers in commercial quantities in a timely manner within the parties to the agreement.

Box 4.7: Short supply provisions

The TPP includes a short supply list,^a which contains a total of 194 inputs (fibers, yarns, and fabrics) considered to be in short supply in the TPP countries. Of the 194 products on the list, 8 are temporary (eligible for 5 years from EIF); the remainder are permanent. Textile and apparel goods can be cut or knit to shape and assembled using inputs on the short supply list sourced from outside the TPP countries and still qualify for benefits under the agreement. Certain inputs on the short supply list are subject to specific end-use requirements, such as men’s dress shirts. In addition, apparel and made-up articles made from inputs on the short supply list must still meet the TPP rules for sewing thread and narrow elastic fabrics. Unlike CAFTA-DR, the short supply list for TPP is set—the agreement does not provide a mechanism for adding or removing products from the list.

The United States and Singapore have a separate side letter that, among other things, allows Singapore to use the TPP short supply list under the existing Singapore FTA in addition to that agreement’s existing short supply list. U.S. textile and apparel imports from Singapore are already free of duty.^b

Source: Compiled by USITC.

^a TPP, chap. 4, Short Supply List, <https://ustr.gov/sites/default/files/TPP-Final-Text-Annex-4-A-Appendix-1-Short-Supply-List.pdf>.

^b TPP, U.S.-SG Letter Exchange on Textiles, and US-SG FTA, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-SG-Exchange-on-Letters-on-Textiles-and-US-SG-FTA.pdf>.

For countries with existing agreements, partners could use either the TPP or existing ROOs when exporting to the United States. There might be some advantage to using TPP ROOs for apparel if manufacturers spread different steps of production across multiple or new TPP partners.⁴⁸⁵

Earned Import Allowance Program for Vietnam

TPP would provide for an Earned Import Allowance Program (EIAP) with Vietnam.⁴⁸⁶ This program would authorize certain woven cotton pants and other bottoms⁴⁸⁷ (bottoms), cut and sewn or otherwise assembled in Vietnam, to enter the United States free of duty under specific conditions if they are made from certain U.S. cotton fabrics,⁴⁸⁸ or fabrics originating from another TPP country, or from any origin, provided it qualifies for preferential treatment under the agreement (box 4.8). Without the EIAP, TPP-originating cotton bottoms would be subject to a yarn-forward rule of origin and the pants would not be free of duty until January 1 of year 13; non-TPP-originating cotton bottoms would be subject to NTR rates of duty.

⁴⁸⁵ Benefits of accumulation are more likely in the long run, after apparel duties are fully eliminated. USITC, hearing transcript, January 15, 2016, 717 (testimony of Stephen Lamar, AAFA); industry representative, interview by USITC staff, Washington, DC, December 16, 2015.

⁴⁸⁶ TPP, chap. 4, U.S. app. E, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-Appendix-E-Earned-Import-Allowance-Program.pdf>.

⁴⁸⁷ Includes men’s and boys’ trousers, bib and brace overalls, breeches or shorts, classified in HTS subheadings 6203.42.20 and 6203.42.40, and women’s and girls’ trousers, bib and brace overalls, breeches or shorts classified in HTS subheadings 6204.62.20 and 6204.62.40.

⁴⁸⁸ U.S. fabrics must be wholly formed and finished in the United States and classified in HTS chapter 52.

Box 4.8: EIAP with Vietnam

Under the EIAP with Vietnam, firms exporting U.S.-produced cotton fabrics for use in bottoms would receive two credits that can be used to import finished cotton bottoms from Vietnam. One credit can be used to receive immediate duty-free treatment for bottoms made with the U.S. qualifying fabrics, and the other credit can be used towards receiving immediate duty-free treatment for cotton bottoms made with non-U.S. fabrics. The EIAP provides an uncapped benefit for duty-free imports of woven cotton bottoms made with U.S. fabrics at a ratio of 1-for-1. The EIAP provides a capped benefit for duty-free imports of woven cotton bottoms assembled in Vietnam with non-U.S. fabrics at a ratio of .75- for-1 for women’s bottoms and 1.3- for-1 for men’s bottoms. Duty-free imports of woven cotton bottoms made from non-U.S. fabrics is limited to 15 million square meters equivalent in year 1, growing to 20 million square meters equivalent by year 10 (and for subsequent years).

Source: Compiled by USITC.

Safeguard Mechanism and Customs Cooperation

The agreement contains a textiles and apparel-specific safeguard mechanism through which a TPP party may temporarily reimpose duties on a good. The party may take this action if increased imports of that good benefiting from preferential treatment under TPP result in serious damage or threaten to cause serious damage to the U.S. or TPP industry in a like or directly competitive good (TPP Chapter 4, Articles 4.3–4.9). The agreement includes detailed customs measures to ensure accuracy of the claims of origin to prevent circumvention of the agreement and to enforce measures affecting trade in textiles and apparel. In addition to customs cooperation, the agreement also includes bilateral side letters between the United States and Brunei, Malaysia, and Vietnam that set up additional requirements for textiles and apparel.⁴⁸⁹ The Brunei letter states that the government would collect and provide information to the United States on its trade and production of textiles and apparel. Among other things, the letters with Malaysia and Vietnam state that TPP partners would establish and maintain a monitoring system for textile and apparel firms exporting to the United States.

Estimated Effects of TPP on the Textiles and Apparel Sectors

Impact on U.S. Exports

The Commission’s modeling results estimate that TPP would result in a 1.3 percent (\$257 million) increase in U.S. exports of textiles to the world over the 2032 baseline. According to the model, U.S. exports of textiles to new FTA partners would experience the largest increase

⁴⁸⁹ TPP, U.S.-BN Letter Exchange on Textiles and Apparel, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-BN-Letter-Exchange-on-Textiles-and-Apparel.pdf>; TPP, U.S.-MY Letter Exchange on Registered Textile and Apparel Enterprises, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-MY-Letter-Exchange-on-Registered-Textile-and-Apparel-Enterprises.pdf>; TPP, U.S.-VN Letter Exchange on Registered Textile and Apparel Enterprises, <https://ustr.gov/sites/default/files/TPP-Final-Text-US-VN-Letter-Exchange-on-Registered-Textile-and-Apparel-Enterprises.pdf>.

(48.9 percent or \$291 million). The model indicates that U.S. exports of textiles to non-TPP countries would decline 3.1 percent overall (\$295 million) compared with the 2032 baseline.

Certain textile subsectors would likely benefit more than others. According to NCTO, there may be some opportunities to increase exports of certain textiles on a limited scale to new FTA partner countries, including technical textiles and cotton and specialty yarns.⁴⁹⁰ In particular, in the short term, U.S. yarn producers might be able to increase exports of cotton spun yarn to Vietnam to allow Vietnamese apparel producers to meet the yarn-forward rule of origin for apparel.⁴⁹¹ Currently U.S. cotton yarn exports to Vietnam are small (accounting for less than 1 percent of total U.S. cotton yarn exports), but they more than doubled to \$1.7 million in 2015 over 2014 levels. However, any increases in U.S. exports of cotton yarns may be short-lived, as there has been significant investment in short-staple spinning in Vietnam, and the country's cotton consumption has rapidly expanded in recent years.⁴⁹² The EIAP program with Vietnam may also help stimulate U.S. exports of denim and other cotton fabrics intended for use in bottoms to Vietnam, although there are mixed opinions on whether this program would be used.⁴⁹³

There may also be opportunities to increase U.S. exports of nonwovens to TPP member countries, especially fabrics under HTS heading 5603 (often referred to in the industry as “rolled goods”). U.S. imports under heading 5603 are currently duty free on an NTR basis. The TPP would give the U.S. industry reciprocal market access in TPP countries. For example, Japan's and Vietnam's ad valorem duties on nonwoven fabrics are 4.3 percent and 12 percent, respectively; both would be free of duty on EIF. Currently such nonwoven fabrics are among the top textile products that the United States ships to Japan and Vietnam, although exports to Japan dropped by 40 percent from 2014 to \$40.4 million in 2015.

⁴⁹⁰ The Industry Trade Advisory Committee on Textiles and Clothing (ITAC-13) also stated that “members producing cotton yarns and fabrics express some optimism for export opportunities due to competitive pricing.” NCTO, written submission to the USITC, February 16, 2016, 2, 6; ITAC-13, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 8.

⁴⁹¹ One textile industry representative stated that there has been significant Chinese investment in cotton ring spinning in Vietnam, which limits U.S. export opportunities in ring spun yarns. However, there may be some opportunity to export cotton open-end spun yarns, which are less labor intensive to produce than ring spun yarns. Industry representative, telephone interview by USITC staff, February 19, 2016.

⁴⁹² USDA, FAS, *Cotton: World Markets and Trade*, January 2016.

⁴⁹³ Some industry representatives said that the EIAP is not practical for a variety of reasons, including the long distances and time required to ship fabrics from the United States to Vietnam, and uncertainties as to how the program would be implemented. However, according to AAFA, some of its members indicated that they might be able to use the program. Gap Inc. also stated it thought it would use the program. USFIA, written submission to the USITC, December 29, 2015, 5; USITC, hearing transcript, January 15, 2016, 766 (testimony of Stephen Lamar, AAFA), 767–68, (testimony of Julie Hughes, USFIA), and 769 (testimony of Stephanie Lester, Gap Inc.); industry representative, telephone interviews by USITC staff, January 11, 2016 and February 5, 2016.

For apparel, the Commission’s modeling results estimate the TPP would result in a 0.3 percent (\$10 million) increase in U.S. exports of apparel to the world over the baseline. Although there is demand in TPP countries for “Made in the USA” apparel such as denim jeans, high-end men’s tailored clothing, fashion knitwear, and hosiery, according to industry representatives, it is likely that any increase in U.S. exports under TPP would be limited because most of these products would not meet the yarn-forward ROOs under the agreement.⁴⁹⁴ However, other industry representatives suggested that it would not be an issue for U.S. apparel manufacturers to meet the ROOs.⁴⁹⁵

Impact on U.S. Imports

The Commission’s modeling results estimate that TPP would result in a 1.6 percent (\$869 million) increase in U.S. imports of textiles and a 1.4 percent (\$1.9 billion) increase in U.S. imports of apparel from the world over the 2032 baseline. As the second largest supplier of apparel to the U.S. market, Vietnam is expected to realize the largest gains in exports of apparel to the U.S. market under TPP.⁴⁹⁶ The projected increase from Vietnam would likely in part be offset by a decline in U.S. imports of apparel from non-TPP partners, particularly China, the largest apparel supplier to the U.S. market. According to the model, U.S. imports of apparel from non-TPP partners would decline by 5.1 percent (\$5.5 billion) compared with the 2032 baseline.

The U.S. Fashion Industry Association (USFIA), representing U.S. apparel brands and retailers, indicated that the long duty staging would limit the use of the agreement for U.S. imports.⁴⁹⁷ Although the duties on products subject to the longer duty staging (10–12 years) will be reduced by at least a 35 percent on day 1 of the agreement, Gap Inc. indicated that this cut is not enough to encourage increased imports under the agreement.⁴⁹⁸ However, there may be some incentive to increase imports of apparel products that have high duties, such as synthetic apparel, which would see a 50 percent tariff cut.⁴⁹⁹

Nevertheless, over the long run, there are significant duty savings to be realized for products that meet the ROOs. In 2015, dutiable imports of textiles and apparel from TPP countries totaled \$12.3 billion, with an estimated trade-weighted average duty of 17.7 percent ad valorem. Duties would be eliminated on EIF on tariff lines representing about \$3.5 billion in

⁴⁹⁴ USITC, hearing transcript, January 15, 2016, 773, 775, 827 (testimony of Stephen Lamar, AAFA); USITC, hearing transcript, January 15, 2016, 776–77 (testimony of Julie Hughes, USFIA); apparel industry representatives, interviews by USITC staff, Washington, DC, December 9 and 16, 2016.

⁴⁹⁵ Textile and apparel industry representatives, telephone interviews by USITC staff, February 5 and 10, 2016.

⁴⁹⁶ One study estimated that exports of apparel from Vietnam to the United States would increase by \$12.5 billion in 2025 as a result of TPP. Tot, “Textiles and Apparel Industry Report,” April 2014, 25.

⁴⁹⁷ USITC, hearing transcript, January 15, 2016, 722 (testimony of Julie Hughes, USFIA).

⁴⁹⁸ USITC, hearing transcript, January 15, 2016, 811 (testimony of Stephanie Lester, Gap Inc.).

⁴⁹⁹ *Ibid.*

dutiable imports from all TPP countries in 2015, with a trade-weighted average duty of 12.6 percent ad valorem.⁵⁰⁰ U.S. imports of apparel from TPP countries that are likely to experience the largest initial increases are those products that are duty free on EIF and have a cut-and-sew rule of origin or are able to use the “short supply” flexibilities to use non-originating inputs. Examples include certain cotton and manmade fiber sweaters, men’s and boys’ cotton dress shirts, women’s and girls’ manmade fiber dresses, baby garments, brassieres, apparel made with coated fabrics, and certain water-resistant jackets (see “Market Access” and “Rules of Origin” discussions above).

Impact on Imports of Apparel from Vietnam

TPP presents an opportunity for significant duty savings on imports from Vietnam, which is already a competitive major supplier of apparel to the U.S. market, ranking second after China.⁵⁰¹ U.S. duties on imports of apparel from Vietnam totaled over \$1.9 billion in 2015.⁵⁰² U.S. imports of apparel from Vietnam totaled \$10.5 billion in 2015, accounting for nearly one-half of Vietnam’s exports of apparel.⁵⁰³ As noted above, Vietnam is expected to realize the largest gains in exports of apparel to the U.S. market under TPP.

Initial growth in U.S. imports from Vietnam under TPP preferences would likely be moderated, particularly in the short term, by Vietnam’s inability to meet the yarn-forward ROOs, coupled with long duty phaseouts for certain key products. Although Vietnam has a competitive, export-oriented apparel manufacturing industry, it lacks upstream production of textile inputs (yarn and fabric) and dyeing and finishing capabilities; it relies heavily on imports of yarn and fabric inputs (box 4.9). According to the American Apparel and Footwear Association (AAFA), about 88 percent of the yarns and fabrics used in Vietnam are imported.⁵⁰⁴ However, only 8 percent (\$1 billion) of Vietnam’s imports of yarns and fabrics were from TPP partners in 2014.⁵⁰⁵ China is Vietnam’s largest source of textile imports, followed by South Korea and Taiwan. All three are non-TPP countries.⁵⁰⁶ Under a yarn-forward rule, apparel manufactured with imported textile inputs from non-TPP countries would not qualify for duty-free treatment.⁵⁰⁷

⁵⁰⁰ Estimated by USITC staff based on import data from USITC DataWeb/USDOC (accessed February 18, 2016).

⁵⁰¹ A recent survey of 30 U.S. fashion companies noted that 90 percent of firms are already sourcing in Vietnam. Lu, “2015 U.S. Fashion Industry Benchmarking Study,” June 2015.

⁵⁰² USITC DataWeb/USDOC (accessed February 17, 2016).

⁵⁰³ Vietnam’s exports of apparel totaled \$20.3 billion in 2014, the latest year available. Its top export markets in 2014 were the United States (45 percent of apparel exports), followed by the EU (15 percent), Japan (13 percent), and South Korea (11 percent). GTIS, Global Trade Atlas database (accessed February 22, 2016).

⁵⁰⁴ USITC, hearing transcript, January 15, 2016, 715 (testimony of Stephen Lamar, AAFA).

⁵⁰⁵ GTIS, Global Trade Atlas database (accessed February 22, 2016).

⁵⁰⁶ China accounted for 46 percent of Vietnam’s total textile imports, while South Korea and Taiwan together accounted for another 34 percent. GTIS, Global Trade Atlas database (accessed February 22, 2016); Thomasson, “Vietnam on the Move,” June 2014.

⁵⁰⁷ U.S. exports of yarns and fabrics to Vietnam totaled only \$104.9 million in 2014, accounting for 1 percent of Vietnam’s total yarn and fabric imports. GTIS, Global Trade Atlas database (accessed February 22, 2016).

Capacity constraints and related price effects could also moderate some of Vietnam's market access gains under TPP.⁵⁰⁸ For example, one U.S. importer noted concerns that apparel manufacturing costs, as well as other indirect transportation costs, would increase in Vietnam as a result of TPP.⁵⁰⁹ Wage rates in Vietnam grew by double-digit rates in recent years and could drive up production costs for apparel if the trend continues.⁵¹⁰ Finally, it is likely that U.S. importers would increasingly compete with EU firms for apparel manufacturing capacity in Vietnam, given that the EU also recently concluded a free trade agreement with Vietnam.⁵¹¹

Box 4.9: Vietnam's Ability to Meet Yarn-forward Rules of Origin

Current estimates of Vietnam's domestic ability to meet a yarn-forward rule of origin for apparel vary by product or factory, and range from 12 to 20 percent of the products. However, for some products such as fleece and certain woven fabrics, inputs are more readily available. Although there is some domestic textile production within Vietnam, only one-quarter of the output is currently estimated to be of export quality. According to numerous industry sources, the dyeing and finishing segments of the supply chain are underdeveloped, as the Vietnam government tightly controlled permits for such operations in the past. Unclear regulations have led to a dearth of investment in this area, resulting in a bottleneck in Vietnam's supply chain.

In 2014, Vietnam's textile industry consisted of 145 yarn spinners, 401 weaving facilities, 105 knitting mills, 94 dyeing and finishing plants, and 7 nonwoven manufacturers. Anticipating yarn-forward rules under TPP, domestic and foreign firms have been investing in upstream fiber and textile capabilities in Vietnam, where TPP-related FDI in the textiles and apparel sector is estimated to be in excess of \$1 billion. Major foreign investors are from China, Hong Kong, Taiwan, and South Korea. Additionally, the Vietnam National Textile and Garment Group (VINATEX), Vietnam's largest textiles and apparel corporation and a state-owned enterprise, is investing in spinning and weaving capacity. It is likely that as this investment becomes operational, more apparel would qualify for benefits under the FTA.

Cotton yarn spinning in Vietnam has grown rapidly since 2010, driven by exports to China, its largest export market (accounting for 80–90 percent of Vietnam's cotton yarn exports), and investment in anticipation of TPP. The increased demand for cotton yarn from China is due to China's domestic cotton policy. To work around restrictions, Chinese textile firms import cotton yarn instead of spinning it domestically. Chinese firms have invested significantly in yarn-spinning in Vietnam, including relocating operations to that country. For example, Texhong Textile, a Chinese company, has investments in Vietnam that accounted for one-quarter to one-third of Vietnam's total yarn production in 2015; much of this production is exported to China. According to statistics from the International Textile Manufacturers Federation (ITMF), Vietnam's installed capacity of short-staple spinning machines (to

⁵⁰⁸ Textile and apparel industry representatives, interviews by USITC staff, Ho Chi Minh City, October 15–17, 2014.

⁵⁰⁹ Apparel industry representative, interview by USITC staff, January 11, 2016; Barrie, "TPP to Benefit Vietnam and Malaysia Most by 2030," January 11, 2016.

⁵¹⁰ In 2015, the minimum wage in Vietnam grew 13–15 percent, and in 2016 the minimum wage was again raised 12.4 percent. Between 2010 and 2015, wages have increased two times for FDI firms and three times for domestic firms, on average. Officials expect wages to rise again in 2017. Donaldson, "2014: Global Sourcing to Be More Costly," January 1, 2014; Russell, "Vietnam Apparel Industry Calls for Lower Minimum," September 3, 2015; Dezan Shira & Associates, "Vietnam's Minimum Wages to Increase in 2016," September 14, 2015.

⁵¹¹ Industry representative, interview by USITC staff, Washington, DC, December 16, 2015; USITC, hearing transcript, January 15, 2016, 779 (testimony of Stephanie Lester, Gap Inc.).

produce cotton or cotton blend yarns) more than doubled from 1.9 million spindles in 2009 to 5.1 million in 2013. Among major textile producers, Vietnam has one of the highest modernization rates of its spinning capacity based on the share of its machinery that is less than 10 years old. Cotton consumption in Vietnam has more than tripled since 2011, indicating that Vietnam is developing its textile supply chain.

According to industry sources, Vietnamese-produced yarns and fabrics are more expensive than similar goods produced in China. For example, in 2014, Vietnamese yarn was estimated to be 5–10 percent more expensive than similar yarn produced in China; fabrics were 5–8 percent more expensive. Under TPP, however, slightly higher input costs can be offset by duty savings on U.S. imports of finished apparel from Vietnam, which had a trade-weighted average duty of 18.5 percent ad valorem in 2015. With limited capacity for inputs to meet yarn-forward ROOs, certain apparel manufacturers expressed concern that increased demand for yarn would lead to higher prices for already scarce goods. Higher input costs could also moderate the ability of Vietnam’s apparel producers to export under TPP in the short to medium term. However, in the long run, increased domestic production of yarn and fabric in Vietnam would shorten lead times. According to one source, Vietnam now needs an extra 10–12 days’ lead time to import yarn and fabric inputs.

Sources: GTIS, Global Trade Atlas database (accessed February 22, 2016); textile and apparel industry representatives, interviews by USITC staff, Ho Chi Minh City, October 15–17, 2014; Tot, “Textiles and Apparel Industry Report,” April 2014, 11, 13, 17, and 20; Olah, “Vietnam Poised to Become Major Apparel Power,” January 30, 2014; CRS, *U.S. Textile Manufacturing and TPP*, August 28, 2014, 14; Fernandez-Stark, Frederick, and Gereffi, *The Apparel Global Value Chain*, November 2011, 7; Dezan Shira & Associates, “Foreign Invested Firms,” August 5, 2014; AmCham Vietnam, “TPP: Another Hong Kong Firm to Invest \$200 Million” (accessed February 18, 2016); USITC, hearing transcript, January 15, 2016, 729 (testimony of Stephanie Lester, Gap Inc.); USDA, FAS, *Cotton: World Markets and Trade*, January 2016; Textile World, “Yarn Exports Drive Growth in Vietnam’s Spinning,” January 19, 2016; Textile Outlook International, *World Markets for Textile Machinery, Part 1*, December 2015, 122; ITMF, *Shipments Statistics Vol. 33/2010*, May 2010; ITMF, *Shipments Statistics Vol. 37/2014*, May 2014.

Impact on Imports of Apparel from Malaysia

U.S. imports of apparel from Malaysia are also expected to increase under the agreement, although expected increases would be smaller in absolute terms than for Vietnam. Malaysia is a smaller supplier of apparel to the U.S. market,⁵¹² and labor shortages may inhibit growth in production.⁵¹³ Malaysia’s exports to the United States would immediately benefit from TPP, as its key exports to the United States fall under the EIF staging category and/or qualify for “short supply” flexibilities.⁵¹⁴ Men’s and boys’ woven cotton dress shirts and sweaters of cotton or manmade fiber accounted for roughly one-half of U.S. apparel imports from Malaysia in 2015.⁵¹⁵ Malaysia, along with Vietnam, would gain duty-free access to the U.S. market for

⁵¹² U.S. imports of apparel from Malaysia totaled \$546 million in 2015. USITC DataWeb/USDOC (accessed February 17, 2016).

⁵¹³ PwC, *Study on Potential Economic Impact of TPP*, December 2015, 154.

⁵¹⁴ USITC, hearing transcript, January 15, 2016, 717 (testimony of Stephen Lamar, AAFA); USFIA, written submission to the USITC, January 29, 2016, 3.

⁵¹⁵ The duty paid on U.S. imports from Malaysia totaled \$102.6 million that year. HTS subheadings 6205.20.20, 6110.20.20, and 6110.30.30. USITC DataWeb/USDOC (accessed February 23, 2016).

certain men's and boys' cotton dress shirts⁵¹⁶ upon EIF, coupled with short supply flexibilities for fabric inputs.⁵¹⁷

In addition, Malaysia may have the potential to increase exports of other products, since it has a vertically integrated textile and apparel sector that is better positioned to meet the yarn-forward ROOs.⁵¹⁸ One study found that the Malaysian textile industry could potentially realize gains from greater value chain integration with Vietnam, increasing textile exports to meet TPP ROOs.⁵¹⁹

Impact on Imports of Apparel from Singapore

Although Singapore is a small supplier of apparel to the U.S. market, it is possible that U.S. imports of some products would increase as a result of a U.S.-Singapore TPP side letter allowing Singapore to use the TPP short supply list under the existing U.S.-Singapore FTA. U.S. imports under the Singapore FTA are already free of duty, so Singapore would be able to ship goods under the FTA using inputs in the TPP short supply list for immediate duty-free treatment. U.S. imports of apparel from Singapore totaled \$12.4 million in 2015, a decline of 62 percent from 2011.

Summary of Views of Interested Parties

According to the report of the Industry Trade Advisory Committee (ITAC) on Textiles and Clothing, the majority of its members "view the Agreement as achieving a balanced outcome."⁵²⁰ Some members raised concerns with specific aspects of TPP. However, while neither representatives of the textile sector (yarns and fabrics) nor the apparel sector are totally satisfied with the agreement, they nevertheless have publicly supported the agreement.⁵²¹ A number of issues regarding TPP were raised at the Commission's hearing, in written submissions to the Commission, and in industry representatives' interviews with Commission staff, as discussed below.

⁵¹⁶ Men's dress shirts as defined under 62052020A in the U.S. Tariff Offer under TPP. See appendix D, "Positions of Interested Parties," for a discussion of industry views on the definition of dress shirts.

⁵¹⁷ U.S. import duties remain on imports from all other TPP countries until year 12.

⁵¹⁸ One industry source indicated that it already purchases fabrics from Malaysia for use in apparel manufacturing. In recent years, Malaysia has received significant additional investment in its yarn and fabric sector, the majority of which was FDI. Industry representative, telephone interview by USITC staff, January 11, 2016; PwC, *Study on Potential Economic Impact of TPP*, December 2015, 143 and 145.

⁵¹⁹ PwC, *Study on Potential Economic Impact of TPP*, December 2015, 153.

⁵²⁰ ITAC-13, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 1.

⁵²¹ AFMA, "AFMA Announces Support of TPP," February 17, 2016, http://www.fibersource.com/f-info/More_News/02-19-2016AFMATPP.pdf (accessed February 24, 2016); NCTO, "U.S. Textile Manufacturers Endorse Trans-Pacific Partnership," January 21, 2016; AAFA, "Apparel & Footwear Association Releases Statement of Support," February 1, 2016; TPP Apparel Coalition, "TPP Apparel Coalition Applauds Signing of the TPP," February 3, 2016. The TPP Apparel Coalition is made up of AAFA, NRF, OIA, RILA, and USFIA.

Rules of origin. The U.S. textile industry supports the yarn-forward rule of origin for apparel.⁵²² According to NCTO, the yarn-forward rule would allow the benefits of the agreement to go to TPP countries, serve as a driver for investment in the region, and ensure “that the current FTA structure is not destabilized.”⁵²³ On the other hand, both Gap Inc. and associations representing apparel brands, retailers, and importers stated that the yarn-forward ROOs would limit imports under TPP.⁵²⁴ The National Retail Federation (NRF) stated the TPP rule of origin for apparel is one of the most restrictive of any U.S. agreement and that “restrictive rules impose compliance costs that are quite large and constitute hidden barriers to trade.”⁵²⁵

A few industry representatives stated that the differences in the textile and apparel ROOs from one FTA to the next make it difficult for the industry to know and comply with the rules and may inhibit some importers from claiming preferences under TPP.⁵²⁶ As stated in one written submission, the different rules for various FTAs means that a factory exporting to multiple different FTA partners may be required to have different supply chains for the same inputs—or they may choose to change their supply chains to meet the most restrictive ROOs in order to avoid cross-contamination of inputs in a factory.⁵²⁷ According to NRF and AAFA, some of their members do not make use of FTAs because of the complicated and burdensome ROOs.⁵²⁸

Short supply provisions. NCTO, representing the domestic textile industry, stated that some of its members were dissatisfied with some of the items designated for the short supply list, including certain wool yarns for sweaters and fabrics of polyester/wool blends.⁵²⁹

U.S. Fashion Industry Association (USFIA) indicated that while some of the items on the short supply list (such as performance outerwear fabrics, wool blend fabrics, and flannel) would help its members, it is concerned that products on the list are narrowly defined and have end-use requirements.⁵³⁰ In addition, industry representatives stated that the inability to change the short supply list means that new products would not be able to be added as new yarns and

⁵²² NCTO, written submission to the USITC, February 16, 2016, 2; industry representatives, telephone interviews by USITC staff, January 14 and 18, 2016.

⁵²³ In its written submission, NCTO noted that the United States has FTAs in place with six TPP countries based on the yarn-forward rule of origin and stated that “a weaker or vastly different TPP rule would have undermined billions in existing U.S. exports.” NCTO, written submission to the USITC, February 16, 2016, 2, 5.

⁵²⁴ USITC, hearing transcript, January 15, 2016, 729–30 (testimony of Stephanie Lester, Gap Inc.) and 782 (testimony of Stephen Lamar, AAFA); NRF, written submission to the USITC, February 16, 2016, 5; RILA, written submission to the USITC, February 16, 2016, 3; USFIA, written submission to the USITC, January 27, 2016, 4–5.

⁵²⁵ NRF, written submission to the USITC, February 16, 2016, 5.

⁵²⁶ USITC, hearing transcript, January 15, 2016, 782–83 (testimony of Stephen Lamar, AAFA); NRF, written submission to the USITC, February 16, 2016, 5.

⁵²⁷ Collinson, written submission to the USITC, December 29, 2015, 3–4.

⁵²⁸ NRF, written submission to the USITC, February 16, 2016, 5; AAFA, written submission to the USITC, February 5, 2016, 3.

⁵²⁹ NCTO, written submission to the USITC, February 16, 2016, 2.

⁵³⁰ USITC, hearing transcript, January 15, 2016, 725 (testimony of Julie Hughes, USFIA).

fabrics are developed.⁵³¹ According to NRF, the flexibilities intended to make the agreement more usable “may inject a high degree of complexity and uncertainty into sourcing” and dissuade some retailers, particularly smaller importers, from importing under TPP.⁵³²

Effect on Western Hemisphere trade. The government of El Salvador and the Central American-Dominican Republic Apparel and Textile Council expressed concern that the initial 35 percent duty cut for most textile and apparel products could “cause a rapid shift in production away from the well-established Western Hemisphere supply chain.”⁵³³ They estimate that lost orders resulting from the transfer of production during the first year of the agreement could affect 15–18 percent of industrial employment in the CAFTA-DR region.⁵³⁴ They requested that the market access provisions intended to protect the Western Hemisphere textile and apparel supply chain be implemented correctly and “rigorously enforced,” particularly for three products of particular importance to the CAFTA-DR region—pullovers and similar articles of cotton and acrylic, and men’s and boys’ cotton shirts (not knitted) other than dress shirts.⁵³⁵ Finally, they expressed concern at the way the flexibilities provided for the TPP ROOs could affect their industry, including the short supply provisions, apparel products eligible for cut-and-sew provisions, and the EIAP program with Vietnam.⁵³⁶

On the other hand, Gap stated that the benefits of TPP are not expected to come “at the expense of Western Hemisphere producers or their U.S.-based textile suppliers.” Instead, according to Gap, the trade would shift from other countries that pay full duties, such as other Asian suppliers.⁵³⁷ In addition, Gap stated that in the next two to three years it is planning to triple its production of goods in the Western Hemisphere, particularly in Haiti and Central America.⁵³⁸ NCTO stated that TPP has three key elements that are intended to keep Western Hemisphere trade stable: (1) the yarn-forward rule of origin; (2) limited cut-and-sew rules and the absence of any trade preference levels that allow exceptions to the ROOs; and (3) the longest duty phaseouts on products that cover the majority of imports from the CAFTA-DR countries (81 percent) in particular, as well as from the entire Western Hemisphere

⁵³¹ USITC, hearing transcript, January 15, 2016, 725, 784 (testimony of Julie Hughes, USFIA); USITC, hearing transcript, January 15, 2016, 785 (testimony of Stephanie Lester, Gap Inc.).

⁵³² NRF, written submission to the USITC, February 16, 2016, 1–2.

⁵³³ Government of El Salvador, written submission to the USITC, February 16, 2016, 1; CECATEC-RD, written submission to the USITC, February 16, 2016, 1.

⁵³⁴ Government of El Salvador, written submission to the USITC, February 16, 2016, 2; CECATEC-RD, written submission to the USITC, February 16, 2016, 1.

⁵³⁵ These products are classified in the HTS as follows: pullovers and similar articles of cotton and acrylic (part of HTS subheadings 6110.20.20 and 6110.30.30) and men's and boy's cotton shirts (not knitted) other than dress shirts (part of 6205.20.20). Government of El Salvador, written submission to the USITC, February 16, 2016, 2; CECATEC-RD, written submission to the USITC, February 16, 2016, 2.

⁵³⁶ Government of El Salvador, written submission to the USITC, February 16, 2016, 2–3; CECATEC-RD, written submission to the USITC, February 16, 2016, 2–3.

⁵³⁷ USITC, hearing transcript, January 15, 2016, 730 (testimony of Stephanie Lester, Gap Inc.).

⁵³⁸ *Ibid.*, 731 (testimony of Stephanie Lester, Gap Inc.).

(66 percent).⁵³⁹ Nevertheless, one U.S. textile industry representative estimated that U.S. textile industry exports to the Western Hemisphere could decline in the long term by as much as 10–15 percent because of TPP.⁵⁴⁰

Labor provisions.⁵⁴¹ Although representatives of apparel firms and importers supported strong labor provisions, some representatives expressed concern about how the provisions would be implemented and how this might affect U.S. importers sourcing from Vietnam.⁵⁴² According to USFIA, “If the United States can suspend tariff concessions for Vietnam at any time—for reasons having nothing to do with conditions at the factories run by our member companies and their business partners—apparel brands may hesitate to utilize the Agreement, blunting the benefits to our sector.”⁵⁴³

Trusted Trader program. USFIA commented that TPP does not recognize the U.S. Customs and Border Protection (CBP) “Trusted Trader”⁵⁴⁴ program.⁵⁴⁵ According to USFIA, its member companies have invested “millions of dollars and hours of time” to provide details to CBP officials on how they do business as part of the Trusted Trader program.⁵⁴⁶ USFIA points to the side letters with Vietnam and Malaysia that require “time-consuming collection of data and additional paperwork,” including detailed paper copies of raw materials invoices, purchase orders, bills of lading, cutting records, etc., that “run counter to the Trade Facilitation and Enforcement Act . . . [that] requires Customs to move to an all-electronic interface.”⁵⁴⁷

Dress shirts. A few industry sources had concerns with the definition of dress shirts (breakouts under HTS subheadings 6205.20 and 6206.30). Dress shirts are duty free on EIF for Vietnam and Malaysia, and also are covered under the short supply provisions of the agreement. A textile industry representative said that the definition for dress shirts in the market access provisions should specify a yarn size for the fabric used in the dress shirts, as it does for the definition in

⁵³⁹ NCTO, written submission to the USITC, February 16, 2016, 2, 4.

⁵⁴⁰ Industry representative, telephone interview by USITC staff, February 19, 2016.

⁵⁴¹ Side agreements between the United States and Brunei, Malaysia, and Vietnam obligate those states to undertake certain labor reforms before TPP can enter into force between the United States and those countries. For more information, see box 6.3 in chapter 6 of this report.

⁵⁴² USITC, hearing transcript, January 15, 2016, 716, 760, and 829 (testimony of Stephen Lamar, AAFA); USFIA, written submission to the USITC, January 29, 2015, 6.

⁵⁴³ USFIA, written submission to the USITC, December 29, 2015, 5.

⁵⁴⁴ For information on the Trusted Trader program, see U.S. Customs and Border Control website at <http://www.cbp.gov/border-security/ports-entry/cargo-security/trusted-trader>.

⁵⁴⁵ USITC, hearing transcript, January 15, 2016, 726, 785–86 (testimony of Julie Hughes, USFIA); USFIA, written submissions to the USITC, December 29, 2015, 6, and January 29, 2016, 1–2.

⁵⁴⁶ USFIA, written submissions to the USITC, December 29, 2015, 6.

⁵⁴⁷ *Ibid.*, December 29, 2015, 6, and January 29, 2016, 2.

the short supply provisions.⁵⁴⁸ The concern is that the definition is too broad and could allow imports of some work shirts.⁵⁴⁹ U.S. importers stated that the short supply definition for men’s dress shirts leaves room for uncertainty as to how U.S. CBP would interpret it.⁵⁵⁰ Also, importers expressed concern that the definition of dress shirts is “U.S. centric” and may not be recognized by customs officials in other TPP countries.⁵⁵¹

Travel Goods.⁵⁵² Three witnesses at the public hearing stated that there would be significant benefits for U.S. imports of travel goods.⁵⁵³ AAFA noted that Vietnam is the second-largest supplier of travel goods to the U.S. market and that there is a strong, immediate opportunity to take advantage of TPP for travel goods, given the flexible ROOs and immediate duty-free treatment.⁵⁵⁴ However, according to the report of the ITAC on Textiles and Clothing, travel goods industry members who manufacture in the United States or CAFTA-DR countries “feel that having all travel goods become duty free immediately from Vietnam is likely to have a negative effect on the redevelopment of the U.S. textile industry and thus have a negative effect on U.S. jobs.”⁵⁵⁵ The Leather Specialty Company, a domestic producer of travel goods, stated that there are over 20 manufacturers of travel goods in the United States that would be affected by TPP.⁵⁵⁶ This firm further stated because of TPP, it has put on hold plans to increase hiring and investment in new equipment.⁵⁵⁷

Footwear⁵⁵⁸

Assessment

TPP would likely result in a \$1.1 billion (2.7 percent) increase in U.S. imports of footwear from all countries as compared to the baseline estimate in 2032. According to the Commission’s

⁵⁴⁸ The short supply provisions state that the fabrics that can be used in the short supply provisions must be of 67 nm or finer for single yarns, or of yarn count 135 nm or finer per ply for multiple yarns. Industry representative, telephone interviews by USITC staff, January 13, 2016.

⁵⁴⁹ Industry representative, telephone interviews by USITC staff, January 13, 2016.

⁵⁵⁰ Industry representatives, interview by USTIC staff, Washington, DC, December 16, 2015; industry representative, telephone interview by USITC staff, January 11, 2016.

⁵⁵¹ Industry representative, interview by USTIC staff, Washington, DC, December 9, 2015; industry representative, telephone interview by USITC staff, January 11, 2016.

⁵⁵² Travel goods are not covered in the modeling or trade table for textiles and apparel. Travel goods are included under “other leather products” for the purposes of the modeling.

⁵⁵³ USITC, hearing transcript, January 15, 2016, 713–14, 805 (testimony of Stephen Lamar, AAFA) and 737–38 (testimony of Richard Harper, OIA); USITC, hearing transcript, January 13, 2016, 292 (testimony of Sarah Thorne, Wal-Mart Stores, Inc.).

⁵⁵⁴ USITC, hearing transcript, January 15, 2016, 713–14 (testimony of Stephen Lamar, AAFA).

⁵⁵⁵ ITAC-13, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 10.

⁵⁵⁶ The Leather Specialty Company, written submission to the USITC, March 16, 2016, 1.

⁵⁵⁷ *Ibid.*

⁵⁵⁸ Includes all types of footwear (protective footwear, athletic shoes, plastic and rubber footwear, slippers, and footwear parts) classified in HTS chapter 64.

model results, U.S. imports from all TPP countries would rise by \$1.6 billion (23.4 percent). Most of this increase would be accounted for by imports of footwear from Vietnam, the second-largest supplier overall and the biggest TPP supplier of footwear to the U.S. market. Because U.S. imports already account for the vast majority of domestic footwear purchases, the significant growth in U.S. footwear imports from TPP countries, especially Vietnam, is expected to occur at the expense of China and other non-TPP footwear suppliers. These imports are not expected to compete with or negatively affect U.S. production. U.S. imports of footwear from China would fall by \$400.4 million (1.3 percent) under TPP.

TPP's impact on U.S. footwear exports is expected to be significant. Total U.S. footwear exports to the TPP countries would grow by \$135.0 million (23.6 percent). Most of the growth would be accounted for by a \$125.0 million (76.5 percent) increase in U.S. footwear exports (primarily parts used to assemble footwear for the U.S. market) to Vietnam. U.S. industry sources have stated that they expect no immediate significant increase in U.S. footwear production as a result of the TPP,⁵⁵⁹ and the Commission's model results show a small (0.5 percent) increase in footwear output as compared to the 2032 baseline.

Overview of U.S. Trade with TPP Partners

U.S. Exports

During 2013–15, U.S. exports of footwear to the world grew 7.2 percent, rising from \$788.9 million to \$845.9 million (table 4.21). During the same period, total U.S. footwear exports to the TPP countries increased even faster—by 22.4 percent to \$400.5 million. The TPP parties accounted for almost half (47.3 percent) of total U.S. footwear exports in 2015, up from 41.4 percent (\$327.3 million) in 2013. Of the top non-FTA TPP partners, U.S. exports of footwear (primarily parts) to Vietnam increased by 72.5 percent, from \$60.1 million in 2013 to \$103.7 million in 2015. At the same time, U.S. footwear exports to Japan fell by 3.9 percent, fluctuating from \$56.2 million in 2013 to \$54.0 million in 2015. The principal footwear products that the United States exports to TPP countries include leather shoes, footwear parts, and branded athletic footwear (box 4.10).

⁵⁵⁹ U.S. footwear industry representative, email message to USITC staff, January 21, 2016.

Table 4.21: U.S. domestic exports of footwear, 2013–15, million dollars

Country	2013	2014	2015
TPP			
Canada	126.4	139.1	148.6
Vietnam	60.1	86.4	103.7
Japan	56.2	51.7	54.0
Mexico	43.9	49.0	41.6
Australia	10.6	13.7	20.3
Chile	12.6	13.0	14.8
Singapore	10.4	12.5	12.6
New Zealand	4.3	2.2	2.3
Peru	2.1	1.5	1.2
Brunei	0.5	1.0	1.0
Malaysia	0.3	0.3	0.4
Total TPP	327.3	370.5	400.5
ROW	461.6	455.2	445.3
Total	788.9	825.7	845.9

Source: USITC DataWeb/USDOC (accessed February 16, 2016).

Note: Totals may not sum due to rounding. ROW = rest of world.

Box 4.10: U.S. Footwear Industry and Employment

The United States has a small footwear industry that manufactures footwear for both the U.S. and foreign markets. For more than a decade, U.S. firms have been outsourcing labor-intensive footwear production to low-cost countries while retaining design, branding, and distribution functions in the United States.^a Some firms produce a limited amount of footwear in the United States, including products for the U.S. military under the Berry Amendment.^b American-made shoes, which accounted for just 1.6 percent of the U.S. footwear market in 2014,^c are concentrated in niches—rubber/fabric footwear, including athletic shoes;^d men’s work shoes; and plastic/protective footwear.^e They have a reputation for high quality, value, and durability.^f The recent growth of U.S. domestic exports in the past few years, particularly to Canada, is attributed to Canadian consumers’ high regard for U.S. footwear, the strength of the Canadian dollar against the U.S. dollar, and to trade preferences under the North American Free Trade Agreement.^g

As U.S. footwear companies have relied increasingly on foreign sources to manufacture footwear, the number of domestic producers of footwear has continued to decline. During 2013–15, the number of domestic footwear manufacturing establishments fell from 278 to 274.^h

^a IBISWorld, *Shoe and Footwear Manufacturing in the US*, December 2015, 7; U.S. footwear industry representative, telephone interview by USITC staff, January 27, 2016.

^b IBISWorld, *Shoe and Footwear Manufacturing in the US*, December 2015, 7; U.S. footwear industry representative, telephone interview by USITC staff, February 10, 2016; USITC, hearing transcript, January 15, 2016, 763–64 (testimony of Matt Priest, Footwear Distributors and Retailers of America). The Berry Amendment was originally passed by Congress in 1941 to promote the purchase of certain U.S. goods. It was included in subsequent defense appropriations acts until it was made permanent in fiscal year 1994 by section 8005 of Public Law 103-139. See Defense Procurement and Acquisition Policy, Berry Amendment FAQs, http://www.acq.osd.mil/dpap/cpic/ic/berry_amendment_faq.html.

^c U.S. footwear industry representative, email message to USITC staff, January 20, 2016.

^d Although most of its shoes are produced in foreign factories, New Balance, a privately owned footwear firm, states that it continues to manufacture more than 4 million pairs of its athletic shoes annually in its facilities in Maine and Massachusetts. Richardson, “Pacific Trade Deal Has Potential to Hurt, Help,” October 5, 2015; U.S. footwear industry representative, telephone interview by USITC staff, March 9, 2016.

^e U.S. footwear industry representative. Email messages to USITC staff, February 24, 2016 and April 5, 2016.

^f IBISWorld, *Shoe and Footwear Manufacturing in the US*, December 2015, 12.

^g IBISWorld, *Shoe and Footwear Manufacturing in the US*, December 2015, 8, 18.

^h The 2015 data are estimated by staff based on preliminary statistics from the U.S. Department of Labor. USDOC, BLS, “Quarterly Census of Employment and Wages” (accessed April 12, 2016).

U.S. Imports

The United States is a major world importer of footwear, and during 2013–15, U.S. imports of footwear from the world rose by \$2.6 billion (10.7 percent) to \$27.2 billion (table 4.22). During the same period, U.S. imports of footwear from the TPP countries grew by \$1.4 billion (40 percent) to \$4.9 billion, and the TPP countries accounted for 18 percent of total U.S. footwear imports in 2015. In 2015, most (87 percent) of the U.S. imports of footwear imported from the TPP countries were dutiable. Of the TPP countries, Vietnam is the largest footwear supplier to the U.S. market, accounting for 88 percent of U.S. footwear imports from the TPP countries in 2015; after China, it is the second leading footwear supplier to the U.S. market. In light of challenges facing Chinese footwear factories in recent years, including rising labor and material costs, labor shortages, employee turnover, and closures,⁵⁶⁰ U.S. footwear companies have been diversifying their supply chains and view Vietnam as an attractive alternative footwear supplier.⁵⁶¹ During 2013–15, U.S. footwear imports from Vietnam rose by almost 50 percent, growing from \$2.9 billion in 2013 to \$4.3 billion in 2015.⁵⁶²

Table 4.22: U.S. footwear imports for consumption, 2013–15, million dollars

Country	2013	2014	2015
TPP			
Vietnam	2,900.9	3,550.5	4,328.6
Mexico	549.0	498.9	493.9
Canada	46.8	58.4	72.6
Australia	6.4	6.6	7.9
Japan	4.9	2.0	5.5
Peru	3.2	3.8	4.3
Malaysia	2.7	1.9	2.1
New Zealand	0.3	0.2	0.4
Singapore	0.3	0.7	0.2
Brunei	0	0.08	0.8
Chile	0.2	0.09	0.03
Total TPP	3,514.7	4,123.0	4,915.6
ROW	21,110.6	21,625.9	22,333.7
Total	24,625.2	25,748.8	27,249.3

Source: USITC DataWeb/USDOC (accessed February 16, 2016).

Note: Totals may not sum due to rounding. ROW = rest of world.

⁵⁶⁰ FootwearBiz, “Shoe Factory Closes in Putian,” January 28, 2016; FootwearBiz, “China’s Share of U.S. Footwear Market,” February 11, 2016.

⁵⁶¹ RILA, written submission to the USITC, February 15, 2016; NRF, written submission to the USITC, February 15, 2016.

⁵⁶² Statements by U.S. footwear industries representatives at the FDRA Sourcing Intelligence Summit, July 22–23, 2015; Barrie, “Mitigating Footwear Sourcing Risks in Vietnam,” September 22, 2015.

The leading types of footwear imported from Vietnam in 2015 were sports and athletic footwear; certain footwear containing rubber and plastic outer soles and leather uppers, including work shoes; and various men’s and women’s leather boots. The average U.S. tariff on footwear imports from Vietnam (which accounted for 99.5 percent of the dutiable value of U.S. footwear imports from TPP countries) is 12.5 percent, whereas the U.S. average rate of duty on footwear imports from all TPP countries is 10.8 percent. Industry sources report that Vietnam’s footwear industry expects to boost its footwear exports by 20 percent in 2016 because of the TPP and other new FTAs.⁵⁶³

Summary of Provisions

TPP (Annex 3-D, Article 3.2) would grant immediate and reciprocal duty-free market access for footwear produced in TPP countries except for 18 “sensitive” U.S. tariff lines—primarily rubber or plastic protective footwear (i.e., work boots, waterproof footwear, and hip waders), as well as leather boots, women’s pumps, and athletic shoes valued at over \$12/pair that are still produced in the United States. In 2015, U.S. imports of footwear classified in the 18 “sensitive” U.S. tariff lines accounted for 41.6 percent (by quantity) of total U.S. footwear imports from the TPP countries. Current duties on the 18 footwear items, which range from 5.0 percent to 37.5 percent (table 4.23), would be phased out over several different staging categories during the first 12 years of the agreement.⁵⁶⁴ In year 12, all duties on U.S. footwear imports would be eliminated and all U.S. imports of footwear from TPP countries would enter the United States free of duty.

Table 4.23: 18 sensitive footwear items and duty rates, 2015

HTS number	Description	Duty rate 2015 (percent)
6401 headings	Waterproof footwear, with outer soles and uppers of rubber or plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging, or similar processes.	
6401.10.00	With a metal toe-cap. Ex: industrial rubber steel-toe work boots.	37.5
6401.92.90	Without a metal toe-cap, covering the ankle but not the knee. Ex: Rubber rain boots, fireman’s boots, industrial rubber boots.	37.5
6401.99.10	Without a metal toe-cap, covering the knee. Ex: Hip waders.	37.5
6401.99.30	Without a metal toe-cap, not covering the ankle, protective against water, oil, grease or chemicals or cold or inclement weather, without closures. Ex: Rubbers.	25.0
6401.99.60	Without a metal toe-cap, not covering the ankle, protective against water, oil, grease or chemicals or cold or inclement	37.5

⁵⁶³ FootwearBiz, “Vietnam: Footwear Industry Targets 20% Growth,” January 22, 2016.

⁵⁶⁴ The duty rates on these products would be reduced and/or eliminated in varying annual periods over 4-, 5-, 7-, 9-, or 12-year periods.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

HTS number	Description	Duty rate 2015 (percent)
	weather, with closures. Ex: Rubbers with buckles.	
6402 headings		
6402.91.10	Footwear with outer soles and uppers of rubber or plastics covering the ankle, protective against water, oil, grease or chemicals or cold or inclement weather, with a metal toe cap, other than sports footwear. Ex: Basic cold weather boot.	37.5
6402.91.80	Not waterproof or protective, other than sports footwear, without a metal toe-cap, covering the ankle, valued over \$6.50 but not over \$12/pair. Ex: High-top basketball shoe, work boot, dress or casual boot.	90 cents per pair +20.0
6402.99.90	Not waterproof or protective, other than sports footwear, without a metal toe-cap, not covering the ankle, valued over \$12/pair. Ex: Men's athletic shoes.	20.0
6403 Headings		
6403.40.30	Footwear with outer soles of rubber/plastics/leather or composition leather and uppers of leather. With a metal toe-cap with welt construction. Ex: Men's leather boots.	5.0
6403.40.60	With a metal toe-cap, not welt construction. Ex: Men's leather work boot.	8.5
6403.91.30	Covering the ankle, welt construction. Ex: Men's leather boot.	5.0
6403.91.60	Covering the ankle, not welt construction; for men, youths, or boys. Ex: Men's leather boot.	8.5
6403.91.90	Covering the ankle, not welt construction, for other than men, youths, or boys. Ex: Women's leather upper fashion boot.	10.0
6403.99.40	Not covering the ankle; welt construction. Ex: Men's oxford work shoe.	5.0
6403.99.60	Not covering the ankle, not welt construction; for men, youths or boys. Ex: Men's leather work shoe.	8.5
6403.99.90	Not covering the ankle; not welt construction; for persons other than men, youths or boys; valued over \$2.50/pair. Ex: Women's pump.	. 10.0
6404 Headings		
6404.19.20	Footwear with outer soles of rubber or plastics and uppers of textile. Designed to be worn as protection against water, oil, grease or chemicals or cold or inclement weather. Ex: Cold weather boot.	37.5
6404.19.90	Not protective, not open toe or open heel, valued over \$12/pair. Ex: Textile upper casual dress shoe.	9.0

Source: HTS, 2015 (Rev.2).

Similar to the ROOs for footwear under NAFTA and other FTAs, the TPP ROOs for footwear require substantial transformation (using what is known as the tariff shift rule)⁵⁶⁵ and a regional value content of at least 55 percent of the appraised value of the article.⁵⁶⁶ Especially significant are two TPP requirements: that all uppers and assemblies of uppers (also called “hanging uppers”)—the parts of the shoe that account for a significant share of a shoe’s value because of the high labor content—originate in the TPP region, and that a tariff differential be in effect until all duty phaseouts on the 18 sensitive footwear items are completed. The tariff differential rule (TPP, Section B, Annex 2-D of Chapter 2, National Treatment and Market Access for Goods) would require that the tariff assessed on a footwear product imported into the U.S. market be based on the TPP country in which the principal value added or production process occurred (e.g., Vietnam, where footwear is manufactured and for which current tariffs on footwear are high and would be phased out over 12 years). The tariff may not be assessed based on a TPP country in which the product has undergone minimal operations such as packaging.⁵⁶⁷ This rule would ensure that the tariff phaseout schedules for sensitive footwear products from certain TPP countries such as Vietnam are upheld.

The TPP would also immediately allow “accumulation” (Article 3.10 of Chapter 3, Rules of Origin and Origin Procedures). Accumulation would permit the TPP parties to treat materials and processing used to manufacture a TPP good from one TPP party in the same way they treat materials and processing from any other TPP party. As such, accumulation would likely strengthen incentives for TPP businesses to integrate production and supply chains within the TPP region rather than bring in supply chain components from outside the region.⁵⁶⁸

Also, under TPP Japan would eliminate its longstanding tariff-rate quota (TRQ) on leather footwear imports (i.e., leather footwear classified in HS headings 6403, 6404, 6405). Currently, the TRQ sets an annual quota of 12 million pairs of footwear that are subject to a quota tariff rate based on the footwear’s tariff classification. If imports of footwear into Japan exceed the quota, the effective Japanese tariff rates reportedly rise to as much as 189 to 300 percent per

⁵⁶⁵ “Substantial transformation” is production that results in a new and different good, which then has a name, character, use, and HTS classification that differs from those of its constituent materials. For example, non-originating raw materials (e.g., leather, plastic, rubber, etc.) would be allowed by the TPP if the final footwear product were produced in the TPP region.

⁵⁶⁶ In contrast to NAFTA and other FTAs which use only the “net cost” method (requiring a calculation of the direct and some indirect costs of producing the shoe minus non-originating content) to calculate the regional value content (RVC) of the imported footwear, the TPP would offer alternative methods of calculating RVC: build-down and build-up. Both methods rely on the values of the finished good and the originating and non-originating materials. Value equates to price. According to an industry representative, both methods appear easier to use than the net cost method used in NAFTA. U.S. industry representative, email message to USITC staff, March 16, 2016.

⁵⁶⁷ For example, footwear produced in Vietnam and shipped to Canada or Mexico for packaging would not qualify for the zero duty rate under NAFTA.

⁵⁶⁸ USTR, “Rules of Origin and Origin Procedures,” November 5, 2015.

pair.⁵⁶⁹ The TPP would eliminate the TRQ, and Japan’s regular tariff rates on footwear would be assessed and then phased out over the first 12 years of the agreement.

Estimated Effects of TPP on the Footwear Sector

Impact on U.S. Exports

Some industry representatives speculate that because the TPP would create a large, multilateral export market, it would encourage the overall growth of U.S. footwear exports.⁵⁷⁰ Commission model estimates indicate that TPP would result in a \$135.0 million (23.6 percent) increase in total U.S. footwear exports with TPP partners. However, most of the increase would be accounted for by a \$125.0 million (76.5 percent) rise in U.S. exports of footwear (primarily parts used to assemble footwear) to Vietnam because footwear production is expected to rise in Vietnam under TPP. In contrast, U.S. footwear exports to NAFTA partners would fall by \$4.1 million (1.6 percent).

The Commission’s modeling results predict a small increase (0.5 percent) in U.S. output and a small increase (0.8 percent) in U.S. employment as a result of TPP. As previously discussed, U.S. footwear imports already account for most footwear purchases in the U.S. market, and most of the increase in U.S. footwear imports resulting from the TPP would come at the expense of non-TPP footwear suppliers such as China. Moreover, footwear made in the United States tends to serve a different market from that for imported footwear. Footwear produced in the United States is designated for the U.S. military or appeals to consumers seeking Made-in-the-USA or Assembled-in-the-USA branded athletic footwear.⁵⁷¹ Industry sources indicated that it is unclear if U.S. footwear production would increase as a result of anticipated export growth to Vietnam as a result of TPP.⁵⁷² It is likely that any increase in manufacturing and employment resulting from TPP would first occur indirectly in the overall footwear supply chain that includes distribution (jobs at ports, trucking jobs, warehouse jobs, and retail jobs), and engineering, before occurring directly in footwear manufacturing.⁵⁷³

⁵⁶⁹ USTR, “National Treatment and Market Access for Goods,” November 5, 2015; FDRA, written submission to the USITC, January 15, 2016.

⁵⁷⁰ U.S. footwear industry representative, telephone interview by USITC staff, February 10, 2016.

⁵⁷¹ FDRA, written submission to the USITC, February 5, 2016, iii.

⁵⁷² However, the TPP reportedly may help boost domestic manufacturing of certain footwear components. U.S. footwear industry representatives, telephone interviews with USITC staff, December 10, 2015, and December 16, 2015.

⁵⁷³ Russell, “In the Money: Nike Reaffirms U.S. Production,” June 29, 2015; FDRA, “Trans-Pacific Partnership: Issue Background,” n.d. (accessed April 13, 2016).

Impact on U.S. Imports

The Commission's modeling results show that TPP would result in a \$1.1 billion (2.7 percent) increase in worldwide imports of U.S. footwear. However, U.S. imports of footwear from all TPP countries would rise by \$1.6 billion (23.4 percent) above the projected 2032 baseline. Vietnam would account for most of the increase in U.S. footwear imports from TPP countries. The growth in imports from Vietnam is expected because of the additional cost savings offered by TPP's elimination of U.S. duties on imports from Vietnam.

U.S. imports of footwear from Vietnam have grown rapidly in recent years without trade preferences, so it is likely that once all duties have been eliminated by TPP, such imports would accelerate at the expense of China, the largest supplier of footwear to the U.S. market.⁵⁷⁴ The Footwear Distributors and Retailers Association (FDRA) has estimated that by 2019, Vietnam will supply 22 percent of the volume of all U.S. footwear imports.⁵⁷⁵ Several major U.S. footwear firms have already begun sourcing a significant share of their footwear purchases from Vietnam. Nike reports that in fiscal 2015, contract factories in Vietnam manufactured about 43 percent of total Nike brand footwear, compared to 32 percent and 20 percent for China and Indonesia, respectively.⁵⁷⁶ Furthermore, in anticipation of duty-free imports and other trade benefits under TPP, some large footwear companies began expanding footwear production in Vietnam even before the signing of the TPP Agreement.⁵⁷⁷ Wolverine, a U.S. firm that specializes in work boots, indicated that in light of TPP's expected benefits, it would shift more of its sourcing from China to Vietnam.⁵⁷⁸ However, one industry source noted that the growth of U.S. footwear imports from Vietnam could be tempered by higher costs that Vietnamese footwear producers will face in meeting TPP labor and environmental commitments and standards.⁵⁷⁹ Concerning increases in footwear imports from other TPP countries, industry sources have suggested that U.S. footwear imports from Malaysia, a tiny footwear supplier to the U.S. market, also could grow as a result of TPP.⁵⁸⁰

⁵⁷⁴ *World Footwear*, "Business of Footwear: Vietnam's Victory," January/February 2016, 10; FDRA, written submission to the USITC, February 5, 2016, iii.

⁵⁷⁵ USITC, hearing transcript, January 15, 2016, 744 (testimony of Matt Priest, Footwear Distributors and Retailers of America). In a post-hearing submission, FDRA stated that it commissioned a study in 2013 analyzing the effect of TPP's elimination of duties. The study found that "the most significant impact will be the large shift in production from China." FDRA, written submission to the USITC, February 5, 2016.

⁵⁷⁶ Nike, "Form 10-K," 67 (accessed January 11, 2016).

⁵⁷⁷ In late 2015, Taiwan-based Pou Chen, reportedly the world's largest contract shoemaker, announced plans to move a significant share of its footwear manufacturing from China to Vietnam because of the latter's lower labor costs and more favorable tariffs under the TPP. Ting-Fang, "Shoemaker Shifts Production to Vietnam Following TPP," 2015; *World Footwear*, "News: Vietnam," 2016, 3.

⁵⁷⁸ FootwearBiz, "Wolverine Worldwide to Shift Production from China," 2014; Phuong, "U.S. Firms Move Footwear Factories to Vietnam," 2014.

⁵⁷⁹ U.S. footwear industry representative, telephone interview by USITC staff, January 28, 2016.

⁵⁸⁰ U.S. footwear industry representative, interview by USITC staff, Rosslyn, VA, December 16, 2015.

Summary of Views of Interested Parties

In its December 2, 2015, report on TPP, the Industry Trade Advisory Committee (ITAC) on Textiles and Clothing provided summary comments on TPP that reflect the key views of its footwear members and the U.S. footwear industry as a whole.⁵⁸¹ U.S. footwear industry representatives have generally and publicly supported TPP. Several principal issues concerning the agreement were raised in ITAC's report, at the Commission's hearing, in written submissions to the Commission, and in interviews with industry representatives, as presented below.

TPP's Duty Elimination and Phaseouts on 18 Sensitive Footwear Items

The TPP's footwear provisions would offer immediate duty elimination on most footwear products and staged duty phaseouts on 18 sensitive footwear items. The provisions are viewed as offering enough flexibility to account for the complexities of modern supply chains while helping to ensure that significant manufacturing activity remains in the TPP region.⁵⁸² The Outdoor Industry Association has stated that TPP presents a tremendous opportunity and that it had consulted closely with domestic suppliers and manufacturers to ensure that its position would not harm U.S. producers.⁵⁸³

The association stated that it supported flexible ROOs and immediate duty phaseouts for non-import-sensitive outdoor footwear products, whereas it proposed stricter ROOs and longer duty phaseouts for import-sensitive products.⁵⁸⁴ However, the association expressed disappointment that TPP does not include tariff breakouts beyond the HTS 8-digit subheadings. But it stated that TPP will "still provide significant benefits for footwear sourced in the TPP region and Made in USA products."⁵⁸⁵

The Footwear Distributors and Retailers Association (FDRA) remarked that the footwear industry has been "heavily and disproportionately burdened by duties," which it characterized as averaging over 10 percent and reaching up to 67.5 percent, in contrast to an average tariff of 1.5 percent on all imported goods.⁵⁸⁶ FDRA emphasized its view that eliminating these tariffs on

⁵⁸¹ Whereas the U.S. non-rubber footwear industry supports the TPP, the rubber footwear and plastic footwear industry takes a neutral position on it. ITAC-13, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 3-4, 6-7, 10.

⁵⁸² *Ibid.*

⁵⁸³ USITC, hearing transcript, January 15, 2016, 734–35 (testimony of Rich Harper, Outdoor Industry Association).

⁵⁸⁴ *Ibid.*, 736.

⁵⁸⁵ *Ibid.*, 736–37.

⁵⁸⁶ USITC, hearing transcript, January 15, 2016, 741 (testimony of Matt Priest, Footwear Distributors and Retailers of America).

footwear imports will lead to lower shoe prices for U.S. consumers.⁵⁸⁷ FDRA has stated that it has long supported TPP and has urged the United States to implement the agreement as soon as possible.⁵⁸⁸ Because annual duties paid on U.S. footwear imports total \$450 million, TPP as negotiated is seen as providing “significant savings for consumers and for brands, retailers, and their footwear supply chain.”⁵⁸⁹

Industry sources have also suggested that the cost savings created by eliminating the steep duties on footwear imports would allow leading footwear companies like Nike to create new manufacturing⁵⁹⁰ and engineering jobs in the United States.⁵⁹¹ FDRA stated that TPP duty savings will enable footwear companies to “create and expand U.S. footwear jobs through both direct investment in new jobs from TPP duty savings, and the movement of additional units with more competitive pricing.”⁵⁹² The Outdoor Industry Association asserted that the “cost savings realized from duty reductions will result in lower costs for manufacturers and consumers of outdoor products that will in turn fuel innovation when reinvested in research and development, create new products, and encourage more people to go outdoors with the best possible apparel, footwear, equipment and accessories.”⁵⁹³ The association added that “enhanced market access for U.S. leather footwear products will likely increase domestic production, exports and raw leather purchases from U.S. tanneries. This in turn will fuel economic growth and more American jobs for outdoor companies.”⁵⁹⁴

The American Apparel and Footwear Association (AAFA) has emphasized that much of TPP’s impact and opportunities are related to trade relations between the United States and Vietnam

⁵⁸⁷ USITC, hearing transcript, January 15, 2016, 743 (testimony of Matt Priest, Footwear Distributors and Retailers of America). Noting that imports of outdoor products are among the most highly taxed when entering the U.S. market, the Outdoor Industry Association has stated that the TPP will eliminate many of the disproportionately high import tariffs assessed on outdoor products not made in the United States. USITC, hearing transcript, January 15, 2016, 734–35 (testimony of Rich Harper, Outdoor Industry Association).

⁵⁸⁸ USITC, hearing transcript, January 15, 2016, 747–48 (testimony of Matt Priest, Footwear Distributors and Retailers of America).

⁵⁸⁹ USITC, hearing transcript, January 15, 2016, 744 (testimony of Matt Priest, Footwear Distributors and Retailers of America) and January 15, 2016, 714 (testimony of Steve Lamar, American Apparel and Footwear Association). Concerning footwear, AAFA has noted that “non-sensitive footwear gets immediate duty-free access and sensitive footwear faces longer-term phaseouts” and that given the expected duty savings, there are substantial opportunities to take advantage of the deal. USITC, hearing transcript, January 15, 2016, 714 (testimony of Steve Lamar, American Apparel and Footwear Association).

⁵⁹⁰ In May 2015, right before President Obama’s visit to Nike headquarters to discuss the TPP, Nike announced that it was prepared to start manufacturing shoes in the United States again if the TPP went into effect. DeBonis, “With Obama on Hand, Nike Announces,” May 8, 2015. And Nike has indicated that once the TPP enters into force, it is committed to increasing investments aimed at developing advanced manufacturing of footwear in the United States. U.S. footwear industry representative, email message to USITC staff, February 17, 2016.

⁵⁹¹ Soni, “Trans-Pacific Partnership: How It Affects Footwear Firms,” May 22, 2015.

⁵⁹² USITC, hearing transcript, January 15, 2016, 746 (testimony of Matt Priest, Footwear Distributors and Retailers of America).

⁵⁹³ USITC, hearing transcript, January 15, 2016, 734 (testimony of Rich Harper, Outdoor Industry Association).

⁵⁹⁴ USITC, hearing transcript, January 15, 2016, 739 (testimony of Rich Harper, Outdoor Industry Association).

and the phaseouts and ultimate elimination of duties on imports from Vietnam.⁵⁹⁵ However, AAFA also noted its concern about the U.S.-Vietnam labor provisions, which could freeze duty reductions if Vietnam does not undertake certain commitments by year 5.⁵⁹⁶

Also pointing to improvements in trade as a result of TPP, the Retail Industry Leaders Association (RILA) voiced support for TPP by noting that Vietnam and Malaysia “provide the biggest opportunities for U.S. retailers sourcing apparel and footwear from the region.”⁵⁹⁷ The National Retail Federation (NRF) stated that producers of athletic footwear in Vietnam are competitive suppliers and echoed the positive feedback from apparel and footwear retailers on the benefits of TPP’s tariff elimination.⁵⁹⁸

According to some industry sources, however, as a result of TPP, the few remaining U.S. footwear manufacturers would likely face increased competition and lower profit margins on their footwear after all the duties on the 18 “sensitive” footwear HS categories are phased out.⁵⁹⁹ New Balance, one U.S. footwear manufacturer of athletic footwear said that TPP could make it much more difficult for it to continue to manufacture domestically if inexpensive imports from Vietnam flooded the U.S. market.⁶⁰⁰ In April 2016, New Balance announced it was renewing its opposition to TPP claiming that eliminating tariffs would lower the price of imports and jeopardize its factory jobs in New England.⁶⁰¹

Japan’s Elimination of its Tariff-rate Quota

For several years, footwear industry and government representatives have reported that Japan’s TRQ on leather footwear imports has restricted the access of U.S. footwear exports to the Japanese market.⁶⁰² Representatives of the U.S. footwear industry have therefore voiced support for Japan’s elimination of its TRQ on leather footwear and the resulting high tariffs

⁵⁹⁵ USITC, hearing transcript, January 15, 2016, 714 (testimony of Steve Lamar, American Apparel and Footwear Association).

⁵⁹⁶ USITC, hearing transcript, January 15, 2016, 716 (testimony of Steve Lamar, American Apparel and Footwear Association). See also box 6.3, chapter 6 of this report, on the U.S.-Vietnam labor side agreement.

⁵⁹⁷ RILA, written submission to the USITC, February 15, 2016.

⁵⁹⁸ NRF, written submission to the USITC, February 15, 2016.

⁵⁹⁹ U.S. footwear industry representatives, telephone interviews by USITC staff, December 10, 2015, and March 9, 2016.

⁶⁰⁰ U.S. footwear industry representative, telephone interview by USITC staff, December 10, 2015 and IBISWorld, *Shoe and Footwear Manufacturing in the US*, December 2015, 9.

⁶⁰¹ Chesto, Jon. “New Balance Accuses Pentagon of Reneging on Sneaker Deal,” April 12, 2016.

⁶⁰² U.S. footwear industry representative, interview by USITC staff, Rosslyn, VA, December 16, 2015; USTR, *2015 National Trade Estimate Report*, 2015, 213.

charged, noting that removing the TRQ would “provide better market access to Japan, increasing exports and enhancing job growth.”⁶⁰³

Chemicals⁶⁰⁴

Assessment

Under TPP, the Commission estimates that U.S. exports of chemical products, including pharmaceuticals, would be \$1.9 billion (0.7 percent) higher than 2032 baseline estimates and U.S. imports would be \$5.3 billion (1.3 percent) higher than the baseline, due in part to tariff reductions. The modeling results also indicate that by 2032 output would be \$2.9 billion (0.3 percent) lower under TPP, relative to the baseline (see box 4.11 for a brief description of the U.S. chemical industry). Output would be lower because U.S. tariffs for chemicals are relatively low now (see box 4.2), as well as the expectation that imports would be higher than exports, compared with baseline estimates. The modeling results also indicate that by 2032 employment would be 0.3 percent lower than the baseline.

Much of the impact in trade would likely be centered on the new TPP partners.⁶⁰⁵ In addition to tariff elimination and market access, industry sources identified provisions regarding rules of origin (ROOs), regulatory harmonization and transparency, and intellectual property (IP) as significant issues for the U.S. chemical industry.

Box 4.11: U.S. Chemical Industry

According to the American Chemistry Council (ACC), the U.S. chemical industry accounts for about 15 percent of global chemical production and is the second-largest in the world after China’s.^a The sector produces a wide variety of commodity and specialty products—e.g., adhesives, dyes and pigments, pesticides, pharmaceuticals, cosmetics, and plastics resins—that are used in all segments of the U.S. economy.^b The sector directly employed about 804,000 people in 2014.^c

^a ACC, *Guide to the Business of Chemistry 2015*, June 2015, 8.

^b Commodity chemicals are usually high-volume, low-price (and low-margin) products. In comparison, specialty chemicals are usually low-volume, high-price products.

⁶⁰³ USITC, hearing transcript, January 15, 2016, 718–19 (testimony of Steve Lamar, American Apparel and Footwear Association); USITC, hearing transcript, 737 (testimony of Richard Harper, Outdoor Industry Association); Matt Priest, FDRA, written submission to the USITC, January 15, 2016, 5.

⁶⁰⁴ This discussion includes chemicals and pharmaceuticals. References to “chemicals” refer to both sectors. Where data for these two sectors are disaggregated, they are referred to as “pharmaceuticals” and “other chemicals.” Trade data in this section are based on NAICS 325 (chemical manufacturing) and 326 (plastics and rubber products manufacturing).

⁶⁰⁵ New TPP partners are those with which the United States currently does not have FTAs, including Brunei, Japan, Malaysia, New Zealand, and Vietnam. Estimates of the effects of liberalizing each sector are presented relative to the baseline changes expected to take place through 2032. In this sector, however, there would be some more immediate effects (e.g., those resulting from tariff liberalization).

^c The ACC employment estimate for the chemical sector (including pharmaceuticals) for 2014—804,000 direct jobs, augmented by an additional 6 million supported by the industry—is based on NAICS 325. BIO and PhRMA provided higher employment estimates for the biotechnology industry and the U.S. innovative biopharmaceutical industry, respectively. BIO, written submission to the USITC, February 17, 2016, 1; PhRMA, written submission to the USITC, February 11, 2016; ACC, *Guide to the Business of Chemistry 2015*, June 2015.

Overview of U.S. Trade with TPP Partners

U.S. exports of chemicals (including pharmaceuticals) to TPP partners grew during 2013–14—from about \$89 billion to almost \$92 billion—before declining to about \$86 billion in 2015. Canada, Mexico, and Japan accounted for about 86 percent of the total in 2015. On average, TPP partners accounted for about 42 percent of total U.S. chemical exports annually during 2013–15 (table 4.24).⁶⁰⁶

Table 4.24: U.S. domestic exports of chemicals, million dollars

	2013	2014	2015
TPP			
Canada	34,676.8	35,861.4	32,747.5
Mexico	31,005.3	32,712.6	30,683.3
Japan	10,148.2	10,303.0	10,033.6
Singapore	4,355.4	3,945.3	3,992.8
Australia	3,687.2	3,486.1	3,377.1
Chile	2,136.3	2,007.7	1,836.9
Peru	1,285.6	1,325.5	1,143.1
Malaysia	1,060.5	929.5	938.3
Vietnam	552.5	579.8	652.6
New Zealand	413.7	407.5	409.9
Brunei	6.4	5.5	5.2
Total TPP	89,327.6	91,564.3	85,820.5
ROW			
Belgium	13,232.8	14,842.7	15,566.2
China	14,591.1	14,603.0	14,147.6
Other ROW	96,945.9	96,861.1	93,996.7
Total ROW	124,769.9	126,306.9	123,710.5
Total	214,097.4	217,871.2	209,531.0

Source: USITC DataWeb/USDOC (accessed February 10, 2016).

Note: Totals may not sum due to rounding. ROW = rest of world. Data are for NAICS 325 and 326, excluding some agricultural products. The agricultural products accounted for a relatively small share of total and TPP trade.

U.S. imports of chemicals (including pharmaceuticals) from TPP partners totaled \$67 billion in 2015, with Canada, Japan, Mexico, Singapore, and Malaysia accounting for 97 percent of TPP imports (see table 4.25). About 88 percent of U.S. imports from TPP parties entered duty-free in 2015 under various programs, including U.S. FTAs or the Agreement on Trade in Pharmaceutical

⁶⁰⁶ USITC DataWeb/USDOC (accessed January 21, 2016).

Products.⁶⁰⁷ The remainder were subject to an average duty of about 4.7 percent. Since many of the chemicals traded between the United States and non-TPP parties are directly comparable in cost and quality, tariff reductions will likely lead to higher imports.

Table 4.25: U.S. imports for consumption of chemicals, million dollars

	2013	2014	2015
TPP			
Canada	33,993.7	34,442.1	32,488.6
Japan	14,006.7	13,897.7	13,027.5
Mexico	9,629.0	10,384.4	10,440.4
Singapore	5,996.1	6,047.8	6,336.9
Malaysia	1,815.6	2,002.4	2,057.4
Chile	816.0	847.9	820.6
Vietnam	387.0	455.4	662.4
Australia	656.0	584.6	595.3
New Zealand	104.2	91.4	108.7
Peru	202.8	122.5	96.7
Brunei	7.0	16.1	5.3
Total TPP	67,614.2	68,892.3	66,639.9
ROW			
China	32,202.3	34,622.0	33,190.1
Ireland	20,399.3	21,395.4	25,742.8
Germany	21,363.2	24,618.5	24,126.7
Other ROW	147,410.6	151,672.4	163,167.8
Total ROW	180,576.8	189,517.5	194,741.8
Total	248,191.0	258,409.7	261,381.7

Source: USITC DataWeb/USDOC (accessed February 10, 2016)

Note: Totals may not sum due to rounding. ROW = rest of world. Data are for NAICS 325 and 326, excluding some agricultural products. The agricultural products accounted for a relatively small share of total and TPP trade.

Summary of Provisions

TPP would immediately eliminate duties on almost 97 percent of U.S. chemical exports to the “new” TPP partners, resulting in a lower-bound estimate of duty savings of at least \$570 million (based on 2015 data).⁶⁰⁸ TPP would also immediately eliminate tariffs from new partners on about 87 percent of U.S. imports. The value of U.S. dutiable imports of chemicals from TPP countries was relatively low in 2015 (about \$8 billion, or 12 percent of total such imports), but

⁶⁰⁷ The Agreement on Trade in Pharmaceutical Products (also called the Pharmaceutical Zero-for-Zero Initiative) was negotiated pursuant to authority contained in legislation that implemented the Uruguay Round Agreements and entered into force in 1995. It eliminated tariffs on pharmaceuticals for all WTO members. Other agreements providing duty-free entry for many chemicals that entered into force in 1995 under the Uruguay Round Agreements include the Uruguay Round Concessions on Intermediate Chemicals for Dyes and the Chemicals Tariff Harmonization Agreement.

⁶⁰⁸ USITC estimates. This duty savings estimate, based on an average rate of duty of 5 percent, could be much higher, given that the new TPP markets have fairly high tariffs for certain chemicals.

elimination of duties would potentially result in industry savings of almost \$400 million annually, based on an average duty rate of 4.7 percent in 2015.⁶⁰⁹

A number of TPP provisions, aside from tariff rate reductions or eliminations, would have a significant impact on the chemical industry. First, ROOs are very important in this sector (TPP, Chapter 2, Annex 3-D; HTS chapters 28–40). The TPP Agreement, like many of the newer FTAs, adds process rules to supplement tariff shifts as criteria to determine origin (Chapter 2, Annex 3-D, notes for Section VI and HTS Chapter 39). For example, the chemical reaction rule is considered a useful alternative to tariff shifts to confer origin, since many chemicals can be produced via chemical reactions without undergoing a subheading-level change. Under the tariff shift requirement, “the foreign input must have a different heading or subheading than the exported product.”⁶¹⁰

However, the TPP ROOs also include regional value content (RVC) rules, which are generally not favored by industry;⁶¹¹ sources also note the potential for colorants to be imported from non-TPP parties under the ROOs for HS Chapter 32. Importers reportedly can choose the rules that work best for them under a particular agreement, but then the provisions of that agreement apply to all phases of the transaction. For example, according to one source, if an importer chooses any rule under TPP, then the transaction will be subject to TPP-specific provisions (e.g., customs entry fees would be charged and duty drawback would be available). Alternatively, if the importer is using a NAFTA rule, then customs entry fees would not be charged, but duty drawback would not be available either.⁶¹²

TPP’s provisions with regard to regulatory harmonization and the ability to maintain or develop transparent, risk-based regulatory systems⁶¹³ (Articles 25.2–25.5) are likely to have a substantial impact on the chemical and pharmaceutical sectors. So will transparency provisions for pharmaceutical pricing and reimbursement policies (TPP Annex 26-A, paragraph 26-A.2), along with issues related to IP, including biologics and data protection. The TPP Cosmetics Annex (Annex 8-D) is expected to harmonize regulations among TPP partners, reportedly allowing U.S. companies to enjoy similar benefits to those in the Association of Southeast Asian Nations and Latin American regional agreements, according to the Personal Care Products Council (PCPC). Among other things, potential benefits cited by the PCPC include addressing divergent labeling requirements among individual markets, eliminating requirements for Certificates of Free Sale, and eliminating dual registration for products that “only differ by

⁶⁰⁹ Based on duties paid on dutiable U.S. imports in 2015. USITC DataWeb/USDOC (accessed February 10, 2016).

⁶¹⁰ USDOC, ITA, “North American Free Trade Agreement: Rules of Origin,” December 17, 2014.

⁶¹¹ One source cited the reported difficulty of “proving” RVC thresholds as prices fluctuate. “Chemical Reaction Rule Under Rules of Origin--Proposal by Australia,” n.d. (accessed March 15, 2015).

⁶¹² Industry representative, email message to USITC staff, March 11, 2016.

⁶¹³ Regulatory issues, technical barriers to trade, and standards are addressed in more detail in chapter 6 of this report.

shade or fragrance.” TPP also addresses processes for developing chemical regulations, as well as good regulatory practices for chemicals.⁶¹⁴

In regard to intellectual property rights (IPR), a provision important to the pharmaceutical sector is the length of the term of protection for data related to new biologic products (Article 18.52).⁶¹⁵ About 900 biologic products are currently under development in the United States.⁶¹⁶ As noted in chapter 6 of this report, where IPR is addressed in more detail, TPP requires at least 8 years of protection, or at least 5 years of protection plus other measures to deliver a comparable outcome, for a new biologic product.

Impact on U.S. Exports

The Commission’s model results estimate that U.S. exports of chemicals would be \$1.9 billion higher as a result of TPP (about 0.7 percent above the 2032 baseline estimate).⁶¹⁷ Products in the “other chemicals” category are projected to drive the increase. Japan, Malaysia, and Vietnam—which are not partners in existing U.S. FTAs and which have fairly high rates of duty for certain chemicals—are expected to account for about half the TPP increase.⁶¹⁸ Whereas U.S. chemical exports to Japan and Malaysia are expected to increase by about 12 and 41 percent, respectively, such exports to Vietnam are expected to more than double, increasing by about \$882.4 million to \$1.7 billion.⁶¹⁹ Higher U.S. chemical exports to Japan would be split between pharmaceuticals and other chemicals (about one-third and two-thirds, respectively); higher exports to Malaysia and Vietnam would mostly consist of other chemicals. The model indicates that the increased TPP exports would likely redirect U.S. exports away from non-TPP parties, including the EU and China.

⁶¹⁴ USDOC, ITA, “Opportunities for the Chemical Sector,” November 2015.

⁶¹⁵ Article 18.52.2 defines a biologic as, at a minimum, a product that is or contains a protein produced using biotechnology processes, for use in human beings for the prevention, treatment, or cure of a disease or condition. Biologic products are considered to represent a major area of U.S. biopharmaceutical innovation and investment. Data protection precludes the unauthorized use by others—for example, generic drug companies—of the clinical test data and other information generated to support a new product for a specified period of time. BIO, written submission to the USITC, February 17, 2016, Appendix A.

⁶¹⁶ *Economist*, “Going Large,” January 3, 2015; PhRMA, “Medicines in Development: Biologics 2013,” February 7, 2013. The Biotechnology Innovation Organization (BIO) estimates that U.S. exports of biopharmaceuticals to TPP countries in 2014 were valued at about \$8 billion and that biologics accounted for about 28 percent of that total (or \$2.3 billion). The top three markets for biopharmaceuticals in 2014 were Canada, Mexico, and Australia.

⁶¹⁷ The ACC projected export growth of \$1.2 billion. USITC, hearing transcript, January 13–15, 2016, 750 (testimony of Greg Skelton, American Chemistry Council).

⁶¹⁸ The International Trade Administration of the U.S. Department of Commerce, noted that the three countries have fairly high rates of duty for certain chemicals. USDOC, ITA, “Opportunities for the Chemical Sector,” November 2015. According to USITC analysis, the simple averages of the duty rates for U.S. exports of cosmetics to Vietnam are fairly high; for example, the averages for two HS 6-digit subheadings are as high as 16–18 percent.

⁶¹⁹ Large absolute increases to NAFTA partners Canada and Mexico are also projected but, given that they are already such large U.S. partners, the growth in U.S. exports to the NAFTA partners is fairly small in percentage terms.

The tariff liberalization is also expected to help producers of products subject to lower rates of duty. ANSAC, an organization representing the three U.S. producers of natural soda ash, said that the immediate elimination of duties on soda ash in Japan and Vietnam will make the U.S. industry more competitive in those markets versus synthetic soda ash from China. ANSAC stated that the U.S. industry exported about \$400 million of soda ash to Asia in 2014.⁶²⁰

The TPP ROOs may facilitate the increase in exports because companies will be able to use multiple criteria, including the chemical reaction rule and other process rules, to determine eligibility for TPP preferential tariff rates. This is expected to ease the administrative burden on companies.

Impact on U.S. Imports

Model results indicate that overall U.S. imports of chemicals would be \$5.3 billion (1.3 percent) higher annually as a result of TPP, compared to the estimated 2032 baseline. Pharmaceuticals would account for 30 percent of the total estimated increase, versus 70 percent for other chemicals.

The increase in chemicals imports would likely be driven by the new FTA partners, particularly Japan and Malaysia, with smaller absolute increases from Brunei, New Zealand, and Vietnam.⁶²¹ U.S. imports of chemicals from Japan would reach \$10.8 billion (about \$1.8 billion or 20 percent above the baseline), with chemicals and pharmaceuticals accounting for about two-thirds and one-third of the increase, respectively. Imports from Malaysia would reach \$5.1 billion, about \$1.2 billion (or about 30 percent) above than the baseline. Other chemicals would account for most of the higher imports. These TPP imports would likely displace imports from the EU, China, and South Korea, as well as displacing some U.S. production. The ROOs may facilitate increased imports. Under TPP ROOs, companies would be able to use multiple criteria, including the chemical reaction rule and other process rules, to determine eligibility for TPP preferential tariff rates, thereby easing their administrative burden.

Summary of Views of Interested Parties

Several parties testifying at the Commission's hearing discussed the importance of reducing or eliminating tariffs on chemical products among TPP parties. In addition, a number of observers stated that other TPP provisions would have valuable benefits for the chemical industry, including provisions addressing regulatory coherence and transparency. Sources also stressed the importance of strong provisions within the agreement should other countries wish to join at

⁶²⁰ ANSAC, "ANSAC Supports the Trans-Pacific Partnership (TPP)," October 15, 2015.

⁶²¹ Large absolute increases to NAFTA partners Canada and Mexico are also projected but, given that they are already such large U.S. partners, the NAFTA percentage is relatively small.

a later date. Comments about the agreement generally addressed five main categories: tariff elimination; ROOs; regulatory issues, including the Cosmetics Annex; IP; and cross-border data flows.

Tariff elimination/reductions. U.S. industry representatives generally indicated that they support tariff elimination/reduction in TPP parties, including Japan, Vietnam, and Malaysia—all of which have fairly high tariffs for U.S. chemical exports. Benefits resulting from the tariff liberalization are said to range from potential market expansion for U.S. companies, including small and medium-sized enterprises, to the provision of a larger variety of products to growing higher-income populations in TPP countries.⁶²² For its part, Halosil says that the elimination of tariffs would make its products more cost-competitive in TPP markets, noting: “Tariffs on our product make it artificially cheaper for buyers in Chile and Peru to purchase from one of our competitors in Spain.”⁶²³ The Color Pigments Manufacturers Association, Inc. (CPMA), on the other hand, stated that the “immediate removal of tariffs on the products of concern to CPMA would have a negative impact on the domestic production of pigments.”⁶²⁴

Rules of origin. Industry representatives generally expressed support for the chemical ROOs, particularly the chemical process rules.⁶²⁵ However, ITAC-3 expressed concern about the inclusion of regional value content rules. ITAC-3 and CPMA also stated concern that the ROOs for HTS headings 3207– 3212 and 3215 (characterized by ITAC-3 as “weaker”) would allow for duty-free entry of colorants from non-TPP parties as well as TPP parties.⁶²⁶

Arkema Inc. supports the chemical reaction rule, saying it will require less documentation. It adds that “the rule will provide a clear, bright line standard that will help businesses up and down the value chain to understand what does, and what does not, qualify for duty-free treatment.” But the company expressed concern that changes to the chemical reaction rule may present challenges for at least one of their products, because competitors would also be able to import materials duty free.⁶²⁷

Regulatory Issues, including the Cosmetics Annex. Industry representatives generally indicated support for the regulatory provisions and the cosmetics annex in TPP. They cited numerous

⁶²² ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 7, 10, 12, 13; PCPC, written submission to the USITC, January 22, 2016, 1; P&G, written submission to the USITC, February 12, 2015, 4; High Impact Technology, LLC, written submission to the USITC, February 12, 2016, 1; USITC, hearing transcript, January 13–15, 2016, 758 (testimony of Maryalice Panarello StClair, Halosil International).

⁶²³ Halosil International, written submission to the USITC, December 21, 2016, 1.

⁶²⁴ CPMA, written submission to the USITC, February 12, 2016, 2, 4.

⁶²⁵ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 7, 10, 12, 13; Arkema Inc., written submission to the USITC, February 12, 2016, 1–2.

⁶²⁶ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 7, 10, 12, 13; CPMA, written submission to the USITC, February 12, 2016, 2, 4.

⁶²⁷ Arkema Inc., written submission to the USITC, February 12, 2016, 1–2.

benefits, including the ability for U.S. companies to compete in countries that currently receive benefits through mutual recognition agreements in Asia and Latin America. Companies also said that both regulatory harmonization and the cosmetics annex will likely reduce marketing and administrative costs and shipping delays.⁶²⁸ Two pharmaceutical industry representatives cited the importance of transparency provisions with regard to pricing, reimbursement, and regulatory policies in TPP countries.⁶²⁹

IPR issues. ITAC-3, BIO, and PhRMA expressed concerns about data protection for biologics. ITAC-3 says its members are generally split regarding the issue. Whereas ITAC-3 members in the generic pharmaceuticals sector generally support the agreement overall, its members in innovative pharmaceutical companies are concerned about the provisions addressing data protection for biologics.⁶³⁰ BIO and PhRMA also say that the term of data protection for biologics is too short, potentially reducing innovation cycles that lead to new products while simultaneously allowing earlier market entry for biosimilars.⁶³¹ BIO adds that the shorter period will likely also allow “foreign competitors to appropriate U.S. technology more quickly, effectively free-riding on U.S. research and development costs.”⁶³² Although BIO cannot quantify the value of the prospective impact on the U.S. biologics industry, it predicts in its submission that U.S. biologic exports to TPP countries (valued at \$2 billion) and U.S. jobs will be affected negatively. The Personal Care Products Council also expressed concerns about counterfeit and parallel imports.⁶³³

Public Citizen and Médecins Sans Frontières asserted that TPP will limit generic competition and, therefore, make medicines more costly and less available globally.⁶³⁴ Public Citizen also

⁶²⁸ USITC, hearing transcript, January 13–15, 2016, 757–58 (testimony of Maryalice Panarello StClair, Halosil International); P&G, written submission to the USITC, February 12, 2016, 5–6; PCPC, written submission to the USITC, January 22, 2016, 2. As noted by the PCPC in their posthearing submission, “In an internal confidential survey, companies reported spending anywhere from \$2,000–\$5,000 a year on certificates of free sale for entry into TPP markets. Product registrations range from \$100 to more than \$5,000 when including product fees, consultants, and FTE hours.” According to PCPC, one company also said that rules making it unable to overlabel/sticker a product—requiring it to change the product’s packaging for a single market—would cost it an extra \$30,000 and two months’ delay in market entry.

⁶²⁹ PhRMA, written submission to the USITC, February 11, 2016, 3; industry representative, telephone interview by USITC staff, February 26, 2016. The industry representative also mentioned that KORUS was the first FTA to incorporate such transparency provisions.

⁶³⁰ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 7, 10, 12, 13.

⁶³¹ BIO, written submission to the USITC, February 17, 2016; PhRMA, written submission to the USITC, February 11, 2016. Biosimilars are a type of biological product that are licensed (approved) by U.S. Food and Drug Administration (FDA) because they are highly similar to an already FDA-approved biological product, known as the biological reference product (reference product), and have been shown to have no clinically meaningful differences from the reference product. U.S. FDA, “Information for Consumers (Biosimilars),” August 27, 2015.

⁶³² BIO, written submission to the USITC, February 17, 2016.

⁶³³ PCPC, written submission to the USITC, January 22, 2016, 1.

⁶³⁴ Public Citizen, written submission to the USITC, December 29, 2015, 1, 6; Médecins Sans Frontières, written submission to the USITC, December 22, 2015, 1–2.

stated that TPP’s Annex on Transparency and Procedural Fairness for Pharmaceutical Products and Medical Devices “may potentially constrain future policy reforms, including the ability of the U.S. government to curb rising and unsustainable drug prices.”⁶³⁵ On the other hand, PhRMA and BIO said that the U.S. industry works to make pharmaceuticals accessible globally.⁶³⁶ PhRMA also stated that a “strong TPP must contain essential transparency provisions that ensure due process in pricing, reimbursement and regulatory policies of TPP countries.”⁶³⁷ Both Leading Biosciences and High Impact Technology, LLC, said that IPR protection is a challenge for them. They note that strengthened IPR protection under TPP will potentially allow them to expand internationally.⁶³⁸

Other Issues. Several other issues were raised by industry, including concern about likely conflicts between TPP and existing U.S. bilateral FTAs. ITAC-3 recommended that the office of the U.S. Trade Representative (USTR) provide more detailed information about the interaction of the agreements and their benefits.⁶³⁹ As mentioned earlier, chemical industry sources cited other TPP chapters as important facets of the agreement, including Regulatory Coherence; new provisions on cross-border data flows in the E-commerce chapter (which are reportedly expected to boost e-commerce among the TPP parties); new provisions on state-owned enterprises; investment; and IPRs, among other areas.⁶⁴⁰

Titanium Metal

Assessment

U.S. titanium metal⁶⁴¹ imports from TPP members, according to Commission estimates, would likely increase by \$202.1 million (109.7 percent) as compared to the 2032 baseline. U.S. output would decrease by \$202.4 million (1.2 percent) and employment would similarly decline by 1.3 percent, as compared to the 2032 baseline. Japan is the principal source of U.S. titanium imports,⁶⁴² despite a 15 percent U.S. import duty on both unwrought titanium (i.e., titanium sponge, ingot, billet, and powders) and wrought titanium (e.g., bars, sheets, and tubes) (box 4.12), and would benefit the most from the removal of duties. U.S. exports of titanium would

⁶³⁵ Public Citizen, written submission to the USITC, December 29, 2015, 3.

⁶³⁶ BIO, written submission to the USITC, February 17, 2016, 5; PhRMA, written submission to the USITC, February 11, 2016, 3.

⁶³⁷ PhRMA, written submission to the USITC, February 11, 2016, 3.

⁶³⁸ Leading Biosciences, written submission to the USITC, February 11, 2016, 1; High Impact Technology, LLC, written submission to the USITC, February 12, 2016, 1.

⁶³⁹ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 7, 10, 12, 13.

⁶⁴⁰ The Dow Chemical Company, written submission to the USITC, February 15, 2015, 2–3; P&G, written submission to the USITC, February 12, 2016, 1, 2, 5; Leading Biosciences, written submission to the USITC, February 11, 2016, 1; High Impact Technology, LLC, written submission to the USITC, February 12, 2016, 1.

⁶⁴¹ Defined as HS codes 8108.20-8108.90.

⁶⁴² Principally titanium sponge, HTS 8108.20.0010.

be slightly lower—other TPP members already apply low or zero duties on imports of these products.

Box 4.12: The Titanium Production Process

Titanium is a specialty metal used in a variety of applications, from golf clubs to aerospace.^a Certain properties of titanium make it ideal for applications where other metals would not be suitable, including its corrosion resistance^b and strength at high temperatures. Titanium is also valued for its high strength-to-weight ratio, being 30 percent stronger than steel but about half steel’s weight; it is twice as strong as aluminum, although 60 percent heavier.^c

Titanium has a unique production process that differentiates it from other metals. Using chemical processes, titanium-bearing ores are converted into titanium tetrachloride (TiCl₄) that is then combined with magnesium under heat and pressure to produce magnesium chloride and a pitted block of titanium metal, called titanium sponge. The titanium sponge is next crushed, sorted, melted, and alloyed with other metals to produce titanium ingot. Ingot can then be manufactured into other downstream titanium products such as sheet, plate, and bar, and then into final products such as aircraft parts.^d See figure below for an illustration of this process and the corresponding HTS numbers. Different countries may be involved in some or all of the various production steps. Titanium metal is traded internationally at the sponge, ingot, and downstream stages.

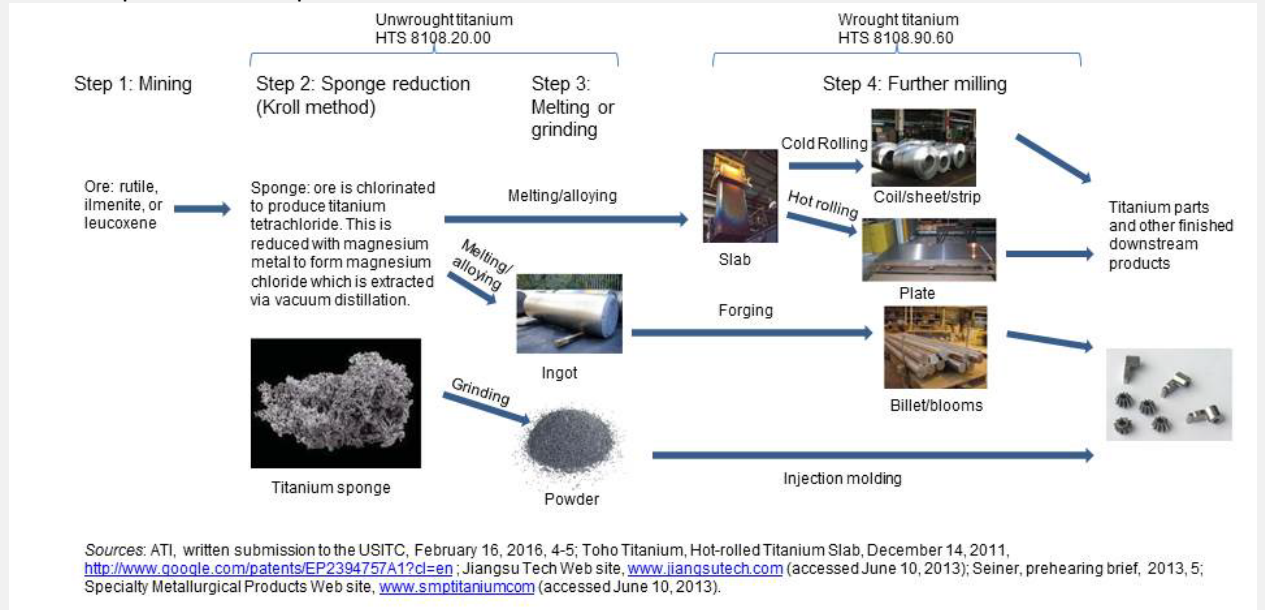
^a Titanium metal is a distinct product from titanium pigments, although both are derived from the same titanium-bearing ores. Titanium metal accounted for less than 7 percent of titanium mineral concentrate use in 2013, while titanium pigments accounted for 93 percent. Bedinger, “Titanium,” 2015, 2.

^b Pure titanium metal is highly reactive with oxygen. On contact with oxygen, it forms a protective oxide layer that provides corrosion resistance in many applications, such as to chemical exposure and seawater. RMI Titanium, “Titanium Alloy Guide,” June 2014, 1.

^c ASM, “All about Titanium Aerospace Metal” (accessed February 25, 2016).

^d Seong, “Titanium,” 2009, 9–10.

Titanium production steps



Overview of U.S. Trade with TPP Partners

U.S. exports of titanium metal totaled 35,041 metric tons (mt) in 2015, of which 26 percent went to TPP partners. However, only three TPP partners—Canada, Japan, and Mexico⁶⁴³—are significant U.S. destination markets for these goods (table 4.26 and box 4.13). Of these three countries, only Japan currently applies import tariffs on U.S. titanium (at a relatively low rate of 3 percent ad valorem). These already relatively low tariffs would be removed immediately upon EIF.

Table 4.26: U.S. domestic exports of titanium products, metric tons

Country	2013	2014	2015
TPP			
Canada	2,750	3,341	4,364
Japan	1,935	1,476	2,628
Mexico	1,531	1,724	1,495
Other TPP	394	447	602
Total TPP	6,611	6,989	9,089
ROW			
United Kingdom	11,071	10,455	10,805
France	4,500	4,700	5,054
Germany	1,566	1,695	1,752
Italy	1,358	1,503	1,692
China	909	780	1,089
Other ROW	8,878	7,342	5,559
Total ROW	28,281	26,476	25,952
Total	34,892	33,465	35,041

Source: USITC DataWeb/USDOC (accessed February 29, 2016), for HS 8108.20, 8108.30, and 8108.90.

Note: Totals may not sum due to rounding. ROW = rest of world.

Box 4.13: The U.S. Titanium Industry

Currently, there are two integrated titanium producers in the United States, Allegheny Technologies Incorporated (ATI)^a and the Titanium Metals Corporation (TIMET), which was acquired by Precision Castparts in 2013.^b Both firms produce sponge, ingot, and downstream titanium products.^c A third U.S. titanium ingot and downstream titanium parts manufacturer is RTI, which was acquired by Alcoa on July 23, 2015.^d RTI has focused on the downstream titanium market. With the qualification of ATI's new titanium sponge facility, the company now produces all its required titanium sponge in-house;^e however, both TIMET and RTI import titanium sponge, either to supplement U.S. titanium sponge production (TIMET) or for all downstream titanium production (RTI).^f The United States accounts for roughly a third of titanium sponge imports globally, by value.^g U.S. titanium sponge employment was estimated at 300 individuals in 2014;^h together with downstream titanium ingot and cast part producers, in 2013 estimated employment in the U.S. titanium industry totaled more than 4,000 workers. TIMET alone employed more than 2,000 workers in 2013, and RTI employed 732 people in its titanium segment in 2014.ⁱ

⁶⁴³ U.S. imports of titanium products from Japan, however, have averaged close to 10 times U.S. exports of titanium products to Japan during 2011–15.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

^a ATI, *2014 Annual Report*, 2015, F-3.

^b Haflich, "Titanium Industry Undergoes Massive Changes into 2013," January–February 2013, 15.

^c TIMET is also integrated one step further upstream and produces its own TiCl₄. Precision Castparts, *Annual Report*, 2015, 2015, 5.

^d Metal Bulletin, "RTI Returns to Black in Q1," April 29, 2015. Alcoa intends to create a separate business unit called Alcoa Titanium and Engineered Products and expects to take advantage of titanium's growth in the aerospace market and RTI's downstream product manufacturing capabilities. Smart, "Alcoa Completes Acquisition of RTI," July 23, 2015.

^e ATI, written submission to the USITC, February 16, 2016, 16.

^f ATI, written submission to the USITC, June 17, 2013, 3.

^g GTIS, Global Trade Atlas database, HS 8108.20 (accessed February 25, 2016).

^h Bedinger, "Titanium and Titanium Oxide," January 2015.

ⁱ Seiner, prehearing statement to the USITC, 2013, 2–3; RTI, "Form 10-K," 2015.

U.S. titanium metal imports increased 21 percent during 2013–15, rising from 40,076 mt to 48,374 mt (table 4.27). TPP members were a significant source of U.S. imports, supplying 44 percent of U.S. imports in 2015, 90 percent from Japan. Japan is a major global producer of titanium metal, as discussed below.

Table 4.27: U.S. imports for consumption of titanium products, metric tons

Country	2013	2014	2015
TPP			
Japan	15,430	15,917	19,264
Canada	965	1,088	899
Mexico	655	967	958
Other TPP	177	499	389
Total TPP	17,227	18,471	21,511
ROW			
United Kingdom	3,627	3,692	4,480
Russia	6,308	4,773	4,446
Germany	2,444	3,809	3,869
France	2,235	2,534	3,412
China	4,156	3,141	2,637
Other ROW	4,079	8,497	8,020
Total ROW	22,849	26,447	26,863
Total	40,076	44,918	48,374

Source: USITC DataWeb/USDOC (accessed February 29, 2016), for HS 8108.20, 8108.30, and 8108.90.

Note: Totals may not sum due to rounding. ROW = rest of world.

Summary of Provisions

Given the anticipated increase of U.S. imports from Japan, import duties were negotiated to be phased out over 10- or 15-year periods (see table 4.28). Staged tariff reductions would be granted only for U.S. imports from Japan and not imports from any other TPP member country.

Table 4.28: U.S. titanium tariff provisions for Japan

HTS	Description	Base rate (percent)	Negotiated tariff phaseout
8108.20.00	Titanium, unwrought; titanium powders	15	15-year, 1 percent annual reduction
8108.90.30	Titanium, articles nesoi	5.50	10-year, .55 percent annual reduction
8108.90.60	Titanium, wrought nesoi	15	10-year, 1.5 percent annual reduction

Source: U.S. TPP Tariff Schedule, October 30, 2015.

Note: Nesoi = not elsewhere specified or included.

Two other provisions would have possible implications for the U.S. titanium industry. The first is that under the tariff differential rule, Japanese titanium that is still subject to tariffs could receive duty-free U.S. import treatment if it were to undergo more than “a minimal operation” in another TPP member country (e.g., something other than packaging, such as extruding titanium billet into bars).⁶⁴⁴ Second, under TPP’s rules of origin (ROOs), as applied to titanium classified under HS 8108.20-8108.90, a product would be considered to be of TPP origin if it undergoes “a change to a good of subheading 8108.20 through 8108.90 from any other subheading,”⁶⁴⁵ possibly permitting titanium from a non-TPP member country to enter the United States duty free with minimal processing in a TPP-member country other than Japan. This is particularly relevant for titanium billet, currently classified as an unwrought product in 8108.20.00.⁶⁴⁶ This is because titanium billet, in particular, may be imported and modified relatively easily in a steel rolling mill into downstream wrought titanium products, a capability currently possessed by a majority of TPP member countries.

Impact on U.S. Exports

The impact of TPP on U.S. exports of titanium products is not expected to be significant. Model results indicated that U.S. exports of titanium products would be \$33.9 million (1.1 percent) less than the projected 2032 baseline. An increase in exports to TPP members of \$47.3 million (7.1 percent) would be offset by an \$81.2 million (3.4 percent) decline in exports to the rest of world, as increased demand within the TPP region leads to higher prices and non-TPP economies turn to suppliers outside the region.

Impact on U.S. Imports

⁶⁴⁴ Horgan, written submission to the USITC, December 29, 2015, 2; ATI, written submission to the USITC, February 16, 2016, 18.

⁶⁴⁵ TPP, Annex 3-D, Product-Specific Rules of Origin.

⁶⁴⁶ The U.S. HTS classification for titanium billet currently does not fit the standard wrought versus unwrought metal product distinction. This billet classification issue has implications for U.S. rules of origin under TPP because titanium billet is currently classified as an unwrought product under HTS 8108.20.00 (despite its forging production requirements), but requires only limited processing (i.e., forging or rolling), using the same equipment as in a steel rolling mill, to be modified to downstream titanium bars or sheets under HTS 8108.90.60. This processed wrought titanium could then receive TPP preferential duties from any TPP partner other than Japan upon EIF due to the negotiated tariff provisions. For more background on U.S. titanium billet classification, please see Customs Ruling HQ 966570, November 7, 2003, and Customs Ruling HQ H027436, April 16, 2009.

Model results indicated a significant increase in U.S. imports of titanium products, with imports from TPP members—particularly Japan—\$202.1 million (109.7 percent) higher compared to the 2032 baseline. Imports from non-TPP countries would be \$86.8 million (13.8 percent) lower, resulting in an increase from all countries of \$115.4 million (14.2 percent).

Although the United States is relatively dependent on imports of titanium sponge to supply its upstream titanium requirements, with imports supplying approximately 73 percent of U.S. consumption in 2015,⁶⁴⁷ the anticipated increased imports due to lower U.S. tariffs could negatively impact the U.S. industry. In addition to the expected growth in U.S. imports of unwrought titanium, wrought titanium imports may also increase indirectly from third-party countries, given the proposed ROOs as well as the Japanese titanium industry’s recent moves into downstream titanium products. Japan has a large titanium sponge industry, and the United States is its principal export market (table 4.29). The Japanese industry primarily manufactures and exports upstream titanium sponge,⁶⁴⁸ which can be used for aircraft engine rotating parts. Japanese firms, however, have announced their intentions to move further into value-added downstream titanium aerospace products, which would compete more directly with downstream U.S. titanium manufactures.⁶⁴⁹

Table 4.29: Japanese production of titanium sponge and unwrought titanium exports to the United States, thousand metric tons

	2011	2012	2013	2014	2015
Japanese production	40.0	40.0	42.0	25.0	30.0
Japanese exports to the United States	15.9	18.9	13.7	12.8	15.1

Source: Bedinger, “Titanium and Titanium Dioxide,” 2012–15; GTIS, Global Trade Atlas database, Japanese exports of 8108.20.100 (accessed February 11, 2016, 2016).

Note: Japanese and global titanium sponge production declined in 2015 due in part to high inventory levels that reflected overcapacity in the industry.

Summary of Views of Interested Parties

TIMET and ATI provided written submissions to the USITC regarding the potential impacts of TPP on the U.S. titanium industry. Both companies noted the likely increase in U.S. imports of titanium from Japan and its possible negative impacts on the U.S. unwrought titanium industry.⁶⁵⁰ The two companies also highlighted the tariff differential rule, noting that Japanese titanium subject to tariffs could receive duty-free U.S. import treatment if it were to undergo

⁶⁴⁷ ATI, written submission to the USITC, February 16, 2016, 28.

⁶⁴⁸ Premium quality (PQ) titanium, which has been qualified for rotary grade aircraft engine parts, requires a particularly rigorous inspection and sorting process. In fact, sponge from the bottom of the titanium metal production crucible cannot be used for PQ sponge, and after crushing, the titanium must be visually inspected for size inconsistencies.

⁶⁴⁹ Metal Bulletin, “Kobe Sets \$91.5M Titanium Expansion,” March 10, 2012.

⁶⁵⁰ Horgan, written submission to the USITC, December 29, 2015, 1; ATI, written submission to the USITC, February 16, 2016, 7.

more than a minimal operation in another TPP member country, thereby potentially disrupting the U.S. market.⁶⁵¹ Both companies also discussed their concerns with the ROOs as they are applied to titanium and noted that they may allow Russian or Chinese titanium that is currently subject to the 15 percent ad valorem U.S. import duties to enter the United States duty free after minimal modification in a third-party TPP country.⁶⁵² The industry is particularly concerned with this last point, given that these ROOs are the same as those originally set out in the 2012 U.S.-Korea free trade agreement and there has been an increase in U.S. imports of titanium mill products from South Korea utilizing inputs (ingots and slabs) from Kazakhstan as a result.

Other Sectoral Issues

Four other sectors did not meet the criteria for full sector analyses, but warrant further discussion based on their size or treatment in TPP. First, aerospace did not fit the criteria for sector analyses above, given the low trade barriers, but is the largest U.S. manufactured goods and natural resource and energy (MNRE) export sector (at the NAICS 4-digit level). Second, motorcycles constitute a small U.S. export sector in comparison to other transportation equipment and one for which U.S. duties range from 0 to 2.4 percent. However, the reduction in tariffs in Malaysia and Vietnam may have significant implications for U.S. exports. Finally, crude petroleum and natural gas face low tariff barriers, but recent changes in U.S. law and the potential facilitation of U.S. exports of natural gas as a result of its receiving national treatment under TPP have implications for U.S. trade in these products. These sectors are briefly discussed below.⁶⁵³

Aerospace Considerations in TPP

The aerospace market in the TPP region is large and growing, with TPP members' aircraft orders forecast to total 11,640 aircraft, worth about \$1.5 trillion, over 20 years.⁶⁵⁴ The United States has the largest industry in the region, with \$222.2 billion in shipments of aircraft and parts in

⁶⁵¹ Horgan, written submission to the USITC, December 29, 2015, 2; ATI, written submission to the USITC, February 16, 2016, 18.

⁶⁵² Horgan, written submission to the USITC, December 29, 2015, 1; ATI, written submission to the USITC, February 16, 2016, 27.

⁶⁵³ Aerospace and motorcycles are included in the other transportation equipment sector in the Commission's model. This sector also includes rolling stock, ships, and other vehicles. The Commission's model results indicate that exports of other transportation equipment will increase by 1.3 percent and imports by 2.1 percent as compared to the 2032 baseline. Exports of oil are projected to increase 7.8 percent and exports of gas by 5.3 percent, while imports are projected to increase by 0.3 and 6.1 percent, respectively.

⁶⁵⁴ Boeing estimate cited in Harress, "Trans-Pacific Partnership," October 6, 2015.

2015.⁶⁵⁵ Tariffs in the region generally have little impact on U.S. aerospace exports, as most U.S. exports of aircraft, spacecraft, gas turbines, and other major parts enter duty free.⁶⁵⁶

According to industry representatives, TPP would likely have a positive benefit on U.S. aerospace production. They indicated that the agreement will (1) increase trade, resulting in higher demand for aircraft in the region; (2) improve U.S. relationships with TPP parties, which will support demand for defense products; and (3) make regional supply chains more efficient, particularly for parts produced in Japan.⁶⁵⁷

Labor unions, however, have indicated that TPP could have a detrimental impact on U.S. aerospace production and employment. They note that Malaysia and Vietnam already produce aircraft parts and are planning to further increase production. The unions note that these countries' lower labor standards and their ability to continue to use offsets under TPP would lead companies to relocate production to those countries.⁶⁵⁸ Aerospace manufacturers, on the other hand, have stated that production is unlikely to move to developing countries due to the sophisticated manufacturing processes, skilled workforce, and high-quality output required.⁶⁵⁹

Removal of Tariffs on Motorcycles in Malaysia and Vietnam

In 2015, the U.S. exported \$1.2 billion in motorcycles, of which 43 percent went to TPP parties.⁶⁶⁰ U.S. motorcycle manufacturers have spoken in support of TPP, because the agreement would lower tariffs on U.S. exports of motorcycles to Malaysia and Vietnam. The 30 percent tariff in Malaysia would be eliminated by year 11 after EIF, and an 83 percent tariff

⁶⁵⁵ U.S. Census, "Advance Report," January 28, 2016, 2; PwC, 2015 Aerospace Manufacturing, April 2015, 2.

⁶⁵⁶ These products generally enter the United States duty free. Among TPP members, Canada, Japan, and the United States are signatories to the plurilateral agreement on trade in civil aircraft. TPP, Annex 2-D: Tariff Commitments; WTO website, "Plurilateral Agreement on Trade in Civil Aircraft" https://www.wto.org/english/tratop_e/civair_e/civair_e.htm (accessed January 26, 2016).

⁶⁵⁷ Japanese companies are major suppliers of components for Boeing aircraft. Aerospace Industries Association, written submission to the USITC, January 22, 2016, 1; Boeing, "Boeing CEO," October 5, 2015; Harress, "Trans-Pacific Partnership," October 6, 2015; USITC, *Shifts in U.S. Merchandise Trade, 2014*, Japan section, June 2015; industry representative, telephone interview by USITC staff, February 26, 2016.

⁶⁵⁸ AFL-CIO, written submission to the USITC, December 29, 2015, 14–15; IAM, written submission to the USITC, December 30, 2015, 4; USITC, hearing transcript, January 13, 2016, 171, 174 (testimony of Bruce Olsson, IAM). "Offsets" are industrial compensation arrangements, such as local production requirements, required by foreign governments as a condition of the purchase of goods and services, generally civil aircraft or defense products, from nondomestic suppliers. Dehoff, Dowdy, and Kwon, "Defense Offsets," July 2014.

⁶⁵⁹ USITC, hearing transcript, January 14, 2016, 553–54 (testimony of Karan K. Bhatia, General Electric); Catchpole, "Business Owners," November 3, 2015; industry representative, telephone interview by USITC staff, February 26, 2016.

⁶⁶⁰ USITC DataWeb/USDOC (accessed February 19, 2016); TPP, Chapter 2.

in Vietnam would be eliminated by year 8.⁶⁶¹ Both markets are much larger than the U.S. market for motorcycles, with annual sales in Vietnam alone totaling more than 3 million motorcycles (compared to U.S. sales of approximately half a million). Also, with rising incomes, motorcycles with larger engine capacities (like those produced in the United States) are becoming more popular in Malaysia and Vietnam.⁶⁶²

Crude Petroleum Exports under TPP

Canada had been the only consistent market for U.S. exports of crude petroleum⁶⁶³ before the removal of the 40-year ban on U.S. exports of crude petroleum on December 31, 2015.⁶⁶⁴ In addition, there have been some exports of Alaskan North Slope (ANS) crude to Japan in recent decades.⁶⁶⁵ Japan's refineries were built to utilize heavy crudes such as ANS, and it is likely that such exports would continue and could increase somewhat. However, in order to expand U.S. exports of crude to Japan and other nations, including TPP nations, U.S. port and pipeline infrastructure would need to be built or expanded. Based on low crude petroleum prices, it is not likely that other TPP nations would become markets for U.S. crude exports in the near term.

Implications of National Treatment for Liquefied Natural Gas

Potential markets exist in Japan and Vietnam for increased U.S. exports of LNG under TPP, but such export increases are several years in the future, despite the current abundance of U.S.-

⁶⁶¹ The value of U.S. imports of motorcycles totaled \$2.1 billion in 2015, of which 41 percent was from TPP parties. Japan was the largest foreign supplier of motorcycles to the U.S. market in 2015. U.S. imports of motorcycles with engine capacities not exceeding 700 cubic centimeters, and all motorcycle parts, currently enter the United States duty free, while larger-engine motorcycles are subject to a 2.4 percent rate of duty. Tariffs on U.S. imports from all TPP parties, except Japan and Peru, will be eliminated upon EIF. Tariffs on imports from Japan will remain at 2.4 percent until year 5, when they will be eliminated. Tariffs on imports from Peru will be reduced in stages and will be duty free in year 6. TPP, Chapter 2, U.S. Tariff Elimination Schedule. Model results specific to the motorcycle industry are not available. Motorcycles are included in the "other transportation" category, discussed above.

⁶⁶² Clothier, "Harley Davidson Sees TPP," October 22, 2015; Kaiser, "Assessing the Global Motorcycle Market," June 20, 2015.

⁶⁶³ Before this recent legislation (signed into law by the President on December 18, 2015), exports of crude petroleum had been prohibited since 1973, except to adjacent countries and as approved by the U.S. government. U.S. exports to Canada were part of a commercial exchange agreement between U.S. and Canadian refiners approved by the Secretary of the U.S. Department of Energy.

⁶⁶⁴ While exports are no longer prohibited, export licenses will continue to be required, and the President will retain the authority to impose new export restrictions for a period not to exceed 1 year under certain circumstances, such as severe crude shortages in the United States or if supply shortages or prices increases occur and are likely to cause sustained adverse effects on U.S. employment. Amendment no. 1 to the Senate Amendment to H.R. 2029, 114th Cong. (December 15, 2015), <http://docs.house.gov/billsthisweek/20151214/CPRT-114-HPRT-RU00-SAHR2029-AMNT1final.pdf>.

⁶⁶⁵ In May 1996, the President determined that allowing exports of Alaskan North Slope (ANS) crude coming through Cook Inlet was in the national interest, thus ending the ban on exports of ANS crude only. Japan is the only market for the ANS crude exports.

produced natural gas.⁶⁶⁶ U.S. exports of LNG would likely be limited by infrastructure issues that pose major barriers to trade.⁶⁶⁷ U.S. ports, as well as ports in other countries, are designed either to import or to export LNG; only a few ports worldwide have both facilities in operation.⁶⁶⁸ For example, Vietnam needs to build pipelines and regasification plants in order to import LNG, and Japan needs to increase its existing import capacity at its operational regasification facilities and/or build additional facilities. Additionally, building and retrofitting LNG export terminals is expensive and often encounters long delays.⁶⁶⁹

⁶⁶⁶ Vietnam is not currently an LNG importer but has announced plans to import LNG in the next few years. Other than Japan and Vietnam, no other TPP nation is currently planning to import LNG.

⁶⁶⁷ The Industrial Energy Consumers of America has expressed concern that TPP will lead to increased U.S. exports of natural gas. It indicates that higher exports will lead to lower natural gas prices in Asia and higher prices in the United States, decreasing the competitiveness of U.S. manufacturers. USITC, hearing transcript, January 13, 2016, 857–60 (testimony of Paul N. Cicio, Industrial Energy Consumers of America).

⁶⁶⁸ There are two types of LNG terminals: liquefaction terminals and regasification terminals. Liquefaction terminals receive natural gas by pipeline from a well field. Before it is liquefied the gas must be cleaned of water, carbon dioxide, hydrogen sulfide, and other impurities that might freeze, become corrosive, or interfere with the liquefaction process. Once liquefied, the LNG is sent by pipeline to a LNG carrier ship or into storage to await transport. Regasification terminals receive natural gas—usually by ship—from other areas. At a regasification terminal the LNG might be temporarily stored or sent directly to a regasification plant. Once regasified it is sent by pipeline for distribution or placed in temporary (underground) storage until it is needed.

⁶⁶⁹ NBR Energy Security Program, *The Trans-Pacific Partnership as a Pathway*, January 2015.

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Chapter 5

Impact on U.S. Trade in Services

Introduction

The TPP Agreement would likely positively affect output and employment for the U.S. services sector, although U.S. global net exports of services would likely be lower than the 2032 baseline projections. As a result of TPP, output would rise in nearly all services sectors (except transportation), but demand for U.S. services would increase faster than output, implying an increase in U.S. demand for services imports from global trading partners.

Net exports of services to TPP partners would likely increase substantially due to liberalization in the agreement. TPP would provide three broad types of services liberalization that would significantly reduce trade costs for U.S. services firms exporting to TPP partner markets: increased market access to specific sectors, adoption of a negative list approach, and assurances of the right to transfer data across borders unimpeded.⁶⁷⁰ Because of increased market access abroad, net exports of services to TPP countries would improve, in contrast to net exports to the world. This increase would be especially notable for business services and communications, which would realize substantial export gains driven by improved market access and rising incomes abroad.

The positive trade effects of TPP services liberalization are, however, likely to be offset in part by increased imports of services from outside the TPP, in line with the increased demand for services that accompanies higher levels of output. At the same time, TPP's impact on services net exports would likely reflect the relatively larger liberalization taking place in goods sectors. U.S. cross-border trade flows in services are likely to be affected by TPP's reallocation of productive resources away from sectors where TPP liberalization would be relatively limited—these are often services sectors, where the need for domestic regulation often limits the ability to trade. Instead, more productive resources would likely flow towards sectors where TPP liberalization would be greater—e.g., agricultural sectors, which would experience significant tariff reductions.

⁶⁷⁰ The data provisions would not apply equally to financial services firms, as discussed further below.

Overview of U.S.-TPP Services Trade Trends

The United States is the world's largest exporter and importer of services, with service industries also accounting for a majority of U.S. production and employment.⁶⁷¹ As discussed above, services can be traded either cross-border or through a commercial presence abroad. Services supplied through commercial presence (i.e., by foreign affiliates) remain the principal means of providing services to foreign markets, while cross-border trade in services is particularly important for several sectors, including travel services and charges for the use of intellectual property.

Cross-border Services Trade

U.S. cross-border services exports to TPP countries were valued at \$176 billion in 2014, accounting for about 26 percent of total private U.S. services exports in that year.⁶⁷² The United States enjoys overall surpluses in services trade with all TPP parties for which data are available. U.S. cross-border services imports from TPP countries totaled \$94 billion in 2014 and represented about 21 percent of total private services imports, giving the United States a services trade surplus with TPP members of \$82 billion.⁶⁷³ U.S. services exports to TPP members rose by 59 percent over the 10-year period from 2005 to 2014 (figure 5.1). However, over the last decade, these exports have grown at a slower rate than exports to non-TPP members. Similarly, over the preceding decade, U.S. services imports from TPP countries rose 45 percent, and these have also increased more slowly than services imports from non-TPP countries since 2005 (figure 5.2). While lower than the rate of growth to non-TPP countries, the upward trajectory of both U.S. exports and imports for TPP countries in most sectors largely mirrors the overall pattern of growth in total U.S. trade in cross-border services.⁶⁷⁴

In 2014, the largest category of private cross-border services trade between the U.S. and TPP members was travel services, which accounted for \$57.5 billion in U.S. exports and \$26.1 billion in imports. Charges for the use of intellectual property ("IP charges") and transportation services were the next-largest categories (table 5.1). U.S. exports to TPP partners in computer services grew the fastest, rising 92.1 percent between 2009 and 2014, followed by maintenance and repair services. U.S. imports grew fastest in the IP charges category, which increased

⁶⁷¹ WTO, "International Trade Statistics 2015," Table 1.9 (accessed January 29, 2016); USDOC, BEA, "Real Value Added by Industry," November 5, 2015; USDOC, BEA, Table 6.5D, "Full-Time Equivalent Employees by Industry," August 6, 2015.

⁶⁷² The services trade data presented here do not include services provided by governments, such as municipally owned utilities and national defense.

⁶⁷³ USDOC, BEA, *Survey of Current Business*, October 2015, Table 2.1. Data for U.S. cross-border services trade is not reported for Peru, Vietnam, or Brunei. All growth rates presented here are the simple increase between years, not the compound annual rate of growth.

⁶⁷⁴ Chapter 1 includes a more general regional economic overview of TPP member countries.

88.6 percent between 2009 and 2014. No category saw a decline from 2009 to 2014, on average; from 2013 to 2014, however, telecommunications saw a fall in both imports and exports, which dropped 5.8 and 7.5 percent respectively. Travel services represented the United States' largest trade surplus in 2014. No major category recorded a deficit in 2014, though deficits were reported for three subcategories: sea freight (a subcategory of transportation), industrial processes (a subcategory of IP charges), and computer services (a subcategory of communications).⁶⁷⁵

Among the TPP members for which data are available, Mexico, Canada, and Japan together accounted for 20 percent of total U.S. cross-border services exports and 17 percent of U.S. total services imports, consistent with their leading positions in U.S. goods trade (figures 5.3 and 5.4). TPP is likely to have a smaller impact on U.S. trade with Canada and Mexico (owing to their participation with the United States in the North American Free Trade Agreement) than it would have on trade with Japan. Japan currently has no free trade agreement (FTA) with the United States, but it is the second-largest importer of U.S. services and the second-largest services exporter to the United States as well (table 5.2).⁶⁷⁶

U.S. services exports have risen the fastest to Chile (86.4 percent over the 2009 to 2014 period), buoyed by a large increase in exports of professional services. The fastest growth in U.S. services imports was seen in those from Malaysia (69.3 percent in 2009–14), driven by a rise in U.S. imports of Malaysian computer services.⁶⁷⁷ More detailed information about U.S. trade with TPP parties can be found in the individual country profiles contained in appendix F.

Services Supplied by Foreign Affiliates

Services supplied by foreign affiliates are a separate category of services trade (“mode 3” trade, in WTO/GATS terminology), and account for the majority of services trade in many sectors. Services supplied by U.S.-owned foreign affiliates to TPP members rose just over 80 percent from 2005 to 2013, increasing from \$211 billion to \$381 billion, and grew faster than foreign affiliate sales in non-TPP countries.⁶⁷⁸ These sales to TPP members accounted for 29 percent of total U.S. foreign affiliate sales in 2013 (figure 5.5). Services supplied to the United States by foreign-owned affiliates of TPP members grew slightly more slowly during 2005–13, increasing 77 percent from \$153 billion to \$270 billion, but rose more quickly than growth in foreign

⁶⁷⁵ For more detailed information on developments in the U.S. services trade, see USITC, *Recent Trends in U.S. Services Trade*, 2015.

⁶⁷⁶ Data for cross-border trade in services between the United States and TPP countries by industry is available only for Australia, Canada, Chile, Malaysia, Mexico, New Zealand, and Singapore. Data for foreign affiliate transactions cannot be disaggregated for individual TPP countries by industry.

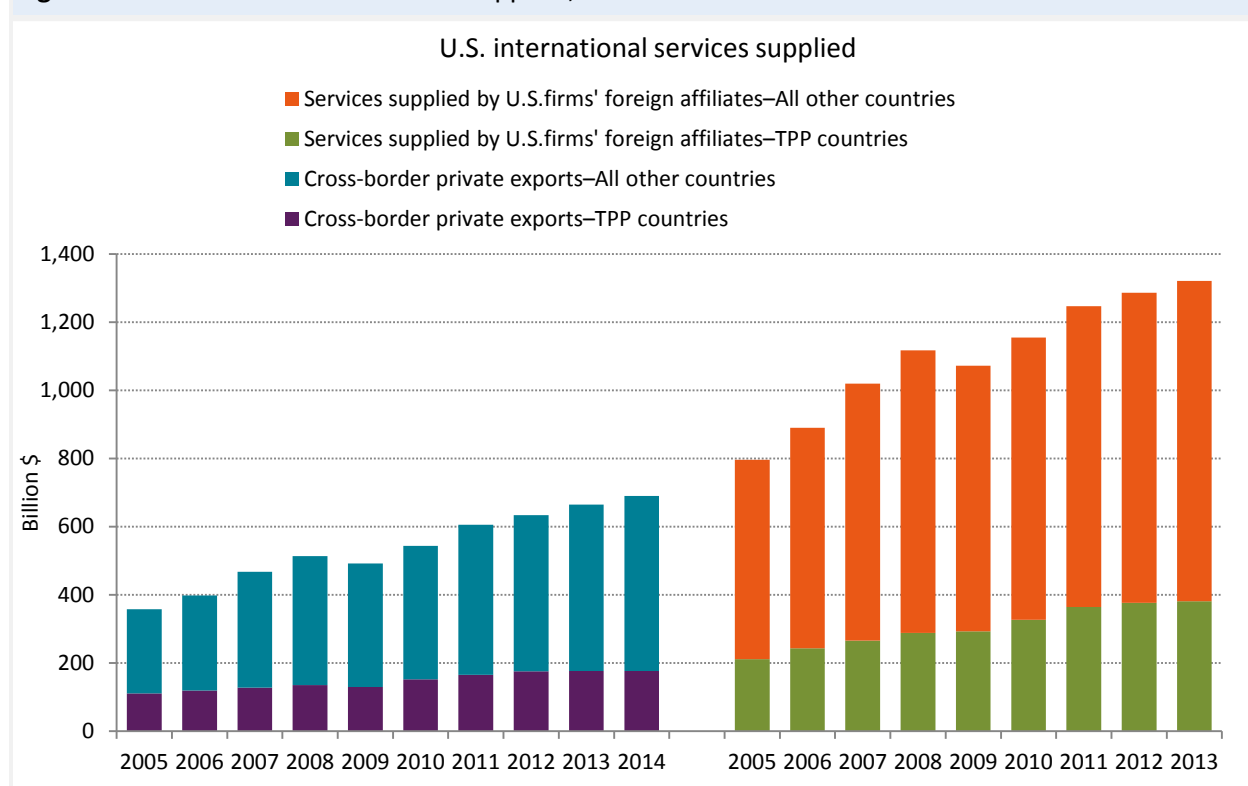
⁶⁷⁷ USDOC, BEA, Interactive Tables, International Data (accessed January 20, 2016).

⁶⁷⁸ While cross-border services trade data are available for 2014, data for foreign affiliate transactions are available only through 2013.

affiliate purchases from non-TPP countries. Foreign affiliate purchases from TPP partners accounted for 32 percent of total U.S. foreign affiliate purchases in the period (figure 5.6).⁶⁷⁹

Like cross-border trade in services, U.S. foreign affiliate transactions with TPP partners were primarily supplied to and purchased from Canada and Japan. Services supplied by U.S. affiliates in Canada totaled \$128 billion in 2013, and services supplied by U.S. affiliates in Japan totaled \$72 billion in that year. Services supplied to the United States by the foreign-owned affiliates of TPP members were mainly sourced from Japan (\$147 billion), Canada (\$84 billion), and Australia (\$23 billion). U.S. foreign affiliate sales to Singapore grew the fastest (79 percent from 2009 to 2014), while purchases from Mexico rose 126 percent during 2009-13—the second largest increase recorded in the period after Chile. By contrast, purchases through foreign affiliates from neighboring Chile experienced a decline of 49 percent during those years (table 5.3).

Figure 5.1: U.S. international services supplied, 2005–14

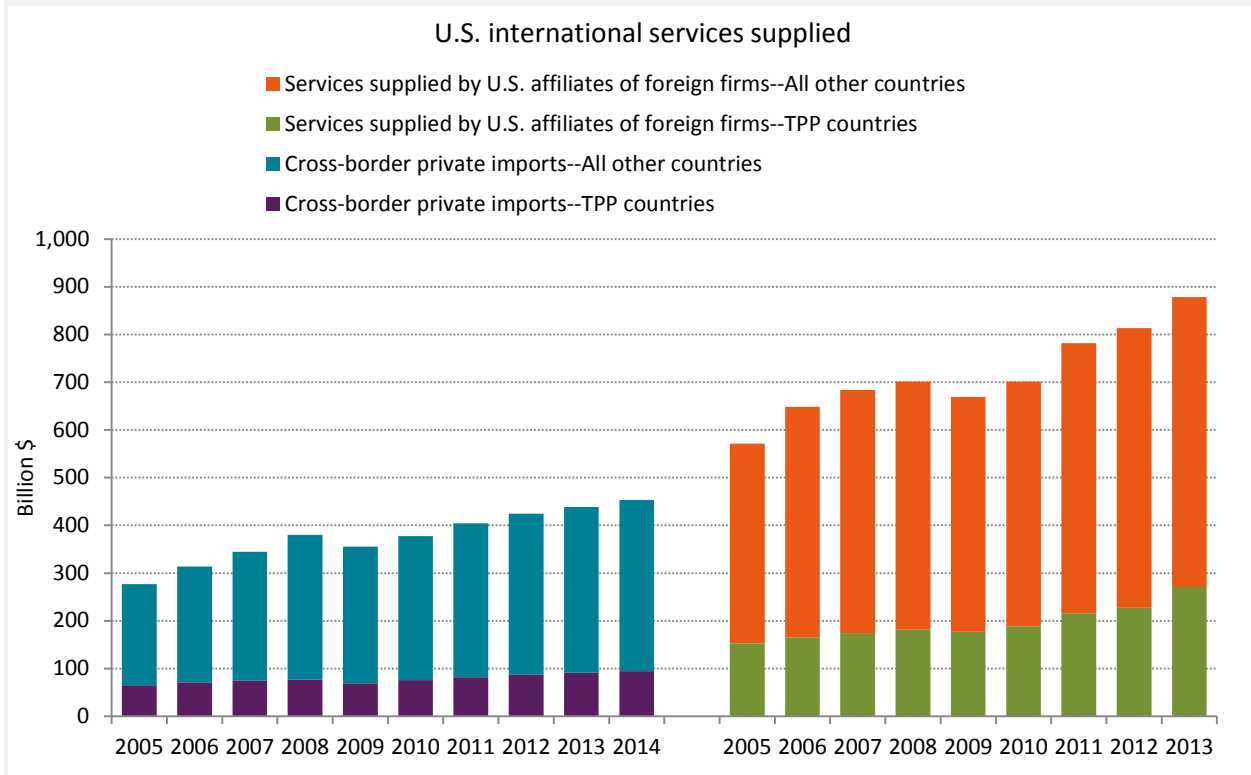


Source: USDOC, BEA, Interactive tables, International Data, January 20, 2016. Corresponds to [appendix table J.16](#).

Notes: Data for affiliates are available from 2005 through 2013. Affiliate data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, and Singapore. Affiliate data for Brunei and Vietnam are not available. Cross-border data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. Cross-border data for Brunei, Peru, and Vietnam are not available.

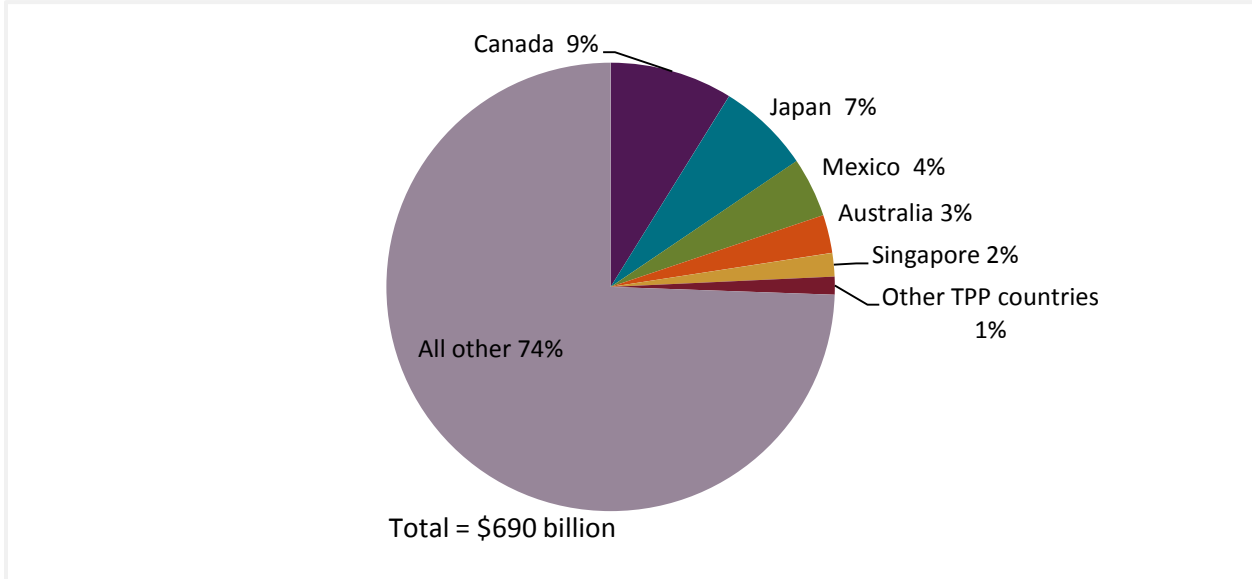
⁶⁷⁹ USDOC, BEA, *Survey of Current Business*, October 2015, table 3.1. Data for foreign affiliate transactions are not reported for Vietnam or Brunei. However, Peru is included. The latest year for which U.S. foreign affiliate transactions data are available is 2013. Chile, Malaysia, and Peru did not report data for 2005.

Figure 5.2: U.S. international services received, 2005–14



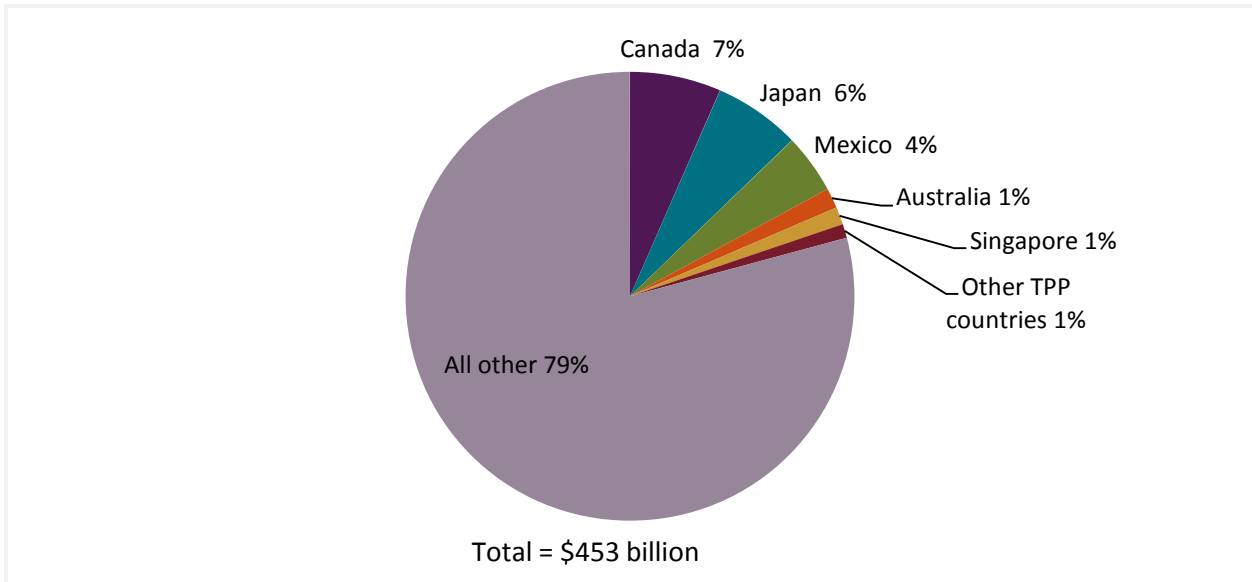
Source: USDOC, BEA, Interactive tables, International Data, January 20, 2016. Corresponds to [appendix table J.17](#).
 Notes: Data for affiliates are available from 2005 through 2013. Affiliate data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, and Singapore. Affiliate data for Brunei and Vietnam are not available. Cross-border data for TPP countries include data from Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. Cross-border data for Brunei, Peru, and Vietnam are not available.

Figure 5.3: U.S. private cross-border exports of services, 2014



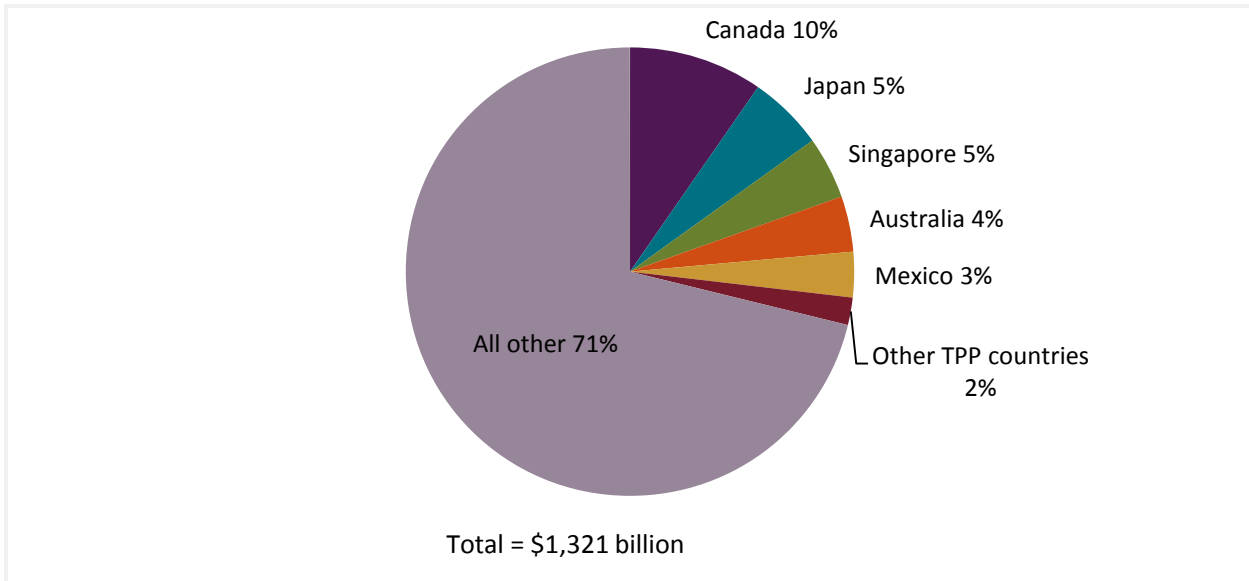
Source: USDOC, BEA, Interactive Tables, International Data, International Services, “Table 2.3: U.S. Trade in Services, by Country or Affiliation and by Type of Service” (accessed January 20, 2016). Corresponds to [appendix table J.18](#).
Note: Other TPP countries include Chile (\$3.8 billion), Malaysia (\$2.8 billion), and New Zealand (\$2.2 billion).

Figure 5.4: U.S. private cross-border imports of services, 2014



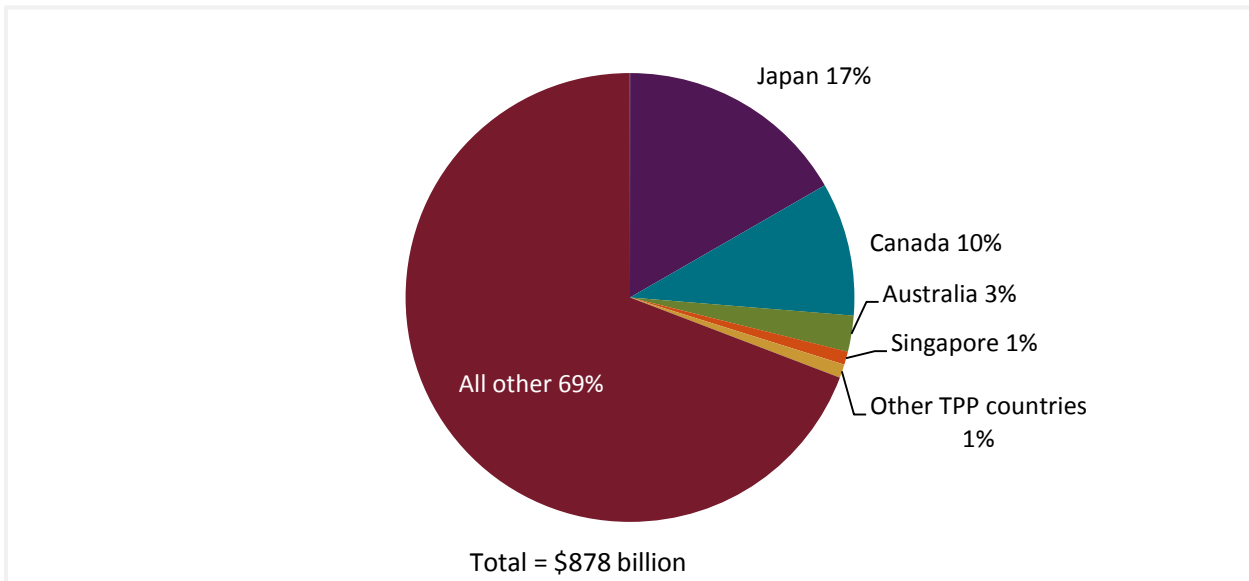
Source: USDOC, BEA, Interactive Tables, International Data, International Services, “Table 2.3: U.S. Trade in Services, by Country or Affiliation and by Type of Service” (accessed January 20, 2016). Corresponds to [appendix table J.19](#).
Notes: Totals may not add to 100 percent due to rounding. Other TPP countries include Malaysia (\$1.8 billion), New Zealand (\$1.5 billion), and Chile (\$1.2 billion).

Figure 5.5: Affiliate transactions: Services supplied to foreign persons by U.S. multinational enterprises through their majority-owned foreign affiliates, 2013



Source: USDOC, BEA, Interactive Tables, International Data, International Services, “Table 3.2: Services Supplied to Foreign Persons by U.S. MNEs through Their MOFAs, by Country of Affiliate and by Destination” (accessed January 20, 2016). Corresponds to [appendix table J.20](#).
 Note: Other TPP countries include Chile (\$11.5 billion), Malaysia (\$7.9 billion), New Zealand (\$4.2 billion), and Peru (\$2.6 billion).

Figure 5.6: Affiliate transactions: Services supplied to U.S. persons by foreign multinational enterprises through their majority-owned U.S. affiliates, 2013



Source: USDOC, BEA, Interactive Tables, International Data, International Services, “Table 4.2: Services Supplied to U.S. Persons by Foreign MNEs through Their MOUSAs, by Country of UBO” (accessed January 20, 2016). Corresponds to [appendix table J.21](#).
 Notes: Totals may not add to 100 percent due to rounding. Other TPP countries include Mexico (\$7,503 million), Malaysia (\$467 million), New Zealand (\$458 million), Chile (\$178 million), and Peru (\$6 million).

Table 5.1: TPP countries: Cross-border exports and imports of U.S. private services by sector, 2009–14, million dollars

	2009	2010	2011	2012	2013	2014
Exports						
Travel	41,287	49,160	52,448	56,842	58,899	57,450
Charges for the use of intellectual property n.i.e.	23,060	29,446	33,557	33,409	30,036	28,288
Transport (includes passenger fares)	41,792	21,636	23,246	24,098	25,002	25,464
Financial services	12,269	14,419	14,700	15,028	15,834	15,971
Professional and management consulting services	9,134	*	11,707	12,837	13,866	14,914
Technical, trade-related, and other business services	7,443	*	9,210	10,970	9,204	8,734
Insurance services	1,609	5,290	5,736	6,587	6,633	6,775
Maintenance and repair services n.i.e.	3,281	3,519	3,649	4,732	5,183	5,661
Research and development services	3,443	*	4,264	4,278	4,550	4,847
Computer services	2,381	2,516	3,099	3,240	3,823	4,575
Information services	1,609	1,514	1,477	1,554	1,689	1,822
Telecommunication services	1,633	1,824	1,839	1,998	1,950	1,803
All other	3	22,324	3,647	1	1	0
Total private services	129,526	151,638	164,930	175,574	176,670	176,301
Imports						
Travel	20,804	22,064	21,610	23,262	24,500	26,089
Transport (includes passenger fares)	13,342	15,805	17,021	17,180	18,756	19,323
Charges for the use of intellectual property n.i.e.	2,942	9,596	9,087	11,073	13,862	14,947
Computer services	3,799	4,265	*	6,575	6,383	6,103
Business and management consulting and public relations services	4,359	4,759	4,621	5,072	5,141	5,409
Financial services	2,459	2,822	3,540	3,647	4,054	4,301
Telecommunication services	1,587	1,421	*	1,288	1,263	1,190
Advertising	715	756	810	857	731	759
Accounting, auditing, and bookkeeping services	370	424	443	492	540	572
Legal	404	409	529	518	494	464
All other	12,925	13,481	23,370	17,052	15,562	15,092
Total private services	68,690	75,802	81,040	87,016	91,286	94,249

Source: USDOC, BEA, Interactive Tables, International Data, International Services, "Table 2.3: U.S. Trade in Services, by Country or Affiliation and by Type of Service" (accessed January 20, 2016).

Notes: Includes Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. N.i.e. = not included elsewhere.

* = not available.

Table 5.2: Cross-border exports and imports of U.S. private services by country, 2009–14, million dollars

Country	2009	2010	2011	2012	2013	2014
Exports						
Australia	13,527	15,362	18,276	18,687	19,210	19,047
Brunei	*	*	*	*	*	*
Canada	43,085	52,695	57,935	61,576	62,376	61,069
Chile	2,026	2,416	3,216	3,555	3,563	3,776
Japan	37,543	42,830	43,252	46,133	45,986	46,081
Malaysia	1,847	2,067	2,637	2,593	2,671	2,819
Mexico	33,718	24,361	26,084	27,798	29,403	29,618
New Zealand	1,547	1,727	2,119	2,065	2,097	2,205
Peru	*	*	*	*	*	*
Singapore	7,133	10,177	11,411	13,167	11,364	11,686
Vietnam	*	*	*	*	*	*
Imports						
Australia	5,251	5,090	6,007	6,651	6,678	6,578
Brunei	*	*	*	*	*	*
Canada	23,206	26,943	30,165	30,793	30,446	29,781
Chile	924	1,012	1,321	1,514	1,264	1,217
Japan	19,326	22,241	22,088	24,535	27,463	28,275
Malaysia	1,048	1,253	1,285	1,427	1,410	1,774
Mexico	13,909	13,849	14,258	15,313	17,161	19,368
New Zealand	1,043	1,221	1,391	1,378	1,476	1,448
Peru	*	*	*	*	*	*
Singapore	3,983	4,193	5,154	5,405	5,388	5,808
Vietnam	*	*	*	*	*	*

Source: USDOC, BEA, Interactive tables, International Data, January 20, 2016.

Notes: * = not available. Totals for TPP countries are not provided because data are not reported for certain countries.

Table 5.3: TPP countries: Services supplied by U.S. firms' foreign affiliates and services supplied by U.S. affiliates of foreign firms, 2009–13, million dollars

Country	2009	2010	2011	2012	2013
Services supplied by U.S. firms' foreign affiliates					
Australia	37,581	45,527	50,431	50,398	52,580
Brunei	*	*	*	*	*
Canada	107,148	117,466	126,155	127,406	127,589
Chile	6,541	8,446	9,981	11,487	11,521
Japan	67,413	68,892	75,383	76,785	71,568
Malaysia	6,237	6,778	7,676	7,745	7,876
Mexico	30,178	34,638	37,620	40,478	43,393
New Zealand	2,760	2,690	3,958	4,254	4,229
Peru	1,530	1,605	2,358	2,678	2,623
Singapore	33,303	40,946	50,274	54,830	59,522
Vietnam	*	*	*	*	*
Total	292,691	326,988	363,836	376,061	380,901
Services supplied by U.S. affiliates of foreign firms					
Australia	13,044	13,270	19,039	21,977	22,865
Brunei	*	*	*	*	*
Canada	67,639	67,639	80,656	81,625	84,394
Chile	347	148	166	187	178
Japan	87,993	93,698	101,055	107,731	146,509

Country	2009	2010	2011	2012	2013
Malaysia	248	251	171	407	467
Mexico	3,326	4,492	5,776	6,626	7,503
New Zealand	272	242	378	442	458
Peru	2	2	3	5	6
Singapore	4,344	6,009	8,779	8,436	8,331
Vietnam	*	*	*	*	*
Total	177,215	188,544	216,023	227,436	270,711

Source: USDOC, BEA, Interactive tables, International Data, January 20, 2016.

Summary of Provisions Affecting Trade in Services

The TPP Agreement contains market access provisions that liberalize cross-border trade in services with TPP partners, and national treatment provisions that would enable firms to establish a commercial presence in TPP partner markets more easily.⁶⁸⁰ TPP's provisions reflect the complex, evolving environment for services trade. For example, digital communications technologies are enabling new methods of delivering services cross-border.⁶⁸¹

TPP's Negative List Approach for Services

A particularly important benefit of TPP for services providers is the “negative list” format of the chapters on Cross-border Trade in Services and on Investment. As a consequence of the negative list approach, provisions of these chapters apply to all services unless parties specifically list an exception, known as a nonconforming measure (NCM).⁶⁸² Adoption of a negative list approach in TPP implies a significant ongoing source of liberalization of services trade. As new products and services are invented in years to come, which is likely given the pace of digital innovation in many services sectors, they will be automatically covered by the terms of the TPP Agreement, with no need for additional negotiations.

As a consequence of the negative list format, TPP's provisions for services trade represent a substantial increase in commitments from the partner countries with which the United States does not currently have an FTA—Japan, Malaysia, New Zealand, Vietnam, and Brunei. In these cases, TPP provisions need to be compared with each country's existing commitments under the World Trade Organization (WTO) General Agreement on Trade in Services (GATS). The GATS

⁶⁸⁰ For additional explanation, see table 5.4.

⁶⁸¹ Walters, Stapleton, and Andrews, “India's Services Sector: Unlocking Opportunity,” 2007, 7.

⁶⁸² A negative list means that the signatories of the TPP promise to provide full access to their services markets unless they specifically list an exception, or NCM. These NCMs appear in three separate annexes to the agreement: the first lists existing measures that do not conform to a party's obligations under the agreement, the second specifies activities and sectors that a party could subject to new or more stringent limitations in the future, and the third lists NCMs relating to financial services. See appendix E for a list of each country's NCMs.

employs a positive list approach, meaning that the parties made services trade commitments only for services trade specifically listed by each country. TPP's negative list approach means that the agreement covers a much greater share of overall trade in services between the TPP parties.

Because existing U.S. FTAs also follow the negative list approach for services, overall there is little new liberalization contained in TPP vis-à-vis the six countries with which the United States has existing FTAs. There are a few specific instances, however, where TPP represents improved commitments from these partners, including reduced trade barriers in professional services (Mexico, Singapore, and Chile), media (Peru), and transportation services (Mexico). Nevertheless, most services sectors that were excluded from liberalization in existing FTAs remain excluded in TPP as well. These include air transport services and certain key industries, such as financial services and telecommunications, in which NCMs carve out exemptions.

Summary of Cross-border Trade in Services Provisions

The provisions of TPP's Cross-Border Trade in Services chapter cover a range of issues, including the supply of a service (i.e., market access), movement of payments, restrictions on the service provider's location, and access to distribution networks. This chapter applies only to services supplied across borders (mode 1), where a service is supplied by a firm in one country to another firm or individual consumer located in another. It does not apply to services supplied through commercial presence (mode 3, or sales and purchases through foreign affiliates).

Provisions on market access allow firms in TPP member countries to supply services in the way they choose without facing geographic or quantitative restrictions. The Cross-Border Trade in Services chapter also includes provisions on market access covering transparency in licensing requirements (Article 10.8), movement of payments and transfers across borders (Article 10.12), and the recognition of qualifications (Article 10.9). At the same time, the chapter allows parties the ability to deny benefits to services suppliers owned by parties in non-TPP member countries. Further, the chapter contains a ratchet mechanism that incorporates any additional autonomous liberalizations by a party (that is, liberalizations made on a party's own account after TPP enters into force) into TPP. This mechanism prevents TPP parties from revoking such changes later if services suppliers are using them to conduct business. (See table 5.4 for a complete list of provisions.)

Table 5.4: Cross-border services provisions

Provision	Meaning	Importance
National treatment (Art. 10.3)	Would prevent TPP members from treating foreign and domestic services (including trademarks, copyrights, and patents) differently once they have entered the market.	Would allow firms to conduct business in a TPP member country on an equal basis with other domestic firms in that country. Along with MFN treatment (see below), this provision is also enshrined in the GATS.
Most-favored-nation (MFN) treatment (Art. 10.4)	Would prohibit TPP members from discriminating between trading partners, with certain exceptions (such as FTAs).	Would allow TPP members to trade on an equal basis with other members.
Market access (Art. 10.5)	TPP members would not be able to impose limitations on the number of service suppliers, the value of services transactions, the number of services operations, or the number of citizens of a certain country who can be employed in the services sector.	Foreign firms are able to supply services in the manner they choose.
Local presence (Art. 10.6)	TPP members would not require service suppliers to establish a local entity, office, or affiliate, or be resident in a territory in order to supply services there.	Foreign firms are able to supply services from wherever they choose.
Domestic regulation (Art. 10.8)	Licensing requirements would not be used to restrict the supply of services. Licensing fees and criteria should be objective and transparent. TPP members should also have procedures in place to domestically assess the competency of foreign professionals in the services sector.	Obtaining licenses is often a barrier to supplying services in foreign countries.
Recognition (Art. 10.9)	Recognition of the qualifications of foreign services suppliers by one TPP member would not imply recognition by any other TPP member. However, recognition of qualifications should not be used as a means of discrimination.	Similar to licensing, obtaining recognition of qualifications in order to supply services can also be a barrier to trade, while the recognition of foreign qualifications allows foreign firms to compete on a level basis with domestic firms.
Denial of benefits (Art. 10.10)	Any TPP member would be able to deny benefits to a services supplier if that supplier is owned or controlled by a non-member country.	TPP members are not obligated to extend any TPP benefits to firms owned by non-TPP members (including shell companies).
Transparency (Art. 10.11)	TPP members would be encouraged to establish ways to deal with questions about regulations, and they should provide advance notice and opportunity for comment before regulations go into effect.	Transparency about regulations and their implementation is important to foreign firms and helps prevent discrimination against them.
Payments and transfers (Art. 10.12)	Payments and transfers should be permitted to move freely across borders, and to be made in a usable currency at market exchange rates, but parties may regulate transfers in a nondiscriminatory way.	This provision protects the ability to move funds across borders, which is essential to the operations of international businesses supplying services.
NCM ratchet mechanism (Annex 10-C)	If any TPP member autonomously liberalizes regulations or policies which allow foreign firms to supply services, that liberalization would become part of TPP and cannot be revoked later if firms of other TPP members are found to be using them to conduct business.	The ratchet mechanism provides certainty and predictability to firms which take advantage of new and more favorable regulations to conduct business in TPP members. Vietnam has a 3-year exception to this mechanism.

Source: USTR, TPP final text.

NCMs contained in annexes to the Cross-Border Trade in Services chapter permit TPP parties to exclude certain industries or practices from the provisions contained in the chapter, and these exclusions could be significant. The impact of listed NCMs contained in the chapter varies by industry. The professional services, retail, and audiovisual services industries would benefit more from liberalization under TPP than the transportation and telecommunications industries, where countries have taken more NCMs.

NCMs with significant negative impacts on opportunities for U.S. services firms would include preferential treatment of local investment and ownership in Malaysia (affecting almost all industries), market access restrictions in transportation services in Canada and Mexico, and restrictions on national treatment and market access in telecommunications in a majority of TPP countries. NCMs involving local-presence requirements, residency restrictions, and restrictions on the recognition of foreign qualifications also exist for certain professional services, retail, and audiovisual services, but have a smaller impact on the chapter's trade-liberalizing provisions. See appendix E for a full list of each TPP party's NCMs.

TPP Cross-cutting Provisions That Impact Services

In addition to the chapters of the TPP Agreement that specifically address services, as discussed above, the agreement includes a number of chapters concerning regulatory provisions that apply to all industries, but that have a significant effect on services firms. These include chapters on investment, government procurement, state-owned enterprises (SOEs), regulatory coherence, and intellectual property.⁶⁸³ The groundbreaking chapter on e-commerce is particularly important for services firms, and is addressed in more detail later in this chapter of the report.

The provisions of the Investment chapter (TPP Chapter 9) are particularly important for services trade, because so much of that trade is carried out through sales by foreign-owned affiliates in local markets (so-called mode 3 trade under the WTO GATS). While the provisions of the Cross-Border Trade in Services chapter shape the rules for services trade across borders (called mode 1 trade under the WTO GATS), sales through affiliates are generally governed by the provisions of the Investment chapter. A notable exception is affiliate sales related to financial services, which are covered by the provisions of the Financial Services chapter (TPP Chapter 11).

The TPP chapter on government procurement is also relevant to services trade, as it covers certain government contracts and governmental entities, and requires signatories to give foreign bidders the same treatment given to domestic bidders. Construction, architecture and engineering services, and information and communications technology (ICT) services are

⁶⁸³ These chapters are discussed in more detail in chapter 6 of this report.

particularly affected by procurement rules. (Notably, the TPP's government procurement rules exclude services in finance and transportation, as well as those related to water and national security.) U.S. services providers frequently compete with SOEs, particularly in energy-related services, telecommunications, financial intermediation, and audiovisual services. TPP would impose new disciplines on SOEs, requiring them to act on a more commercial basis and limiting government subsidies, thereby providing more equal access for U.S. competitors.

The Regulatory Coherence chapter (TPP Chapter 25) would create coordination and review processes that would let parties review and jointly develop regulations. These measures are likely to help increase trade in services because regulations are particularly apt to limit such trade, especially in financial, education, and health services. In these sectors, opinions about the best principles for domestic regulation often differ significantly; measures in TPP that would encourage parties to adopt widely recognized best practices in designing and implementing regulations are seen as helpful.⁶⁸⁴

The protection of intellectual property rights is particularly relevant to several services sectors. It is especially important for audiovisual services (a broad field that includes film and TV programming, book publishing and sound recording, and broadcasting and recording of live events) and computer and software services. TPP's Intellectual Property chapter would raise the level of copyright protection and enforcement for U.S. audiovisual services providers and software services providers in the region.

One particular horizontal issue addressed in TPP has gained significant public attention: the treatment of e-commerce, and specifically cross-border data flows.⁶⁸⁵ Industry representatives note that the provisions enabling businesses to transfer data across borders and prohibiting TPP partner governments from introducing data localization requirements are likely to represent one of the most important advances for trade liberalization in TPP.⁶⁸⁶ The provisions contained in the E-commerce chapter are described more fully in the section on e-commerce and digital trade below.

⁶⁸⁴ USITC, hearing transcript, January 14, 2016, 266 (testimony of Peter Allgeier, Coalition of Services Industries).

⁶⁸⁵ *Ibid.*, 264–6.

⁶⁸⁶ *Ibid.*, 263 and 267.

Value of Codifying Existing Practice and Policy

The TPP Agreement would improve the environment for trade in services overall, even though many of the commitments of TPP partners are not liberalized beyond existing policies and regulations already in force. Countries often find it economically beneficial and politically acceptable to have open services sectors, even when they have not made international commitments to openness. As a result, many countries have liberalized their services markets far beyond their commitments in trade agreements, leaving a gap between their de jure and de facto policy environments. See box 5.1 for a comparison of these two benchmarks for assessing TPP’s commitments in professional services.

Box 5.1: Assessing Liberalization from TPP in the Professional Services Sector

The Commission has assessed liberalization in services sectors by comparing provisions in the TPP to those in previous FTAs. Another way of assessing liberalization is to compare TPP commitments to current domestic regulatory policy. Since agreements tend to codify existing regulations,^a this alternate method would be expected to reflect less liberalization than a comparison of TPP with prior agreements.

However, some instances of liberalization which appear related to trade agreements may not be captured by this alternate method. For example, in the case of Malaysia, recent changes in legal services liberalization (implemented in 2014) allow foreign law firms to establish in Malaysia and allow foreign lawyers to practice in permitted areas of Malaysian law.^b These changes appear to be confirmed in TPP.^c

^a A summary of the Roundtable discussion will be included in the forthcoming USITC publication, *Recent Trends in U.S. Services Trade, 2016 Annual Report*, which is scheduled for release in September 2016.

^b Malaysian Bar, “Liberalisation of Legal Services,” April 27, 2015.

^c See annex E for Malaysia’s NCMs related to legal services.

While it is not possible to quantify this effect, reducing the gap between de jure and de facto policies, even with commitments that fall short of the de facto level of liberalization, has value because it reduces uncertainty for market participants. Investors face less risk that in the future, governments will backslide and re-impose discriminatory policies, either in the form of significant protectionist actions or as small adjustments in regulation. Limão and Maggi, for example, present evidence that trade policy volatility, and not just the level of trade restrictiveness, decreases after countries sign trade agreements.⁶⁸⁷

⁶⁸⁷ Limão and Maggi, “Uncertainty in Trade Agreements,” 2013; Hallward-Driemeier and Pritchett, “How Business Is Done,” 2011. Researchers who have compared de jure and de facto policy environments find large gaps. Hallward-Driemeier and Pritchett compared the World Bank’s “Doing Business” measures (which assess regulatory conditions) with the World Bank’s Enterprise Surveys (which ask firms to report their actual operating experiences). They found large discrepancies: for example, across all countries the median de jure time to obtain a construction permit was 210 days, but the median de facto time was only 59 days.

Summary of Views of Interested Parties

Assessments of TPP's likely impact by representatives of U.S. services industries have been broadly positive. A representative of the Coalition of Services Industries stated that TPP would offer market access commitments for firms providing e-commerce and online media as well as express delivery services. The representative remarked, however, that issues remain concerning remaining restrictions related to data localization, national treatment, and market access for financial services, as well as NCMs on investment in Malaysia.⁶⁸⁸ E-commerce commitments were also noted as being particularly important for small and medium-sized enterprises.⁶⁸⁹ Another industry representative stated that TPP will provide solid gains in professional services, audiovisual services, and certain financial services, though it will not prevent countries from intervening in reinsurance.⁶⁹⁰ However, a representative from the American Insurance Association maintained that TPP would create significant market access for U.S. property and casualty insurers, particularly in countries in Asia that currently have low insurance penetration, and that the agreement would also limit the competitive advantages enjoyed by Japan's state-owned postal service in supplying insurance.⁶⁹¹

Several industry representatives noted the connection between improved market access for services and increased trade in goods, with services such as research and development and maintenance embedded in the supply chains for producing pharmaceuticals, semiconductors, and aircraft engines.⁶⁹² Others, however, highlighted the distributional effects of TPP, contending that even if the agreement generates small increases in employment in services industries, these would not offset the larger job losses projected for manufacturing, given that the provision of services is relatively less labor intensive.⁶⁹³

⁶⁸⁸ USITC, hearing transcript, January 13, 2016, 264–68 (testimony of Peter Allgeier, Coalition of Services Industries).

⁶⁸⁹ USITC, hearing transcript, January 15, 2016, 835 (testimony of Linda Schmid, Trade in Services International).

⁶⁹⁰ USITC, hearing transcript, January 14, 2016, 645–47 (testimony of Bob Vastine, Center for Business and Public Policy, Georgetown University).

⁶⁹¹ USITC, hearing transcript, January 13, 2016, 270–73 (testimony of Stephen Simchak, American Insurance Association).

⁶⁹² USITC, hearing transcript, January 13, 2016, 208 (testimony of James Fatheree, U.S.-Japan Business Council); USITC, hearing transcript, January 14, 2016, 516 (testimony of C. Devi Bengfort Keller, Semiconductor Industry Association); USITC, hearing transcript, January 14, 2016, 584 (testimony of Karan Bhatia, GE).

⁶⁹³ USITC, hearing transcript, January 15, 2016, 835 (testimony of Robert Scott, Economic Policy Institute); USITC, hearing transcript, January 15, 2016, 901–05 (testimony of John Hansen, Americans Backing a Competitive Dollar - Now!).

Impact of TPP on Services

The Commission's model provides a baseline projection of the global economy through 2032, together with a projection of the incremental impact of TPP policy changes on U.S. exports, imports, national output, and employment in each industry sector. According to the Commission's model projections, U.S. output of services would be higher with implementation of TPP—services output would exceed baseline projections by \$42.3 billion, or 0.1 percent—with higher output seen in nearly all services sectors (except transportation, logistics, travel, and tourism). However, with increased demand for U.S. exports from TPP partner markets where barriers to services imports would be lowered, total demand for U.S. services is likely to increase faster than output, implying that U.S. services imports would likely rise more than exports, worsening U.S. net exports in services with the world.⁶⁹⁴

Of course, these projections for U.S. cross-border exports and imports of services do not refer to the additional trade effects from TPP on the level of U.S. foreign affiliate sales in other TPP markets and the level of foreign-owned affiliates' sales in the United States, which are likely to be positive. TPP's impact on investment and commercial presence is likely to be significant in many services sectors. TPP partners would agree to reduce investment restrictions and to improve the business environment, with such commitments as those enabling cross-border data flows and those leveling the playing field with local SOEs. The Commission's model takes into account the changes in investment restrictions embodied in the agreement in its projections for changes in output and employment, but does not model the detailed effects of TPP provisions on foreign affiliate sales.

According to Commission model estimates, under TPP, U.S. exports of services to TPP partner markets would be \$16.6 billion higher than the baseline projections for 2032, as a result of increased market access abroad. This positive trade impact is likely to be partially offset by lower services exports of \$11.8 billion to non-TPP parties upon implementation of the agreement, relative to baseline projections, as trade is diverted from non-TPP markets (table 5.5).

At the same time, services imports from TPP partners are estimated to be \$2.1 billion higher, relative to baseline, as certain TPP partners experience productivity gains that translate into

⁶⁹⁴ As discussed in chapter 2, the modeling analysis begins by generating a projection of the global economy through 2032, with detailed forecasts for the 12 countries in the TPP, including the United States, and major non-TPP trading partners. This projection provides a baseline against which the effects of policy changes from the TPP Agreement can be compared. The modeling includes three types of liberalization: removing or reducing tariffs and tariff-rate quotas (TRQs), removing certain nontariff measures on goods and on traded (cross-border) services, and investment liberalizations that improve market access for U.S.-owned foreign affiliates. The maximum trade deficit modeling condition implies that a large increase in net exports to TPP partners will be partially offset by a large decrease in net exports with respect to trading partners in the rest of the world.

more efficient supply of services. As the United States is already relatively open to services imports, TPP would represent relatively limited additional liberalization. The increase in U.S. demand for services imports that would arise from higher levels of output and exports would likely be met by the United States' currently important trading partners, such as the EU. The Commission's model therefore estimates that imports from non-TPP countries are likely to be \$4.9 billion above baseline projections (table 5.6).

Total U.S. net exports of services to TPP partners are therefore estimated to be \$14.5 billion above the baseline level, but total U.S. net exports of services globally are expected to be \$2.2 billion below baseline projections, owing to lower U.S. net exports to the rest of the world of \$16.7 billion relative to baseline (table 5.7). These estimates take into account trade diversion and substitution effects, as well as changes in relative income and activity levels in country markets.

Table 5.5: Estimated effects of TPP on U.S. services exports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Services	16,566.9	10.8	2,956.2	5.2	1,667.1	5.2	11,943.6	18.6	-11,769.5	-1.9	4,797.4	0.6
Selected industry sectors												
Wholesale and retail trade	1,402.5	15.6	508.5	11.8	184.4	9.5	709.6	25.8	-553.8	-2.2	848.7	2.5
Transportation, logistics, travel, and tourism	-51.4	-0.2	-76.8	-0.9	-29.7	-0.5	55.1	0.7	-1,206.9	-1.3	-1,258.4	-1.1
Communications	1,391.5	25.2	416.9	20.8	237.3	12.4	737.4	46.4	-513.8	-2.0	877.7	2.8
Financial services n.e.c.	1,008.9	8.3	-19.2	-0.4	-25.0	-1.0	1,053.1	24.6	-1,020.9	-2.0	-12.1	0.0
Insurance	564.3	4.6	-23.8	-0.3	-16.4	-1.1	604.4	15.9	-529.9	-1.9	34.4	0.1
Business services	9,520.1	20.7	1,346.7	15.3	857.0	9.5	7,316.4	26.0	-4,944.6	-2.0	4,575.5	1.6
Recreational and other services	-96.7	-0.7	-53.5	-0.8	-37.5	-1.5	-5.7	-0.1	-591.2	-1.8	-687.8	-1.5

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified. The services industries which are addressed in detail later in this chapter do not track clearly to the model results presented above. The reason is that the services sectors defined in the GTAP database often aggregate several industries, while some services industries are spread among several GTAP categories. Electronic commerce is relevant to almost all GTAP services sectors. Computer services are mostly included in the GTAP business services category, but Internet service providers are included in the GTAP communications category, as are telecommunications. Except for insurance and pension funding, all financial services are included in GTAP's financial services n.e.c. category. Professional services (engineering, legal, etc.) are included in the broad business services category. Express delivery services are mostly found in the transportation, logistics, travel, and tourism category, although courier services are included in the communications category. While broadcasting falls within the communications category, other audiovisual services are included in the recreational and other services category.

Table 5.6: Estimated effects of TPP on U.S. services imports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Services	2,070.7	2.5	2,058.7	4.9	-150.9	-0.7	162.9	0.8	4,891.8	1.0	6,962.5	1.2
Selected industry sectors												
Wholesale and retail trade	7.6	0.1	-21.8	-0.7	1.8	0.2	27.6	2.1	534.8	1.3	542.4	1.2
Transportation, logistics, travel, and tourism	2,137.8	11.6	2,255.6	23.2	-74.0	-1.6	-43.8	-1.0	-367.3	-0.4	1,770.5	1.5
Communications	50.0	1.4	-10.3	-0.6	-0.8	-0.1	61.2	7.3	256.4	1.1	306.4	1.2
Financial services n.e.c.	-70.1	-0.8	-40.4	-1.0	-49.3	-1.7	19.6	0.9	857.9	1.4	787.8	1.1
Insurance	-45.2	-0.5	-30.0	-0.5	-9.3	-0.7	-5.9	-0.3	748.7	1.3	703.5	1.1
Business services	27.9	0.1	-16.6	-0.2	-21.1	-0.3	65.6	1.4	2,003.6	1.3	2,031.5	1.2
Recreational and other services	-24.4	-0.5	-28.1	-0.8	10.7	1.4	-7.0	-0.9	223.7	1.4	199.3	0.9

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified. The services industries which are addressed in detail later in this chapter do not track clearly to the model results presented above. The reason is that the services sectors defined in the GTAP database often aggregate several industries, while some services industries are spread among several GTAP categories. Electronic commerce is relevant to almost all GTAP services sectors. Computer services are mostly included in the GTAP business services category, but Internet service providers are included in the GTAP communications category, as are telecommunications. Except for insurance and pension funding, all financial services are included in GTAP's financial services n.e.c. category. Professional services (engineering, legal, etc.) are included in the broad business services category. Express delivery services are mostly found in the transportation, logistics, travel, and tourism category, although courier services are included in the communications category. While broadcasting falls within the communications category, other audiovisual services are included in the recreational and other services category.

Table 5.7: Estimated effects of TPP on net U.S. services exports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Services	14,496.2	20.5	897.5	6.0	1,818.0	15.8	11,780.7	26.5	-16,661.3	-14.0	-2,165.1	-1.1
Selected industry sectors												
Wholesale and retail trade	1,394.9	36.0	530.3	39.3	182.7	16.4	682.0	48.1	-1,088.6	-6.6	306.3	2.4
Transportation, logistics, travel, and tourism	-2,189.3	-50.3	-2,332.4	-307.4	44.2	3.8	98.9	2.5	-839.6	-11.1	-3,028.9	-94.2
Communications	1,341.5	73.3	427.2	268.1	238.1	25.9	676.2	90.0	-770.2	-20.6	571.3	10.2
Financial services n.e.c.	1,078.9	35.4	21.1	1.4	24.3	4.4	1,033.4	50.3	-1,878.8	-18.2	-799.9	-11.0
Insurance	609.4	24.6	6.2	1.6	-7.1	-2.5	610.4	33.8	-1,278.6	-4.5	-669.2	-2.6
Business services	9,492.2	39.6	1,363.3	123.9	878.1	59.2	7,250.8	30.8	-6,948.3	-7.3	2,544.0	2.1
Recreational and other services	-72.2	-0.8	-25.4	-0.8	-48.2	-2.7	1.3	0.0	-814.9	-5.0	-887.2	-3.6

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified. The services industries which are addressed in detail later in this chapter do not track clearly to the model results presented above. The reason is that the services sectors defined in the GTAP database often aggregate several industries, while some services industries are spread among several GTAP categories. Electronic commerce is relevant to almost all GTAP services sectors. Computer services are mostly included in the GTAP business services category, but Internet service providers are included in the GTAP communications category, as are telecommunications. Except for insurance and pension funding, all financial services are included in GTAP's financial services n.e.c. category. Professional services (engineering, legal, etc.) are included in the broad business services category. Express delivery services are mostly found in the transportation, logistics, travel, and tourism category, although courier services are included in the communications category. While broadcasting falls within the communications category, other audiovisual services are included in the recreational and other services category.

As a result of TPP, U.S. output and employment in services are projected to exceed the baseline level by a small percentage by 2032 (0.1 percent, as shown in table 5.8), although the size of the U.S. services sector means that this represents a large amount in dollar terms. Despite the global competitiveness of the U.S. services industries, the estimated effects on output and employment are small in percentage terms for several reasons. First, international trade in services is small relative to the total revenues of the U.S. services sectors. Second, as resources move into goods industries (particularly food and agriculture), where the TPP liberalization is greater, this increases the input costs of the services industries. As a result, output and employment in sectors with relatively less liberalization in TPP, such as the transportation sectors, may decline or experience only modest growth. Exports in two services sectors shown in the table: transportation, logistics, travel and tourism; and recreational and other services would be lower than the baseline under TPP; these are sectors that would not experience significant liberalization under TPP, so the model assumes that economic resources would shift away from them, towards sectors that would be liberalized under the agreement.

Table 5.8: Estimated effects of TPP on U.S. services output, employment, and trade: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Services	4,797.4	0.6	6,962.5	1.2	42,342.6	0.1	0.1
Selected industry sectors							
Wholesale and retail trade	848.7	2.5	542.4	1.2	7,447.5	0.1	0.1
Transportation, logistics, travel, and tourism	-1,258.4	-1.1	1,770.5	1.5	-719.9	0.0	-0.1
Communications	877.7	2.8	306.4	1.2	2,845.6	0.2	0.1
Financial services n.e.c.	-12.1	0.0	787.8	1.1	1,520.0	0.1	0.1
Insurance	34.4	0.1	703.5	1.1	707.9	0.1	0.0
Business services	4,575.5	1.6	2,031.5	1.2	11,576.0	0.2	0.1
Recreational and other services	-687.8	-1.5	199.3	0.9	1,749.8	0.1	0.1

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified. The services industries which are addressed in detail later in this chapter do not track clearly to the model results presented above. The reason is that the services sectors defined in the GTAP database often aggregate several industries, while some services industries are spread among several GTAP categories. Electronic commerce is relevant to almost all GTAP services sectors. Computer services are mostly included in the GTAP business services category, but Internet service providers are included in the GTAP communications category, as are telecommunications. Except for insurance and pension funding, all financial services are included in GTAP's financial services n.e.c. category. Professional services (engineering, legal, etc.) are included in the broad business services category. Express delivery services are mostly found in the transportation, logistics, travel, and tourism category, although courier services are included in the communications category. While broadcasting falls within the communications category, other audiovisual services are included in the recreational and other services category.

The estimated effects on individual services sectors are mixed. For example, the combined transportation, logistics, travel, and tourism sector is projected to see a slightly lower level of employment relative to the 2032 baseline, partially because TPP does not liberalize several segments in this sector (air transportation, for instance, is explicitly excluded from the agreement). At the same time, higher projections for U.S. national income imply higher U.S.

tourism abroad, which shows as an increase in imports for this sector. On the other hand, services liberalization in TPP would generate some positive effects on other U.S. services industries' output and employment. Output in the communications and the business services sectors is projected to improve slightly more than in other sectors, in reflection of these two sectors' greater sensitivity to the liberalization in the TPP's e-commerce provisions. U.S. services providers would face fewer barriers to entering new markets, and would likely increase exports in the services where the United States has a strong competitive advantage, such as cloud computing services or express delivery services.⁶⁹⁵ Gains within these more narrowly defined industries may be substantially higher than in the more aggregated sectors available in the Commission's model.

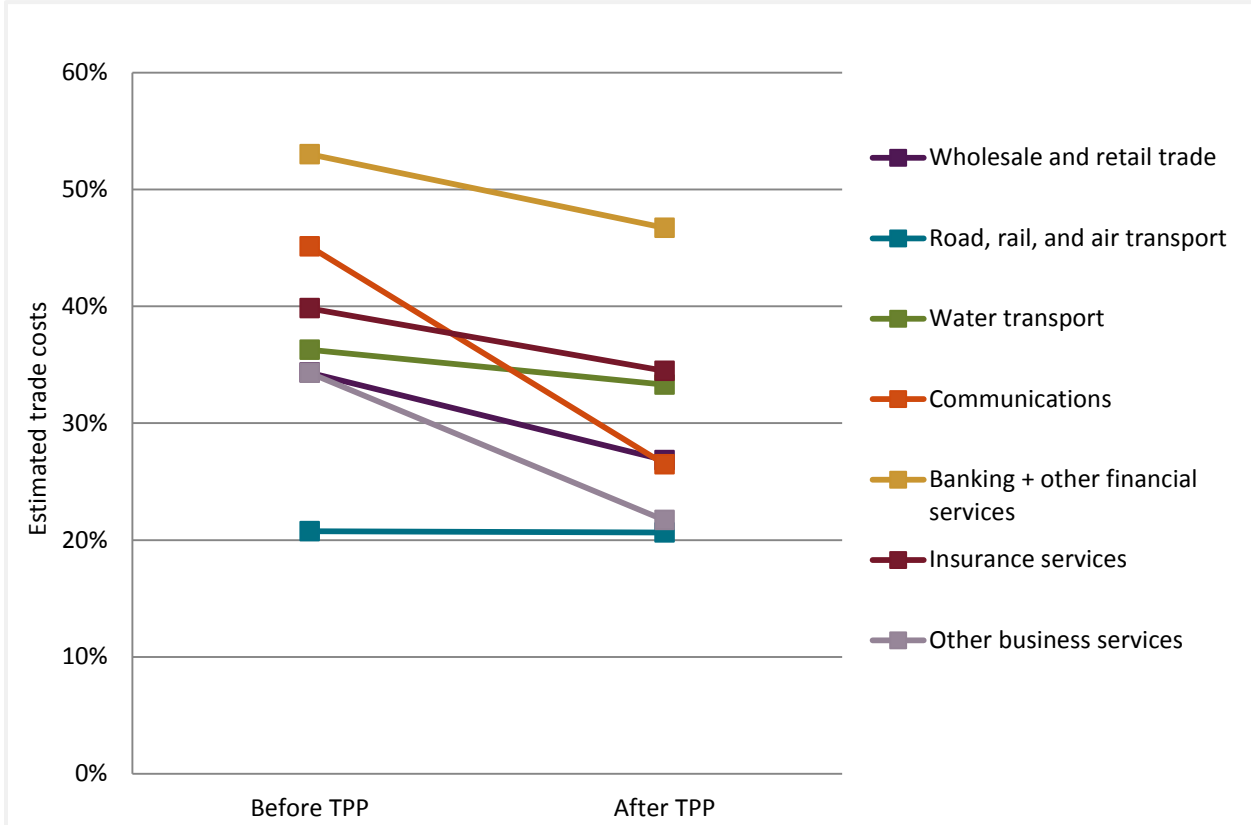
Figures 5.7 and 5.8 illustrate Commission estimates for the reductions in trade costs from TPP liberalization for particular services sectors and TPP markets.⁶⁹⁶ The largest reductions in trade costs are estimated for communications and for other business services, reflecting the heavy use of digital technologies in these sectors, as well as certain specific commitments to liberalize in professional services. Financial services and retail and wholesale distribution services also will experience lower trade costs, but to a lesser extent: these sectors are somewhat less digitally intense than the other two, and TPP contains weaker provisions on the prohibition of data localization in the case of financial services, a weakness potentially costly to that sector. The transportation sectors' trade costs would not be lowered significantly by the TPP Agreement, although certain subsectors, such as express delivery, would see a tangible benefit, especially from the agreement's provisions on e-commerce.

Costs of services trade with individual TPP partners vary widely, depending on their overall degree of openness to the foreign provision of services, but the TPP Agreement would lower costs of trade with each partner at least to some degree (see figure 5.8). U.S. services exporters to the countries with no existing U.S. FTA would see a significant benefit from TPP, with a reduction of trade costs by around one-third. Services exporters to Mexico would also see trade costs fall significantly, by 22 percent, as the TPP liberalization starts from a baseline in which trade costs are relatively high.

⁶⁹⁵ USITC, hearing transcript, January 14, 2016, 263, 267 (testimony of Peter Allgeier, Coalition of Services Industries); USITC, hearing transcript, January 14, 2016, 281 (testimony of Christopher A. Padilla, IBM Corporation); Frankel, "Congress Should Give TPP a Thumbs Up," *Boston Globe*, November 11, 2015. Market-access provisions for services are found in TPP's Chapter 10, Cross-Border Trade in Services (CBTS), Chapter 11, Financial Services, and to a limited extent in Chapter 13, Telecommunication Services. National treatment provisions related to services firms established abroad are included in TPP's Chapter 9, Investment, and in both the financial services and telecommunications chapters. Other chapters that have strong impacts on trade in services include the chapters that address e-commerce, state-owned enterprises, intellectual property, government procurement, and regulatory coherence.

⁶⁹⁶ These were assumed in the Commission's CGE model simulation, along with changes in trade costs for goods and reduced restrictions on foreign investment. See appendix G for more on the trade data and modeling methodology of reductions in services trade costs.

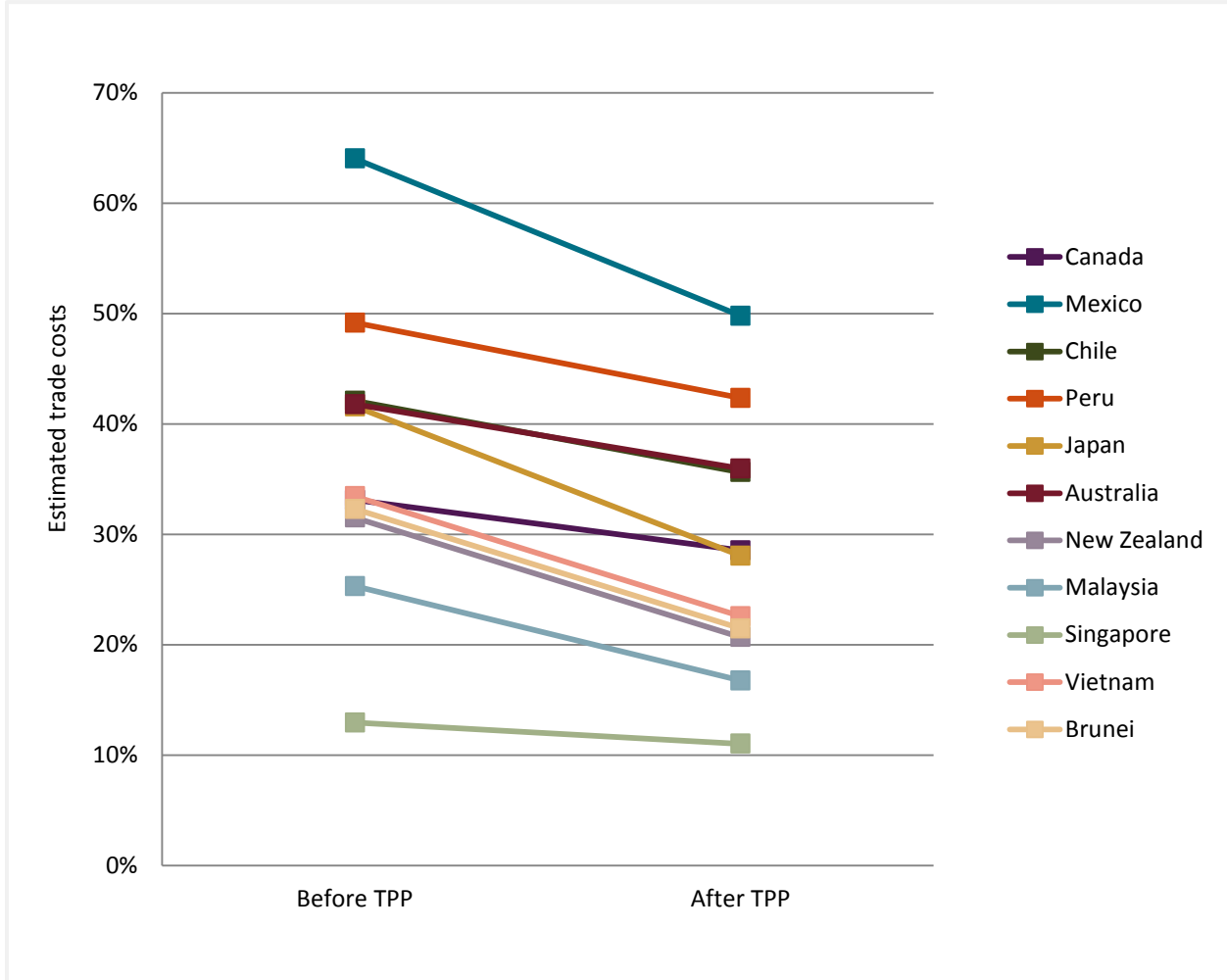
Figure 5.7: How TPP reduces the trade costs faced by U.S. services exporters, by services industry



Source: USITC estimates. Corresponds to [appendix table J.22](#).

Note: This illustration refers to the trade costs faced by U.S. services exporters in the sectors listed with regard to their exports to TPP partner markets. These estimated ad valorem costs (defined as tariff equivalents) measure the magnitude of additional costs (relative to the cost of domestic sales) associated with cross-border services exports from the United States to its 11 TPP partners, by broad services sector. (See appendix G for more detail on the Commission's approach to estimating changes in trade costs.)

Figure 5.8: How TPP reduces the trade costs faced by U.S. services exporters, by TPP partners



Source: USITC estimates. Corresponds to [appendix table J.23](#).

Note: This illustration refers to the trade costs faced by U.S. services exporters in all sectors with regard to their exports to individual TPP partner markets. These estimated ad valorem costs (defined as tariff equivalents) measure the magnitude of additional costs (relative to the cost of domestic sales) associated with cross-border services exports for all sectors combined, by TPP partner country. (See appendix G for more detail on the Commission's approach to estimated changes in trade costs.)

Sector-specific Analysis

TPP would provide significantly improved market access for U.S. services firms in the five countries that do not have an FTA with the United States. In each of these countries, liberalization is concentrated in one or two sectors: professional services (Brunei and Malaysia), media (Malaysia), telecommunications (New Zealand), and retail (Brunei and Vietnam). More detailed analysis of TPP's impact on specific U.S. services sectors is provided below. The sectors discussed include those that are likely to be significantly impacted because they are important sectors for U.S. services trade and are sectors in which TPP introduces significant liberalization of trade, at least with certain TPP partners.

In addition to the broad Cross-Border Trade in Services chapter, TPP includes chapters dedicated to e-commerce, financial services, and telecommunications services, because these services sectors play an important role in both services trade itself and in enabling goods trade. This chapter of the report describes TPP's potential impact on digital trade and computer services (affected particularly by the TPP E-commerce chapter), financial services (where some important new commitments have been made by TPP partners), professional services (where several TPP partners have lowered barriers), audiovisual services (where U.S. firms are likely to see improved market access), express delivery services (important for facilitating trade in time-sensitive goods and cross-border e-commerce sales), and telecommunications services (where enterprise services represent an important new opportunity). Also, the short case study on retail services highlights how TPP's provisions for goods trade, as well as those for services trade, would have a large impact (box 5.2).

Box 5.2: TPP Is Expected to Assist Trade in Retail Services

The TPP countries represent an enormous market for U.S. retail services, with TPP economies representing 36 percent of global GDP and over 800 million consumers. Although there is no specific retail chapter in the TPP Agreement, retail services benefit from a wide variety of measures distributed throughout the agreement, addressing many existing and potential barriers for retailers. Key provisions include (1) tariff reductions and eliminations, (2) e-commerce and customs facilitation measures, and (3) strengthened foreign investment laws. Likely beneficiaries range from the largest U.S. retail multinationals, such as Walmart and Amazon, to small and medium-sized enterprises (SMEs) and Internet-based microenterprises that increasingly operate internationally through online platforms such as eBay and Etsy.

Lower tariffs and an improved rules-of-origin system were key aims of the U.S. retail industry in TPP negotiations.^a Reduced tariffs on industrial and agricultural products would likely lower supply chain costs for U. S. retailers marketing in the United States and in TPP markets. For example, in Japan, tariffs would be reduced on U.S.-produced beef, dairy products, and processed foods, which would lower input costs and increase sales for U.S. retailers operating in that country.^b Moreover, many TPP participants are also key suppliers to U.S. retailers; Vietnam, for example, is the second leading U.S. supplier of footwear and apparel products (after China). Consequently, tariff reductions on textile and apparel products would likely lower the costs on these goods produced in Vietnam and other TPP suppliers, thereby lowering costs for U.S. retailers and consumers in the United States and other TPP markets.^c

E-commerce, the fastest-growing segment in U.S. and global retail services, is prominently featured in TPP. The agreement's e-commerce provisions, including ensuring the free flow of data and prohibitions against forced localization,^d would likely assist U.S. online retailers and suppliers, including SMEs and microenterprises that use the Internet as an integral platform to connect with international customers and vendors. Other e-commerce provisions that facilitate retail trade relate to electronic customs forms, signatures, authentication, and payment; these would also likely fuel increased e-commerce growth between U.S. retailers and customers in TPP partner countries.

In addition, TPP addresses significant barriers that disproportionately affect SME retail exporters. Such barriers include security concerns by international shoppers with respect to their payment information, and privacy protections. TPP would establish legal frameworks to facilitate electronic payments transactions, protect personal information, and facilitate cooperation on fraud and spam.^e Such

measures would boost confidence in retailers' international transactions. In addition, TPP addresses customs barriers that raise supply chain costs for U.S. retailers. TPP customs provisions would simplify and smooth customs and border procedures, including customs processing related to express shipments, and would promote the advanced electronic submission of customs documentation.^f

TPP would strengthen investment laws, deter discriminatory requirements, and ensure that U.S. retail investors have access to dispute settlement mechanisms, likely promoting U.S. retail investment in TPP markets.^g According to one large U.S. multinational retailer, TPP would provide greater investment certainty. As a result, although barriers to U.S. retail investment in most TPP countries are relatively low,^h the agreement is expected to promote increased investment in certain participant countries, including fast-growing developing economies in the Asia-Pacific region. For example, Vietnam, a key growth market for U.S. retailers, would eliminate an economic needs test for foreign retail stores of over 500 square meters after five years, which would increase certainty for U.S. investors and would serve as a template for other countries in future negotiations.ⁱ

^a NRF, "NRF Applauds Bipartisan Senate Letter," May 1, 2012; RILA, "Retailers Applaud," February 25, 2014. For additional discussion of rules of origin in TPP, see chapter 4.

^b USITC, hearing transcript, January 14, 2016, 291–92 (testimony of Sarah Thorn, Walmart).

^c AAFA, "Apparel and Footwear Association Releases Statement," February 1, 2016; Thorn, written testimony to the USITC, December 29, 2015.

^d Data localization measures are laws or regulations requiring firms to locate data and/or computing facilities within a country's borders as a condition of doing business in that country. For additional information on localization, see the e-commerce discussion later in this chapter.

^e E-Commerce Chapter, Articles 14.8 and 14.5.

^f See the discussion of the Customs and Express Delivery sections for an analysis of TPP customs provisions. Cummins Inc., written submission to the USITC, February 14, 2016.

^g USTR, "Chapter 9, Investment: Chapter Summary," November 5, 2015.

^h The World Bank STRI database indicates that only a few TPP countries restrict investment in retail services, and those countries have relatively low STRI scores.

ⁱ Thorn, written testimony to the USITC, December 29, 2015; USITC hearing transcript, January 14, 2016, 293 (testimony of Sarah Thorn, Walmart).

Digital Trade and Computer Services

Assessment

TPP's provisions bearing on digital trade and Internet-based commerce,⁶⁹⁷ areas in which the United States has strong competitive advantages, are more wide-ranging than in any previous U.S. FTA. According to many observers, TPP's e-commerce and other digital trade-related provisions are the most transformative measures in the agreement.⁶⁹⁸ The E-commerce chapter provides a broad framework for digital trade and serves as a template for future U.S. and global trade agreements. This is especially true when this chapter is combined with other TPP

⁶⁹⁷ Provisions in TPP Chapter 14, "Electronic Commerce," apply to measures "that affect trade by electronic means." This broadly includes transmissions of data, information, and digital products over the Internet or over private electronic networks. Such transmissions by financial services firms are excluded from coverage under this TPP chapter.

⁶⁹⁸ USITC, hearing transcript, January 13, 2016, 275-76 (testimony of Ed Brzytwa, Information Technology Industry Council); 280-81 (testimony of Christopher Padilla, IBM); 299 (testimony of Carl Schonander, Software & Information Industry Association); 142-43 (testimony of Alan Wolff, National Foreign Trade Council).

chapters, including Cross-Border Trade in Services, Intellectual Property, Investment, and Customs and Trade Facilitation. The e-commerce provisions will therefore likely have a positive economic impact on a wide array of U.S. businesses, from large multinational corporations to SMEs, and across a broad range of U.S. economic sectors.

For computer services firms in particular, the provisions of the E-commerce chapter would provide U.S. firms with levels of market access, national treatment, and regulatory transparency that generally exceed those afforded by parties' commitments under the GATS and other existing U.S. FTAs.⁶⁹⁹ Exports of computer services would be expected to increase in the long term, especially to the five countries that do not have existing U.S. FTAs.⁷⁰⁰

Underscoring the potential importance of the new TPP provisions is the proliferation of both tariff and nontariff barriers to computer services trade around the world, with many countries enacting laws that block the free flow of information. Since 2008, governments of the 11 TPP parties have erected 10 measures that have had an impact on U.S. exports of computer services.⁷⁰¹ These measures pertain to government procurement, local-content requirements, restrictions on cross-border data transfers of personal information, in-country data center requirements, permission for full inspection, and import licenses for hybrid ICT products.⁷⁰² TPP would address such measures in TPP Chapter 29 (Exceptions) and in the provisions of the E-commerce chapter (TPP Chapter 14).

Discouraging future barriers among the TPP parties is critically important, as these relatively recent and rapidly evolving technologies are creating new kinds of services, as well as enabling, for the first time, international trade in existing services.⁷⁰³ Services increasingly provided

⁶⁹⁹ Computer services include hardware- and software-related services; data processing services; customized software and related use licenses; non-customized software with a periodic license fee; and software downloaded or otherwise electronically delivered. Cross-border transactions in non-customized packaged software with a license for perpetual use are computer goods. BEA, DOC, International Transactions tables (accessed February 18, 2016).

⁷⁰⁰ These countries—Brunei, Japan, Malaysia, New Zealand, and Vietnam—would switch to a “negative list” schedule of services commitments, which would contribute to improved market access. As discussed, for rapidly evolving computer services, a “negative list” approach will lead to greater gains over time, as it automatically captures liberalizing changes to laws and regulations, provides greater transparency, and reduces transaction costs.

⁷⁰¹ According to Global Trade Alert, these measures affected trade with all relevant trading partners, including the United States. In addition, the United States itself implemented four measures that affected imports of computer services from other countries. Examples include “Buy America” provisions (Pub. L. No. 111-147 (2010) and a tax on foreign procurement of goods and services by the federal government enacted in 2011 (Pub. L. No. 111-347). Global Trade Alert tracks imposition of 25 types of trade impediments in this sector, ranging from import bans to technology transfer requirements and local content requirements. Global Trade Alert website, <http://www.globaltradealert.org/> (accessed February 17, 2016).

⁷⁰² In June 2015, the Malaysian government amended its Customs Act to require import licenses for hybrid ICT products, including devices with multiple features ranging from medical devices to computer products.

⁷⁰³ Chander, “Robots, the Internet of Things,” October 23, 2015, 5.

across TPP borders include abstract concepts such as thinking, analyzing, recommending, and remembering.⁷⁰⁴ Christopher A. Padilla, representing IBM, testified that “computer systems can learn, they can reason and they can understand language and help us to analyze the floods of data that all the devices we all carry and that are in everything we use are generating.”⁷⁰⁵

Summary of Provisions

The TPP Electronic Commerce Chapter

TPP’s e-commerce provisions are intended to provide a framework for an open Internet and encourage electronic commerce. They seek to do so by ensuring the free flow of digital information and data among TPP partners and by prohibiting government requirements that data storage and use be restricted to a single country. These provisions address digital trade in all industries, including the digitally intensive computer services sector,⁷⁰⁶ except financial services, which were specifically excepted. Key provisions include:

- *Cross-border data and information flows* (Article 14.11): Ensures that firms and individuals can transmit data freely across borders, unless there is a legitimate public policy objective.
- *Data and server localization measures* (Article 14.13): Prohibits governments from forcing businesses to set up computing and/or data storage facilities within their borders, subject to public interest regulations.⁷⁰⁷

The e-commerce chapter also covers a range of other provisions that facilitate digital transactions and trade, provide consumer protection and privacy, protect software, and promote cooperation. These other provisions cover:

- *Customs duties and other discriminatory measures* (Articles 14.3 and 14.4): Prohibits tariffs on digital goods, such as software, video, and music. Provides for nondiscriminatory treatment of digital products, and prohibits TPP countries from favoring domestic suppliers of digital goods and services.
- *Electronic customs forms, signatures, authentication, and payment* (Articles 14.5 and 14.6): Facilitates digital and physical trade of goods by encouraging paperless trading.
- *Software code* (Article 14.17): Constrains governments from requiring that software code be divulged as a condition for market access.

⁷⁰⁴ Ibid., 6.

⁷⁰⁵ USITC, hearing transcript, January 13, 2015, 281 (testimony of Christopher Padilla, IBM).

⁷⁰⁶ A discussion of the impact of the TPP on U.S. computer services is discussed below, after the general discussion of the e-commerce provisions and impacts.

⁷⁰⁷ Examples of such public interest regulations include preventing spam, protecting privacy, and combating cyber-crime. USTR, “Chapter 14, Electronic Commerce: Chapter Summary,” November 5, 2015.

- *Personal information protection* (Article 14.8): Requires adoption of legal frameworks to protect personal information.
- *Interconnection* (Article 14.2): Enables parties to negotiate with foreign suppliers of digital services on a commercial basis.
- *Spam* (Article 14.14): Adopts measures to prevent unsolicited email.
- *Cooperation* (Article 14.15): Commits parties to assist SME businesses in e-commerce, including sharing experiences with other parties on regulations, policies, and enforcement.
- *Cybersecurity* (Article 14.16): Builds capabilities and collaboration to counter Internet and e-commerce security threats.
- *Principles on access to and use of the Internet for electronic commerce* (Article 14.10): Recognizes the benefits of consumers being able to access and use online services and applications of their choice, and to connect the devices of their choice to the Internet. These principles are hortatory in nature, are “subject to applicable policies, laws and regulations,” and this article is therefore not enforceable.

The provisions on data localization do not cover financial services firms, which are covered separately in the Financial Services chapter (Chapter 11).⁷⁰⁸ The E-commerce chapter provisions are subject to the GATS Article XIV exclusions (Article 29.1.3), which permit measures necessary to protect public morals or order; protect human, animal, and plant health; and secure compliance with laws or regulations which are not inconsistent with the provisions of the GATS.⁷⁰⁹ Government procurement and government data processing are also excluded from the e-commerce provisions (Article 14.2.3).⁷¹⁰

Data and Information Flows

A key new provision⁷¹¹ in the TPP E-commerce chapter commits signatories to allow cross-border information and data transmission by electronic means, unless there is a legitimate public policy objective that is not unjustifiable discrimination, arbitrary, or a disguised barrier to trade (Article 14.11). The transformation brought about by digital technologies and the Internet now requires unrestricted and protected cross-border data flows for consumers and businesses

⁷⁰⁸ Financial services are covered under a different standard to accommodate more regulatory discretion for prudential reasons, allowing regulators to more effectively maintain financial stability and to respond more quickly to a potential financial crisis. The financial services section of this chapter provides more detail below.

⁷⁰⁹ WTO, Article XIV (General Exceptions) of General Agreement on Trade in Services, paragraphs (a), (b), and (c).

⁷¹⁰ Governments may require the processing and storage of government data to occur on domestic computing facilities.

⁷¹¹ No commitments ensuring the free flow of data and information have been included in any existing U.S. trade agreement with a TPP partner. For analysis of earlier agreements' E-commerce chapters, see USITC, *U.S.-Colombia Trade Promotion Agreement*, December 2006, and *U.S.-Korea Free Trade Agreement*, September 2007.

large and small—protections that are now considered fundamental by many U.S. firms.⁷¹² The Internet and digital connections are replacing many physical flows with digital flows, including for such functions as back-office operations, distribution and logistics, and manufacturing.⁷¹³ Cross-border data flows are substantially larger than indicated by commercial transactions and official trade statistics.⁷¹⁴

Manufacturing is one field to which the E-commerce chapter's provisions would be of increasing importance; the growing use of the Internet of Things (manufactured goods connected to the Internet through embedded technology)⁷¹⁵ requires the free movement of ever-larger amounts of data, which would be protected under TPP. At the USITC hearing, a representative from GE stated that its operations depend on cross-border data flows to link its smart-technology manufactured products, such as aircraft engines and power plant turbines, over wireless networks and the Internet, so they can use data analytics to process, analyze, and store information and data from across the globe. GE refers to these digital global networks as the "Industrial Internet," which is becoming more and more commonplace as smart technology embedded in manufacturing goods becomes more ubiquitous.⁷¹⁶

TPP's e-commerce provisions would also be particularly important for SMEs that rely on Internet-based services to sell and source products and services around the globe. SMEs, including very small businesses and individual entrepreneurs, are able to use the Internet to connect to clients and vendors and to leverage their computer data storage and management operations using cloud computing. Freedom of access to digital channels and the Internet would allow them to expand in ways that, in the view of several observers, would not be possible without this technology and the new digital trade protections that would be afforded by TPP.⁷¹⁷

Not least, the TPP provisions protecting free data flows would also be critical to individual U.S. consumers, according to several experts. Many of the 800 million people in TPP countries who are equipped with mobile phones and other IT devices use software applications, such as mobile apps and online productivity tools, which depend on the transfer and processing of data

⁷¹² USITC, hearing transcript, January 13, 2016, 299 (testimony of Carl Schonander, SIIA); January 14, 2016, 668 (testimony of Robert Vastine, Georgetown University)

⁷¹³ McKinsey Global Institute, "Global Flows in a Digital Age," April 2014.

⁷¹⁴ USITC, hearing transcript, January 13, 2016, 333 (testimony of Peter Allgeier, Coalition of Services Industries).

⁷¹⁵ For more detail, see the discussion below.

⁷¹⁶ USITC, hearing transcript, January 14, 2013, 529 (testimony of Karan Bhatia, GE).

⁷¹⁷ Several hearing participants commented on the importance of the open Internet for SMEs. USITC, hearing transcript, January 14, 2016, 603 (testimony of Linda Dempsey, SIA); January 13, 2016, 225 (testimony of Vanessa Sciarra, Emergency Committee for American Trade); NFTC, "NFTC Statement on TPP Agreement," December 22, 2015. Digital technologies enable even the smallest firms or individuals to sell and source products and services globally. McKinsey Global Institute, "Global Flows in a Digital Age," April 2014.

remotely, including across borders.⁷¹⁸ Increasingly, software and storage functions used by individual consumers are moving to cloud platforms, for which unimpeded data flows are critical to efficient operation.⁷¹⁹ Rules prohibiting forced localization will reportedly boost the competitive advantage currently enjoyed by U.S. cloud-based services, since a substantial number of firms use such services and the cloud providers themselves are located in the United States.⁷²⁰

Data and Other Localization Policies

TPP is the first U.S. trade agreement that would prohibit measures that compel companies to conduct certain digital trade-related activities within a country's borders. Examples of prohibited measures would include requiring data servers to be located in-country; requiring local content for digital goods and services; and requiring domestic consumers to use local digital companies.⁷²¹ Similar to the data and information flow provision, under TPP governments would not be able to require localization unless there is a legitimate public policy objective (Article 14.13).⁷²²

The TPP e-commerce provisions prohibiting forced localization and preventing digital protectionism would allow U.S. firms to locate computer servers and data storage anywhere across the globe, based on cost, efficiency, and security, thereby lowering costs and reducing inefficiencies.⁷²³ Data localization laws particularly affect sectors that use web-based technologies, including retail, healthcare, professional services, computer services, and others. Localization can also impose costs on the countries that establish these policies. According to one study, the costs are substantial in a number of countries that have instituted such measures.⁷²⁴ According to Commission witnesses, localization rules can be especially costly to small businesses. For SMEs, data processing, management, and storage can be made much easier via external, often remote, data centers in the cloud that are easily accessible via the Internet. Industry experts contended that requiring SMEs, microenterprises, and individual entrepreneurs to set up data centers in every country where they operate would be

⁷¹⁸ Espinel, "International Data Flows: Promoting Digital Trade," November 3, 2015.

⁷¹⁹ Swedish National Board of Trade, "E-commerce—New Opportunities, New Barriers," April 2012, 16.

⁷²⁰ Kilic and Israel, "The Highlights of the Trans-Pacific Partnership," November 15, 2016.

⁷²¹ USTR, TPP, full text, E-Commerce chapter, Articles 14.4 (Nondiscriminatory Treatment of Digital Products); 14.13 (Location of Computing Facilities); and 14.10 (Principles on Access to and Use of the Internet).

⁷²² For example, according to the government of Australia, the country's Privacy Act and e-health record system (Personally Controlled Electronic Health Record Act 2012) would not be subject to the TPP e-commerce commitment on data localization, because privacy and health are public policy objectives of the government. Government of Australia, DFAT, "Trans-Pacific Partnership Agreement: Chapter Summary," December 11, 2015.

⁷²³ USITC, hearing transcript, January 13, 2016, 312 (testimony of Peter Allgeier, Coalition of Service Industries).

⁷²⁴ Modeling estimates range from 0.1 percent to nearly 2 percent of GDP for certain countries. Bauer et al., "The Costs of Data Localization," May 2014; USITC, hearing transcript, January 14, 2016, 599 (testimony of Karan Bhatia, GE).

prohibitively expensive for them. Moreover, the cost of cloud computing services for consumers would likely rise if access to cloud services was restricted.⁷²⁵

Other Provisions

The provisions prohibiting customs duties on electronic transmissions would be another key protection for content providers and streaming services. Beneficiaries would include U.S. providers of computer software and platforms, mobile applications, and suppliers of cloud computing services. The TPP E-commerce chapter also includes protections for personal privacy and online consumer protection, which are of increasing concern for U.S. individual Internet users and cross-border shoppers (Article 14.7).⁷²⁶ Building on past U.S. trade agreements, the e-commerce chapter promotes electronic authentication and signatures and paperless trading. It also eases electronic transactions, which will likely facilitate electronic commerce and e-sales of both electronic products and physical goods among TPP signatories.⁷²⁷

Provisions Most Significant for Computer Services

As described above, under TPP, U.S. providers of computer services would be entitled to unrestricted market access, nondiscriminatory regulatory treatment, and greater transparency according to the terms of the agreement. The negative list approach is an important factor for improving U.S. firms' access to TPP markets. The negative list approach would also cover the services for which countries scheduled limited or no commitments under the GATS, including services yet to be offered commercially.

TPP would promote cross-border information flows and data exchanges among the 12 signatories and, thus, likely increase U.S. computer services exports to the Asia-Pacific region, although the impact would vary by country depending on the size of the market.⁷²⁸ The impact

⁷²⁵ USITC, hearing transcript, January 13, 2016, 348 (testimony of Ed Brzytwa, Information Technology Industry Council) and (testimony of Peter Allgeier, Coalition of Service Industries), and January 14, 2016, 512 (testimony of Linda Dempsey, NAM). Establishing a data center can cost \$70 million–\$80 million. Verge, “Second Google Data Center Coming to Singapore,” June 2, 2015.

⁷²⁶ Annex 10-C exempts Brunei and Vietnam from the requirement to “adopt or maintain a legal framework that provides for the protection of the personal information of the users of electronic commerce” until they actually put such a framework into place, after which they would simply have to maintain it.

⁷²⁷ Among existing U.S. trade agreements with TPP participants, the Australian FTA and the Peru TPA include provisions on electronic authentication and paperless trading. USTR, “E-Commerce FTA Chapters” (accessed February 10, 2016).

⁷²⁸ The eight TPP parties for which data are available (Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore) accounted for 30 percent of U.S. computer services exports and 25 percent of U.S. computer services imports in 2014. The Asia-Pacific region is the fastest-growing ICT spending region in the world, with growth of 4.5 percent in real terms forecast for 2016 (worldwide ICT spending growth of 0.6 percent is forecast for 2016). Gartner, Inc., “Forecast Alert: IT Spending, Worldwide, 4Q15 Update,” January 14, 2016. The Asia-Pacific region is also leading in the growth of both IT services and spending on the Internet of Things, accounting for more than 40 percent of worldwide total spending in this segment. IDC, “APEJ IT Services to be Resilient,” December 6, 2015; IDC, “Internet of Things Spending Forecast,” December 10, 2015.

on U.S. exports specifically of online computer services associated with cloud computing, the Internet of Things, and big data analytics would likely also be very positive, given that these services are often most efficiently provided by global providers over the Internet.⁷²⁹ Over time, despite slower phase-in of liberalization in Malaysia and Vietnam (described below), TPP's provisions would helpfully address issues of interoperability and access to Internet infrastructure and content, and would represent a reduction in trade impediments for providers of cross-border data services.⁷³⁰ Taken together, the TPP e-commerce provisions would likely benefit U.S. computer services firms. These provisions would remove almost all significant barriers to trade and investment in computer services and deter the establishment of future barriers among the parties.⁷³¹

However, while TPP would liberalize trade in computer services to a great extent, some barriers would remain after the agreement enters into force. An important caveat to TPP's provisions enabling cross-border digital commerce is that governments can impose measures for legitimate public policy objectives, such as health, morals, the environment, and national security (Article 29.1.3) (Also see the discussion above in this chapter).

In addition, TPP's provisions for liberalization will be more challenging for some TPP partners, such as Malaysia and Vietnam, and these partners will not liberalize immediately. Currently, Australia, Canada, and New Zealand, for example, are largely open and present few barriers to imports, inward foreign direct investment, exports, or competitiveness. However, Malaysia and Vietnam are much more trade restrictive. Both countries have traditionally provided preferential treatment for domestic providers in government procurement.⁷³² Malaysia generally invites international tenders only when domestic services are not available, and in those cases, U.S. companies usually find it is necessary to have a local partner before their tenders will be considered.⁷³³ Vietnam imposes barriers to encrypted software and requires U.S. providers of cloud computing services to operate under laws or policies that mandate the use of certain types of software, services, standards or technologies, and that discriminate

⁷²⁹ As the provision of computer services moves increasingly to the Internet, cloud computing and big data services, as well as the expansion of connectivity through the Internet of Things, are becoming more prominent. "Cloud computing" refers to online computer services, i.e., scalable and elastic IT capabilities that are delivered as a service using Internet technologies. "Big data" describes information assets that are high volume, high velocity and/or high variety and that can be processed to enable enhanced insight, decision making, and process automation. The "Internet of Things" is a network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or external environments.

⁷³⁰ Localization barriers to trade are among the most potentially distorting trade measures. Ezell, Atkinson, and Wien, *Localization Barriers to Trade*, September 2013, 4–6.

⁷³¹ Canada, Malaysia, New Zealand, Australia, Brunei, and Vietnam had either considered introducing, or had already introduced, local data storage requirements, as well as data security and data privacy regulations that would restrict where companies would be permitted to store and process data. Wein and Ezell, *Concluding a High-Standard, Innovation-Maximizing TPP*, December 2013, 11.

⁷³² Malaysia and Vietnam are observers, but not signatories, to the WTO Committee on Government Procurement.

⁷³³ USTR, *2015 National Trade Estimate Report on Foreign Trade Barriers*, 263, 427.

based on the nationality of the vendor, developer, or service provider.⁷³⁴ Additional barriers to trade in both Malaysia and Vietnam include a lack of transparency in government decision making and procedures, as well as investment measures that may disadvantage U.S. firms.

For the first two years of the agreement, existing measures in Malaysia and Vietnam would not be subject to the dispute settlement process for provisions pertaining to cross-border data flows, localization, or discrimination. Allowing such barriers to persist would appreciably, though temporarily, limit gains in U.S. computer services exports to those quickly growing markets. Nevertheless, in the long term, TPP would likely lead to significant liberalization and changes in the regulatory environments that foreign providers of computer services face in these markets.

As noted, carveouts for government procurement and government data processing under Article 14.2.3 would enable TPP parties to require that processing or storage of government data take place on domestic computing facilities. Because governments are among the largest purchasers of computer services, this is potentially a significant exception, as the decreased openness of the procurement market would likely create delays and raise production costs for U.S. providers of computer services. A prerequisite to use domestic data centers, for example, would greatly undermine the efficiencies of cloud computing.⁷³⁵

Four side letters are relevant to computer services. One of these pertains to transparency provisions with Australia; two address government procurement (the applicability of TPP rather than NAFTA for Canada, and the applicability of TPP rather than NAFTA among the United States, Canada, and Mexico); and the final one clarifies the conditions that Vietnam could apply to electronic payment services. Vietnam would be able to require electronic payment services to be supplied through a gateway operated by a national switching facility licensed by the State Bank of Vietnam as long as the requirement (1) ensures the security, speed, or reliability of the services, and (2) is not used to avoid Vietnam's obligations, impose unreasonable costs, or otherwise disadvantage service providers from another party.⁷³⁶

Under Article 2.2, Chile and Mexico have agreed only to "endeavor" to become participants in the Information Technology Agreement (ITA), even though the Market Access chapter requires that each party become ITA participants.⁷³⁷ The requirement to join the ITA would be of greater

⁷³⁴ BSA | The Software Alliance, "2013 BSA Global Cloud Computing Scorecard," 2013, 22–23.

⁷³⁵ Verge, "Second Google Data Center Coming to Singapore," June 2, 2015. Data centers are expensive; Google is building a data center in Singapore for an estimated \$380 million.

⁷³⁶ USTR, TPP, full text, [U.S.-Vietnam Letter Regarding Electronic Payment Services](#).

⁷³⁷ ITAC-8, *The Trans-Pacific Partnership Trade Agreement: Report of the Industry Trade Advisory Committee on Information and Communications Technologies, Services, and Electronic Commerce*, December 3, 2015. The ITAC-8 considers it "unfortunate" that Chile and Mexico have only agreed to "endeavor" to become ITA participants.

significance to future entrants to TPP, since all parties except Chile and Mexico are already participants.

Estimated Effects of TPP on Digital Trade

The United States is a leading global innovator and creator of digital products and content, and in analyzing, storing, and managing data.⁷³⁸ At the same time, U.S. firms in nearly all sectors of the economy have moved to adopt digital technologies in their operations.⁷³⁹ Consequently, TPP's e-commerce provisions, including particularly those ensuring cross-border data flows and protecting against localization measures, will likely strengthen the competitive advantage the United States has in many digital sectors. In the view of several Commission hearing participants, benefits are likely to accrue to a wide array of U.S. businesses and individuals that rely on digital trade and technologies across most sectors of the U.S. economy, from the very largest U.S. corporations, including high-technology leaders such as Amazon, Apple, eBay, Facebook, Google, and Microsoft, to SMEs, microenterprises, and individual Internet users.⁷⁴⁰ The expanded e-commerce protections would be particularly beneficial for information and technology firms, and the impact of TPP on U.S. computer services providers is discussed in detail below.

More widely, TPP will likely benefit U.S. businesses in all sectors with relatively higher levels of digital intensity.⁷⁴¹ These include information and technology firms—such as cloud computing and storage services providers, producers of audiovisual products, and providers of streaming services—but also, increasingly, manufacturers, retailers, and other services providers that depend on electronic commerce and the Internet as well.⁷⁴² Professional services providers that can digitize and transmit their services electronically, such as engineering and architectural services and healthcare providers, will also benefit from the e-commerce provisions, as well as other parts of TPP, including provisions on the cross-border supply of professional services.⁷⁴³

⁷³⁸ USITC, *Digital Trade 1*, 2013; Aaronson, "The Digital Trade Imbalance and Its Implications," February 2016.

⁷³⁹ See USITC, *Digital Trade 2*, 51, figure 2.10, "Characteristics of Internet Usage."

⁷⁴⁰ Data flows are increasingly important in almost all sectors, including in IT, manufacturing, healthcare, transportation, energy, and environment. USITC, *Digital Trade 1*, 2013, 3-2; BSA, "What's the Big Deal with Data?" October 2015. Providers of video services, which account for an estimated 60 percent of global Internet bandwidth, are also expected to be important beneficiaries of protections on digital flows. USITC, hearing transcript, January 13, 2016, 282 (testimony of Christopher Padilla, IBM); Espinel, testimony before the House Committee on the Judiciary Subcommittee on Courts, Intellectual Property, and the Internet, November 3, 2015; USITC hearing transcript, January 13, 2016, 198–99 (testimony of John Murphy, U.S. Chamber of Commerce).

⁷⁴¹ This is defined as the degree to which different industry sectors have adopted digital technologies. Several different metrics may be used to rank the digital intensity of different sectors. USITC, *Digital Trade 1*, 2013, xii.

⁷⁴² USITC, *Digital Trade 1*, 2013, 2-2, 3-2.

⁷⁴³ For discussion of digital intensity by sector, see chapter 3, USITC, *Digital Trade 1*, 2013.

Effect of TPP E-commerce Provisions on Services Trade Costs

The effect of the e-commerce provisions is one key component in the calculation of the overall reduction in services trade costs brought about by the Agreement. As discussed above, the impact of the e-commerce provisions on cross-border trade in services is likely to vary by sector, depending on how intensively digital technologies are used in the course of business.⁷⁴⁴ Commission modeling estimates that the communications sector would see the largest reduction in trade costs as the result of the liberalization associated with the E-commerce chapter provisions, with the estimated trade costs falling by 19 percent to 37 percent from a baseline level of 45 percent. Other sectors with large estimated reductions in trade costs due to the e-commerce provisions are “other business services” (which includes professional services and technical services, as well as equipment leasing and real estate services), with a 17 percent decline from a baseline ad valorem equivalent (AVE) of 34 percent, and the wholesale and retail trade sector, with a 10 percent decline from a baseline AVE of 34 percent. In each instance, the impact of the e-commerce provisions is significant. Nonetheless, a large part of total trade costs will remain, as these include the impact of the entire range of regulatory impediments to trade.

TPP Impact on U.S. Computer Services Trade

Taken together, the TPP provisions related to trade in computer services introduce important liberalization. As a result, U.S. exports of computer services are projected to increase to above baseline levels in 2032, with the largest increases going to Japan, Malaysia, and Vietnam. Under TPP, Japan’s computer services commitments would improve relative to its GATS commitments; for example, it could not allow discriminatory measures for new services or services that are not yet technically feasible. TPP would not likely have a significant impact on U.S. imports of computer services from any TPP member country, as the United States is already generally open to foreign firms.⁷⁴⁵

Summary of Views of Interested Parties

The Internet Association notes that TPP promotes “pro-Internet policies” that have been absent from previous U.S. trade agreements. The association argues that such policies are important to Internet-based industries, which are an “essential American export.”⁷⁴⁶ Numerous Commission hearing participants, representing a range of industry sectors, emphasized the importance of the TPP provision protecting cross-border data flows. For example, a Walmart representative noted that the retail services company is investing heavily in IT and e-commerce, and relies on an open Internet to serve customers at home and internationally. The firm also depends on

⁷⁴⁴ Note: this discussion of the impact of TPP e-commerce provisions on trade costs refers to Commission estimates of inputs to the model, not model results.

⁷⁴⁵ Computer services are mainly traded business to business; OECD, “STRI Brief: Computer Services,” 2014.

⁷⁴⁶ Beckerman, “Statement in Support of the Trans-Pacific Partnership,” March 30, 2016.

digital connections between its U.S. base and its global affiliates to provide many back-office functions, such as human resources and accounting, from its U.S. base to global affiliates.⁷⁴⁷

U.S. interested parties from the computer services industry support TPP as “an historic trade agreement that potentially opens and grows digital markets, safeguards intellectual property, and advances hightech American jobs.”⁷⁴⁸ They consider the commitments on core ICT issues, such as market access and behind-the-border trade restrictions (e.g., cross-border data flows, prohibitions on forced localization and technology) to be significant achievements that would promote the economic interests of the United States. Despite some shortcomings, interested parties view TPP as a catalyst for new opportunities in the AsiaPacific region.

Market Access

Industry commentators strongly supported the TPP provisions assuring that (1) parties’ market access commitments on services apply as much to services delivered or performed electronically as they do to those delivered conventionally, and (2) parties may not require computer services firms to establish a local presence as a condition for supplying services, which is crucial for ensuring the ability to offer services such as cloud computing.⁷⁴⁹ The report of the Industry Trade Advisory Committee for Information and Communications Technologies, Services and Electronic Commerce (ITAC- 8) states that the Market Access chapter would help to ensure that the goods exported by the U.S. ICT industry to the other TPP parties receive national treatment and have full market access.⁷⁵⁰ Peter Allgeier, representing the Coalition of Service Industries, testified that there is “integration between services and goods.” He further testified that “it’s a two-way integration in that to the extent barriers are coming down on goods, they are going to require additional services to meet those markets.”⁷⁵¹

Data and Information Flows

Industry representatives largely endorsed the TPP Agreement, emphasizing that rules ensuring free and full transfer of data and information would likely strengthen demand for the capabilities and cost efficiencies of cloud computing, the Internet of Things, and big data analytics.⁷⁵² Upon release of the TPP text, Dean Garfield, president and CEO of the Information Technology Industry Council, released a statement that TPP “addresses new issues critical to the continued growth of, and innovation by, the tech sector. For the first time in a trade

⁷⁴⁷ USITC, hearing transcript, January 13, 351 (testimony of Sara Thorn, Walmart).

⁷⁴⁸ Entertainment Software Association, “ESA Statement on Trans-Pacific Partnership,” October 7, 2015.

⁷⁴⁹ Industry representatives, interview by USITC staff, Washington, DC, February 15, 2016.

⁷⁵⁰ ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, Executive Summary.

⁷⁵¹ USITC, hearing transcript, January 13, 2016, 332 (testimony of Peter Allgeier, Coalition of Service Industries).

⁷⁵² Cisco reports that the digital universe—composed of the data we create and copy annually—is doubling in size every two years; by 2020, the digital universe will reach 44 zettabytes, or 44 trillion gigabytes. Industry representative, telephone interview by USITC staff, January 6, 2016.

agreement, there are provisions that prohibit restrictions on cross border data flows.”⁷⁵³ In testimony before the Commission, Carl Schonander, representing the Software and Information Industry Association (SIIA), argued that Article 14.11 on cross-border data flows is the “fundamental commitment” with respect to the digital economy. He further stated that “cross-border data flows are an intrinsic feature of the 21st century global information economy, they are as essential to today’s economic, social and political activity as air travel and electricity.”⁷⁵⁴ Describing data as the “lifeblood of the 21st century economy,” Christopher A. Padilla, representing IBM, praised TPP as a “forward looking trade pact that seeks to limit obstacles to digital data flows even before they can take root.”⁷⁵⁵

Localization

In their positive comments on TPP, U.S. industry representatives frequently cited provisions prohibiting data localization measures and the benefits they would give to U.S. firms and U.S. economic growth. Victoria Espinel, president and CEO of BSA | The Software Alliance, stated, “For the first time, enforceable trade rules establish free flow of data across borders as the rule and address trade barriers such as requiring localization.”⁷⁵⁶ Another industry representative testified that Article 14.13, which addresses localization measures, is “ground breaking in trade terms.”⁷⁵⁷

Many industry representatives have, however, expressed concern about Article 14.1, which excludes the financial services industry from the provisions pertaining to both cross-border data flows and localization measures. One industry representative considers the localization exception “very disturbing,” adding that “financial services are denied the cost and efficiency benefits of the lowered trade barriers but will also be exposed to the considerable risks that derive from data localization laws to managing a secure, well-functioning global information system.”⁷⁵⁸

Other Issues

The ITAC-8 considers it a shortcoming that existing measures in Malaysia and Vietnam are not subject to the dispute settlement process for both cross-border data flow and localization provisions for the first two years of the agreement.⁷⁵⁹ The ITAC-8 is also of the opinion that

⁷⁵³ ITI, “ITI Reviewing TPP Agreement Text,” November 5, 2015.

⁷⁵⁴ USITC, hearing transcript, January 13, 2016, 299–300, 302 (testimony of Carl Schonander, SIIA).

⁷⁵⁵ IBM, “IBM Statement on Close of Trans-Pacific Negotiations,” October 5, 2015.

⁷⁵⁶ BSA, “BSA Welcomes Trans Pacific Partnership Agreement,” October 4, 2015.

⁷⁵⁷ USITC, hearing transcript, January 13, 2016, 300 (testimony of Carl Schonander, SIIA).

⁷⁵⁸ USITC, hearing transcript, January 13, 2016, 333 (testimony of Peter Allgeier, Coalition of Services Industries). ITAC-8’s report “urges the Administration to avoid this exception in future agreements”; ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 3.

⁷⁵⁹ ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 8.

establishing restrictions on the regulation of cryptography “will be regarded as groundbreaking and fundamental to progress in the field of information and communication technology,” but is disappointed at the exceptions for financial institutions and law enforcement.⁷⁶⁰

Even with these reservations, stakeholders and interested parties largely support TPP and believe the computer services provisions will be of economic and societal benefit to the United States. Ed Brzytwa, representing the Information Technology Industry Council, testified that “the TPP Agreement will be a viable tool to promote durable growth and innovation in the United States and globally and expand the social and economic benefits of the digital economy.”⁷⁶¹

Financial Services

Financial services are traditionally treated separately from other services in free trade agreements. Sector-specific provisions are necessary because countries need to ensure a trade and regulatory environment for financial institutions (such as banks and insurance companies) that is prudent, comprehensive, and efficient, but that also retains regulators’ flexibility to react to potential crises. TPP’s Financial Services chapter (Chapter 11) contains the agreement’s provisions regarding financial institutions’ market access, national treatment, and cross-border data flows, as well as provisions addressing cross-border trade of other financial services providers. As listed in TPP Chapter 11, financial services includes direct insurance; reinsurance; insurance intermediation; services auxiliary to insurance; deposit taking and lending; leasing; payments and money transmission; guarantees; trading of all assets, foreign exchange, and equities; securities; money broking; asset management; settlement and clearing; provision and transfer of financial information; and advisory, intermediation, and other auxiliary services.

Assessment

Again, TPP would likely have the greatest impact in markets where the U.S. did not previously have an FTA: Brunei, Japan, Malaysia, New Zealand, and Vietnam. Financial services firms would gain significant protections with regard to market access, most-favored-nation tariff treatment, and national treatment that could result in significant export growth.⁷⁶² Insurance firms would likely see the most immediate effects from provisions regarding state-owned postal entities, particularly in Japan, that also sell insurance and other financial services. At the same time, TPP’s expected positive impact on overall growth rates in TPP markets would likely lead to increased demand for financial services in those markets, because demand for financial services

⁷⁶⁰ Ibid., 13.

⁷⁶¹ USITC, hearing transcript, January 13, 2016, 275–76 (testimony of Ed Brzytwa, Information Technology Industry Council).

⁷⁶² AIA, written submission to the USITC, January 13, 2016.

generally tracks economic growth and activity. Additionally, increased goods trade resulting from TPP would also likely increase overall demand for cross-border trade in financial services, especially trade-associated finance and insurance. The derived demand for financial services arising from international trade in goods explains why financial services account for a larger share of global trade in value-added terms than direct exports and imports do.⁷⁶³

Banking

Most TPP markets are free of the most restrictive policies affecting market access for providers of banking services (i.e., deposit taking and lending). With the exception of Malaysia, Brunei, and Vietnam, U.S. banks already enjoy relatively open market access to TPP partner countries.⁷⁶⁴ However, Malaysia, Brunei, and Vietnam maintain moderate market access barriers (mostly related to foreign equity limits and different licensing criteria for foreign versus domestic banks), which they retain under the TPP Agreement. These are included in Annex III as nonconforming measures (NCMs).

Overall, TPP would provide some additional liberalization for U.S. banks' exports and foreign direct investment, in the form of improved market access and increased certainty for investors from the expanded protections under the investor-state dispute settlement (ISDS) mechanism. These effects are largest for the TPP partners with which the U.S. does not have an existing FTA, but there are also important effects in the other TPP markets, given the expanded access to ISDS and assurances for cross-border data transfer under TPP.

Insurance

TPP would likely increase trade in insurance services among the parties by lowering market access barriers for insurers and by reducing impediments to competition in local markets. These provisions would apply both to cross-border trade (mode 1) and to the establishment of affiliates (mode 3), the primary modes of international trade in insurance services. As is the case in other sectors, the export-boosting effect for insurance would likely be strongest for U.S. trade with TPP parties that do not already have FTAs with the United States. Even a small amount of liberalization would be significant, given the size of the insurance markets in the United States (which accounted for a quarter of the \$4.8 trillion insurance premiums written globally in 2014) and in Japan (which accounted for 10 percent).⁷⁶⁵ In 2013, the United States

⁷⁶³ Rouzet et al., "Services Trade Restrictiveness Index (STRI)," 2014.

⁷⁶⁴ The Services Trade Restrictiveness Index (STRI) is a rough measure of market openness whose value changes based on whether a country maintains certain restrictive policies, but it is not a comprehensive measure. All TPP partners have a score of zero, with the exceptions of Brunei, Malaysia, and Vietnam, which have scores of 50, indicating the presence of moderately distorting policies.

⁷⁶⁵ Other TPP countries combined accounted for 7 percent (excluding Brunei, for which data are not available). I.I.I., "World Overview," n.d. (accessed January 25, 2015).

exported \$17 billion and imported \$53 billion of cross-border insurance services, and sold \$65 billion of insurance through affiliates abroad while purchasing \$69 billion of insurance from affiliates in the United States.⁷⁶⁶

Summary of Provisions Applying to Financial Services

The Financial Services chapter (TPP Chapter 11) defines a financial institution as a financial intermediary or other enterprise that is regulated as a financial institution (Article 11.1). TPP's Annex 11-A lists the financial services that are covered by the cross-border trade provisions. The chapter does not apply to government procurement of financial services. This section will describe provisions in the chapter that apply generally to all financial services, before examining in more detail TPP provisions that specifically affect the banking and insurance sectors.

The TPP Financial Services chapter defines the scope of covered services in line with the GATS. The chapter incorporates certain provisions from the TPP Investment chapter (TPP Chapter 9) and the Cross-border Trade in Services chapter (TPP Chapter 10), and includes provisions for national treatment and most-favored-nation status and for market access. Most importantly, these provisions state that TPP partner countries may not give more favorable treatment to domestic financial services firms than to foreign ones. The Financial Services chapter also contains provisions that relate to the supply of new financial services (Article 11.7). If a TPP partner country allows its own financial institutions to provide new financial services, financial institutions from other TPP parties will also be permitted to provide these services in the market.⁷⁶⁷

The chapter also provides protections to investments in financial institutions, similar to those provided by existing U.S. FTAs. These provisions are particularly important in that financial services are typically traded by establishing commercial presence.⁷⁶⁸ In addition, TPP provides expanded rights for U.S. financial services firms to handle investment disputes using the ISDS mechanism in certain instances.

Financial institutions have access to ISDS for violations regarding transfers, special formalities and information requirements, and denial of benefits, as is the case under existing U.S. FTAs. In addition, TPP expands ISDS for financial services to cover violations of the minimum standard of treatment and treatment in the case of armed conflict or civil strife.⁷⁶⁹ However, the Financial Services chapter does not go as far as the ISDS section of the Investment chapter (Chapter 9) in extending ISDS to U.S. investors to redress violations of national treatment or most-favored-

⁷⁶⁶ USDOC, BEA, "International Services," tables 2.2, 3.1, and 4.1 (accessed January 16, 2015).

⁷⁶⁷ This is in line with the adoption of a negative list approach for making services commitments, whereby full liberalization and equal treatment is assumed unless an exception is explicitly stated.

⁷⁶⁸ Rouzet et al., "Services Trade Restrictiveness Index: Financial Services," 2014, 6.

⁷⁶⁹ Stewart and Stewart, "TPP: A Side-by-Side Comparison," n.d. (accessed January 12, 2016).

nation status. Financial institutions must still pursue such disputes through the state-to-state dispute settlement process outlined in TPP Chapter 28.⁷⁷⁰

The ISDS mechanism for financial services also contains a new provision about an exemption for prudential regulations (Article 11.22).⁷⁷¹ Under this provision, if an ISDS case is brought against a TPP country and the responding country invokes the exemption for prudential regulations, the relevant regulators from the two parties consult to determine if the regulation in dispute is indeed a prudential regulation. If so, then the investment arbitration case is resolved in favor of the host country. However, if the regulators do not agree, a parallel state-to-state dispute settlement on the question of whether the regulation falls within the prudential exception proceeds alongside the ISDS proceeding.

Consistent with the provisions of the E-commerce chapter that apply to other industries (Article 14.11), the Financial Services chapter provides for the free movement of data across borders to allow firms to carry out the data analysis needed in the regular course of doing business (Chapter 11, Annex B). The general prohibition against data localization requirements stated in the E-Commerce chapter (Article 14.13), however, does not apply to financial institutions and other providers of cross-border financial services (Article 14.1). The Financial Services chapter's provisions on the transfer of information across borders are new and add protections for financial services firms not included in prior trade agreements. However, the impact of these provisions is offset by the exclusion of financial services from the prohibition of data localization measures.

As is the case for cross-border trade and investment in other services industries, the provisions of the Financial Services chapter are applied on a negative list basis, meaning that they apply in the absence of an exception, or NCM. For financial services, the NCMs are outlined in Annex III of the agreement. NCMs of note are an investment screening requirement in Malaysia and a special ratchet mechanism for Vietnam. In its NCM, Malaysia reserves the right to screen all foreign investment in the financial services sector for "the best interests of Malaysia" (Malaysia, Annex III).⁷⁷² Vietnam's temporary exemption from the agreement's general ratchet mechanism would allow Vietnam a transition period for new liberalization undertaken after TPP's entry into force (TPP Chapter 11, Annex C). Unlike the rule for other TPP partners, where any new liberalization enacted after TPP's entry into force would be binding moving forward

⁷⁷⁰ For more information on the dispute settlement process, see the section on TPP Chapter 28 in chapter 6 of this report.

⁷⁷¹ As defined in the TPP, "prudential" refers to regulations meant to maintain the safety, soundness, integrity, or financial responsibility of individual financial institutions or cross-border financial service suppliers as well as the safety, and financial and operational integrity of payment and clearing systems (Article 11.11, n.10).

⁷⁷² While Malaysia's Annex III commitments list certain factors to be considered in the decision, no precise standards are defined.

(Article 11.10), Vietnam would be allowed during the 3 years after TPP enters into force to introduce and subsequently remove more liberal policies than those in place at entry into force.

Banking

The provisions of the TPP Financial Services chapter, as discussed above, apply to providers of cross-border financial services, including the banking sector. Annex 11-A provides a list of financial services sectors, by country, where TPP countries undertake specific cross-border commitments. In no case did a TPP party undertake commitments on cross-border (mode 1) trade in banking services, largely because banks are closely regulated in each market. As a result, mode 3 trade (trade through commercial presence, or investment) accounts for the vast majority of trade in retail and commercial banking.⁷⁷³ TPP provisions affecting banks are therefore focused on their trade through commercial presence.

Most of the NCMs related to banking address the treatment of branches of foreign banks (where the foreign investor does not control a locally incorporated bank). The treatment of branches ranges broadly: Australia would limit the size of initial deposits in branches of foreign banks to those over \$A250,000 (roughly equivalent to \$195,000); Canada and Japan would not permit the branches to participate in their national deposit insurance schemes; and Brunei would reserve the right to provide certain benefits only to locally incorporated banks.

Insurance

In addition to the general provisions described above, the Financial Services chapter of TPP contains certain measures that specifically affect insurance firms. It liberalizes cross-border trade in freight insurance and reinsurance,⁷⁷⁴ and for some parties it also liberalizes insurance-related auxiliary and intermediation services. The chapter also lets regulators expedite the offering of insurance services (Article 11.16).

Section C of the Financial Services chapter stipulates that postal entities which supply insurance should not be treated more favorably than private suppliers. In the case of Japan, this issue is further clarified in a side letter between the United States and Japan, which affirms that Japan Post can distribute insurance products from companies other than Japan Post Insurance. This gives foreign insurers access to Japan Post's distribution network.

Measures affecting state-owned insurers are generally excluded from coverage through NCMs: Australia, Brunei, Canada, Malaysia, and New Zealand all specifically mention state-owned

⁷⁷³ Rouzet et al., "Services Trade Restrictiveness Index: Financial Services," 2014.

⁷⁷⁴ Reinsurance is the practice of insurers transferring portions of risk portfolios to other parties by some form of agreement in order to reduce the likelihood of having to pay a large obligation resulting from an insurance claim.

enterprises in their Annex III entries. Compulsory insurance is also a point of sensitivity;⁷⁷⁵ New Zealand and Peru exclude any measure related to compulsory insurance, while Chile and Singapore require that compulsory insurance be purchased in-country. The Financial Services chapter generally prohibits nationality requirements for senior managers and boards of directors of foreign-owned companies (Article 11.9), but several signatories would require residency for insurance brokers or board directors. Some countries would place limits on the form that foreign-owned insurance companies can take, such as Mexico's prohibition on branches. These requirements are codified in Annex III, which lists exceptions to generally applicable provisions.

Vietnam and Malaysia both have particular carve-outs related to insurance. Vietnam was concerned that its regulators might need time to build the capacity to handle new, sophisticated financial products so, as with banking, it negotiated a temporary exemption from the ratchet mechanism (the requirement that commitments will not be undone after they are accepted). Malaysia will keep an economic needs test for new insurance products, with the Ministry of Finance determining whether or not to approve a financial services license.

TPP is more comprehensive than previous FTAs, but in many respects it builds on provisions in earlier agreements. For example, the U.S.-Peru agreement let foreign insurers participate in Peru's government-mandated pension program. And in most existing U.S. FTAs, as in TPP, cross-border insurance liberalization is limited to marine, aviation, and transit insurance; reinsurance; and auxiliary services.⁷⁷⁶ Separate rules apply to supply of insurance through affiliates.

Impact of TPP in Selected Financial Service Sectors

As banks and insurance providers are the two largest categories of regulated financial institutions, the impact of TPP on these sectors is described in more detail below.

Banking

The Commission's model estimates that, as a result of TPP, the output of U.S. non-insurance financial services (this category consists primarily of banking services providers) would be \$1.5 billion higher than the baseline estimate for 2032. Looking at TPP partners without existing U.S. FTAs, the Commission estimates U.S. cross-border net exports of non-insurance financial services would be \$1.0 billion higher than the baseline, almost entirely the result of an

⁷⁷⁵ Compulsory insurance is insurance that individuals or organizations are legally required to buy, such as auto liability insurance in the United States.

⁷⁷⁶ All U.S. trade agreements preserve the right of governments to regulate the insurance industry for prudential reasons, so the effects of FTAs partly depend on how governments interpret and apply this broad exception. Countries like Bahrain, Colombia, Oman, Panama, and Peru have relatively small insurance markets, and most had already committed to significant liberalization in the GATS, so the anticipated effects on insurance trade were modest but positive.

estimated increase in exports to these markets, as estimated imports to the United States from new FTA partners are likely to be small. Net exports of non-insurance financial services to TPP partners with existing FTAs would increase by only \$24 million relative to baseline in 2032. However, increased net exports of non-insurance financial services to TPP partners would be more than offset by an estimated \$1.9 billion decrease in net exports of these services to other trading partners outside TPP (relative to the baseline estimate for 2032). The combined \$1.0 billion fall in the level of exports of these services to non-TPP markets and estimated \$0.9 billion rise in the level of imports of these services from non-TPP markets relative to baseline projections reflects the overall shift of both goods and services trade from non-TPP to TPP partners, as well as the impact of stronger demand for services in the United States.

Insurance

Brunei, Japan, Malaysia, New Zealand, and Vietnam do not have prior FTAs with the United States, so from the perspective of U.S. insurers these countries would see the most significant market liberalization with TPP.⁷⁷⁷ In TPP parties with existing U.S. FTAs, markets are already relatively accessible to U.S. insurance providers, but the ISDS mechanism, postal insurance provisions, and other elements of TPP should further increase policy certainty and reduce investment risk for U.S.-based insurers. The Commission's model estimates that U.S. net exports of insurance services (mode 1 trade) to TPP partners would be \$0.6 billion higher than baseline projections (again because of strong exports and only a very small change in imports), but net exports globally would be \$0.7 billion lower than the projected 2032 baseline level.⁷⁷⁸

More significant effects are likely to be seen in mode 3 trade, or the sales of foreign affiliates established in TPP partner markets. A 2009 report by the Commission used a gravity model to estimate the impact of nontariff measures on the insurance industry, and found that a 1 percent decrease in a country's insurance restrictiveness correlated with a 1.5 percent increase in U.S. affiliate sales of insurance to that country.⁷⁷⁹ The policy changes in TPP cannot be clearly mapped to this measure of restrictiveness (e.g., the availability of ISDS recourse was not part of the restrictiveness score), but this elasticity suggests that insurance exports are fairly responsive to liberalization.

At the same time, demand for insurance generally tracks economic growth. As people become wealthier, they are more likely to buy health and life insurance and to acquire cars, houses, and other goods that can be insured. If the TPP Agreement raises the overall rates of economic growth in the TPP parties, that should provide opportunities for increased sales of insurance.

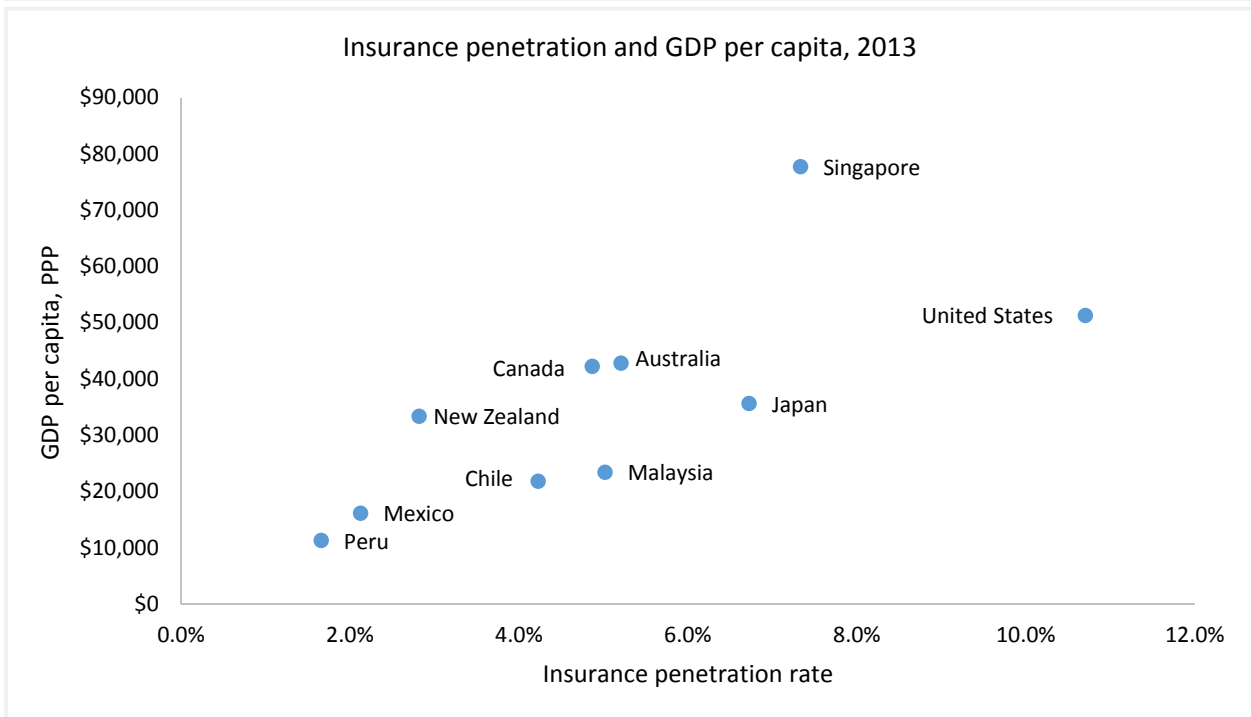
⁷⁷⁷ USITC, hearing transcript, January 13, 2016, 268 (testimony of Peter Allgeier, Coalition of Services Industries).

⁷⁷⁸ Estimates by USITC.

⁷⁷⁹ USITC, *Property and Casualty Insurance Services*, March 2009.

However, insurance penetration rates are a more precise measure of room for growth, and these rates differ from indicators of overall economic development. New Zealand, Singapore, and Mexico all have lower insurance penetration rates than their GDP per capita would predict, possibly because of market access barriers (figure 5.9).⁷⁸⁰ These countries are attractive growth markets for insurance companies, since they would be expected to buy more insurance just to meet global averages. New market access facilitated by TPP may lead to additional insurance purchases in these countries.

Figure 5.9: Insurance penetration and GDP per capita, 2013



Source: OECD.Stat, “Insurance Indicators” (accessed January 16, 2016); World Bank, “World Development Indicators” (accessed January 16, 2015). Corresponds to [appendix table J.24](#).

⁷⁸⁰ Penetration rates were not available for Brunei or Vietnam.

Summary of Views of Interested Parties

There is broad agreement that the market-access, most-favored-nation, and national treatment protections will increase the ability of U.S. financial services firms to engage in the markets of TPP partners. However, there is also a consensus that U.S. financial services firms will not experience the same benefits from TPP as will U.S. firms in other industries, largely because of differences in investment screening, ISDS coverage, and data-flow provisions.⁷⁸¹ In written testimony to the Commission, the American Insurance Association was optimistic that TPP will create opportunities for U.S. insurers, noting the low insurance penetration rates and high growth rates in TPP countries. The AIA believes TPP has improved upon previous trade agreements by addressing anti-competitive advantages enjoyed by state-owned insurance providers, particularly in Japan, and expanding the coverage of ISDS procedures, though it is disappointed that commitments on financial data flows are weaker than those for non-financial data.⁷⁸²

Financial service industry stakeholders have voiced widespread concern about Malaysia's investment screening program. Industry representatives express uncertainty about how Malaysia's investment screening mechanism will work in practice, noting in particular that there is no standard for what constitutes the "best interests of Malaysia."⁷⁸³

Additionally, the inability of individual firms to pursue claims through ISDS on these matters is seen as tantamount to those claims being unenforceable, since relying on state-to-state dispute settlement sets such a high bar.⁷⁸⁴ However, some observers view the idea of extending ISDS protections in TPP as potentially undermining the domestic regulatory framework for financial services institutions in some TPP countries.⁷⁸⁵

Given the weaker language on transfer of information in the Financial Services chapter, financial services firms have expressed significant frustration that the increased protections for cross-border data flows and against data localization measures won for other industries will not

⁷⁸¹ USITC, hearing transcript, January 13, 2016, 268 (testimony of Peter Allgeier, Coalition of Services Industries) and 272 (testimony of Stephen Simchak, American Insurance Association); USITC, hearing transcript, January 14, 2016, 648 (testimony of Bob Vastine, Georgetown Center for Business and Public Policy); Guida, "Morning Trade," March 10, 2016; Bliss and Lane, "TPP Series: Services Chapter," March 9, 2016.

⁷⁸² USITC, hearing transcript, January 13, 2016, 270-74 (testimony of Stephen Simchak, American Insurance Association).

⁷⁸³ USITC, hearing transcript, January 13, 2016, 265 (testimony of Peter Allgeier, Coalition of Services Industries); USITC, hearing transcript, January 14, 2016, 647 (testimony of Bob Vastine, Georgetown Center for Business and Public Policy).

⁷⁸⁴ USITC, hearing transcript, January 13, 2016, 266 (testimony of Peter Allgeier, Coalition of Services Industries); USITC, hearing transcript, January 14, 2016, 648 (testimony of Bob Vastine, Georgetown Center for Business and Public Policy).

⁷⁸⁵ AFL-CIO, written submission to the USITC, December 29, 2015.

apply to financial services firms.⁷⁸⁶ Treasury Secretary Jack Lew has defended the differing treatment, however, saying the United States did not push for an equal standard due to prudential concerns of U.S. financial regulators.⁷⁸⁷

Professional Services

This section provides a summary of provisions and outlines instances of potential liberalization in professional services across TPP partners. Three categories of professional services are included in the discussion: (1) architectural, engineering, integrated engineering, and urban planning and landscape architectural services; (2) accounting, auditing, and bookkeeping services; and (3) legal services.

Liberalization in professional services is observed in the same way as for other services sectors. For existing FTA partners, the degree of liberalization is the difference between the NCMs listed in existing FTAs and those listed in TPP. For new FTA partners, liberalization is assessed by comparing each country's commitments in the GATS with commitments under TPP. The scope for liberalization is limited in some TPP countries, either because prior agreements already establish a liberal environment for trade, or because countries have kept restrictions from existing agreements in TPP. In addition, as for all services sectors, the adoption of a negative list approach in TPP implies eventual wider coverage of the agreement with respect to new services that may be introduced in the future.

Assessment

Five TPP partners have scaled back their exceptions to open trade in professional services, at least to some degree, creating new opportunities for U.S. businesses. The analysis shows that, relative to their GATS commitments, Brunei and Malaysia's TPP commitments represent liberalization across the three professional services categories outlined above.⁷⁸⁸ Additionally, relative to preexisting FTAs or GATS commitments, the following countries' TPP commitments signify liberalization: Chile and Japan in legal services; New Zealand in integrated engineering, urban planning and landscape, and architectural services; and Singapore in architectural and engineering services, as well as auditing services.

⁷⁸⁶ USITC, hearing transcript, January 13, 2016, 265, 268 (testimony of Peter Allgeier, Coalition of Services Industries); USITC, hearing transcript, January 14, 2016, 647 (testimony of Bob Vastine, Georgetown Center for Business and Public Policy); *Inside U.S. Trade*, "U.S. Financial Firms Worried about TPP Exception," November 3, 2015.

⁷⁸⁷ Guida, "Lew Defends Financial Services Data Carveout," February 11, 2016.

⁷⁸⁸ See discussion below for more information on which professional services subsectors would be liberalized under TPP.

Summary of Provisions

In practice, foreign suppliers of professional services may face restrictions on international trade that can include residency or establishment requirements, limits on the number or types of entities allowed, and restrictions on entering into partnerships with or employing locally qualified professionals, among others.⁷⁸⁹ Restrictions based on qualification, licensing, or authorization, or lack of transparency in regulations, are also prevalent in many countries. The provisions of TPP which address and potentially liberalize these restrictions are constrained by the presence of sector-specific NCMs, which inform the analysis below.

Architectural, Engineering, Integrated Engineering, and Urban Planning and Landscape Architectural Services

Within TPP, certain countries have requirements for residency or local presence in architectural, engineering, and related services (which restrict or set conditions on cross-border trade), as well as limits on form, including partnership requirements (which further regulate trade via commercial presence).⁷⁹⁰ However, these NCMs are not viewed as particularly onerous restrictions to trade, and, as outlined below, there are also instances of liberalization due to the agreement.⁷⁹¹

TPP Parties with Existing U.S. FTAs

- Singapore's TPP commitments represent liberalization relative to the U.S.-Singapore Agreement because there are fewer scheduled NCMs. That agreement contained NCMs that specified registration and residency requirements and licensing requirements for corporations, along with other restrictions for architectural and engineering services, while Singapore's TPP commitment specifies only Singapore's maintenance of a controlling interest in the national engineering company.⁷⁹²

⁷⁸⁹ On restrictions in legal and accounting services, see Geloso Grosso et al., "Services Trade Restrictiveness Index," 2014, 8–10.

⁷⁹⁰ Brunei, Canada, Japan, and Malaysia have such restrictions in one or more industry area. Singapore and Peru also have restrictions in this area, discussed below. For a full list of NCMs, see appendix E.

⁷⁹¹ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 10.

⁷⁹² U.S.-Singapore FTA, Annex 8A, 10, 15; for TPP sources, see appendix E.

- In the case of Australia, Chile, Peru, Mexico, and Canada, there do not appear to be any substantial or effective changes relative to existing FTAs.⁷⁹³

Countries with Which the United States Does Not Currently Have an FTA:

- Brunei's TPP commitments, which specify residency, registration, or other restrictions, represent liberalization across architecture, engineering, and related services relative to the GATS, where no commitments were made.⁷⁹⁴
- Similarly, Malaysia's TPP commitments, which specify registration, residency, and limits on form or ownership, represent liberalization relative to their GATS mode 3 commitments in architectural and engineering services, which specified that such services may be supplied only by a natural person.⁷⁹⁵
- Finally, New Zealand's TPP commitments represent liberalization in integrated engineering and urban planning and landscape architectural services, where there were no previous GATS commitments.
- Japan and Vietnam's TPP commitments do not represent change relative to their GATS commitments.⁷⁹⁶

Accounting and Auditing

In practice, TPP countries' prevailing restrictions on the foreign provision of accounting and auditing services involve limits on activities by non-locally licensed individuals, including on ownership of firms, which are viewed as particularly restricting to trade.⁷⁹⁷ Within TPP, NCMs taken by certain countries mainly relate to such local licensing or local qualification restrictions,

⁷⁹³ There is no change in commitments under TPP in the case of Australia and Chile, because neither country scheduled NCMs in this area, and their existing FTAs already created a liberal environment (U.S.-Australia FTA; U.S.-Chile FTA). Under NAFTA, Mexico required an address for professional services, a provision which does not appear in TPP (NAFTA, Annex 1, I-M-44); the U.S.-Peru Agreement and TPP both specify higher registration fees for foreign architects, and nonresidents must have contract with residents (TPP also applies the latter to urban planning and landscape architectural services) (U.S.-Peru TPA, Annex 1, 5); under TPP, Canada maintains subnational NCMs related to residency and/or corporate form which were absent in NAFTA. However, U.S. providers would likely benefit from existing commitments under NAFTA.

⁷⁹⁴ WTO and World Bank, I-TIP Services database (accessed January 11, 2016-April 11, 2016). See appendix E for full list of Brunei's NCMs in this area.

⁷⁹⁵ These appear to be the most significant changes. See WTO and World Bank, I-TIP Services Database (accessed January 11, 2016-April 11, 2016) and appendix E for complete GATS commitments and NCMs in this area. For example, previous GATS commitments included caps on foreign direct investment for certain joint ventures (integrated engineering and landscaping services).

⁷⁹⁶ Both Japan's TPP provisions and GATS commitments include a local-presence requirement for architectural services; Vietnam does not list any restrictions in TPP, so its commitments under TPP are essentially the same as its full commitments scheduled under GATS.

⁷⁹⁷ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 9. See ITAC report for discussion of Mutual Recognition Agreements.

and appear to affect both cross-border trade and trade via commercial presence.⁷⁹⁸ Further, several countries have residency or local-presence requirements for auditing services, which serve to restrict cross-border trade.⁷⁹⁹ Nevertheless, as outlined below, there are instances where TPP would create new opportunities for U.S. accounting and auditing firms.

TPP Parties with Existing U.S. FTAs

- Singapore's TPP commitments represent liberalization relative to the U.S.-Singapore FTA for auditing services. Under TPP, Singapore does not have any NCMs in this area, where previous restrictions related to registration and residency.⁸⁰⁰
- In the cases of Australia, Canada, Chile, Mexico, and Peru, there do not appear to be any substantial or effective changes relative to existing FTAs.⁸⁰¹

Countries with Which the United States Does Not Currently Have an FTA

- Brunei's TPP commitments represent liberalization relative to GATS in accounting services, where no commitments were made.⁸⁰² Similarly, Malaysia's TPP commitments represent liberalization relative to GATS in accounting, auditing, and bookkeeping, since Malaysia has no NCMs in TPP in these areas, whereas previous GATS mode 3 commitments contained restrictions.
- Japan and New Zealand's TPP provisions do not represent a change relative to their GATS commitments.⁸⁰³

⁷⁹⁸ Brunei (authorization/joint venture), Chile (registration), Japan (requalification), and Peru (licensing). These licensing-related issues appear to relate to actual practice. The World Bank's Services Trade Restrictions Database (STRI), which provides information on applied services trade policy for 2008–10, catalogues restrictions specific to trade via commercial presence for auditing and accounting services where one of the prevailing limitations appears to be that firms must be owned by locally licensed professionals or related restrictions/requirements on local licensing, qualification, and representation by a local firm. World Bank, Services Trade Restrictions Database (accessed January 11, 2016–April 11, 2016)); Borchert, Gootiz, and Mattoo, "Guide to the Services Trade Restrictions Database," 2012.

⁷⁹⁹ This is the case for five countries (Australia, Canada, Japan, Peru, and Vietnam). This also appears related to certain countries' restrictions in actual practice. World Bank, Services Trade Restrictions Database (accessed January 11, 2016–April 11, 2016).

⁸⁰⁰ U.S.-Singapore FTA, Annex 8A, 9.

⁸⁰¹ Australia and Chile's existing FTA restrictions related to registry and/or residency in auditing are similar to those in TPP (U.S.-Australia FTA, Annex 1, 10; U.S.-Chile FTA, Annex 1, 18); Mexico does not have any NCMs in this area in TPP, while under NAFTA, Mexico's restrictions in this area were phased out and only a local address requirement remained (NAFTA, Annex 1, I-M-47). Although Canada and Peru's existing FTA restrictions appear to be more liberal than under TPP, they are unlikely to affect U.S. providers, which are likely afforded commitments in existing agreements. See appendix E for Canada's subnational NCMs across auditing, accounting, and bookkeeping and Peru's NCMs in auditing.

⁸⁰² While there are no accounting-specific NCMs in TPP, Brunei's TPP commitments specify joint venture and authorization requirements for auditing, which appear to be similar to its GATS commitments.

⁸⁰³ Under TPP, Japan has licensing and local presence requirements for certified public accountants and tax accountants, while previous GATS commitments required services to be supplied by a natural person or by an audit corporation under Japanese law; under TPP, New Zealand does not have any NCMs in this area. New Zealand also made full commitments under GATS.

- Finally, Vietnam’s local-presence NCMs for auditing under TPP are unlikely to represent an effective change relative to Vietnam’s GATS commitments.

Legal Services

Internationally traded legal services typically involve foreign lawyers providing legal services involving their home country law, international law, or other countries’ laws. Host country law, an increasingly important area of international trade, is normally subject to requalification and other requirements.⁸⁰⁴ With the exception of Japan, all other TPP member countries permit cross-border provision of legal services (as it relates to the ability to practice in areas other than host country law), as part of the TPP Agreement and in line with their current practice.⁸⁰⁵ Most countries regulate the provision of legal services via commercial presence, especially as it relates to the practice of host country law.⁸⁰⁶ Although TPP includes some NCMs that limit market opening,⁸⁰⁷ TPP commitments would represent liberalization in certain instances compared with either previous U.S. trade agreements or the GATS.

TPP Parties with Existing U.S. FTAs

- Chile’s TPP provisions represent liberalization relative to the U.S.-Chile FTA. Under TPP, Chile’s provisions include residency requirements for the giving of advice related to Chilean law, while the U.S.-Chile agreement specified that only Chilean natural persons could be authorized to practice as lawyers (i.e., advising on Chilean law).⁸⁰⁸
- Australia, Canada, Peru, and Singapore’s TPP provisions do not represent effective changes relative to previous agreements.⁸⁰⁹ Mexico’s TPP provisions do not appear directly comparable to those under NAFTA.⁸¹⁰

⁸⁰⁴ Geloso Grosso et al., “Services Trade Restrictiveness Index,” 2014, 7.

⁸⁰⁵ World Bank, Services Trade Restrictions Database (accessed January 11, 2016-April 11, 2016).

⁸⁰⁶ Brunei, Chile, Japan, Malaysia, Mexico, Singapore, and Vietnam have restrictions in TPP, mainly applied to the practice of host country law—for example, related to limits on form or local qualification requirements. Within the World Bank STRI database, several countries’ restrictions relate to licensing, ownership, form, or a prohibition on supplying legal services. This discussion minimally covers restrictions on services related to patents, trademarks, or notaries. For details on both, see appendix E.

⁸⁰⁷ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 20–21.

⁸⁰⁸ U.S.-Chile FTA, Annex 1, 19.

⁸⁰⁹ Australia, Canada, and Peru’s FTA restrictions, related to patent, trademark, or notary services, are carried over to provisions in TPP (U.S.-Australia FTA, Annex 1, 7; NAFTA, Annex 1, I-C-21, I-C-22; U.S.-Peru TPA, Annex 1, 4). Canada appears to be an exception, since there was a phaseout related to these provisions under NAFTA. Singapore maintains “any measure” for the practice of Singapore law; see International Bar Association, “Singapore International Trade in Services,” June 2014, for Singapore’s laws governing trade in legal services, and U.S.-Singapore FTA, Annex 8A, 12-13, for information on existing FTA commitments.

⁸¹⁰ It is unclear whether TPP represents liberalization in Mexican legal services with respect to NAFTA. NAFTA, Annex 1, I-M-45; Annex 2, II-M-2; Annex VI, VI-M-2.

Countries with Which the United States Does Not Currently Have an FTA

- The TPP provisions for Brunei, Japan, and Malaysia represent liberalization relative to their GATS commitments. Brunei and Japan maintain NCMs in legal services under TPP—including local presence or local qualification requirements (Japan) or partnership requirements and prohibition on the provision of advice on host country law (Brunei). Malaysia outlines conditions under which foreign law firms are allowed to practice Malaysian law. However, these countries' TPP provisions represent liberalization, as there were either no prior GATS commitments or trade in host country law was not allowed under GATS.
- Vietnam and New Zealand's TPP provisions do not appear to represent substantial changes relative to their GATS commitments.

Summary of Views of Interested Parties

The ITAC on Services and Finance Industries (ITAC-10) reported that principal provisions of TPP's Cross-Border Trade in Services chapter, including Article 10.5 (Market Access) and Article 10.6 (Local Presence), address relevant and important concerns in the foreign provision of professional services.⁸¹¹ Article 10.8 (Domestic Regulation) and Article 10.9 (Recognition) were also reported as important for trade in professional services.⁸¹² Certain provisions of TPP Annex 10-A on Professional Services (which encourages the recognition of professional qualifications, licensing, or registration) were highlighted by ITAC-10 as particularly important or as having a potentially significant impact, including (1) the formation of a Professional Services Working Group, (2) the establishment of temporary or project-specific licensing, and (3) the consideration of specific laws and regulatory issues for legal services.⁸¹³

According to Robert Vastine of Georgetown University, TPP is viewed by industry representatives as having a positive impact on the U.S. services sector, including professional services industries.⁸¹⁴ One participant in the Commission's hearing noted that as U.S. multinational corporations expand their operations abroad, their demand increases for support

⁸¹¹ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015. See page 10 of this document for information on TPP Chapter 10's relevance for architecture and engineering services, as well as a discussion of technical barriers to trade as they relate to such services. See also pages 20–21 on legal services, including a discussion of TPP Chapters 12 (Temporary Entry for Business Persons), 27 (Administrative and Institutional Provisions), and 28 (Dispute Settlement) as they relate to the provision of legal services.

⁸¹² ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 9, 21. See page 9 for a discussion of accounting and auditing services, which includes a discussion on Mutual Recognition Agreements and the relevance of Chapter 26 for such services.

⁸¹³ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 10, 21–22.

⁸¹⁴ USITC, hearing transcript, January 14, 2016, 662–63 (testimony of Robert Vastine, Georgetown University); Vastine, written testimony to the USITC, January 14, 2016, 2. Mr. Vastine noted that the International Trade Advisory Committee (ITAC) for Services and Finance Industries reported gains for accounting, architecture, and engineering services.

from professional services firms at home, such as legal and accounting services.⁸¹⁵ Another hearing participant noted TPP’s beneficial impacts in facilitating greater transparency about compliance with rules and regulations (such as meeting requirements that permit professionals to stay in foreign markets for extended periods, as well as tax, financing, and currency exchange-related issues). A lack of transparency in this domain has been a significant barrier to SMEs seeking to export services.⁸¹⁶ An additional hearing participant echoed the opportunities for greater transparency (related to regulation and licensing) that TPP would offer professional services firms, especially in conjunction with increased potential for trade, given the spread of digital technologies. However, also noted were the difficulties involved for certain professional services still subject to stringent regulations.⁸¹⁷

Express Delivery Services⁸¹⁸

Assessment

Industry representatives indicate that, in broad terms, the U.S. express delivery industry would benefit from an anticipated expansion in merchandise trade—including growing shipments generated by e-commerce—with TPP partners. Industry representatives also stated that express- and customs-related provisions in the TPP Agreement improve upon similar provisions in previous FTAs. In particular, the treatment of express delivery under the Cross-Border Trade in Services chapter clearly defines the scope of a postal monopoly’s universal service obligation (USO) by the price and value of shipments, and specifies that the postal industry regulator must be separate from the monopoly provider.⁸¹⁹ The Customs chapter of TPP removes weight and value limitations on express shipments, although it falls short of requiring countries to specify

⁸¹⁵ USITC, hearing transcript, January 13, 2016, 351 (testimony of Sarah Thorn, Walmart).

⁸¹⁶ USITC, hearing transcript, January 13, 2016, 296–97, 345 (testimony of George Judd, Cask LLC); Judd, written testimony to the USITC, January 13, 2016, 1–2.

⁸¹⁷ USITC, hearing transcript, January 13, 2016, 338–39 (testimony of Peter Allgeier, Coalition of Service Industries).

⁸¹⁸ Express delivery services are the expedited collection, transport, and delivery of time-sensitive documents, parcels, and other goods using air, sea, road, or rail transport services. Express firms maintain electronic control of the items they convey throughout the supply chain, even when a portion of transport and delivery is outsourced to third-party providers. Express firms also supply, on behalf of their customers, the payment of tariffs, customs fees, and taxes on goods that are destined for foreign markets. This definition is adapted from that of the Express Association of America (EAA), which represents four firms in the express delivery industry: DHL (Germany), FedEx (United States), TNT (Netherlands), and UPS (United States). Express services do not include letter delivery provided by postal authorities or commercial transportation services. See USTR, TPP, full text, Annex 10-B, “Express Delivery Services” (accessed November 10, 2015); EAA, “EAA Mission,” n.d. (accessed November 10, 2015).

⁸¹⁹ Express industry representatives emphasized that state-owned postal monopolies are the primary competitors of private express delivery providers, rather than other express firms. The state-owned posts may use their monopoly benefits to subsidize package delivery. As a result, provisions that prohibit unfair competition by postal monopolies are especially important to the express industry. Expert panel at “2015–2016 TPP Series Part VI: Services” conference, March 9, 2016.

de minimis levels.⁸²⁰ In addition, TPP commitments on express delivery are also significant for SME exporters, a growing customer segment of the express delivery industry, and for exporters that ship time- and temperature-sensitive goods such as pharmaceutical and healthcare products.⁸²¹

Express delivery firms may also benefit from other provisions in the agreement, including those found in the chapters on Investment (TPP Chapter 9); E-commerce (TPP Chapter 14); Competitiveness and Business Facilitation (TPP Chapter 22); Small and Medium-Sized Businesses (TPP Chapter 24); Regulatory Coherence (TPP Chapter 25); and Transparency and Anti-Corruption (TPP Chapter 26). Together, these chapters include commitments that strengthen FTA disciplines on investment, Internet access, data privacy protection, supply chains, and regulatory transparency. These disciplines are also designed to help SMEs engage more effectively in international trade, and they establish best practices for supply chain performance. As a result, industry representatives suggest that TPP could have potentially significant and far-reaching effects on U.S. express delivery firms and their customers.⁸²²

Summary of Provisions

TPP contains two areas of provisions that directly affect express delivery firms. These are the Annex on Express Delivery Services within the Cross-Border Trade in Services chapter (Annex 10-B) and the chapter on Customs Administration and Trade Facilitation (TPP Chapter 5). The agreement also includes other provisions that may affect the ability of express firms to operate in TPP countries, such as those related to e-commerce, SMEs, competition policy, and supply chain performance.⁸²³

Annex on Express Delivery Services

The Annex on Express Delivery Services promotes fair competition between express firms and postal providers in TPP countries and prohibits postal authorities from abusing their monopoly position. Specifically, the annex requires that TPP countries (1) clearly define the scope of their postal monopolies using objective, quantitative criteria, such as price and weight limitations; (2)

⁸²⁰ For the purposes of this section, de minimis refers to a threshold monetary value beneath which a shipment may clear customs without needing to pay tariffs, customs fees, and taxes; submit manifest information (i.e., the description of a good that is being brought into a country); or undergo formal customs procedures. Industry representatives, interview by USITC staff, September 21, 2015; industry representative, telephone interview by USITC staff, December 11, 2015. Industry representatives stated that the TPP would provide a platform for parties to continue to look at the issue of establishing a baseline for de minimis levels, even as an agreement may be reached under other international forums, such as APEC. Expert panel at “2015–2016 TPP Series Part VI: Services” conference, March 9, 2016.

⁸²¹ UPS, written submission to the USITC, December 29, 2015.

⁸²² Allgeier, written submission to the USITC, January 11, 2016, 8-9; industry representative, telephone interview by USITC staff, December 11, 2015.

⁸²³ Industry representative, telephone interview by USITC staff, December 11, 2015.

agree to maintain a level of market openness in express delivery services that is no less than at the time of the signing of the agreement; (3) prohibit their postal authorities from subsidizing their commercial services with funds from their universal service obligation of letter and mail delivery;⁸²⁴ (4) prohibit postal authorities from either requiring private express firms to supply universal postal service or assessing discriminatory fees on them; and (5) establish an independent regulator for express delivery services that is separate from the monopoly postal provider, and whose decisions and procedures are “impartial, non-discriminatory, and transparent.”⁸²⁵

For each of these provisions, industry representatives have indicated that the language in TPP is both clearer and stronger than in previous FTAs, and helps to promote a level playing field for private express firms that compete with state-owned postal authorities.⁸²⁶ An example of a country where these provisions would be particularly important is Japan, where competition in express delivery services between private firms and the country’s monopoly provider, Japan Post, is limited.⁸²⁷

The Cross-Border Trade in Services chapter also contains market access and national treatment provisions that are important to the express delivery industry. Market access provisions remove joint venture and equity requirements on express firms, permitting them to set up new facilities or expand existing ones (e.g., through the acquisition of a joint venture partner) as demand for their services grows.⁸²⁸ In addition to opening express markets in current TPP parties, industry representatives suggest that these provisions would establish an important baseline for

⁸²⁴ This provision would not apply to Vietnam until 3 years from the date that the agreement enters into force. USTR, TPP, full text, Annex 10-B, “Express Delivery Services,” footnote 13 (accessed January 8, 2016).

⁸²⁵ USTR, TPP, full text, Annex 10-B, “Express Delivery Services” (accessed January 8, 2016).

⁸²⁶ Industry representative, telephone interview by USITC staff, December 11, 2015; UPS, written submission to the USITC, December 29, 2015.

⁸²⁷ USITC, hearing transcript, January 13, 2016, 131 (testimony of James Fatheree, U.S.-Japan Business Council).

⁸²⁸ Industry representative, telephone interview by USITC staff, December 11, 2015. In addition, investment provisions under Chapter 9 of the agreement encourage U.S. companies to invest in TPP countries, and these companies, in turn, will likely bring their express delivery service providers with them. Investment activity will therefore increase the “footprint” of U.S. firms in TPP countries in terms of employment and ancillary services providers. USITC, hearing transcript, January 13, 2016, 192 (testimony of Vanessa Sciarra, Emergency Committee for American Trade). Investment provisions also protect foreign express firms from government expropriation and contain dispute settlement mechanisms for foreign investors. Industry representatives, interview by USITC staff, Washington DC, September 21, 2015.

potential signatories to the agreement, such as Indonesia, that maintain joint venture or equity requirements on foreign express firms.⁸²⁹

For both Malaysia and Vietnam, two countries with which the United States does not currently have FTAs, market access commitments under TPP would be expected to lead to liberalization of services ancillary to express delivery. Malaysia would be expected to change existing laws/regulations limiting foreign participation in customs clearance services. Vietnam would be expected to eliminate foreign equity restrictions on customs clearance, freight agency, and warehousing services, thereby enabling foreign express providers to keep the “end-to-end” control of the items they transport in these markets.⁸³⁰ Furthermore, national treatment provisions, applicable to all signatories, would protect foreign express firms from unfair or discriminatory treatment when competing against private express firms in TPP countries.⁸³¹

Customs Administration and Trade Facilitation: Express Shipments⁸³²

Article 5.7 in TPP Chapter 5 (Customs Administration and Trade Facilitation) outlines customs procedures that facilitate the clearance of express items.⁸³³ These procedures would apply to all express shipments regardless of weight or value. In addition, they would (1) allow manifest information to be submitted in advance of a shipment’s arrival;⁸³⁴ (2) be designed to expedite the release of certain express shipments with a minimum of customs paperwork; (3) permit a single electronic submission of manifest information for all goods contained within an express shipment; (4) provide for the release of express items within six hours after the submission of

⁸²⁹ Industry representative, telephone interview by USITC staff, December 11, 2015. Indonesia requires foreign express delivery providers to enter into joint ventures (limited to a 49-percent equity stake) with Indonesian firms. Since the conclusion of the TPP, Indonesia has indicated interest in joining the agreement, as have South Korea, the Philippines, Taiwan, and Thailand. USITC, hearing transcript, January 13, 2016, 48, 60 (testimonies of Ambassador Ashok Kumar Mirpuri of Singapore and Ambassador Kenichiro Sasae of Japan).

⁸³⁰ UPS, written submission to the USITC, December 29, 2015. These commitments pertain broadly to logistics services. They are implied rather than explicitly stated in the TPP text (because of the negative list approach of the agreement's NCM Annex, which identifies only sectors where restrictions are in place). Rather, they are expected to be codified in these countries' domestic laws and become binding commitments once the agreement enters into force. Industry representative, email message to USITC staff, February 19, 2016; USTR representative, email message to USITC staff, February 23, 2016.

⁸³¹ Industry representative, telephone interview by USITC staff, December 11, 2015. National treatment obligations, defined under Article XVII of GATS, address the discriminatory treatment of foreign firms in host countries. These obligations concern competition between private entities. USITC, transcript of the Ninth Annual Services Roundtable, November 5, 2015, 38; WTO, “Guide to Reading the GATS Schedules,” n.d. (accessed December 2, 2015).

⁸³² See chapter 6 for detailed discussion of customs administration and trade facilitation provisions in TPP.

⁸³³ For a full discussion of the TPP's provisions on Customs Administration and Trade Facilitation, see chapter 6, “Assessment of Cross-cutting and Procedural Provisions and Other Provisions Addressing Rules and Nontariff Measures.”

⁸³⁴ Manifest information includes a full description of merchandise being brought into a country, its country of origin, the shipper's and recipient's name and address, and the customs value and destination of the merchandise. Hufbauer and Wang, “Logistics Reform for Low-Value Shipments,” June 2011, 2.

customs documentation (as long as the shipment has reached its destination); and (5) eliminate customs duties on express shipments valued at or below de minimis levels.⁸³⁵

Industry representatives indicated that the customs provisions in TPP are intended to simplify and modernize customs processing related to express shipments, and would promote the advance electronic submission of customs documentation—an important deterrent to corruption by customs officials.⁸³⁶ These provisions would also be more transparent than in prior FTAs and would represent a notable improvement in expediting customs procedures in Malaysia and Vietnam. Overall, the efficiency of customs procedures is an important factor in the ability of express firms to provide timely service, as supply chain globalization, and increasing consumer demand for “borderless” transactions, have enhanced the role that express firms play in international commerce.⁸³⁷

Industry sources state that TPP does not require countries to specify de minimis levels in the agreement (as the U.S.-Korea FTA does, for example) and thus falls short of this benchmark.⁸³⁸ Countries have reportedly refrained from specifying de minimis levels in TPP due largely to the sharp growth in e-commerce shipments. These shipments, though small in value, represent potential revenue sources for customs authorities that they may not wish to forgo.⁸³⁹

Other Provisions

Industry representatives indicate that provisions in other chapters of the agreement would likely have a positive impact on express delivery firms. For example, Chapter 14 on Electronic Commerce would expand opportunities for consumers to buy goods online, while at the same time removing restrictions on the movement of data across borders. Better consumer access to online commerce would likely increase U.S. merchandise trade and stimulate growth in the

⁸³⁵ Industry representatives, interview by USITC staff, Washington, DC, September 21, 2015.

⁸³⁶ The electronic submission of customs documentation would also assist in increasing cargo security and reducing the costs of customs processing. Remarks by expert panel at “2015–2016 TPP Series Part VI: Services” conference, Washington International Trade Association, Washington, DC, March 9, 2016.

⁸³⁷ Frontier Economics and the Global Express Association, “Express Delivery and Trade Facilitation: Impacts,” January 2015, 12; Oxford Economics, “The Impact of the Express Delivery Industry on the Global Economy,” September 2009, 17.

⁸³⁸ Allgeier, written submission to the USITC, January 11, 2016, 9. The agreement states that “no customs duties will be assessed on express shipments valued at or below a fixed amount set under the Party’s law.” TPP countries will be given the opportunity to revise de minimis levels based on factors such as inflation, the costs associated with customs collection, and the provision’s impact on trade facilitation and SMEs. See USTR, TPP, full text, Article 5.7, “Express Shipments,” paragraph 1 (f), n.d. (accessed January 13, 2016). In certain TPA partners, de minimis levels remain quite low. For example, in Canada the de minimis is \$20, and in Mexico, it is \$50. Expert panel at “2015–2016 TPP Series Part VI: Services” conference, March 9, 2016.

⁸³⁹ Industry representative, telephone interview by USITC staff, December 11, 2015. Industry sources note that the recently passed Trade Facilitation and Trade Enforcement Act of 2015 (H.R. 664 and S. 1269) sets a de minimis level of \$800 for U.S. imports. Congress.gov, “H.R.644—Trade Facilitation and Trade Enforcement Act of 2015” (accessed January 19, 2016).

demand for express delivery services. The removal of data localization requirements (along with guarantees on data privacy protection) would make it easier for express firms to do business in foreign markets and to ensure the protection of express firms' customer and company data.⁸⁴⁰

Separately, TPP's dedicated chapter on Small and Medium-sized Businesses (TPP Chapter 22) would require governments to create websites that provide SMEs with access to the text of the agreement and summarize its main provisions. The chapter would also require governments to establish "SME committees" that provide guidance on exporting to TPP countries.⁸⁴¹ As noted, SMEs are an important and growing customer segment of the express delivery industry, and bolstering their participation in merchandise trade would lead to higher demand for express services.

TPP Chapter 22 on Competitiveness and Business Facilitation contains new language, not included in previous FTAs, which would require TPP signatories to develop best practices for supply chain performance and which encourages SME participation in regional supply chains.⁸⁴² Among other things, provisions on supply chain performance would address the goal of moving goods more efficiently through customs checkpoints. They would also address the need for better implementation of "behind-the-border" measures, such as product testing, which could delay the delivery of express items.⁸⁴³

Finally, industry representatives noted that the agreement's provisions on Regulatory Coherence (TPP Chapter 25) and Transparency and Anti-Corruption (TPP Chapter 26) aim to ensure the integrity of regulatory processes (including customs) in TPP countries. They would also give express firms the opportunity to review and comment on proposed regulatory changes that may affect their business.⁸⁴⁴

⁸⁴⁰ Industry representative, telephone interview by USITC staff, December 11, 2015. Industry representatives note that large global express delivery firms are indeed "data firms." For instance, express firms process millions of daily customer requests to track packages before and after their final delivery. Expert panel at "2015–2016 TPP Series Part VI: Services" conference, March 9, 2016.

⁸⁴¹ USTR, TPP, full text, Article 24.1: "Information Sharing," and Article 24.2: "Committee on SMEs."

⁸⁴² USTR, TPP, full text, Article 22.3: Supply Chains."

⁸⁴³ Industry representative, telephone interview by USITC staff, December 11, 2015.

⁸⁴⁴ Ibid.

Nonconforming measures (NCMs) and Chile and Japan Side Letters

Four TPP countries would maintain NCMs on postal and/or express delivery services, including Brunei, Japan, Mexico, and Singapore.⁸⁴⁵ Among these, Mexico would maintain the right to place restrictions on foreign equity participation in postal services;⁸⁴⁶ however, Mexico would exclude courier and parcel services from foreign investment limitations on domestic road freight transport services.⁸⁴⁷

In addition to the above NCMs, the United States signed a side letter with Chile about the regulation of Chile's postal monopoly, and with Japan about competition in express delivery services.⁸⁴⁸ Japan's side letter is particularly important to U.S. and other foreign express providers, as it commits the government of Japan to providing an annual revenue and expense statement for Japan Post's Express Mail Service. The statement is aimed at addressing the potential for unfair cross-subsidization between Japan's postal and express services.⁸⁴⁹

Overview of U.S. Trade in Express Delivery Services

In 2014, the value of U.S. exports of air freight services to TPP countries (used here as a proxy for express delivery services) was \$2.6 billion, whereas U.S. imports totaled \$1.2 billion, leading

⁸⁴⁵ Brunei states that foreign firms are not permitted to supply domestic courier or express delivery services except in the form of a joint venture with a Bruneian entity. Japan maintains a reservation on the supply of postal services, but this reservation does not apply to the delivery of packages, parcels, goods, direct mail, or periodicals. Singapore requires all providers of basic letter services to be incorporated under Singapore's Companies Act. USTR, TPP, full text, Annex I, Schedule of Brunei Darussalam, I-BN-29; Annex II, Schedule of Japan, 4; Annex II, Schedule of Mexico, 9; and Annex I: Singapore's Reservations to Chapter 9 (Investment) and Chapter 10 (Cross-border Trade in Services), 13. For a full list of NCMs in the TPP, see appendix E.

⁸⁴⁶ USTR, TPP, full text, Annex II, Schedule of Mexico, 9, n.d. (accessed January 15, 2016).

⁸⁴⁷ USTR, TPP, full text, Annex I, Schedule of Mexico, 62–63; USTR, email message to USITC staff, November 10, 2015. Specifically, the agreement states: "Investors of another Party or their investments may not own, directly or indirectly, an ownership interest in an enterprise established or to be established in the territory of Mexico, engaged in transportation services of domestic cargo between points in the territory of Mexico, except for parcel and courier services."

⁸⁴⁸ Chile's side letter confirms that the government (1) does not include express delivery services within the scope of its postal monopoly and (2) is not required to maintain detailed financial accounts on its monopoly postal provider, Correos de Chile, pursuant to provisions in paragraph 5, Annex 10-B of the agreement. USTR, TPP, full text, Related Instruments, U.S.-Chile Side Letter Exchange Regarding Express Delivery Services. Paragraph 5, Annex 10-B, of the agreement states: "No Party shall allow a supplier of services covered by a postal monopoly to cross-subsidize its own or any other competitive supplier's express delivery services with revenues derived from monopoly postal services." USTR, TPP, full text, Annex 10-B, "Express Delivery Services."

⁸⁴⁹ Japan's side letter also requires both the United States and Japan to supply advance electronic customs data on postal items, including express shipments, in order to enhance customs efficiency and supply chain security. This requirement is established under Article 9 of the Universal Postal Convention ("Security and Violations") and is to be adopted by all members of the Universal Postal Union. The U.S. Postal Service and Japan Post will participate in a pilot program that aims to jump-start the implementation of such requirements on international postal items, including outbound express shipments. USTR, TPP, full text, Related Instruments, U.S.-Japan Side Letter Exchange on Non-Tariff Measures.

to a U.S. surplus of \$1.4 billion.⁸⁵⁰ The top five U.S. export markets for air freight services in 2014 were Japan (\$1.2 billion), Mexico (\$398 million), Singapore (\$382 million), Australia (\$284 million), and Canada (\$194 million). By contrast, the five largest U.S. import markets were Japan (\$611 million), Singapore (\$306 million), Australia (\$132 million), Chile (\$56 million), and New Zealand (\$45 million).⁸⁵¹ Among TPP partner countries, the list of the top five U.S. export and import markets in air freight services remained relatively stable during the 2005–14 period, with Australia, Japan, and Singapore consistently ranking among the top three.⁸⁵²

Impact of TPP on Express Delivery Services

According to the Commission’s economic analysis, the TPP could potentially lead to an increase in U.S. exports of air freight transport services of \$550 million. This increase would result from an estimated rise in merchandise trade among TPP partners of \$119 billion through the year 2032 which, in turn, would stimulate additional demand for transportation services among TPP parties.⁸⁵³ As such, the analysis suggests that the TPP would likely have a positive impact on the business of U.S. express delivery firms.

Audiovisual Services⁸⁵⁴

Assessment

TPP’s Cross-border Trade in Services chapter would generally offer U.S. audiovisual services firms increased levels of market access and national treatment by reducing or freezing most local-content quotas and liberalizing foreign ownership restrictions in parties’ respective broadcasting and film industries. Moreover, the Intellectual Property chapter (TPP Chapter 18) strengthens copyright protection and enforcement for U.S. audiovisual services providers in the

⁸⁵⁰ USDOC, BEA, *Survey of Current Business*, table 2.2: U.S. Trade in Services, by Type of Service and by Country or Affiliation, release date October 15, 2015. Air freight services refer to the transport of goods on dedicated air cargo planes or in the cargo hold of passenger aircraft. U.S. exports of air freight services pertain to the transport of U.S. merchandise exports and express items by U.S. carriers to foreign countries or between two foreign destinations, whereas U.S. imports pertain to the transport of U.S. merchandise imports and express items by foreign carriers to the United States. BEA representative, email message to USITC staff, February 2, 2016.

⁸⁵¹ USDOC, BEA, *Survey of Current Business*, table 2.2: U.S. Trade in Services, by Type of Service and by Country or Affiliation, release date October 15, 2015. U.S. export and import rankings by country are calculated based on available country-specific data from BEA for 2014, the latest year for which such data are available. BEA does not capture country-level data on Brunei, Peru, or Vietnam.

⁸⁵² USDOC, BEA, Interactive Data, October 15, 2015.

⁸⁵³ The economic model estimates that the TPP Agreement would result in an increase in merchandise trade among TPP partners. The model calculates that a total of \$5.8 billion of additional transportation services could be required to transport this higher volume of merchandise trade. Of this total, \$1.1 billion of air transport services could be demanded. The model does not specify which TPP partners would supply the additional air transport services, but ITC staff estimate that the United States would likely provide at least 50 percent.

⁸⁵⁴ Audiovisual services refer to terrestrial, cable, satellite, and digital/pay television broadcasting and motion picture production and distribution.

parties. The effect of TPP provisions on U.S. cross-border exports of audiovisual services, however, is likely to be moderate in the short term. Nonetheless, TPP parties, particularly Canada and Japan,⁸⁵⁵ with large and established television and film markets will likely provide U.S. audiovisual services suppliers with the largest benefits in the longer term.⁸⁵⁶ Moreover, TPP would likely have minimal impact on cross-border imports of audiovisual services to the United States, largely due to the market predominance of (or consumer preferences for) domestic U.S. television programs and films in this country.

Although the general provisions of the TPP Cross-border Trade in Services and Intellectual Property chapters, as noted above, apply to audiovisual services, the TPP commitments that impact the industry most directly are found in Annexes I and II under Non-Conforming Measures (NCMs), as is the case for other services industries. For parties without an existing U.S. FTA (Brunei, Japan, Malaysia, New Zealand, and Vietnam), TPP would switch commitments from a “positive list” under the GATS to a generally more liberal “negative list” schedule of services commitments. This is of particular importance to the audiovisual services industry, as a negative list approach would imply that any new services (e.g., digital content distribution) developed as a result of innovation or technological advancement would automatically be subject to disciplines established under TPP.⁸⁵⁷

Overall, in the longer term, improvement in U.S. firms’ access to TPP audiovisual services markets would be the most significant for Canada, Japan, Malaysia, and Vietnam. For Canada and Japan, this is due to market size. Notably, Canada and Japan made specific commitments in TPP to relax existing or future limitations on online content and on-demand television services, respectively, recognizing the growing importance of digital media services. Malaysia and Vietnam represent significant participants in the burgeoning Southeast Asian film market.⁸⁵⁸ Although Vietnam listed the most NCMs in audiovisual services of all partner countries, it is already among the world’s biggest consumers of digital content.⁸⁵⁹ Moreover, the Vietnamese government has set concerted national policies to encourage greater e-commerce and

⁸⁵⁵ U.S. cross-border exports of film and television and tape for Canada and Japan reached \$1.45 billion and \$768 million in 2014, respectively, and were the United States’ two largest TPP export markets for audiovisual services. U.S. cross-border imports of film and television and tape from Canada and Japan reached \$142 million and \$8 million in 2014, respectively. USDOC, BEA, *Survey of Current Business*, October 2015.

⁸⁵⁶ Zhang, “Global Cinema Exhibition Market,” October 2013, 4–5.

⁸⁵⁷ Low and Mattoo, “Is There a Better Way?” 1999, 22.

⁸⁵⁸ Pinewood Iskandar Malaysia, completed in December 2013, is the largest independent integrated studio facility in Southeast Asia. The RM550 million (about \$132 million) facility offers filmmakers 100,000 square feet of film stages, 24,000 square feet of television studios, postproduction facilities, and complete support services. The studio, with state-of-the art equipment, is set to position itself as the regional hub for film and television production. The Weinstein Company has shot part of the television series *Marco Polo* at the facility. Prensario International, “Malaysia: Pinewood Iskandar Malaysia Studios Opens,” June 16, 2014.

⁸⁵⁹ Thanh Nien News, “Vietnam among the World’s Biggest Consumers,” April 2, 2015.

digitization in general, which will likely benefit U.S. audiovisual content providers in the future.⁸⁶⁰

Summary of Provisions

For TPP parties that are already U.S. FTA partners, gains from TPP will reflect the difference between the NCMs that those countries listed in their FTAs and those listed in TPP. For new FTA partners, existing audiovisual services commitments are defined by each country's commitments in the GATS, compared with commitments under TPP.

Existing U.S. FTA Partners

Australia: Under TPP, Australia has shifted many of its detailed Annex I NCMs (current measures) to broader Annex II NCMs (potential measures). This shift represents a gradual liberalization compared to its prior FTA with the United States.

For example, in the U.S.-Australia FTA, Annex I specified that transmission quotas for local content on television broadcasting could not exceed 55 percent of the programming transmitted annually between 6 a.m. and midnight and that transmission quotas for local content imposed on advertising broadcasts could not exceed 80 percent annually (Annex I, p. 15). In TPP, Annex I mentions no specific audiovisual services measures, but Annex II reserves Australia's right to maintain unspecified measures relating to transmission quotas for television broadcasting; nondiscriminatory expenditure requirements for Australian production; other audiovisual services transmitted electronically; spectrum management; and subsidies and grants for investment in Australian cultural activity, among others. However, the annex notes that this entry does not apply to foreign investment restrictions in the broadcasting and audiovisual services sector (Annex II, p. 8). Under the previous and current agreements, Australia reserved the right in Annex II to adopt or maintain preferential international coproduction arrangements⁸⁶¹ for film and television productions (Annex II, p. 9/Annex II, p. 10).

Canada: Under TPP, Canada would liberalize its NCMs to exclude certain carve-outs relating to cultural businesses previously found in NAFTA. It notably excludes online content from potential discrimination (Annex II, no. 14).

⁸⁶⁰ Vietnam's ministerial targets include creating an online presence for 60 percent of the country's businesses by the year 2020 ("Vision 2020"). Hoang, "Vietnam Rolling Out Digital Economy Strategy," September 24, 2015; Bloomberg BNA Conference, "The Trans-Pacific Partnership," December 2, 2015.

⁸⁶¹ International coproduction arrangements refer to television programs or films whose production companies are from at least two different countries. In most coproduction agreements, certain incentives are offered to partnering foreign producers, such as tax rebates and expedited visas for foreign workers.

Chile: Chile's TPP NCMs would largely remain unchanged from its U.S.-Chile FTA NCMs, maintaining residency and nationality requirements for media owners; local-content quotas of up to 40 percent for television broadcasts (Annex I, p.3/Annex I p. 4); and reservations that accord differential treatment measures for cultural industries, including audiovisual cooperation agreements and government-supported subsidies (Annex II, p. 11-12).

Mexico: Mexico, under TPP, would make selected improvements from its NCMs under NAFTA. First, under TPP Mexico would maintain a 49 percent foreign equity ownership cap on television broadcasting that was previously established under NAFTA (Annex I, no. 8 and no. 9), but eliminate its Spanish-language requirements. Mexico would also reduce the total annual screen time dedicated to the projection of national films to 10 percent, down from 30 percent under NAFTA (Annex I, no. 46). Finally, under Annex II of TPP, Mexico lists detailed local-content quotas for the number of channels and hours for television broadcasts and advertising and other film screening authorizations (Annex II, no. 9), providing greater specificity to commitments compared to language in NAFTA.

Peru: Peru's NCMs for TPP and its prior FTA would remain very similar, but include notable liberalization in foreign equity ownership in broadcasting. Under Annex I for both agreements, Peru maintains residency and nationality requirements for broadcasters (Annex I, p. 2/Annex I, no. 3); it also limits foreign shareholders from holding a broadcasting authorization in a zone bordering that foreign national's country of origin (Annex I, p. 2/Annex I, no. 5). Further, it indicates that at least 30 percent, on average, of the total weekly programs by free-to-air television broadcasters be dedicated to Peruvian-produced content and aired between the hours of 5 a.m. and midnight (Annex I, p. 3/Annex I, no. 4). Moreover, broadcast companies must allocate at least 10 percent of their daily programming to Peruvian cultural content, such as history, literature, and folklore (Annex I, p. 8/Annex I, no. 15). On the other hand, in Annex I of TPP, Peru drops the 40 percent foreign equity ownership cap in broadcasting enterprises that was designated in its previous FTA (Annex I/no. 3).

Singapore: Singapore's TPP NCMs would offer more detailed measures than does the existing U.S.-Singapore FTA. However, both solely consist of Annex II (potential measures) relating to broadcasting services—namely, expenditure requirements for local content, measures relating to spectrum management and licensing of broadcasts, and investment subsidies and grants for Singaporean content (8B, 8/Annex II, no. 7). Notably, in the TPP NCMs, Singapore states that non-scheduled broadcasting services (e.g., streaming content) are not subject to Annex II reservations (Annex II, no. 7).

New U.S. FTA Partners

For TPP parties that are not already U.S. FTA partners (Brunei, Japan, Malaysia, New Zealand, and Vietnam), existing commitments for audiovisual services are found in the GATS, so the following section compares GATS commitments to TPP. Overall, by virtue of the negative list format, commitments in audiovisual services would be significantly more extensive in TPP for these countries than is the case under the GATS. Each country would schedule different NCMs under TPP, however, as discussed below.

Brunei: Under TPP, Brunei would reserve the right to adopt or maintain any measure relating to licensable free-to-air or subscription broadcasting (Annex II, no. 12). Since Brunei listed no commitments for audiovisual services in its GATS schedule, the entire sector was previously “unbound,” meaning that Brunei was free to introduce or maintain any measures inconsistent with market access or national treatment. Switching from its GATS schedule to TPP would thus be a significant liberalization.

Japan: Japan’s existing GATS commitments broadly liberalize audiovisual services for both market access and national treatment measures. Nonetheless, TPP would again offer greater liberalization, given the agreement’s negative list approach to services commitments. Japan’s sole NCM for audiovisual services under TPP would relate to the supply of or investment in the broadcasting industry. The NCM’s expanded language states that on-demand services, including such services provided over the Internet, are not subject to potential reservations (Annex II, no. 6). However, Japan does include a broader NCM across all cross-border trade in services that allows for the carve-out of any measure in which those services were not technically feasible at the time of entry into force (Annex II, no. 3).

Malaysia: In adopting TPP, U.S. audiovisual services providers in Malaysia would generally see improvement in commitments, as the new agreement would freeze Malaysian broadcasting quotas. However, Malaysia’s TPP NCMs would limit the granting of certain broadcasting licenses (Annex I, no. 9), and Malaysia reserves the right to adopt or maintain differential treatment to countries under any international agreement with regard to broadcasting (Annex II, no. 6). Malaysia also reserves the right to review products following their importation and distribution to ensure decency standards (e.g., programming licensed for broadcasting on television, cable, and satellite stations) (Annex II, no. 10).

Malaysia’s commitments under its GATS schedule, by comparison to its TPP commitments, are difficult to assess side by side, since the TPP language is much broader compared to its more specific GATS commitments. For instance, Malaysia’s GATS includes a requirement for a commercial presence for motion picture and videotape production and distribution services. Market access is made available only through joint venture agreements, in which foreign shareholding must not exceed 30 percent. Further, Malaysia, in GATS, requires that 20 percent

of total broadcasting screening be dedicated to local content, including language dubbing requirements. These precise GATS measures are not detailed or addressed directly in Malaysia's TPP NCMs, and therefore should be considered either frozen at current levels or liberalized.

New Zealand: Under TPP, New Zealand would reserve the right to adopt or maintain preferential coproduction arrangements for film and television production, including the promotion of local content (Annex II, 18–19). New Zealand's GATS commitments also note no major restrictions for market access and national treatment except for the funding of certain indigenous programming. Although New Zealand's audiovisual services industry was already relatively liberalized under the GATS, improvements would be seen in switching to TPP's negative list format.

Vietnam: For Vietnam, the NCMs under TPP would be the most extensive of all TPP parties. Under Annex I, investment in Vietnam's motion picture distribution and projection service industries are allowed only through a business cooperation contract or a joint venture with an authorized Vietnamese partner. In the case of a joint venture, foreign equity ownership would not be allowed to exceed 51 percent (Annex I, 9). Further, the screening of Vietnamese films must be not less than 20 percent of total films on an annual basis, with cinemas showing at least one Vietnamese film between 6 p.m. and 10 p.m. (Annex I, 10).

Under Annex II, Vietnam reserves the right to adopt or maintain any measures to protect "cultural heritage" (Annex II, 17) and to regulate broadcasting activities in any form according to Vietnamese law (Annex II, 18). Vietnam also reserves the right to adopt or maintain any future measures in respect of investment, production, and distribution of video records on any medium (Annex II, 19), including subsidies for audiovisual services and preferential treatment to television programs and cinematographic works produced under coproduction agreements (Annex II, 20).

Vietnam's GATS commitments note similarly strong measures. Vietnam states that all films must have their content censored by Vietnamese authorities. Again, market access for motion picture production and distribution is allowed only through a business cooperation contract or a joint venture with an authorized Vietnamese partner—echoing the foreign equity ownership cap of 51 percent.

Even though Vietnam details more NCMs than any other party, TPP would establish a base level of liberalization where listed quotas and other limitations would be locked in and would not be subject to future policy changes that would increase discrimination.

Summary of Views of Interested Parties

U.S. industry representatives are generally satisfied with the TPP provisions on audiovisual services.⁸⁶² The ITAC on Services and Finance Industries (ITAC-10) reported that the agreement creates the foundation for expanded commercial opportunities in the TPP region.⁸⁶³ In terms of market access, however, ITAC-10 noted that existing FTA partners have essentially reiterated their previous FTA commitments on audiovisual services, leading the committee to state its disappointment about the extent to which broadcast and cable television remain subject to restrictions on ownership, program nationality and quantity, and the potential for governments to provide broad cultural support to domestic broadcasters.⁸⁶⁴ Similarly, the Motion Picture Association of America (MPAA) noted that unlike the theatrical and online markets, TPP does very little to open up the television market. In particular, according to the MPAA, some of the TPP parties would be able to maintain discriminatory policies in pay TV, which is especially important in countries with low broadband penetration.⁸⁶⁵

Nonetheless, ITAC-10 and the MPAA agreed that TPP parties have made meaningful new market access commitments in the developing online, on-demand marketplace for audiovisual services. In TPP, they note important new online commitments from Canada, Singapore, and Japan, specifically:⁸⁶⁶

- Canada would exclude “measures restricting the access to online foreign audiovisual content.”
- Singapore makes a commitment allowing nondiscriminatory access for video streaming.
- Japan notes that on-demand and online services are not subject to reservation; however, Japan would reserve the right to discriminate in the case of new services not yet technically feasible when TPP enters into force. The MPAA indicated that this right to discriminate in new services not technically feasible would appear to undercut one of the fundamental benefits of the agreement’s negative list structure.⁸⁶⁷

Many commenters agreed that the Intellectual Property chapter (TPP Chapter 18) is quite strong in patents, trademarks, and copyrights, and stated that the U.S. audiovisual sector is very

⁸⁶² USITC, hearing transcript, January 14, 2016, 645 (testimony of Robert Vastine, Georgetown University).

⁸⁶³ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 10–12.

⁸⁶⁴ *Ibid.*, 11.

⁸⁶⁵ MPAA, written submission to the USITC, February 16, 2016, 3–5; USITC, hearing transcript, January 13, 2016, 265 (testimony of Peter Allgeier, Coalition of Service Industries).

⁸⁶⁶ ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 11–12; MPAA, written submission to the USITC, February 16, 2016, 3–5.

⁸⁶⁷ MPAA, written submission to the USITC, February 16, 2016, 3.

pleased with the outcome there.⁸⁶⁸ Specifically, ITAC-15 (Intellectual Property Rights) and the International Intellectual Property Alliance approvingly highlight the fact that the substantive text adds a provision requiring criminal penalties for unauthorized “camcording.”⁸⁶⁹ Moreover, the MPAA points out the importance of TPP’s extending the term of copyright protection to the global minimum standard of life plus 70 years. This, according to the MPAA, directly benefits creators and is also important in facilitating global trade in creative networks.⁸⁷⁰ Finally, the Copyright Alliance noted that the same rules for enforcement against infringement of physical goods should apply online. Although it softens or qualifies certain provisions found in prior FTAs, TPP includes requirements to adopt legal remedies for online infringement, establishes a notice-takedown-counternotice regime,⁸⁷¹ and creates judicial procedures under which a rights holder can obtain the identity of the alleged infringer, among others.⁸⁷²

Telecommunications

Assessment

For more than a decade, U.S. telecommunications carriers have largely avoided, with few exceptions,⁸⁷³ making investments in retail telecom services markets abroad.⁸⁷⁴ In a likely continuation of this trend, and notwithstanding the provisions of the TPP telecommunications chapter, U.S. telecom carriers are unlikely to enter into the retail markets of most TPP partner countries.⁸⁷⁵ Largely this is because the retail sectors of most such countries are mature, highly competitive markets characterized by multiple service providers, high levels of service penetration, and declining average revenue per user, all factors that limit the likelihood of

⁸⁶⁸ USITC, hearing transcript, January 13, 2016, 225 (testimony of John Murphy, U.S. Chamber of Commerce). For further discussion of the Intellectual Property chapter (TPP Chapter 18), see chapter 6 of this report.

⁸⁶⁹ ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 21; IIPA, written submission to the USITC, December 29, 2015.

⁸⁷⁰ MPAA, written submission to the USITC, February 16, 2016, 4.

⁸⁷¹ “Notice-takedown-counternotice” refers to the process of removing copyright infringing content from websites (notice-takedown) and, when necessary, countering false infringement claims (counternotice). DCMA.com, “What is a DMCA Takedown?” n.d. (accessed May 9, 2016).

⁸⁷² Copyright Alliance, written submission to the USITC, February 12, 2016. For additional discussion of how TPP addresses copyright infringement, see the discussion of Intellectual Property Rights in chapter 6 of this report.

⁸⁷³ In recent years, one of the few notable examples of a U.S. carrier entering a retail market is AT&T’s acquisition of two companies in Mexico, Iusacell and Nextel Mexico, in 2015. AT&T, “AT&T Closes Acquisitions of Mexican Wireless Provider,” January 16, 2015; AT&T, “AT&T Completes Acquisition of Nextel Mexico,” April 30, 2015.

⁸⁷⁴ Industry representative, interview by USITC staff, Washington, DC, February 2, 2016; industry representative, interview by USITC staff, Washington, DC, March 10, 2016. Retail telecom services entail the delivery of telecommunication services to individual consumers, typically voice, text, and Internet services.

⁸⁷⁵ Commission model results, specifically for the telecommunications sector, including projected levels of exports and imports, are not available, as this sector is included in the broader communications sector in the GTAP database. (The GTAP “communications” category includes post and courier services, Internet services providers, and TV and radio broadcasting, as well as telecommunications services.)

establishing (or maintaining) profitable operations.⁸⁷⁶ Several TPP partners—notably Brunei,⁸⁷⁷ Canada,⁸⁷⁸ and Vietnam⁸⁷⁹—also maintain foreign equity caps, restrictions that are likely to deter U.S. carriers from establishing or expanding their operations in those countries.⁸⁸⁰ Moreover, in the cases of Australia, Chile, Peru, and Singapore, the nearly identical nature of the TPP telecom chapter and each country’s respective FTA telecom chapter means that these provisions have been in place for more than 10 years, with the effect of such provisions, if any, already having impacted the market.⁸⁸¹

Over the past decade, U.S. telecom carriers have moved into foreign markets largely by focusing on offering enterprise services. Enterprise services comprise the delivery of telecom services—typically setting up and maintaining corporate networks connecting offices in different countries—to multinational corporations. Common enterprise services, most of which involve setting up corporate networks, include dedicated Internet access, virtual private network, Ethernet private line, and long-haul private line services.⁸⁸² The main U.S. providers of enterprise services in TPP foreign countries are AT&T, CenturyLink, GTT Communications, Level

⁸⁷⁶ Industry representative, interview by USITC staff, Washington, DC, February 2, 2016; BMI, Telecommunications Reports for TPP Countries (except Brunei), Q4 2015 or Q1 2016; Evans, *Brunei Darussalam*, December 15, 2015.

⁸⁷⁷ Brunei’s Annex 1, Non-conforming Measures, require that foreign nationals and enterprises provide telecommunications services through a commercial agreement with a licensed operator in Brunei. Foreign nationals and enterprises may not own more than 51 percent equity shareholding in all telecommunications enterprises.

⁸⁷⁸ Canada’s Annex 1, Non-conforming Measures, stipulates that foreign investors are restricted to a maximum, cumulative voting interest of 46.7 percent in facilities-based telecom operators, based on 20 percent direct investment and 33.3 percent indirect (portfolio) investment. However, foreign investment is allowed up to 100 percent in facilities-based telecommunications services firms that have revenues, including those of affiliates, from the provision of telecommunication services in Canada representing less than 10 percent of the total telecommunications services annual revenues in Canada. After entering the market, foreign investors may exceed the 10 percent market share restriction if the increase in revenues above the threshold does not result from the acquisition of another facilities-based supplier. There are also no foreign equity caps for suppliers conducting operations under a submarine cable license or a satellite authorization.

⁸⁷⁹ Vietnam’s Annex 1, Non-conforming Measures, includes several provisions. Facilities-based basic services are permitted only through a joint venture (or purchase of share in a Vietnamese enterprise), with foreign equity limited to 49 percent; facilities-based value-added services are permitted only through a joint venture (or purchase of shares in a Vietnamese enterprise with foreign equity limited to 51 percent), and foreign equity of up to 65 percent will be allowed no later than 5 years of the TPP’s entry into force; non-facilities-based basic and value-added services are permitted only through a joint venture (or purchase of shares in a Vietnamese enterprise) with foreign equity limited to 65 percent, or 70 percent for virtual private networks. (Foreign equity limitations and joint venture requirements will be eliminated no later than 5 years after the TPP’s entry into force.) Facilities-based carriers own and operate the network(s) over which they offer telecom services, whereas non-facilities-based carriers lease such networks.

⁸⁸⁰ Industry representative, interview by USITC staff, Washington, DC, June 18, 2015; industry representative, interview by USITC staff, Washington, DC, February 2, 2016; industry representative, telephone interview by USITC staff, March 18, 2016.

⁸⁸¹ Industry representative, interview by USITC staff, Washington, DC, March 10, 2016.

⁸⁸² TeleGeography, *Global Enterprise Networks* (executive summary), 2015, 1–12.

3 Communications, Sprint, and Verizon.⁸⁸³ Currently, most U.S. enterprise services providers have established operations in at least some TPP countries. Verizon, for example, offers at least some services in all TPP countries (including Brunei), followed by AT&T (11 TPP countries), Sprint (11 TPP countries), Level 3 (10 TTP countries), CenturyLink (5 TPP countries), and GTT (4 TPP countries).⁸⁸⁴

As their clients expand into new countries, enterprise carriers are required to expand their global networks to unserved (or underserved) countries and cities, activities which require them to invest in new network points of presence (POPs), deploy telecom equipment, and connect those POPs to their global network.⁸⁸⁵ The provisions of Chapter 13 would likely benefit U.S. enterprise carriers that are seeking to establish POPs in unserved TPP countries. They would do so largely by making it easier to not only offer telecommunication services (and establish a legal entity), but also to negotiate with local telecom carriers.

The use of the negative list would be particularly helpful in this context. First, the negative list approach would allow carriers to offer the telecommunication services of their choice in TPP markets, a benefit that would be useful over time as new services are developed and deployed.⁸⁸⁶ Similarly, unless a party stipulates a certain type of business entity in the NCMs (frequently a joint venture), the negative list approach would allow U.S. carriers to adopt the business entity that best suits their needs in each country.⁸⁸⁷ These negative list benefits, combined with provisions requiring transparent licensing criteria and processes, might also enable U.S. carriers to offer higher-value-added services in some countries.⁸⁸⁸

At an operational level, once an enterprise carrier has established itself in a TPP market, the obligations imposed by Article 13.12 (Colocation by Major Suppliers) would make it easier to

⁸⁸³ TeleGeography, *Global Enterprise Networks* (list of company profiles), 2015, 1–5; global network maps of AT&T, CenturyLink, GTT Communications, Level 3 Communication, Sprint, and Verizon. Maps are available online as follows: AT&T, http://www.corp.att.com/spectrumnewsletter/WHOLESALE_MAP.pdf (accessed April 13, 2016); CenturyLink, <http://www.centurylink.com/business/asset/network-map/international-long-distance-map-nm090926.pdf> (accessed April 13, 2016); GTT Communications, <http://www.gtt.net/our-network/network-maps/> (accessed April 13, 2016); Level 3 Communications, <http://maps.level3.com/default/#.Vw57wv72bcs> (accessed April 13, 2016); Sprint Communications, https://www.sprint.net/network_maps.php (accessed April 13, 2016); Verizon Communications, http://www.verizonenterprise.com/resources/brochures/br_verizon-global-network-map_en_xg.pdf (accessed April 13, 2016).

⁸⁸⁴ AT&T, <http://www.corp.att.com/ap/about/where/> (accessed March 25, 2016); AT&T, http://www.corp.att.com/latin_america/where/ (accessed March 25, 2016); and the global network maps found on the websites of CenturyLink, GTT, Level 3, Sprint, and Verizon (accessed March 24, 2016). Some maps may not be up to date. Verizon appears to be the only U.S. enterprise carrier offering services in Brunei.

⁸⁸⁵ TeleGeography, *Global Enterprise Networks*, 2015, 1.

⁸⁸⁶ Industry representative, interview by USITC staff, Washington, DC, March 10, 2016.

⁸⁸⁷ Industry representative, telephone interview by USITC staff, March 18, 2016.

⁸⁸⁸ Industry representative, interview by USITC staff, Washington, DC, March 10, 2016.

establish a POP,⁸⁸⁹ which involves being able to locate telecommunications equipment in (or near) established Internet exchange points, network access points, local offices, undersea cable landing stations, and other premises where in-country telecommunications providers place routers, switches, bridges, multiplexers, and other telecommunications equipment. Once a POP is established, U.S. carriers also need to connect business customers to the POP, often by using the existing local network(s) and, ultimately, connect the POP to their international network, typically at a submarine cable landing station.⁸⁹⁰

The obligations imposed by the provisions in TPP related to network facilities would improve the climate in which U.S. carriers negotiate with their foreign counterparts to carry out these functions. Specifically, such beneficial provisions might include requirements for in-country carriers to connect with U.S. enterprise carriers (Article 13.5: Obligations Relating to Suppliers of Public Telecommunication Services, specifically the Interconnection provisions; Article 13.11: Interconnection with Major Suppliers);⁸⁹¹ provisions allowing U.S. carriers to access and utilize local and long-distance networks (Article 13.9: Resale; Article 13.10: Unbundling of Network Elements by Major Suppliers; Article 13.12: Provisioning and Pricing of Leased Circuits Services by Major Suppliers); provisions allowing U.S. carriers to construct in-country networks (Article 13.14: Access to Poles, Ducts, Conduits); and provisions allowing U.S. carriers to access submarine cable stations (Article 13.15: International Submarine Cable Systems).⁸⁹²

More generally, provisions in TPP that help to establish a benign investment climate would make it easier for U.S. carriers to operate in TPP markets. Such provisions include the requirements for an independent regulator (Article 13.16: Independent Regulatory Bodies and Government Ownership); dispute resolution procedures (Article 13.21: Resolution of Telecommunications Disputes); transparency requirements (Article 13.22: Transparency), technological neutrality (Article 13.23: Flexibility in the Choice of Technology); and regulatory oversight (Article 13.26: Committee on Telecommunications).⁸⁹³

Due to changes in the telecommunications industry over the past few years, particularly the growing use of data and cloud computing centers, the E-commerce chapter (TPP Chapter 14) has become critically important to the U.S. telecom industry.⁸⁹⁴ Specifically, Article 14.10 (Principles on Access to and Use of the Internet for Electronic Commerce) contains a firm commitment requiring the parties to allow the cross-border flow of data. This is of crucial importance to U.S. carriers, as cross-border data flows are integral to offering cloud computing

⁸⁸⁹ Industry representative, telephone interview by USITC staff, March 18, 2016.

⁸⁹⁰ Industry representative, interview by USITC staff, Washington, DC, February 2, 2016.

⁸⁹¹ Industry representative, telephone interview by USITC staff, March 18, 2016.

⁸⁹² Ibid.

⁸⁹³ Ibid.

⁸⁹⁴ Industry representatives, interviews by USITC staff, Washington, DC, February 2, 2016, and March 10, 2016.

services and/or migrating to software-defined networks (SDN).⁸⁹⁵ The growing emphasis on such services also requires that U.S. carriers be able to establish data and network operating centers in locations of their choosing. As a consequence, Article 14.13 (Location of Computer Facilities) of the E-commerce chapter, which stipulates that no party shall require a covered person to use or locate computing facilities in that party's territory as a condition for conducting business in that territory, is of major importance. Indeed, according to industry participants, it is absolutely essential to U.S. carriers seeking to take advantage of the cost and network efficiencies derived from managing data processing and network management functions from a centralized location.⁸⁹⁶

Certain provisions in the TPP's State-Owned Enterprises (SOEs) chapter are also relevant to U.S. enterprise services providers, particularly those interested in entering Brunei or Vietnam, as the telecom services markets of both countries are dominated by state-owned telecom services providers. Beneficial provisions include those that require telecom sector SOEs to compete on the basis of quality and price, rather than through commercial and regulatory discrimination, subsidies, and favoritism. The chapter's provisions will also allow U.S. telecom companies to bring enforcement actions against SOEs that engage in discriminatory behavior.⁸⁹⁷

Another important benefit of TPP to U.S. enterprise carriers is simply that its provisions benefit their multinational corporate clients across a wide set of industries, allowing such clients to enter new markets and/or increase sales in existing markets. These expanded activities, in turn, typically lead to increased sales of enterprise services.⁸⁹⁸ In addition, the inclusion of several commercially significant partner countries with which the U.S. did not previously have an FTA— notably Japan, Malaysia, and Vietnam—is also an important benefit to U.S. enterprise carriers.⁸⁹⁹

Summary of Provisions

Most of the provisions in the telecom chapter—which are based upon the United States' Telecommunications Act of 1996⁹⁰⁰—were introduced in the U.S.-Singapore FTA⁹⁰¹ and have been repeated more or less verbatim in all subsequent FTA telecom chapters. As a result, the

⁸⁹⁵ See additional discussion of TPP and the computer services industry earlier in this chapter. Industry representative, interview by USITC staff, Washington, DC, February 2, 2016; ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015.

⁸⁹⁶ Industry representatives, interviews by USITC staff, Washington, DC, February 2, 2016, and March 10, 2016; ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015.

⁸⁹⁷ ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015.

⁸⁹⁸ Industry representative, interview by USITC staff, Washington, DC, June 18, 2015; industry representative, telephone interview by USITC staff, March 18, 2016.

⁸⁹⁹ Industry representative, interview by USITC staff, Washington, DC, March 10, 2016.

⁹⁰⁰ See 47 U.S.C. Sections 251/252.

⁹⁰¹ The U.S.-Singapore FTA was signed in 2003.

TPP telecom provisions apply for the first time only to the TPP parties that do not have a post-Singapore FTA with the United States, namely Brunei, Canada, Japan, Malaysia, Mexico, New Zealand, and Vietnam.⁹⁰²

The provisions of the telecom chapter would require each party to ensure that enterprises of the other parties have access to and use of any public telecommunications service offered in its territory and/or across its borders on reasonable and nondiscriminatory terms and conditions. The chapter also obligates suppliers of public telecommunications services to provide network interconnection, number portability, and access to telephone numbers to suppliers of the other parties on reasonable and nondiscriminatory terms and conditions. In addition, major suppliers⁹⁰³ of each party are required to offer telecommunication services to suppliers of the other parties on terms and conditions no less favorable than those accorded to their own subsidiaries, affiliates, and nonaffiliated service suppliers, particularly regarding the availability, provisioning, rates, and quality of such services. Major suppliers are also subject to specific additional obligations related to competitive safeguards, services resale, network unbundling, interconnection, leased circuits, colocation, and access to rights-of-way and submarine cable landing stations.

The telecom chapter also commits the parties to ensure the independence of their respective telecommunications regulatory bodies, including the requirement that all regulatory decisions and procedures made by such bodies be impartial with respect to all market participants. The parties would also be required to give their telecommunications regulatory bodies the authority to enforce measures relating to the obligations set out in the telecom chapter, including the ability to impose effective sanctions. Parties must also give these bodies the authority to maintain transparent and nondiscriminatory procedures related to licensing, allocation and use of scarce resources, and dispute resolution.

For the first time in a U.S. FTA, the telecom chapter extends network access rules to mobile telecommunications services suppliers. This marks a significant development, since past FTAs excluded mobile services from such obligations. TPP is also the first FTA to address the issue of mobile roaming, with provisions that require the parties to cooperate on promoting transparent and reasonable rates for international mobile roaming and/or minimize impediments to roaming alternatives.⁹⁰⁴ Last, TPP establishes a Committee on

⁹⁰² ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015.

⁹⁰³ “Major supplier” is defined as a supplier of public telecommunication services that has the ability to materially affect the terms of participation (regarding price and supply) in the relevant market for public telecommunication services due to (1) control over essential facilities or (2) use of its position in the market.

⁹⁰⁴ For example, an alternative to mobile roaming services might be using Voice over Internet Protocol (VoIP) services via a smartphone.

Telecommunications, which is tasked with reviewing and monitoring the implementation and operation of the TPP Telecommunications chapter.

Several footnotes in the TPP Telecommunications chapter contain minor exclusions for several parties—notably Chile and Vietnam—from certain obligations. Annex 13-A and 13-B to the telecommunications chapter exclude rural telephone suppliers in the United States and Peru, respectively, from certain obligations. Telecommunications is subject to the NCM exceptions laid out in Annexes 1 and 2 of TPP. These annexes contain a number of provisions affecting telecommunication services providers, with foreign equity caps being the most common measure. More detail on these NCMs is provided in appendix E of this report.

Summary of Views of Interested Parties

The TPP telecom chapter has attracted very little public comment or analysis, either positive or negative, with most discussions confined to either listing or describing the provisions. To date, the main analytical assessments of the telecommunications chapter have been offered by the American Enterprise Institute (AEI) and the Industry Trade Advisory Committee for Information and Communications Technologies, Services, and Electronic Commerce (ITAC-8). In its report *Grading the Trans-Pacific Partnership on Trade*, AEI gave the telecommunication chapter a grade of C+, with stated concerns including the chapter's provision on independent regulators ("Chapter 13 repeats a standing mistake in pretending that public telecom providers can be separated from the telecom regulator in most countries").⁹⁰⁵

By contrast, ITAC-8 calls for the approval and implementation of the TPP Agreement overall, stating that it meets industry objectives, promotes the economic interests of the United States, and provides equity and reciprocity for the U.S. ICT, services, and e-commerce sectors. Regarding the telecom chapter, ITAC-8 states that numerous commitments in the chapter will foster opportunities for market access and trade for U.S. providers in TPP telecom markets, making special note of provisions related to mobile roaming, regulatory forbearance, and technological neutrality.⁹⁰⁶

⁹⁰⁵ Scissors, *Grading the Trans-Pacific Partnership on Trade*, December 2015, 7.

⁹⁰⁶ ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015. ITAC-8 does not address AEI's concern about public telecom regulators. The ITAC-8 report's only discussion of regulatory independence consists of a description of the relevant TPP provisions.

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Chapter 6

Assessment of Cross-cutting and Procedural Provisions and Other Provisions Addressing Rules and Nontariff Measures

This chapter assesses the likely impact on the U.S. economy of the regulatory and administrative chapters of the TPP Agreement. For each TPP chapter, the report provides a qualitative assessment of the impact of that chapter on the U.S. economy, a summary of the provisions of the chapter, and a summary of the views of interested parties most directly relevant to the chapter. In most cases, the assessment is based on the views of interested parties as expressed in testimony at the Commission hearing, written submissions provided for the record, public reports of trade advisory committees working with the U.S. Trade Representative (USTR), and private interviews with Commission staff. Where available, the assessments take into account publicly available outside estimates of the effects of these TPP chapters. In the case of intellectual property rights, the Commission presents the results of an econometric model that estimates the relationship between a country's patent protections and its payments to the United States for the use of intellectual property. The provisions of the Investment chapter are described here as well; in addition, a quantified analysis of TPP investment provisions serves as an input into the computable general equilibrium model that generates Commission estimates of the economy-wide effects of the TPP Agreement.⁹⁰⁷

The TPP provisions addressed here comprise the 23 TPP chapters that do not specifically apply to the agriculture, nonagricultural goods, or services sectors (table 6.1). These provisions are cross-cutting in that, for the most part, they apply to more than one sector. These chapters address customs administration and trade facilitation, trade remedies, technical barriers to trade, sanitary and phytosanitary (SPS) measures, investment, government procurement, competition, intellectual property rights, labor, environment, dispute settlement, transparency and anticorruption, exceptions and general provisions, and the agreement's initial and final provisions. In addition, several chapters covering topics with broad application to many industries that have not been included in previous U.S. free trade agreements (FTAs) are addressed here, including temporary entry for business persons, state-owned enterprises,

⁹⁰⁷ See chapter 2 and appendix G of this report for additional information on the quantification of investment provisions.

cooperation and capacity building, competitiveness and business facilitation, development, small and medium-sized enterprises (SMEs), and regulatory coherence.

Table 6.1: TPP chapters described in chapter 6 of the report

TPP chapter number	TPP chapter title
1	Initial Provisions
5	Customs Administration and Trade Facilitation
6	Trade Remedies
7	Sanitary and Phytosanitary Measures
8	Technical Barriers to Trade
9	Investment
12	Temporary Entry for Business Persons
15	Government Procurement
16	Competition
17	State-Owned Enterprises
18	Intellectual Property
19	Labour
20	Environment
21	Cooperation and Capacity Building
22	Competitiveness and Business Facilitation
23	Development
24	Small and Medium-Sized Enterprises
25	Regulatory Coherence
26	Transparency and Anti-Corruption
27	Administrative and Institutional Provisions
28	Dispute Settlement
29	Exceptions and General Provisions
30	Final Provisions

Source: USTR, TPP full text.

Note: TPP Chapter 2 (National Treatment and Market Access) is covered in chapters 3 and 4 of this report. TPP Chapters 3 (Rules of Origin) and 4 (Textiles and Apparel) are covered in chapter 4 of this report. TPP Chapters 10 (Cross-Border Trade in Services), 11 (Financial Services), 13 (Telecommunications), and 14 (Electronic Commerce) are covered in chapter 5 of this report.

Customs Administration and Trade Facilitation

Assessment

Chapter 5 of the TPP Agreement focuses on Customs Administration and Trade Facilitation. The chapter addresses various components of the Customs clearance process, including publication of laws, regulations and procedures; release of goods; advance rulings; express shipments; penalties; and customs cooperation. According to USTR, TPP is the first U.S. trade agreement to include disciplines on the imposition of customs penalties, and the chapter also expands the customs cooperation commitments in previous trade agreements by committing all TPP

countries to cooperate on preventing duty evasion, smuggling, and other customs offenses.⁹⁰⁸ The provisions of the chapter would be expected to have a positive impact on the U.S. economy by reducing trading costs for U.S. businesses in many industries.

Summary of Provisions

The TPP Agreement would require that each party to the agreement ensure that its customs procedures are applied in a manner that is predictable, consistent, and transparent (Article 5.1). Parties would be expected to cooperate regarding significant customs issues; provide advanced notice of significant changes in rules and regulations that govern importations or exportations and share information, as needed or appropriate, with other parties on a number of issues. These include assessing the value of goods for customs purposes; import and export restrictions; how parties will go about initiating claims if a customs offense is suspected; and how offenses will ultimately be investigated. If a party has a reasonable suspicion of unlawful activity related to its laws or regulations governing imports, it would be able to ask another party to provide specific confidential information that is normally collected in connection with the importation of goods (Article 5.2).

At the written request of the importer or exporter of a shipment, TPP countries would be required to give advance rulings on the shipment before it is imported. These rulings would apply to tariff classification, customs valuation, country of origin, or other matters that involved parties may see as pertinent. These rulings must be issued no later than 150 days after the request is received, provided that all documentation needed to make a ruling has been received. The ruling would be required to remain in effect for a minimum of 3 years, provided that the law, facts, and circumstances on which the ruling is based remained unchanged (Article 5.3).

The Customs Administration and Trade Facilitation chapter would require TPP parties to endeavor to use international standards in their procedures for the release of goods and to implement other World Customs Organization standards. It would also require them to make electronic systems accessible to customs users and to employ automated systems for risk analysis and targeting (Article 5.6). The chapter also requires parties to expedite customs treatment of express shipments by streamlining the documentation required to move freight through the importation and customs clearance process (Article 5.7). Streamlining this process would help boost the competitiveness of U.S. businesses, especially U.S. SMEs, as discussed further in the section on Express Delivery Services in chapter 5.

⁹⁰⁸ USTR, Trans-Pacific Partnership Agreement, Chapter 5, Chapter Summary, downloaded from USTR website on April 6, 2016.

Article 5.8 sets out rules regarding the imposition of a penalty by a party's customs administration for a breach of its customs laws, regulations or procedural requirements. Existing U.S. FTAs with Peru, Chile, and Australia make a general mention of penalties as they pertain to customs and trade facilitation. Each of these agreements states that parties should adopt and maintain rules and regulations that allow them to impose civil, administrative, and, if necessary, criminal sanctions in response to violations of customs laws and regulations. TPP, however, goes into much greater depth on this point. Under TPP, all parties would be required to adopt and enforce an impartial protocol for imposing penalties should a breach of established customs laws and regulations occur. Should a penalty be issued by a party's customs administration, it is the issuer's responsibility to give the penalty recipient specific details, in writing, as to why the penalty is being issued. The chapter further states that the parties are responsible for adhering to strict, preset timelines in imposing penalties for breaches of customs law. It specifies that the penalty imposed should be "commensurate with the degree and severity of the breach" and that no part of the penalties that are assessed or collected may be used to remunerate a government official (Article 5.8).⁹⁰⁹

Article 5.10 requires each party to adopt or maintain simplified customs procedures for the efficient release of goods in order to facilitate trade between the parties, and provide for the release of goods within a period no longer than that required to ensure compliance with its customs laws and, to the extent possible, within 48 hours of the arrival of the goods. This Article also requires each party to adopt or maintain procedures that provide for the electronic submission and processing of customs information in advance of the arrival of the goods in order to expedite the release of goods from customs control upon arrival; allow goods to be released at the point of arrival without temporary transfer to warehouses or other facilities; and allow an importer to obtain the release of goods prior to the final determination of customs duties, taxes and fees by the importing Party's customs administration when these are not determined prior to or promptly upon arrival, provided that certain other conditions are met. This release provision is similar to provisions in existing U.S. FTAs, with the exception of the Australia and Singapore FTAs, which require a security mechanism to be put in place before the shipment is released.

Article 5.11 requires that each party make its customs laws, regulations, and general administrative procedures and guidelines publicly available, including online, and to the extent possible, in the English language. It also requires each party to appoint a designated point of contact whose primary responsibility would be to field and respond to questions from businesses and the general public (Article 5.11). These requirements are identical to

⁹⁰⁹ The TPP is the first U.S. trade agreement to include disciplines on the imposition of customs penalties. USTR, "TPP Made in America: Chapter 5," November 5, 2015.

requirements already in place under existing U.S. FTAs with Australia, Chile, Peru, and Singapore.

Summary of Views of Interested Parties

At the Commission hearing, several witnesses said that they expected TPP to improve and simplify customs procedures, partly by helping to standardize those procedures across countries.⁹¹⁰ According to the report of the International Trade Advisory Committee on Customs Matters and Trade Facilitation (ITAC-14), provisions put in place that allow the private sector to conduct administrative review of advance rulings and that require parties to make their rulings available electronically (via Internet) will not only heighten transparency, but will also provide an effective means of pinpointing inaccuracies and inconsistencies in ruling determinations.⁹¹¹ In contrast, in a written submission to the Commission, the Tile Council of North America said that TPP's customs rules would not be effective in combating transshipment and mislabeling problems faced by the tile industry in TPP countries, because the language of the Customs and Trade Facilitation chapter permits customs authorities too much discretion in enforcing customs rules.⁹¹²

Trade Remedies

Assessment

The Trade Remedies chapter of TPP is divided into two sections. Section A authorizes a TPP party to apply a safeguard measure against imports from one or more other TPP parties during a transitional period when certain conditions are met, and Section B sets out five nonbinding provisions designed to promote transparency and due process in countervailing duty and antidumping duty proceedings. The provisions in Section A should not have a direct economic impact on the United States except to the extent that another party imposes a safeguard measure on imports of U.S. goods during the transitional period, or the United States imposes a measure on imports from a TPP party. The provisions in Section B will likely promote greater transparency and due process in countervailing duty and antidumping duty investigations involving TPP parties.

⁹¹⁰ USITC, hearing transcript, January 14, 2016, 519 (testimony of Devi Keller, Semiconductor Industry Association); January 14, 2016, 535 (testimony of Jay Steinmetz, Barcoding Inc.); and January 15, 2016, 758 (testimony of Maryalice Panarello St Clair, Halosil Inc.) For additional information on the de minimis rules and other sections of TPP chapter 5, see the discussion of express delivery services in chapter 5 of this report.

⁹¹¹ ITAC-14, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 6.

⁹¹² Tile Council of North America, written submission to the USITC, January 22, 2016, 3-4.

Summary of Transitional Safeguard Provisions

Like other FTAs that the United States has entered into since 1988, the TPP Agreement includes a transitional safeguard provision that allows a party to the agreement to restore a duty or suspend further reductions in a duty during a transition period if, as result of a reduction in duties under the agreement, the party determines that increased imports are causing or threatening to cause serious injury to a domestic industry.

The eligibility test is met when, as a result of the reduction or elimination of a customs duty in accordance with the Agreement, an originating good from one party to the Agreement, or from two or more parties collectively, is being imported into the party's territory in such increased quantities and under such conditions as to cause or threaten to cause serious injury to the domestic industry (Article 6.3.1).

A remedy may be applied only during the "transition period" for a good. This is defined to mean the 3-year period beginning on the date of entry into force (EIF) of the TPP Agreement, except where the tariff on the good is eliminated over a longer period of time, in which case the transition period is the period of the staged tariff elimination for that good (Article 6.1). The remedy may only be in the form of a duty, with any increase limited to the lesser of the current applied most-favored-nation (MFN) rate of duty or the applied MFN rate preceding EIF of the agreement (Article 6.3.2). The duration of any remedy is limited to 2 years, with a possible extension of up to 1 year if the party applying the measure determines that the measure continues to be necessary to prevent or remedy serious injury and facilitate adjustment. A party may not apply a transitional safeguard measure on a good more than once (Article 6.4).

The chapter incorporates by reference certain provisions of the World Trade Organization (WTO) Agreement on Safeguards. These include provisions on the conduct of investigations and hearings, confidential business information, economic factors to be considered in making injury determinations, and the publication of a report setting out findings and reasoned conclusions reached on all pertinent issues of fact and law (Article 6.5). The chapter also defines terms such as "domestic industry," "serious injury," and "threat of serious injury" in the same way as in the WTO Safeguards Agreement (Article 6.1).

The chapter requires that each party promptly notify the other parties when launching an investigation, making an injury finding, deciding to apply or extend a measure, or deciding to modify a measure, and it identifies the types of information that must be included in the notification (Article 6.6). A party applying a measure is expected to provide mutually agreeable compensation to each party against whose good the measure is applied and provide opportunity for consultations in that regard (Article 6.7). Safeguard actions taken under the chapter are subject to the dispute settlement provisions of the TPP Agreement. The chapter

expressly states that nothing in the TPP Agreement affects the rights and obligations of the parties under Article XIX of the General Agreement on Tariffs and Trade (GATT) 1994 and the WTO Agreement on Safeguards (the global safeguards provisions) (Article 6.2.1)—with one exception. The exception is that a party initiating a safeguard process must provide other parties with an electronic copy of the notification given to the WTO Committee on Safeguards under Article 12.1(a) of the Safeguards Agreement (Article 6.2.2–3).

Summary of Views of Interested Parties

The parties participating in the Commission’s investigation did not specifically address the safeguard provisions in the trade remedies chapter in their written statements and hearing presentations. Other interested parties addressed the TPP transitional safeguard provision only to a limited extent. The Industry Trade Advisory Committee (ITAC) on Steel noted the limited remedy options available under the provision, stating that “Because U.S. tariffs on steel are already at zero, the safeguard would not assist U.S. companies in the event of a surge of imports from TPP countries.”⁹¹³ The American Farm Bureau Federation, in its comments about the effects of the agreement on the U.S. agricultural sector, stated that the trade remedies chapter ensures that U.S. producers are able to use all trade remedy laws, including the safeguard law. It said that the agreement will not affect the rights and obligations of TPP parties under the WTO Agreement on Safeguards.⁹¹⁴

Summary of Provisions Relating to Antidumping and Countervailing Duty Procedures

Consistent with the approach in other U.S. FTAs, each party retains its rights and obligations under Article VI of GATT 1994 and the WTO Antidumping (AD) and Subsidies and Countervailing Measures (SCM) Agreements. Nothing in TPP confers any rights or imposes any obligations on the parties with regard to procedures or measures taken under Article VI of GATT 1994 or the WTO AD and SCM Agreements. For this reason, no party shall have recourse to dispute settlement for any matter arising under Section B of the chapter (Antidumping and Countervailing Duties) or Annex 6-A of the Trade Remedies chapter (Article 6.8).

In order to promote transparency and due process in trade remedy proceedings, Annex 6-A contains a non-comprehensive list of five AD/CVD practices (Annex 6-A and n.1). This list is not comprehensive, and these provisions are not binding and not subject to dispute settlement

⁹¹³ ITAC-12, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 15.

⁹¹⁴ American Farm Bureau Federation, written submission to the USITC, February 26, 2016, 23.

(Article 6.8 and Annex 6-A, n.1). The Annex 6-A practices pertain to five issues: notification of petition filings; on-the-spot verifications; access to information; deficient information submissions; and disclosure of essential facts (table 6.2).

Table 6.2: Practices relating to antidumping and countervailing duty proceedings

AD/CD practice	Explanation
Notifying of AD/CVD petition filing	<p>After receiving a properly documented petition for an AD or CVD investigation, investigating authorities shall notify the government of the concerned exporting Member. (Article 6.7 AD Agreement; Articles 11.5, 13.1 SCM Agreement).</p> <p>No later than seven days before initiating an investigation, the Party provides written notification of its receipt of the application to the other Party. (Annex 6-A(a)).</p>
On-the-spot verifications	<p>Investigating authorities may conduct on-the-spot verification in others' territories, with the agreement of the firm and unless the other WTO member objects. Subject to the requirement to protect confidential information, the investigating authorities "shall make the results of any such investigations available, or shall provide disclosure thereof ... to the firms to which they pertain and may make such results available to {petitioners}." (Article 6.7 AD Agreement; Article 12.6 SCM Agreement).</p> <p>The investigating authorities "promptly notify each respondent of their intent" to conduct verification of "information that is provided by a respondent" that is "pertinent to the calculation of antidumping duty margins or the level of a countervailable subsidy," provide "at least 10 working days advance notice" of the verification dates, provide at least five working days prior to verification an outline of the topics that will be covered during the in-person verification and the types of supporting documentation that will be reviewed, and in sufficient time for interested parties to defend their interests (subject to the protection of confidential information),⁹¹⁵ issue a written report "that describes the methods and procedures followed in carrying out verification and the extent to which the information provided by the respondent was supported by the documents reviewed during the verification." (Annex 6-A(b)).</p>
Access to information	<p>Investigating authorities shall whenever practicable provide timely opportunities for all interested parties to see all information that is relevant to the presentation of their cases, that is not confidential and that is used by the authorities in an anti-dumping investigation, and to prepare presentations on the basis of this information. Moreover, investigating authorities shall require interested parties providing confidential information to furnish non-confidential summaries thereof, except in exceptional circumstances where such information is not susceptible of summary. Where good cause is shown, investigating authorities shall maintain the confidentiality of such</p>

⁹¹⁵ (defining "confidential information" in footnote 3 as including "information which is provided on a confidential basis and which is by its nature confidential, for example, because its disclosure would be of significant competitive advantage to a competitor or because its disclosure would have a significantly adverse effect upon a person supplying the information or upon a person from whom that person acquired the information.").

AD/CD practice	Explanation
	<p>information, not disclosing it without permission of the submitting party. (Articles 6.4 to 6.51 AD Agreement; Articles 12.3 to 12.4 SCM Agreement).</p> <p>A Party’s investigating authorities maintain a public file that contains all non-confidential documents that are part of the record for each investigation and review. Moreover, the public file and a list of all documents that are contained in the record of the investigation or review are physically available for inspection and copying during the investigating authorities’ normal business hours or electronically available for download. Additionally, the public file contains to the extent feasible without revealing confidential information, non-confidential summaries of confidential information that is contained in the record of each investigation or review. Information that is not susceptible of summarization may be aggregated by the investigating authority. (Annex 6-A(c)).</p>
Deficient information submission	<p>Where an interested party “refuses access to, or otherwise does not provide necessary information within a reasonable period or significantly impedes the investigation,” the investigating authorities may make their determinations “on the basis of the facts available.” (Article 6.8 and Annex II to AD Agreement; Article 12.7 SCM Agreement).</p> <p>Investigating authorities inform interested parties that submit non-compliant but timely information of the nature of the deficiency, and to the extent practicable in light of the investigation’s time limits, “provide that interested party with an opportunity to remedy or explain the deficiency.” If investigating authorities disregard all or part of the original and any subsequent responses, they “explain in the determination or other written document the reasons for disregarding the information.” (Annex 6-A(d)).</p>
Disclosure of essential facts	<p>The investigating authorities shall, before a final determination is made, inform all interested parties of the essential facts under consideration which form the basis for the decision whether to apply definitive measures. Such disclosure should take place in sufficient time for the parties to defend their interests. (Article 6.9 AD Agreement; Article 12.8 SCM Agreement).</p> <p>Before a final determination is made, the investigating authorities inform all interested parties of the essential facts that form the basis of the decision whether to apply definitive measures. Subject to the protection of confidential information, the investigating authorities may use any reasonable means to disclose the essential facts, including “a report summarizing the data in the record, a draft or preliminary determination or some combination of those reports or determinations” (TPP at Annex 6-A(e)).</p>

Source: TPP Annex 6-A.

Summary of Views of Interested Parties

None of the participants in the Commission’s hearing discussed Section B (Antidumping and Countervailing Duties) of the TPP Trade Remedies chapter. According to the American Farm Bureau Federation, the chapter ensures that all U.S. producers are able to use all trade remedy laws and does not affect TPP parties’ rights and obligations under the WTO AD and SCM Agreements. The federation also observed that U.S. exporters facing trade remedy measures from other TPP parties “are provided procedural due process and transparency.”⁹¹⁶ Three groups (the AFL-CIO, the United Steelworkers, and the Sweetener Users Association) argued in their prehearing written statements that existing trade laws are not used effectively.⁹¹⁷

In its submission to USTR, the Industry Trade Advisory Committee on Steel on the Trans-Pacific Partnership Agreement (ITAC-12) observed that the TPP Trade Remedies chapter “explicitly does not alter any of the rights or obligations of member countries’ antidumping and countervailing duty laws.” This is important, according to the ITAC, because U.S. AD/CVD laws need to remain strong to allow for maximum protection against dumped and subsidized steel imports. The Steel ITAC-concluded that the overall effect of the Trade Remedies chapter “on trade remedy laws is neutral, which is viewed as a positive for U.S. steel producers.”⁹¹⁸

Sanitary and Phytosanitary Measures⁹¹⁹

Assessment

The sanitary and phytosanitary (SPS) provisions in TPP Chapter 7 would likely benefit U.S. firms exporting food and agriculture products to all TPP members, particularly those firms exporting to TPP members that have not previously entered into FTAs with the United States. Many of the SPS provisions in TPP build on provisions in earlier U.S. FTAs and the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (WTO SPS Agreement). Many U.S. firms and other interested parties that appeared at the Commission’s hearing and/or filed written

⁹¹⁶ American Farm Bureau Federation, written submission to the USITC, February 26, 2016, 23.

⁹¹⁷ American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), written submission to the USITC, December 29, 2015, 36–37; Gerard, written testimony submitted to the USITC, December 29, 2015, 8; Sweetener Users Association, January 12, 2016, 4.

⁹¹⁸ ITAC-12, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 1, 2, 5, 14–15, 18.

⁹¹⁹ The World Trade Organization defines a sanitary or phytosanitary measure as “Any measure applied (a) to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms; (b) to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs; (c) to protect human life or health within the territory of the Member from risks arising from disease carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or (d) to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.” WTO SPS Agreement, Annex A:1.

submissions expressed support for the chapter and expressed the view that TPP's requirements on SPS transparency and science-based risk analysis would be beneficial. Some, however, expressed concerns about these same provisions or raised concerns about the impact of TPP's SPS provisions on U.S. consumer safety.⁹²⁰ Multiple side letters were also negotiated as part of the TPP Agreement, which address several longstanding SPS disputes (see table 6.3).⁹²¹

U.S. firms investing in and exporting to TPP countries would benefit from the parallel negotiations between the United States and individual TPP parties to resolve specific outstanding SPS issues, as well as from cross-cutting provisions within the SPS chapter which would likely lead to the removal or avoidance of SPS barriers in TPP markets.⁹²² Several interested parties said that they were particularly pleased with the SPS chapter's overall transparency provisions and new requirements that measures be based on science.

Summary of Provisions

Chapter Overview

TPP incorporates by reference (Article 7.1) the definitions in Annex A of the WTO SPS Agreement. Chapter 7 would apply to SPS measures and is designed to require modern, science-based food safety regulations in TPP parties.⁹²³ This would require that TPP parties use science and risk analysis as a foundation for SPS measures, similar to U.S. food and agricultural safety requirements and building on current requirements under the WTO SPS Agreement. The TPP SPS chapter also creates enhanced rules, often referred to as "WTO Plus," that are

⁹²⁰ Article 5.3 of the WTO SPS Agreement addresses members' ability to achieve the "appropriate level of sanitary and phytosanitary protection from risk." TPP Article 7.2(b) purports to "reinforce and build on the [WTO] SPS Agreement."

⁹²¹ See following Summary of Provisions section for details on TPP side letter agreements.

⁹²² Not specifically related to the TPP negotiations, the United States recently made bilateral agreements with individual TPP parties for the removal of certain SPS barriers to U.S. exports. Peru agreed in March 2016 to remove barriers to U.S. beef and beef product exports that have remained in effect since 2003 and also opened the market to U.S. live cattle in July 2015. The United States also reached an agreement with Peru in April 2015 to resolve certain SPS issues which allowed greater access to Peru's market for U.S. pork and pork products. Separately, Vietnam removed SPS barriers and opened its market to all imports of U.S. beef products in March 2015. After seven years of negotiations with the United States, Mexico also agreed in March 2015 to immediately remove certain SPS measures that had blocked U.S. slaughter cattle exports to the country for more than a decade. Additionally, Chile and the United States recently resolved previous SPS issues that granted Chilean market access to U.S. live cattle and renewed domestic access to U.S. bovine embryos. Separately, Australia recently recognized the United States' BSE Negligible Risk status with the World Organisation for Animal Health (OIE), a pivotal step in re-opening the market for U.S. beef products. Because these specific SPS issues were resolved through bilateral negotiations technically separate from the TPP negotiations, they are not included in the discussion below of TPP's side letters. Where appropriate, they are addressed in the industry specific discussions in chapter 3 of this report.

⁹²³ Though the term "science" was used in the TPP SPS chapter, "science" was not defined in the TPP, or in the WTO SPS Agreement.

intended to ensure that science-based SPS measures are developed and implemented in a transparent, predictable, and nondiscriminatory manner, and establishes a TPP Committee on Sanitary and Phytosanitary Measures.

The chapter includes a number of provisions on adaptation to regional conditions, including pest- or disease-free areas and areas of low pest or disease prevalence; equivalence; science and risk analysis; audits; import checks; certification; transparency; emergency measures; cooperation; cooperative technical consultations; and dispute settlement. A brief summary of the specific provisions follows, focusing where possible on a comparison of TPP with the WTO SPS Agreement and other U.S. FTAs.

Scope: The chapter's provisions would apply specifically to all sanitary and phytosanitary measures of a party, and would not be limited to those of central governments. Nothing in the chapter would prevent a party from adopting or maintaining halal requirements for food and food products in accordance with Islamic law (Article 7.3).

Committee on Sanitary and Phytosanitary Measures: The chapter would establish a Committee on Sanitary and Phytosanitary Measures, composed of representatives of each party, to enhance the implementation of the chapter, to intensify their cooperation on matters of mutual interest, and to enhance communication and cooperation on SPS matters, including in preparing positions for meetings of the WTO's SPS Committee (Article 7.5).⁹²⁴

Adaptation to Regional Conditions, Including Pest- or Disease-Free Areas and Areas of Low Pest or Disease Prevalence: Article 7.7 of the chapter would require importing parties to assess the pest- or disease-free status of regions, zones, or compartments in the exporting party, or areas of low pest or disease prevalence there, in order to facilitate trade. The chapter creates new transparency rules for explaining the process and rationale used for making determinations in this domain, and creates stronger commitments about the expected timing for responding to requests of other parties (Article 7.7).

Equivalence: TPP parties would be required to apply equivalence to a group of measures or on a systems-wide basis, to the extent feasible and appropriate (Article 7.8.1). Upon request by one party, parties agree to recognize the equivalence of measures that can be demonstrated to achieve the same level of protection and that have the same effect in reaching the identified

⁹²⁴ U.S. bilateral agreements with Australia, Canada, Chile, Peru, and Mexico provide for bilateral cooperation and consultations on SPS measures. Coverage under the North American Free Trade Agreement (NAFTA) contains certain provisions regarding equivalency and audits that may surpass WTO SPS requirements, while TPP's cross-cutting horizontal SPS provisions in general still surpass current U.S. SPS commitments through NAFTA. Thus these TPP provisions are likewise new for NAFTA parties.

objective.⁹²⁵ Moreover, if a party chooses the option of requesting systems-wide equivalence, and the equivalence assessment were to result in approval of a systems-wide equivalence, then all producers authorized by the exporting party's regulatory authorities would be allowed to export to the party granting equivalence. The chapter also created new rules for transparency requirements. If a measure is found not to be equivalent, the rationale for this decision would have to be provided.

Science and Risk Analysis: The chapter creates new rules that go beyond previous WTO SPS and U.S. FTA commitments for assessing risk and determining the appropriate level of sanitary and phytosanitary protection. Importantly, TPP's SPS chapter is the first time that a U.S. trade agreement has included risk analysis, which is broader than the risk assessment standard applied in earlier U.S. FTAs.⁹²⁶ Article 7.1 defines risk analysis as containing three components: risk assessment; risk management; and risk communication (Article 7.1).⁹²⁷ Of those three components, only risk assessment was included in the WTO SPS Agreement or past U.S. trade agreements.

The chapter requires that SPS measures be based on science and that SPS measures either conform to the relevant international standards or on documented, objective, and scientific evidence that is rationally related to the measure.⁹²⁸ The requirement that the scientific evidence be rationally related to the measure is an expansion of the WTO SPS Agreement.⁹²⁹ The SPS chapter also expands on the WTO SPS Agreement in that it requires an importing party to provide information on requests concerning the progress of an analysis (Article 7.9).

Audits: TPP contains a new category of rules for audits, much of which builds on previous WTO SPS Committee work.⁹³⁰ Under TPP, importing parties would have the right to audit the exporting party's competent authorities and associated or designated inspection systems, in order to determine if an exporting party is able to meet the SPS requirements of the importing

⁹²⁵ Recognition of a measure as being equivalent if it has "the same effect" is an expansion of the concept of equivalence in the WTO SPS Agreement. This is also one of the very few concepts in the SPS chapter for which a party will not have recourse to the TPP dispute settlement process.

⁹²⁶ Risk assessments have been included or referenced in the following U.S. trade agreements: the WTO SPS Agreement, the U.S.-Korea Free Trade Agreement, the U.S.-Australia Free Trade Agreement, and NAFTA. Risk analysis was not included in any of these agreements.

⁹²⁷ Risk management is defined by TPP as "the weighing of policy alternatives in light of the results of risk assessment and, if required, selecting and implementing appropriate control options, including regulatory measures." Risk communication is defined by TPP as "the exchange of information and opinions concerning risk and risk-related factors between risk assessors, risk managers, consumers and other interested parties" (Article 7.1).

⁹²⁸ "Rationally related" was not defined by TPP.

⁹²⁹ The requirement that a measure be based either on relevant international standards or on scientific evidence is not subject to the dispute settlement provisions in TPP.

⁹³⁰ Though the chapter's new section on audits builds on past WTO SPS Committee work, audits have never been included in the WTO SPS Agreement, or in any past U.S. trade agreement.

party. Audits could include competent authorities' control programs, including inspection and audit programs, and on-site inspections of facilities. Importantly, audits would be systems-based and be designed to check the effectiveness of the exporting party's regulatory controls. The chapter also lays out detailed rules about transparency, about giving the audited party an opportunity to comment, about requirements for using objective and verifiable evidence and data, and about procedures to prevent the disclosure of confidential information (Article 7.10).

Import Checks: The SPS chapter creates a new section of rules concerning import checks, which also tie into the parties' most recent commitments under the WTO Trade Facilitation Agreement. The TPP rules (Article 7.11) build on the WTO SPS Agreement's Annex C, for control, inspection, and approval procedures. TPP's import check provisions are new rules which were not included previously in the WTO SPS Agreement (or its annexes), nor in past U.S. trade agreements (though NAFTA also contains separate and different rules on control, inspection, and approval procedures). The chapter would commit TPP parties to ensure that import checks for SPS requirements are based on the actual potential risk posed by the import, and that the import checks are carried out without undue delay. Importing parties would be required to ensure that any testing conducted uses appropriate and validated methods in a facility that operates under a quality assurance program that is consistent with international laboratory standards. The chapter would also create a rapid notification mechanism requiring parties to inform traders within seven days if a shipment is being prohibited or its entry restricted for a reason related to food safety or to animal or plant health (Article 7.11).

Certification: TPP's certification commitments go beyond that of the WTO SPS Agreement, in that it limits the information required for certificates to only what is related to SPS issues. Parties may cooperate to develop draft model certificates. Parties to TPP would promote the implementation of electronic certification and other technologies to facilitate trade (Article 7.12).

Transparency: Article 7.13 would require parties to give public notice of proposed, draft, and final SPS measures by using the WTO SPS notification submission system. Parties would normally allow for at least 60 days for interested parties to submit comments, and parties would be required to provide relevant documentation that was considered in developing the proposed measure, including supportive objective scientific evidence. Moreover, all final SPS measures would be required to be published in an official journal or on an official website (Article 7.13).

Emergency Measures: TPP's emergency measures are also new compared to both current U.S. FTAs and the WTO SPS Agreement. Article 7.14 requires that a party adopting an emergency measure needed to protect human, animal, or plant life or health promptly notify the other parties of that measure, and requires that the party adopting the emergency measure take into

consideration any information provided by other parties in response to the notification. A party adopting an emergency measure must review its scientific basis within six months and make the results available to parties upon request. If the measure is maintained after the review because the reason for its adoption remains, the party should review the measure periodically (Article 7.14).

Cooperative Technical Consultations: Article 7.17 provides a consultation process, known as a cooperative technical consultation (CTC), that a party may have recourse to at any time it considers that the continued use of the administrative procedures or bilateral or other mechanisms of another TPP party would not resolve the matter. One or more parties (“requesting party”) may initiate a CTC with another party (“responding party”) to discuss any matter arising under Chapter 7 that the requesting party considers may adversely affect its trade by delivering a request to the primary representative of the responding party. Unless the consulting parties agree otherwise, they must meet within 30 days of the responding party’s acknowledgement of the request to discuss the matter identified in the request, with the aim of resolving the matter within 180 days of the request if possible. No party may have recourse to dispute settlement under Chapter 28 of the TPP Agreement (Dispute Settlement) for a matter arising under Chapter 7 without first seeking to resolve the matter through a CTC in accordance with this article (Article 7.17).

Dispute Settlement: With several exceptions, Article 7.18 provides that a party to the TPP Agreement may have access to the dispute settlement mechanism in TPP’s Chapter 28 for disputes arising under TPP Chapter 7 when the CTC mechanism does not first resolve a matter (Article 7.18).⁹³¹ The application of dispute settlement would be phased in for certain provisions so that parties have enough time to align their SPS procedures with TPP requirements (Article 7.18(1)). Any underlying WTO-based SPS obligations upon which the commitments of TPP’s SPS chapter are based would also remain subject to WTO dispute settlement. The complaining party may select the forum used to settle the dispute (e.g., the WTO dispute settlement process or the TPP dispute settlement process), and that forum will be used to the exclusion of all others. Differently from the WTO dispute settlement process, TPP lays out strict timelines for consultations, formation of a panel to hear the dispute, and final resolution, which should lead to faster resolution of disputes.

Side Letters: In addition to the chapter’s horizontal SPS provisions, a number of TPP side agreements also address specific existing bilateral SPS issues with TPP parties (table 6.3). The impacts of these side letters on U.S. trade vary significantly and are presently unknown. One

⁹³¹ As noted, two provisions in the SPS chapter are specifically not subject to the dispute settlement provisions of the TPP. These are (1) recognition that a measure is equivalent if it has “the same effect” and (2) the requirement that an SPS measure be based either on relevant international standards or on scientific evidence.

example is beef trade between the United States and Singapore. In the letter, Singapore recognized the United States' classification by the World Organisation for Animal Health (OIE) as a country with a negligible risk for bovine spongiform encephalopathy (BSE or mad cow disease), and agreed to permit the importation of all beef and beef products from animals of all ages. The United States likewise recognized Singapore's status with the OIE as a country with negligible BSE risk. The United States and Singapore also agreed to open consultations on goods containing beef-derived products, pathogen reduction treatments used in producing meat and poultry products, and pork-related trade issues.⁹³² Because these specific SPS issues were resolved through parallel negotiations, and not through the horizontal measures contained in TPP's SPS chapter, they are not specifically referenced in the SPS chapter's provisions. Where appropriate, these issues are considered in the industry-specific discussions in chapter 3 of this report.

Table 6.3: Selected bilateral SPS outcomes addressed in TPP side letters

Country	Product	Relevant side letter	Summary of outcome
Canada	Milk	U.S.-Canada Letter Exchange on Milk Equivalency	Bilateral cooperation to achieve equivalency of "milk products" in the "Grade A" category.
Chile	Salmonid eggs	U.S.-Chile SPS Letter Exchange	Finalizing protocol to allow importation of salmonid eggs from an approved compartment in Washington State. Intensifying work on separate protocol for the importation of salmonid eggs into Chile from any approved compartment in the state of Maine.
Japan	Post-harvest fungicides	U.S.-Japan Letter Exchange on Non-Tariff Measures	Japan to implement streamlined approval process for fungicides, to cover both pre-harvest and post-harvest use in the application process.
	Food additives	U.S.-Japan Letter Exchange on Non-Tariff Measures	Japan is to faithfully implement a Cabinet decision to completely approve four specific food additives.
	Gelatin/collagen	U.S.-Japan Letter Exchange on Non-Tariff Measures	Japan has eased restrictions on imports of gelatin and collagen.
Singapore	Beef and all beef products	U.S.-Singapore SPS Letter Exchange	Singapore agreed to permit the importation of all U.S. beef and beef products from animals of all ages, regulated under the U.S. Federal Meat Inspection Act.
	Beef-derived products	U.S.-Singapore SPS Letter Exchange	Singapore agreed to open consultations by February 2017 to discuss full market access to Singapore for products containing beef-derived products regulated by the U.S. FDA.
	Pork	U.S.-Singapore SPS Letter Exchange	A bilateral cooperative mechanism on pork trade established for consultation between technical experts with respect to pork-related trade issues, including Trichinella-related mitigation.

⁹³² See the TPP, full text, U.S.-Singapore SPS Letter Exchange.

Country	Product	Relevant side letter	Summary of outcome
	Meat and poultry products	U.S.-Singapore SPS Letter Exchange	A bilateral cooperative mechanism on pathogen reduction treatments (PRTs) established to cooperate with respect to PRTs used in the production of meat and poultry products.
Vietnam	Offal (internal organs)	U.S.-Vietnam Letter Exchange on Offals	Vietnam confirmed that it currently maintains no import prohibition on offal products from the United States. Agreement to cooperate to facilitate trade of U.S. offal products exported to Vietnam.
	Fish	U.S.-Vietnam Letter Exchange on Catfish	U.S. and Vietnamese regulatory authorities will cooperate regarding the U.S.'s new inspection program for Siluriformes fish (which includes catfish).

Source: TPP, full text.

Summary of Views of Interested Parties

The views of interested parties were divided between stakeholders who voiced strong support for TPP's SPS chapter and those who expressed concern about its provisions. Additionally, certain stakeholders voiced concerns about U.S. regulatory authorities' ability to comply with and enforce food safety provisions in the United States.⁹³³ Most comments from agricultural interests were supportive of the SPS provisions in TPP. Industry representatives also widely supported the CTC process outlined in Article 7.17,⁹³⁴ and the ability to have recourse to dispute settlement under Chapter 28 for SPS measures.⁹³⁵

Several organizations specifically praised Article 7.9, which would require that SPS provisions either conform to international standards or be based on scientific evidence, including an assessment of risk. According to industry representatives, SPS import regulations not based on scientific evidence have been an important factor limiting trade, particularly in meat and

⁹³³ IATP, written submission to the USITC, February 16, 2016; BCTGM, written submission to the USITC, February 8, 2016, 5-6; FARFA, written submission to the USITC, February 10, 2016, 2.

⁹³⁴ USITC, hearing transcript, January 15, 2016, 461 (testimony of Stephen Sothmann, U.S. Hides, Skins, and Leather Association); ATAC for Trade in Animal and Animal Products, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 9-10.

⁹³⁵ NAM, written testimony to the USITC, January 8, 2016, 6; National Milk Producers Federation and the U.S. Dairy Export Council, written submission to the USITC, December 22, 2015, 4; USITC, hearing transcript, January 14, 2016, 383-84 (testimony of Thomas Suber, U.S. Dairy Export Council); U.S. Grains Council, written submission to the USITC, February 15, 2016, 9; American Farm Bureau Federation, written submission to the USITC, February 26, 2016, 23; California Citrus Mutual, written submission to the USITC, December 24, 2015, 2; Fonterra (USA) Inc., written submission to the USITC, February 12, 2016, 4; Wine Institute, written submission to the USITC, February 12, 2016, 3; North American Meat Institute and the U.S. Hide, Skin, and Leather Association (NAMI/USHSLA), written testimony to the USITC, December 28, 2015, 5-6; USITC, hearing transcript, January 14, 2016, 403 (testimony of Stephen Sothmann, NAMI/USHSLA).

poultry products.⁹³⁶ Others stated support for Article 7.11, noting that TPP would be the first U.S. trade agreement to require that import checks be based on actual risks and that checks should be conducted without undue delay, which is particularly important for trade in perishable products.⁹³⁷ Stakeholders also strongly supported the chapter's many transparency provisions.⁹³⁸

On the other hand, several trade advisory committees and organizations testifying before the Commission stated that TPP's SPS provisions would only be as effective as the willingness to fully implement and enforce them.⁹³⁹

The Pet Food Institute said that the Chapter 28 mechanism may help discourage parties from adopting domestic policies that adversely affect U.S. exports and help ensure that they abide by their WTO commitments to implement regulations that are science-based and transparent.⁹⁴⁰ The National Chicken Council said that "at the end of the day," the government needs to be willing to use and enforce the SPS provisions, which has been a "problem."⁹⁴¹ Other observers stated that the language of the SPS chapter is too ambiguous, potentially posing a threat to the public interest and/or undermining the ability to resolve disputes.⁹⁴²

The Farm and Ranch Freedom Alliance said that the SPS provisions in TPP might allow foreign firms in TPP member countries to challenge and ultimately weaken U.S. food safety regulations, such as restrictions on antibiotics use in livestock,⁹⁴³ and that lower food safety requirements in TPP partner countries could pose a danger to U.S. consumers.⁹⁴⁴ Other critical comments

⁹³⁶ The Agricultural Technical Advisory Committee (ATAC) on Trade in Animal and Animal Products, *The Trans-Pacific Partnership (TPP) Agreement*, December 3, 2015, 5, 9, 11; NAMI/USHSLA, written submission to the USITC, December 28, 2015, 5–6.

⁹³⁷ Dempsey, written testimony to the USITC, January 15, 2016, 8–9; ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership (TPP) Agreement*, December 3, 2015, 9–10; USITC, hearing transcript, January 15, 2016, 463–464 (testimony of Devry Boughner Vorwerk, Cargill); ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 6.

⁹³⁸ ATAC for Trade in Tobacco, Cotton, and Peanuts, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 11; ATAC for Trade in Grains, Feeds, Oilseeds, and Planting Seeds, *The Trans-Pacific Partnership Agreement (TPP)*, December 2015, 10; ITAC-11, *The Trans-Pacific Partnership*, December 1, 2015, 6.

⁹³⁹ ATAC for Trade in Fruits and Vegetables, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 2–3; ITAC-7, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 6; National Foreign Trade Council, written submission to the USITC, January 13, 2016, 6.

⁹⁴⁰ USITC, hearing transcript, January 15, 2016, 436 (testimony of Peter Tabor, Pet Food Institute).

⁹⁴¹ USITC, hearing transcript, January 14, 2016, 464–65 (testimony of Kevin Brosch, Brosch Trade, LLC).

⁹⁴² ATAC for Trade in Fruits and Vegetables, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 2–3; APAC, *The Trans-Pacific Partnership Trade Agreement*, Minority Report, Annex, December 1, 2015, 10; USITC, hearing transcript, January 15, 2016, 462 (testimony of Bill Bullard, R-CALF USA). Peterson Institute for International Economics, written submission to the USITC, February 11, 2016, 57–58; ITAC-11, *The Trans-Pacific Partnership*, December 1, 2015, 6.

⁹⁴³ FARFA, written submission to the USITC, February 10, 2016, 2.

⁹⁴⁴ BCTGM, written submission to the USITC, February 8, 2016, 5–6; FARFA, written submission to the USITC, February 10, 2016, 2, 4–5.

focused on the potential for governments to challenge mandatory labeling laws for genetically engineered ingredients.⁹⁴⁵ Two agriculture industry representatives stated their concern that Article 7.11's rapid-response mechanism could be used to challenge U.S. inspection and testing of perishable agricultural goods, if goods were detained long enough to allow for lab testing.⁹⁴⁶ Other stakeholders voiced concerns that the SPS chapter did not address the products of modern biotechnology,⁹⁴⁷ and that TPP's Chapter 2 provisions on national treatment and market access could conflict with the agreement's SPS requirements.⁹⁴⁸

Technical Barriers to Trade (TBT)

Assessment

The technical barriers to trade (TBT) provisions of the TPP Agreement would likely provide significant benefits for U.S. firms investing in and exporting to TPP parties. Under the TBT chapter, the parties would commit to offer more transparency and greater access to the regulatory process for stakeholders from other TPP parties, and to cooperate on common regulatory approaches. Certain provisions in the TBT chapter are already included in existing U.S. FTAs with some TPP parties, but most of the provisions extend the TBT commitments for all parties. In particular, the TBT chapter would create detailed rules that would help to improve the day-to-day business environment for all goods sectors by ensuring that technical regulations, standards setting, and conformity assessment procedures do not create unnecessary barriers to trade. The chapter would also create new requirements in all TPP parties which would permit foreign firms to participate in regulatory, standards, and conformity assessment processes on an equal footing with parties' domestic interests. According to a number of interested parties, these changes would lower costs and create a more level playing field for U.S. businesses operating in the TPP region. Additionally, the chapter contains seven product-specific annexes that are likely to benefit U.S. exporters of wine and distilled spirits, information and communications technology (ICT) products, pharmaceuticals, cosmetics, medical devices, and prepackaged foods and food additive products.⁹⁴⁹ A number of key TPP commitments are new for the United States and all TPP partners (table 6.4).

⁹⁴⁵ FARFA, written submission to the USITC, February 10, 2016, 6.

⁹⁴⁶ FARFA, written submission to the USITC, February 10, 2016, 4–5; IATP, written submission to the USITC, February 16, 2016, 3.

⁹⁴⁷ For discussion of genetically modified organisms (GMOs), see chapter 3 of this report.

⁹⁴⁸ Peterson Institute for International Economics, written submission to the USITC, February 11, 2016, 57-58; IATP, written submission to the USITC, February 16, 2016.

⁹⁴⁹ Additional information on the impact of TPP on these industries is presented in chapters 3 and 4 of this report.

Table 6.4: Summary of key commitments that surpass those of previous U.S. FTAs

Article	Brief summaries of new aspects of provisions	New articles for all parties
8.5	Parties must apply international standards, guides, and recommendations to avoid creating unnecessary obstacles	8.5:3
8.6	Includes more detailed rules for conformity assessment procedures	8.6:3, 8.6:4, 8.6:8, 8.6:9, 8.6:15, and 8.6:16
8.7	Includes more specific transparency and regulatory revision provisions to close loopholes	8.7:3, 8.7:8, 8.7:14, and 8.7:15
8.8	Includes definitions of WTO TBT terminology and time periods for compliance.	8.8:1, 8.8:2, and 8.8:3
8.9	Supports regulatory alignment and acceptance of conformity assessment results	8.9:2 ^a , 8.9:4, 8.9:7
8.10	Allows consultations on local government requirements; matters must be discussed within 60 days ^b	8.10:2bis, 8.10:3, and 8.10:4
8.11	Cooperation with nongovernmental bodies, including in multilateral/regional bodies	8.11:3(e), 8.11:3(g), ^c 8.11:3(h), 8.11:7(b-c)

Source: USTR, TPP full text, Chap. 8, Technical Barriers to Trade.

^a The first half of this provision has been standard in all U.S. post-TBT FTAs (except that with Singapore), but TPP extends the provision to include two more goals: “to support greater regulatory alignment and to eliminate unnecessary technical barriers to trade in the region.”

^b The U.S.-Peru TPA has similar, but different wording. Under that agreement, parties must make every effort to obtain a mutually satisfactory solution within 60 days of consultations.

^c Previous FTAs have encouraged cooperation regarding third-party issues, but TPP is more detailed.

Based on information reported by the U.S. government and industry representatives regarding TBT measures that create unnecessary barriers to trade, the TBT commitments in TPP would likely be particularly helpful for U.S. exporters and investors in Japan, Malaysia and Vietnam. Table 6.5 outlines U.S. industries that currently face TBT barriers in those countries and would be expected to benefit from TPP’s TBT provisions.⁹⁵⁰

⁹⁵⁰ This assessment, and the sectors included, is based solely on information provided in the footnoted sources.

Table 6.5: U.S. industries that may potentially benefit from TPP’s TBT provisions, new FTA partners

TPP party	U.S. sector	Type of TBT	Principal relevant TBT provision
Japan	Automotive	Standards, certification	8.5:2 and U.S.-Japan Side Letter
	Medical devices	Lengthy approval periods, non-harmonization with certain international standards	8.5:2 and Annex 8-E
	Pharmaceuticals	Lengthy approval periods, non-harmonization with certain international standards	Annex 8-C
	Food and dietary supplements	Burdensome process and lack of protection for proprietary ingredients requirements	Annex 8-F
	Medicated cosmetics	Pre-market approvals	Annexes 8-D and/or 8-C
Malaysia	Regulatory transparency, in general		8.7
	Electrical manufacturing ^a		8.5:2, 8.6, and 8.7
	Medical imaging products ^b		8.5:2, 8.6, 8.7, and Annex 8-E
Vietnam	Prepackaged food and beverages	Labeling requirements	8.10 and/or 8.11
	Commercial cryptographic goods ^c	Restrictions on importation and sale	Annex 8-B

Source: USTR, *2015 National Trade Estimate Report*, 2015, relevant chapters—“Japan,” 222–26, “Malaysia,” 263, 268, and “Vietnam,” 425—unless footnoted otherwise.

^a NEMA, written submission to the USTR, November 22, 2010, 2.

^b NEMA, written submission to the USTR, November 22, 2010, 2.

^c SIA, written submission to the USITC, January 22, 2016, 4–5.

The TBT commitments included in the six existing U.S. FTAs with TPP parties are quite diverse. The U.S.-Peru TPA offers TBT commitments that are closest to those in the TPP Agreement; the U.S. FTAs with Singapore and Chile are among the older U.S. FTAs and are less comprehensive than TPP. The application of the TPP TBT chapter would likely offer U.S. companies significant gains over existing bilateral FTAs, such as those with Singapore and Chile. Many of TPP’s provisions regarding publication, notification, and comment would be new to U.S. FTAs concluded before 2004, so TPP’s rules in that area would represent new commitments for Canada, Mexico, Chile, and Singapore, and to a certain extent for Australia. Certain rules related to publication and notification would be new for all TPP parties except Peru. Table 6.6 lists possible U.S. industries that may benefit from the reduction or elimination of TBTs under TPP Chapter 8.

Table 6.6: U.S. industries that may potentially benefit from TPP’s TBT provisions, existing FTA partners

TPP party	U.S. industry	Type of TBT	Principal relevant TBT provision
Canada	Seeds (wheat, barley)	Registration	8.6, 8.10
	Cheese	Compositional standards	8.5, 8.9, 8.10
Chile	Labeled food products	Nutritional labeling	8.5, 8.7, 8.10
Mexico	Processed prepackaged foods	New labeling requirements; lack of notification; insufficient time for compliance period	8.7, 8.8
	Electronic and electrical equipment	Energy efficiency labeling, standby energy consumption limits, duplicative testing, specified testing methods, insufficient compliance period	8.5, 8.6, 8.8
Peru	Biotechnology agriculture	Biotechnology moratorium; lack of specific regulatory standards on risk assessment	8.5, 8.7, 8.10
	Biotechnology foods	Labeling of biotechnology foods which requires a highly complex and expensive conformity process; lack of regulatory capacity to set, monitor and enforce such standards	8.5, 8.6, 8.7

Source: USTR, *2015 National Trade Estimate Report*, 2015, “Canada,” 58, “Chile,” 65–66, “Mexico,” 270, and “Peru,” 315–16. Note: U.S. agricultural biotechnology and biotechnology foods could also benefit in Peru from the modern biotechnology provisions contained in TPP Chapter 2 and described in chapter 3 of this report, and the SPS provisions contained in TPP Chapter 7 and described in chapter 6 of this report.

Summary of Provisions

The applicable definitions, objectives and scope of the chapter are set out in the first several articles. Article 8.1 sets out definitions. Article 8.2 states that the objective of the chapter, including its Annexes, is to facilitate trade, including by eliminating unnecessary technical barriers to trade, enhancing transparency, and promoting greater regulatory cooperation and good regulatory practice. Article 8.3 states that the chapter “applies to the preparation, adoption and application of all technical regulations, standards and conformity assessment procedures of central government bodies (and, where explicitly provided for technical regulations, standards and conformity assessment procedures of governments on the level directly below that of the central government) that may affect trade in goods between the Parties, except” government procurement and sanitary and phytosanitary measures, which are covered in other TPP chapters. Article 8.4 incorporates and makes part of the chapter certain provisions in the WTO TBT Agreement.

The remaining portions of the TPP TBT chapter set out the various obligations of the parties: international standards, guides and recommendations (Article 8.5); conformity assessment (Article 8.6); transparency (Article 8.7); compliance periods for technical regulations and conformity assessment procedures (Article 8.8); cooperation and trade facilitation (Article 8.9); and information exchange and technical discussions (Article 8.10), in addition to establishing a Committee on Technical Barriers to Trade (Article 8.11). The TBT chapter also contains seven sector-specific annexes detailing particular provisions covering standards, regulatory issues, and conformity assessment for wine and distilled spirits, ICT, pharmaceuticals, cosmetics, medical

devices, proprietary formulas for prepackaged foods and food additives, and organic products. A brief summary of the specific provisions most likely to have an impact on the U.S. economy follows.

International Standards, Guides, and Recommendations (Article 8.5): Under Article 8.5, the parties acknowledge the important role that international standards, guides and recommendations can play in supporting greater regulatory alignment, good regulatory practice and reducing unnecessary barriers to trade; agree to apply the *WTO TBT Committee Decision on the Principles for the Development of International Standards Grades and Recommendations*, and agree to cooperate with each other, where feasible and appropriate, to ensure that international standards, guides and recommendations that are likely to become a basis for technical regulations and conformity assessment procedures do not create unnecessary obstacles to international trade.

Conformity Assessment (Article 8.6): Article 8.6 requires that each party accord to conformity assessment bodies located in the territory of another Party treatment no less favorable than that it accords to conformity assessment bodies located in its own territory or in the territory of any other party. It also requires that, in order to ensure that it accords such treatment, each party must apply to conformity assessment bodies located in the territory of another party the same or equivalent procedures, criteria and other conditions that it may apply where it accredits, approves, licenses or otherwise recognizes conformity assessment bodies in its own territory. Further, the chapter would ensure that conformity assessment bodies testing or certifying products would not be required to be located within a party's territory, nor that they would have to be accredited by an accreditation body which operates an office in the party's territory. TPP would also require parties to explain any non-acceptance of conformity assessment results conducted in the territory of another party. Furthermore, it would forbid parties to require consular transactions, including related fees and charges, connected to conformity assessment. Conformity assessment fees imposed by a party would be limited to the approximate cost of the services rendered.

Transparency (Article 8.7): Article 8.7 requires that each party allow persons of the other parties to participate in the development of technical regulations, standards and conformity assessment procedures by its central government bodies on terms no less favorable than those it accords to its own persons.⁹⁵¹ Article 8.7 also requires each party to publish all proposals for new technical regulations and conformity assessment procedures and proposals for amendments to existing technical regulations and conformity assessment procedures, and all final technical regulations and conformity assessment procedures and final amendments to

⁹⁵¹ This reflects the U.S. approach to standards-setting. TPP, Technical Barriers to Trade Summary. <https://medium.com/the-trans-pacific-partnership/technical-barriers-to-trade-20e57df6a7d1#.r6105lw2c>

existing technical regulations and conformity assessment procedures, of central government bodies. Each party must publish such proposals and final actions, preferably by electronic means, in a single official journal or website. Each party must also take “such reasonable measures as may be available” to ensure that proposals and final actions of local governments on the level directly below that of the central government are published. Article 8.7 also sets out a number of notification requirements relating to notices, including that the notice explain the objectives of a proposal and how the final technical regulation or conformity assessment procedure achieves them, and that the party provide a comment period (“normally” at least 60 days).

Compliance Period for Technical Regulations and Conformity Assessment Procedures (Article 8.8): To clarify ongoing differences in the way parties interpret various provisions of the WTO TBT Agreement affecting the time allowed to comply with technical regulations and conformity assessment procedures, TPP clarifies that the term “reasonable interval” normally means a period of not less than six months. Moreover, each party would endeavor to provide an interval of more than six months between the publication of final technical regulations and conformity assessment procedures and their EIF.

Cooperation and Trade Facilitation (Article 8.9): This chapter encourages parties to intensify their collaboration to facilitate the acceptance of conformity assessment results and to support greater regulatory alignment. Parties would give due consideration to any new sector-specific proposal for cooperation under the chapter. Upon request of another party, any party would explain the reasons why it has not accepted a technical regulation of that Party as equivalent.

Information Exchange and Technical Discussions (Article 8.10): Parties also agree to exchange information on technical matters within the scope of this chapter. The relevant parties are required to discuss the matter raised within 60 days of the request, and the discussions and any information exchanged would be confidential, unless the parties participating agree otherwise. The parties “shall endeavor” to resolve the matter as expeditiously as possible, recognizing that the time required to resolve a matter will depend on a variety of factors, and that it may not be possible to resolve every matter through technical discussions.

Committee on Technical Barriers to Trade (Article 8.11): Article 8.11 would establish a Committee on Technical Barriers to Trade (TBT Committee) to monitor the implementation and operation of the chapter and to intensify joint work with a view to facilitating trade between the parties. Among other functions, the TBT Committee may agree on priority areas of mutual interest for future work under the chapter and proposals for new sector-specific or other initiatives. All decisions by the TBT Committee would be taken by consensus.

Annexes (Article 8.12): Article 8.12 addresses the annexes. It would require that the Committee, unless the parties otherwise agree, no later than five years after the date of entry into force of the Agreement and at least once every five years thereafter, review implementation of the Annexes, with a view to strengthening or improving them and, where appropriate, make recommendations to enhance alignment of the Parties' respective standards, technical regulations and conformity assessment procedures in the sectors covered by the Annexes. It would also require the Committee to consider whether the development of annexes concerning other sectors would further the objectives of the chapter or the agreement.

Annexes

Annex 8-A: Wine and Distilled Spirits: This annex establishes guidelines for labeling products, while preserving the ability of regulators to ensure consumer protection. It creates a common definition of "wine" and "distilled spirits" to facilitate trade in these products, and also provides for supplementary labeling of wine and distilled spirits to help enable producers to comply with import requirements. TPP parties commit to not reject imports solely because they use certain descriptive terms and adjectives related to wine or winemaking, such as "chateau," "reserve," "noble," "tawny," or "vintage." Parties would not require a sample quantity larger than is strictly necessary to carry out relevant conformity assessment procedures. Moreover, a party would not normally apply any final technical regulation, standard, or conformity assessment procedure to wine or distilled spirits that have been placed on the market in the party's territory before the date on which the regulation/standard/procedure enters into force.

Annex 8-B: Information and Communications Technology Products (ICT Annex): The ICT Annex covers commercial products that contain cryptography and that promote the electromagnetic compatibility of ICT products.⁹⁵² Among other commitments, TPP parties would be prohibited from disclosing proprietary information of cryptography-containing ICT products, requiring foreign companies to partner with a person in its territory, or requiring products to use a particular cryptographic algorithm or cipher, in order to comply with technical regulations or conformity assessment procedures. Exemptions are granted for (1) a TPP government's production, sale, or use of a product; (2) requirements maintained by a TPP government related to the network it owns or controls; and (3) measures a TPP government takes related to financial institutions or markets. Another exemption "preserves the ability of law enforcement

⁹⁵² Additional information on the effects of the TPP on cryptographic goods is presented in chapter 4, box 4.1 of this report.

authorities to obtain, pursuant to legal procedures, unencrypted communications from service suppliers using encryption they control.”⁹⁵³

Additional provisions remove requirements and make it easier for U.S. companies to do business. For example, a party must accept a supplier’s declaration of conformity for unintentional electromagnetic emitters where a party requires assurance for electromagnetic compatibility, as is done in the United States.⁹⁵⁴

Annex 8-C, 8-D, and 8-E: Pharmaceuticals, Cosmetics, and Medical Devices: Each of these annexes promotes transparent and open practices when regulating products in these sectors.⁹⁵⁵ TPP would require that each party define which regulatory bodies have the authority to regulate products in its territory. Parties would be required to consider relevant scientific and technical guidance when developing regulations, grant marketing authorizations based on specified and publicly available criteria, give reasons for rejecting applications, and establish due process procedures that allow for appeal. Parties would apply a risk-based approach to regulating cosmetic products, and would recognize that cosmetic products are generally expected to pose less potential risk to human health or safety than medical devices or pharmaceutical products.

Parties would seek to work together through relevant international initiatives to better align their respective product regulations. Moreover, where more than one agency is authorized to regulate products within the territory of a party, the party would eliminate any unnecessary duplication of regulatory requirements for these product categories. No party may require that products in these categories receive marketing authorization from the country of manufacture as a condition for receiving marketing authorization from the party.

These annexes make additional sector-specific commitments about labeling, inspections, testing, authorizations and reauthorizations, and guidelines for developing regulations. Parties would not be required to adopt a single definition of “cosmetic” or “pharmaceutical,” nor would they be required to include or exclude a particular product in the definitions. Annex 8-C (Pharmaceuticals) harmonizes TPP data requirements for applications for marketing authorization (which includes product “approvals” and “registration”), though parties’ paperwork may differ.

Annex 8-F: Proprietary Formulas for Prepackaged Foods and Food Additives: The annex would allow parties to require companies to provide ingredient information about prepackaged food

⁹⁵³ ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 13.

⁹⁵⁴ Except in respect to products a party regulates as a medical device, medical device system, or a component of a medical device or medical device system.

⁹⁵⁵ These three annexes are separate, but have many duplicate provisions.

and food additives. At the same time, it would ensure the confidentiality of information about proprietary formulas that companies must provide in order to meet this requirement. Each party would also ensure that it limits its information requirements to what is necessary to achieve its legitimate object.

Annex 8-G: Organic Products: The Annex would encourage the exchange of information on issues related to the production, certification, and related control systems of organic products. Parties are also encouraged to cooperate in developing international guidelines, standards, and recommendations related to trade in organic products. Parties would be required to enforce their own requirements covering the production, processing, or labeling of products as organic. Parties would be encouraged to consider requests for recognition or equivalence of another party’s standards, technical regulations, or conformity assessment procedures relating to the production, processing, or labeling of products as organic.

Summary of Views of Interested Parties

Most stakeholders strongly endorsed the TBT chapter, though others expressed critical views, and some views were mixed. Many of the ITAC committees provided strong positive comments on the TBT chapter. In particular, the ITAC on Standards and Technical Barriers to Trade (ITAC-16), which represents a wide range of industry groups and standards experts, strongly endorsed TPP’s TBT chapter, calling it a “significant step forward” in contending with the “stealth-like” nature of nontariff barriers to trade, and stating that the provisions would improve the business climate for manufacturers and service providers in TPP countries. The Committee noted with approval the language on technical regulations, stating that the conformity assessment provisions would require U.S. trading partners to use processes similar to those in the United States, which would reduce the cost of testing incurred by U.S. exporters, especially for SMEs. The Committee also highlighted the chapter’s strong provisions on transparency, but recognized that many of the transparency provisions might be difficult for some TPP parties to comply with.⁹⁵⁶

Other reports by ITACs and Agricultural Technical Advisory Committees (ATACs) highlighted the importance of the chapter’s strong language on transparency;⁹⁵⁷ its provisions on testing requirements;⁹⁵⁸ its commitments to apply the WTO TBT Committee Decision regarding international standards;⁹⁵⁹ its inclusion of for-profit and nongovernmental conformity

⁹⁵⁶ ITAC-16, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 5–8.

⁹⁵⁷ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 11; ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership (TPP) Agreement*, December 3, 2015, 9.

⁹⁵⁸ ITAC-4, *The Trans-Pacific Partnership*, December 3, 2015, 7.

⁹⁵⁹ ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 7–8.

assessment and standards setting bodies within the Agreement;⁹⁶⁰ and its requirement to allow foreign participation in standards and conformity assessment procedures developed by central government bodies.⁹⁶¹

ASTM International (ASTM), one of the largest voluntary standards development organizations in the world, emphasized that “non-tariff barriers are among the biggest challenges facing exporters across the Asia-Pacific” and called the TBT chapter an opportunity to facilitate trade. In particular, ASTM applauded TPP’s commitment to applying the WTO TBT Committee Decision on the Principles for the Development of International Standards, its provisions on the use of science-based measures to support regulatory objectives, and its provisions ensuring increased transparency.⁹⁶²

Several companies testifying before the Commission noted the importance of the TBT chapter in reducing barriers to exports.⁹⁶³ General Electric (GE) noted that the TBT chapter would be important to facilitating exports of manufactured goods—in particular, those in novel product areas where companies are developing new standards, such as electricity smart grids. This would likely support additional sales by SMEs and other GE parts suppliers.⁹⁶⁴ Several companies testified at the Commission hearing that TPP would help to standardize the customs and registration process across member countries, reducing the delays and administrative costs associated with overly burdensome regulation.⁹⁶⁵

The American Chemistry Council (ACC), National Association of Manufacturers (NAM), and United States Fashion Industry Association (USFIA) supported the TBT and Regulatory Coherence provisions that would promote cooperation to address regulatory divergence and coherence. These associations particularly highlighted provisions that would increase transparency and require parties to employ nondiscriminatory procedures for developing technical regulations, standards, and conformity assessments procedures.⁹⁶⁶

The U.S.-Japan Business Council (USJBC) supported TPP’s transparency and TBT measures, stating that such issues have long been a concern among U.S. businesses and exporters doing business in Japan. The USJBC was particularly supportive of the TBT provision that would require a 60-day period, in principle, for comments on draft regulations.⁹⁶⁷ It also expressed a

⁹⁶⁰ ITAC-4, *The Trans-Pacific Partnership*, December 3, 2015, 7.

⁹⁶¹ ITAC-7, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 6.

⁹⁶² Quinn, written testimony to the USITC, January 6, 2016, 2.

⁹⁶³ Judd, written testimony to the USITC, January 13, 2016, 2.

⁹⁶⁴ GE, written submission to the USITC, January 5, 2016.

⁹⁶⁵ St Clair, written testimony to the USITC, December 18, 2015; Halosil International, written submission to the USITC, January 13, 2016; Hughes, written testimony to the USITC, December 29, 2015, 4, 7.

⁹⁶⁶ Skelton, written testimony to the USITC, December 29, 2015; Dempsey, written testimony to the USITC, January 8, 2016, 6; Hughes, written testimony to the USITC, December 29, 2015, 7.

⁹⁶⁷ Currently, in principle Japan has a 30-day requirement for comments on draft regulations.

positive view of a side letter in which Japan made unilateral commitments to better ensure the transparency of its advisory committees, which are central to the development of regulatory and legal reform proposals and policy direction.⁹⁶⁸

Not all views of the TBT chapter presented to the Commission were positive. The National Foreign Trade Council (NFTC) pointed out that the impact of the TBT provisions would depend on how they were implemented and enforced.⁹⁶⁹ Both Ford and the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) expressed strong concerns regarding automotive standards, addressed in more detail in chapter 4 of this report. The USA Poultry and Egg Export Council (USAPEEC) lamented the lack of any provisions in the TBT chapter that would address existing halal-certification-based barriers in Malaysia to U.S. meat exports.⁹⁷⁰ While generally supportive, the American Olive Oil Producers Association (AOOPA) criticized the agreement for omitting olive oil from the list of sectors with a specific sectoral annex in the TBT chapter. The organization noted that a number of issues related to olive oil fraud—in particular, the lack of harmonization of grade standards and labeling packaging requirements—could be resolved through a TPP olive oil program.⁹⁷¹

The Commission received a number of comments focused on the TBT product-specific annexes. ITAC-4, which includes representatives of the U.S. wine and distilled spirits industry, expressed a belief that the annex will streamline U.S exports of those products and make it easier for U.S producers to comply with various labeling requirements. According to ITAC-4, the annex would likely lead to the elimination of many certificate requirements for wine and distilled spirits.⁹⁷² ITAC-4 was also pleased to note that Vietnam, Malaysia, and New Zealand have agreed to recognize bourbon and Tennessee whiskey as distinctive products of the United States, and that Japan has agreed to begin its internal process for affording such recognition.⁹⁷³

Interested party opinions on the ICT annex were divided. The majority of ICT stakeholders told the Commission that this annex would provide substantial benefits to the technology sector. In particular, they supported the Annex’s encryption provisions, emphasizing that the provisions are specific as to whether a government can require transfer of or access to encryption keys as

⁹⁶⁸ U.S.-Japan Business Council, written submission to the USITC, December 29, 2015, 9–10.

⁹⁶⁹ Wolff, written testimony to the USITC, January 13, 2016, 6.

⁹⁷⁰ USITC, hearing transcript, January 15, 2016, 456 (testimony of Kevin Brosch, USA Poultry and Egg Export Council).

⁹⁷¹ AOOPA, written submission to the USITC, January 22, 2016, 4.

⁹⁷² ITAC-4, *The Trans-Pacific Partnership*, December 3, 2015, 8.

⁹⁷³ *Ibid.*

a condition of an encrypted product entering the marketplace.⁹⁷⁴ For example, in its hearing testimony, the Semiconductor Industries Association (SIA) stated that TPP provisions related to encrypted products would protect trade flows of semiconductors and other ICT products “on the scale of hundreds of billions of dollars.” SIA also noted that TPP would require Vietnam to amend its restrictions on the importation and sale of commercial cryptography, which currently threatens “a substantial amount of semiconductor and ICT trade flows into Vietnam.”⁹⁷⁵

There were diverse reactions to the annex’s exceptions pertaining to financial institutions and law enforcement. Several stakeholders stated that the annex is weaker than it seems, declaring that it would not prevent governments from requiring access to decrypted data or protect developers against backdoor demands from their own government.⁹⁷⁶ Others contended that the provisions go too far and might have national security implications.⁹⁷⁷ Still others expressed the belief that the true meaning of the encryption provisions will only be elaborated through litigation, and that until then, there will be some uncertainty as to what the provisions actually mean.⁹⁷⁸

The Commission received comments from the principal cosmetics industry trade association regarding the Cosmetics Annex. The Personal Care Products Council (PCPC) testified that it strongly supports both the TBT Chapter and the Cosmetics Annex. In particular, PCPC testified that this annex would increase U.S. exports because of its risk-based, transparent approach to cosmetics regulation, its promotion of international standards and approaches, and its recommendation that regulators move away from bureaucratic pre-market approval systems, instead relying, as the United States does, on shared responsibilities between manufacturers and governments.⁹⁷⁹ PCPC also expressed support for ending mandates for periodic and expensive reauthorizations for products that have been safely on the market for years, and for separate authorization processes for each product shade and fragrance variation. PCPC said that these and other changes required under the TBT provisions would reduce costs and facilitate trade in practical ways that are especially meaningful for small and medium-sized

⁹⁷⁴ USITC, hearing transcript, January 13, 2016, 331 (testimony of Edward Brzywta, Information Technology Industry Council); USITC, hearing transcript, January 13, 2016, 330 (testimony of Christopher Padilla, IBM Corporation); SIA, written submission to the USITC, December 17, 2016, 2; Fraser, “Why the TPP Trade Agreement Is Great,” October 23, 2015.

⁹⁷⁵ SIA, written submission to the USITC, January 22, 2016, 4–5.

⁹⁷⁶ EFF, “Has the TPP Ended the Crypto Wars? Hardly,” November 18, 2015; ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 3.

⁹⁷⁷ For example, Stewart Baker, a partner with Steptoe & Johnson LLP in Washington, criticized the provisions for “cement[ing] Silicon Valley’s position on encryption into international treaty law,” which he argued would necessitate reopening trade negotiations and making concessions to TPP countries if Congress were to decide in the future to change U.S. backdoor security requirements. Wright, “TPP Countries Can’t Insist on Software Code Disclosure,” November 10, 2015; Baker, “USTR Wins the Crypto War,” November 6, 2015.

⁹⁷⁸ Lester, “The TPP and Encryption,” November 18, 2015.

⁹⁷⁹ Lamoriello, written testimony to the USITC, January 15, 2016, 3.

cosmetics companies. It noted that one of its member companies expects to save in a single TPP country over \$100,000 in registration fees alone, once different fragrances or shades are taken into account.⁹⁸⁰

ITAC-3, the advisory committee for chemicals, pharmaceuticals, and health/science products and services, was the only group to comment on the Medical Devices Annex. ITAC-3 strongly supported the annex, in particular its inclusion of consideration for internationally developed guidance, use of risk-based systems, basing approvals solely on safety and effectiveness (not economics), and following reasonable timelines for reviews.⁹⁸¹

Investment Assessment

The TPP Investment chapter is likely to have a positive impact on the U.S. economy by providing new protections for U.S. investors abroad, primarily in the five TPP countries with which the United States does not already have an FTA: Brunei, Japan, Malaysia, New Zealand, and Vietnam. Investors from those five countries would also gain new commitments by the United States that may lead to additional inward U.S. foreign investment. However, because the U.S. economy is already substantially open to foreign investment, it is unlikely that TPP would generate significant new investment flows into the United States. In particular, Japan, by far the largest economy of the five, is already the second-largest investor in the United States.⁹⁸²

The Investment chapter consists of the chapter text, 12 annexes (see table 6.7), and the annexes on nonconforming measures (NCMs)(Annexes I and II), which apply to both investment and cross-border trade in services. The chapter follows the negative list format; that is, its provisions apply to all sectors of the economy, apart from specific cases identified in Annexes I or II. Such an approach means that new products and services are automatically covered as they are introduced, without having to negotiate new provisions of the agreement.⁹⁸³ The investment chapters of existing U.S. FTAs follow the same format, but U.S. investment commitments under two WTO agreements, the Agreement on Trade-related Investment Measures (TRIMs) and the General Agreement on Trade in Services (GATS), follow a positive list format, under which only products and services that are specifically identified in the agreement are covered. Thus, for the United States, the major expansion in commitments would be

⁹⁸⁰ Ibid., 4.

⁹⁸¹ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 11.

⁹⁸² Japan's direct investment position in the United States was \$372.8 billion in 2014, valued at historical cost. USDOC, BEA, *Survey of Current Business*, September 2015, 14.

⁹⁸³ Peterson Institute, written submission to the USITC, February 11, 2016, 101.

between the United States and the five TPP countries with which it has not already entered into free trade agreements.

Many interested parties noted that while the provisions of the Investment chapter are critical for investors, it works together with the provisions of many other chapters to create an integrated environment that promotes investor confidence and encourages new investment both into and out of the United States. TPP chapters frequently cited in this regard include those on intellectual property, customs and trade facilitation, state-owned enterprises, technical barriers to trade, and many others, depending on investors' individual interests.⁹⁸⁴

Summary of Provisions

The format of the TPP Investment chapter is similar to that of the chapters in most existing U.S. FTAs. The chapter is divided into two sections: Section A outlines the rights of investors and the rules that govern cross-border investment, and Section B defines the investor-state dispute settlement (ISDS) process.⁹⁸⁵ As in other U.S. FTAs, investment by financial services firms is covered by the Financial Services chapter of the agreement (Chapter 11), which specifically incorporates some but not all parts of the Investment chapter.⁹⁸⁶

Section A of Chapter 9 sets out the rules that would govern new investments, and defines the types of investments that are covered by the chapter (Article 9.1). Specifically, the FTA would require each party to give national treatment (Article 9.4)⁹⁸⁷ and MFN treatment (Article 9.5) to investors and covered investments of the other party. The treatment of investors under the FTA must comply with but need not go beyond customary international law (Article 9.6). Other provisions include:

- Expropriation could be only for a public purpose; it must be nondiscriminatory and accompanied by payment of prompt, adequate, and effective compensation in accordance with due process of law (Article 9.7).
- All financial transfers relating to covered investments—including, but not limited to, contributions to capital, payment of interest, and payments under contracts—would be permitted to cover the full value of the investment and must be permitted freely and without delay (Article 9.8).

⁹⁸⁴ *Ibid.*, 102–3.

⁹⁸⁵ The U.S.-Australia FTA follows a different format, as that agreement does not contain an ISDS mechanism.

⁹⁸⁶ See chapter 5 of this report for additional discussion of the TPP Financial Services chapter.

⁹⁸⁷ National treatment is treatment at least as good as the treatment received by a country's domestic investors.

- Neither party could impose or enforce performance requirements as a condition of investment (Article 9.9).⁹⁸⁸
- Neither party could require that senior management be of any particular nationality; however, such a requirement is permitted for boards of directors, provided that the requirement does not impair the ability of the investor to exercise control over its investment (Article 9.10).

Section A also deals with NCMs (Article 9.11), subrogation (Article 9.12), and special formalities and information requirements (Article 9.13). See appendix E for a summary of each country's NCMs with regard to investment and cross-border trade in services. Some new language in Section A clarifies the rights of investors under the chapter. In particular, Article 9.6 (Minimum Standard of Treatment) clarifies that a party's taking an action that does not meet an investor's expectations—or failing to take an action that meets them—is not a breach of the article, and therefore not actionable under an ISDS arbitration case. Finally, Section A includes two articles that have not been included in existing U.S. FTAs. Article 9.15 (Investment and Environmental, Health and other Regulatory Objectives) provides that nothing in the chapter could be construed to prevent a party from adopting, maintaining, or enforcing “any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental, health, or other regulatory objectives.” Article 9.16 (Corporate Social Responsibility) reaffirms the importance of parties' encouraging businesses operating in their territories to incorporate principles of corporate social responsibility into their operations.

Section B of this chapter would provide for consultation and negotiation of disputes under the ISDS process, and provides detailed information and procedures for pursuing dispute settlement. It covers submission of claims to arbitration (Article 9.18), selection of arbitrators (Article 9.21), conduct of the arbitration (Article 9.22), transparency of the arbitral proceedings (Article 9.23), governing law (Article 9.24), interpretation of annexes (Article 9.25), expert reports (Article 9.26), consolidation of claims submitted separately to arbitration (Article 9.27), and awards of monetary damages (not including punitive damages) or restitution (Article 9.28). Under the terms of the provisions of Section B, each party would consent to claims being submitted to arbitration under specified rules according to the process outlined in the FTA. The awards made by any arbitration tribunal would have binding force only between the disputants and with regard to the particular case.

Section B includes several provisions that have not been included in existing U.S. FTAs. In Article 9.22 (Conduct of the Arbitration), paragraph (4) adds new language permitting the arbitration

⁹⁸⁸ Examples include requirements to export a given level of goods or services, achieve a given level of domestic content, or to transfer certain technology.

tribunal to determine that a claim is “manifestly without legal merit” and to dismiss such a claim. Paragraph (7) explicitly states that an investor that submits a claim to arbitration bears the burden of proving all elements of the claim. Section B also outlines additional transparency procedures for the ISDS process, and an ethics system for ISDS arbitrators. Under TPP, financial services firms have access to the ISDS process for the first time in a U.S. trade agreement, but only for the breach of certain provisions. They are able to bring ISDS cases related to violations of the minimum standard of treatment, commitments to compensate for damages due to civil strife, and commitments to compensate for direct and indirect expropriations. However, they are not permitted to bring arbitration cases related to the national treatment or MFN provisions of the agreement.⁹⁸⁹ In addition, Article 29.5 (Tobacco Control Measures) of TPP Chapter 29 (Exceptions and General Provisions) allows parties to exempt from the ISDS process any claims challenging a tobacco control measure.⁹⁹⁰ Box 6.1 provides an overview of data regarding U.S. and global ISDS cases under previous FTAs.

Box 6.1: Selected Facts About ISDS Arbitration Cases

There have been 15 ISDS arbitration cases filed by investors against the United States, mostly under NAFTA. Ten of these were decided in favor of the United States, three were settled outside of the arbitration proceedings, one was discontinued, and one remains pending as of March 2016.^a In addition, TransCanada Corporation of Canada filed a notice of intent to submit a claim to arbitration on January 6, 2016. The notice requests damages of over \$15 billion from the U.S. government for failure to approve construction of the Keystone pipeline.^b Under NAFTA rules, the notice of intent must be filed at least 90 days before a claim is formally submitted.^c

Of 88 cases filed against various states under ISDS mechanisms in U.S. trade agreements, 22 cases (25 percent) were dismissed (i.e., the host governments won) and 15 cases (17 percent) were won by the investors. A total of \$444.1 million was awarded, compared with total claims for damages of \$3.2 billion (11 percent of total claims awarded).^d

There are nearly 2,400 bilateral investment treaties in force around the world. In over 90 percent of these, there has not been a single arbitration claim under ISDS; however, the number of disputes filed in the past 10 years has increased in proportion with the rise in global foreign direct investment (FDI). European investors have filed 46 percent of investment arbitration claims since 1987; U.S. investors, 22 percent. This is consistent with the U.S. and European shares of global outward FDI. In one analysis of the 268 ISDS cases arbitrated at the International Centre for Settlement of Investment Disputes, about one-third were settled in advance of a ruling. For the remainder, host states won about twice as often as investors. When investors were successful, final awards amounted to less than 10 cents on the dollar, on average, compared with the initial claim.^e

⁹⁸⁹ For additional discussion of TPP’s application to the financial services sector, see chapter 5 of this report.

⁹⁹⁰ A tobacco control measure is defined as a measure of a party related to the production or consumption of manufactured tobacco products (including products made or derived from tobacco), their distribution, labeling, packaging, advertising, marketing, promotion, sale, purchase, or use, as well as enforcement measures, such as inspection, recordkeeping, and reporting requirements. The exception does not apply to measures with respect to tobacco leaf that is not in the possession of a manufacturer of tobacco products or that is not part of a manufactured tobacco (fn 13, Art. 29.5).

^a UNCTAD, Investment Dispute Settlement Navigator database, accessed March 15, 2016.

^b Notice of Intent, TransCanada Corporation v. the United States of America, January 6, 2016.

^c NAFTA, Article 1119: "Notice of Intent to Submit a Claim to Arbitration."

^d The remaining cases are still pending. Public Citizen, "Table of Foreign Investor-State Cases and Claims," June 2015, based on data from UNCTAD's Investment Dispute Settlement Navigator database.

^e Miller and Hicks, "Investor-State Dispute Settlement," January 2015, 6–10.

The Investment chapter contains 12 annexes. Some of these deal with particular issues that apply to all TPP parties, such as the definition of "customary international law" or the treatment of public debt in relation to an ISDS claim. Others apply to specific situations for specific parties. Table 6.7 summarizes the annexes to the Investment chapter.

Table 6.7: TPP Investment chapter annexes

Title	Relevant TPP Parties	Summary
Annex 9-A: Customary International Law	All	Defines "customary international law" for purposes of the chapter.
Annex 9-B: Expropriation	All	Deals with expropriation (direct and indirect) in some detail. To be considered expropriation, a party's action or series of actions would be required to interfere "with a tangible or intangible property right or property interest in an investment."
Annex 9-C: Expropriation Relating to Land	Singapore and Vietnam	Deals with expropriation relating to land, specifically with regard to Singapore and Vietnam.
Annex 9-D: Service of Documents on a Party under Section B	All	Provides points of contact for each party with regard to service of documents in an ISDS matter.
Annex 9-E: Transfers	Chile	States that Chile reserves the right to restrict or limit transfers in order to ensure currency stability and the normal operation of domestic and foreign payments.
Annex 9-F: DL 600	Chile	States that Chapter 9 does not apply to certain aspects of Chile's Foreign Investment Statute (Decreto Ley 600) or its Foreign Capital Investment Fund Law (Ley 18.657).
Annex 9-G: Public Debt	All	Deals with the treatment of public debt in relation to ISDS claims.
Annex 9-H: Non-conforming Measures Ratchet Mechanism	Australia, Canada, Mexico, New Zealand	Clarifies that a decision not to approve an investment proposal would not be subject to dispute settlement provisions under Section B of Chapter 9 (ISDS) or Chapter 28 (Dispute Settlement).
Annex 9-I: Non-conforming Measures Ratchet Mechanism	Vietnam	Addresses an exception for Vietnam with regard to the imposition of nonconforming measures, for three years after entry into force of TPP.
Annex 9-J: Submission of a Claim to Arbitration	Chile, Peru, Mexico, Vietnam	States that an investment claim that has been submitted to a party's court or administrative tribunal may not later be submitted to ISDS arbitration.
Annex 9-K: Submission of Certain Claims for Three Years after Entry into Force	Malaysia	Addresses submission of claims under ISDS related to a government procurement contract.
Annex 9-L: Investment Agreements	All	Addresses conditions for submitting ISDS claims to arbitration, including certain limitations on consent to arbitration by Peru and Mexico.

Source: TPP Chapter 9 (Investment).

Nonconforming Measures Related to Investment

As noted above, the negative list structure of the Investment chapter includes all parts of the economy that are not specifically carved out. Those exceptions are contained in Annex I and Annex II of the agreement. Annex I lists exemptions for existing laws or regulations, maintained at the central or regional (state) government level, which might violate the provisions of the agreement. NCMs at the local government level would be exempted without requiring any notation in an annex. As an example, box 6.2 illustrates how Mexico's TPP commitments and its NCMs related to the energy sector combine to create new opportunities for U.S. investors in Mexico's energy sector.

Annex II lists reservations to ensure that a party maintains flexibility to adopt or maintain future measures that would be inconsistent with the requirements of TPP.⁹⁹¹ The actual content of the reservations in Annexes I and II vary widely. Some reservations are horizontal in nature, meaning that they address general policy provisions that affect all investment, whereas others only apply to investment in specific industries. In some cases, the reservation indicates a potential constraint on foreign investment that may not have a significant effect on investors' activities or business results. Consequently, the inclusion of a sector in an annex does not mean that the entire sector has been exempted from coverage by the investment disciplines of the FTA. In some cases, new instances of liberalization are found in the NCM annexes. Given the complexity of a multilateral FTA, the NCMs for each country are summarized in appendix E, and not addressed separately here.

⁹⁹¹ Each party's Annex III lists NCMs specific to financial services, relating to both existing and potential laws and regulations. This annex is part of the Financial Services chapter (TPP Chapter 11), not the Investment chapter.

Box 6.2: Investment Liberalization in Mexico’s Energy Sector under TPP

Compared with its commitments under NAFTA, the TPP would present new opportunities for U.S. investment in Mexico's energy sector, even though Mexico has taken several NCM exceptions to its general investment commitments in TPP that would impact the energy sector. According to one estimate, the liberalization of Mexico's oil and gas and electricity sectors could attract up to \$15 billion of additional foreign investment per year from all countries. For the first time, foreign companies would have guarantees that they would be able to bid to participate in the exploration, production, processing, and distribution of oil, gas, and geothermal resources in Mexico.^a

For example, the TPP Investment chapter's national treatment provision (Article 9.4) requires that foreign investors be treated equally with domestic investors. However, Mexico has scheduled an exception stating that, for all sectors, investors must receive prior government approval to control more than 49 percent of the equity of an investment valued above a certain threshold (set at \$1 billion). But this threshold level would be a significant increase from the existing level of \$250 million under NAFTA. The higher threshold is particularly important to investors in the energy sector, where individual investment projects tend to have high values.^b Mexico also has taken NCM exceptions permitting the Ministry of Energy to impose particular performance requirements on foreign investors, contrary to Article 9.4 (National Treatment) and Article 9.9 (Performance Requirements) of TPP’s Investment chapter. However, Mexico has unilaterally amended its constitution to liberalize certain aspects of the energy sector in recent years, so under both TPP and NAFTA, some of that liberalization would be captured by the “ratchet mechanism” (Article 9.11.1(c)), which requires Mexico to maintain its more liberal regulations in the future. This “ratchet” would only apply to foreign participation in cross-border services under TPP, not under NAFTA.

Several other aspects of Mexico's TPP commitments would likely prove beneficial to investors in the energy industry as well. First, unlike NAFTA, TPP covers written investment agreements, which investors rely on when establishing or acquiring an investment. Such investment agreements would relate to exploitation of natural resources, supply of infrastructure services, and construction of infrastructure projects (Article 9.1). Foreign companies would also have new access to Mexico's energy sector through the Government Procurement chapter (TPP Chapter 15), under which TPP-based companies would be able to bid for energy-related projects, and through the state-owned enterprises chapter (TPP Chapter 17), under which PEMEX (Mexico's state-owned energy company) would be required to act in accordance with commercial considerations.^c

^a Freehills, “Impact of Trans-Pacific Partnership on the Energy Sector,” November 2, 2015. (The original estimate was \$20 billion in Australian dollars, converted to USD at market rates on March 16, 2016).

^b Mexico, Annex I; Freehills, “Impact of Trans-Pacific Partnership on the Energy Sector,” November 2, 2015.

^c Taylor, Mansour, and Konstantopoulos, “The Trans-Pacific Partnership,” October 15, 2015.

Summary of Views of Interested Parties

In the Commission's hearing, ambassadors from Peru and Singapore credited the existing U.S. FTAs with encouraging investment between the United States and their countries. According to Ambassador Castilla of Peru, the U.S.-Peru TPA, together with other Peruvian trade agreements, has encouraged that country to maintain open economic policies, thus attracting

significant new investment to Peru. That may be the case for the other new TPP partners as well, which would benefit U.S. investors.⁹⁹² According to Ambassador Mirpuri of Singapore, the U.S.-Singapore FTA has led to significant increases in investment between the two countries, so TPP is likely to yield additional economic benefits as well.⁹⁹³

The Commission received a significant number of comments on the Investment chapter in written submissions and at the Commission's hearing. Business interests tended to be strongly supportive of the chapter, both for its provisions on investment protections in Section A and for the ISDS process in Section B. Overall, these groups stated that the Investment chapter provides critical protections that would protect and encourage investment by U.S. firms in TPP parties. Further, they agreed that outbound U.S. FDI helps to spur U.S. productivity, economic growth, and exports; improves U.S. competitiveness; and helps to secure stable energy supplies and other inputs needed for domestic production by U.S. companies.⁹⁹⁴

The majority of business groups testifying to the Commission hearing said that they regarded the ISDS process as a critical protection assuring access to rule of law in case of a dispute with a host country government.⁹⁹⁵ The National Association of Manufacturers stated in written testimony that TPP would represent a significant step forward in protection for U.S. investors in Brunei, Japan, Malaysia, and New Zealand, with which the United States has no investment agreement; in Vietnam, where U.S. investors have only limited access to ISDS; and in Australia, where the existing U.S.-Australia FTA does not include ISDS. For Canada and Mexico, TPP would grant some additional investor protections as compared with the NAFTA.⁹⁹⁶ Walmart said that a specific investment benefit for U.S. investors in Vietnam would be the elimination, within 5 years, of Vietnam's economic needs test for new investment in the retail and distribution industries.⁹⁹⁷

Several interested parties expressed concern about TPP's carve-out from the ISDS procedures for claims challenging tobacco control measures. They objected to the carve-out, both on its face and because they viewed it as likely to set a precedent for excluding a single product or industry from the ISDS process. Further, they stated that countries are free to impose

⁹⁹² USITC, hearing transcript, January 13, 2016, 88–90 (testimony of Luis Miguel Castilla, Ambassador of Peru).

⁹⁹³ USITC, hearing transcript, January 13, 2016, 36–38 (testimony of Ashok Kumar Mirpuri, Ambassador of Singapore).

⁹⁹⁴ ECAT, written testimony to the USITC, December 28, 2015, 5; USITC, hearing transcript, January 14, 2016, 513–14 (testimony of Linda Dempsey, NAM); USITC, hearing transcript, January 14, 2016, 467–68 (testimony of Robert Vastine, Georgetown University).

⁹⁹⁵ Proponents of this view at the USITC hearing included the Coalition of Service Industries, written testimony to the USITC, January 11, 2016, 7; National Association of Manufacturers (NAM), written testimony to the USITC, January 8, 2016, 7; U.S. Chamber of Commerce, written testimony to the USITC, January 13, 2016, 4; ECAT, written testimony to the USITC, December 28, 2015, 5; Vastine, written testimony to the USITC, January 14, 2016, 3.

⁹⁹⁶ Dempsey, written testimony to the USITC, January 8, 2016, 7–8.

⁹⁹⁷ Thorn, written testimony to the USITC, December 29, 2015.

regulations in the public interest without such a targeted exclusion.⁹⁹⁸ In addition, Universal Leaf Tobacco Company expressed concern that this provision would inhibit tobacco companies from marketing their products, thus reducing demand for leaf tobacco, leading the company to call for rejecting the agreement.⁹⁹⁹

In contrast, in written submissions and testimony at the Commission's hearing, several labor unions, environmental groups, and other nonbusiness interests expressed concerns about the Investment chapter. A number of organizations argued that the investment protections in Section A encourage U.S. companies to relocate jobs to other countries with lower wage rates, decisions that might be made differently without the protections for investors included in TPP agreement. The AFL-CIO specifically cited the automobile, auto parts, and call center industries as potentially vulnerable to offshoring of jobs.¹⁰⁰⁰ Richard Cunningham, a specialist in international trade law, in written testimony prepared for the Commission's hearing, raised the possibility that TPP would not necessarily encourage U.S. firms to move production overseas, but would affect their choice of location once such a decision was made, encouraging U.S. investors to choose offshore locations within the TPP region.¹⁰⁰¹

Many organizations have also raised concerns related to the ISDS provisions in Section B. According to the Farm and Ranch Freedom Alliance, TPP's ISDS provisions would threaten U.S. sovereignty by vastly increasing the number of foreign entities able to challenge U.S. laws through ISDS.¹⁰⁰² The AFL-CIO, the UAW, the United Steelworkers, the Sierra Club, and others have expressed concern that ISDS provisions will lead arbitration panels to overturn host country environmental, health, or other public interest regulations. Even where such regulations are not actually overturned, there are concerns that ISDS cases, or the threat of such cases, can create a "chilling" effect, such that host countries become less likely to regulate in the public interest, or are quick to change regulations when an investor threatens an arbitration case.¹⁰⁰³

Another concern frequently raised against the ISDS process is that it creates a special, extra-judicial dispute settlement process for investors that is not available to other groups. According

⁹⁹⁸ U.S. Chamber of Commerce, written testimony to the USITC, January 13, 2016, 9; Universal Leaf Tobacco Company, written submission to the USITC, February 12, 2015, 2–3; ECAT, written testimony to the USITC, December 28, 2015, 5; USITC, hearing transcript, January 14, 2016, 514 (testimony of Linda Dempsey, National Association of Manufacturers); Wolff, written testimony to the USITC, January 13, 2016, 6–7.

⁹⁹⁹ Universal Leaf Tobacco Company, written submission to the USITC, February 12, 2015, 2–3.

¹⁰⁰⁰ Drake, written testimony to the USITC, December 29, 2015, 18–23, 46; Citizens Trade Campaign, written submission to the USITC, February 17, 2016, 2.

¹⁰⁰¹ Cunningham, written testimony to the USITC, December 29, 2015, 4.

¹⁰⁰² FARFA, written submission to the USITC, February 10, 2016, 1.

¹⁰⁰³ Sierra Club, written submission to the USITC, February 12, 2016, 5–6; USITC, hearing transcript, January 13, 2016, 200 (testimony of Celeste Drake, AFL-CIO).

to views expressed to the Commission, this allows investors to enforce the terms of an FTA in a way that is not available to labor or environmental groups seeking to enforce the provisions of the Labor or Environment chapters of the agreement. Instead, non-investors must work through their home country government to enforce the FTA, a process that is subject to delays and political decisions by each government involved.¹⁰⁰⁴ Further, according to the AFL-CIO, “[b]y offering additional legal protections beyond those that exist under U.S. law or other countries’ national courts, ISDS makes it more attractive to send production and investment overseas.”¹⁰⁰⁵

The report of the Trade and Environment Policy Advisory Committee (TEPAC) stated that many of its members have expressed concern over TPP’s ISDS provisions, but also said that the TPP investment chapter goes further than previous FTAs in clearly addressing some of the specific concerns that have been raised about ISDS. In particular, according to TEPAC, the chapter provides for new levels of transparency and public participation in ISDS cases, compared with previous U.S. FTAs. For example, the TPP investment chapter specifically permits the filing of amicus curiae submissions in ISDS cases (though it does not require a tribunal to accept such submissions), and permits the investor’s home country government to submit briefs. The TEPAC report also stated that the chapter contains language clarifying the right of host countries to regulate for a public purpose in a nondiscriminatory manner, and allows the TPP parties to offer guidance on applying the code of conduct for dispute settlement proceedings outlined in Chapter 28 (Dispute Settlement) to ISDS arbitrators.¹⁰⁰⁶ Other observers disagree that these changes go far enough. The AFL-CIO, in a prehearing statement to the Commission, stated that “the minimal changes to the investment chapter do not fix the glaring shortcomings inherent in the undemocratic investor-to-state ISDS mechanism.”¹⁰⁰⁷

Temporary Entry for Business Persons

Assessment

TPP provisions on temporary entry of business persons will likely have little or no effect on the United States, as U.S. obligations under this chapter are limited to the expeditious processing of visa applications, transparency, and international cooperation. According to USTR, these obligations will not require any change in U.S. regulation or practice,¹⁰⁰⁸ and other countries’

¹⁰⁰⁴ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 21; AFL-CIO, written submission to the USITC, 46.

¹⁰⁰⁵ AFL-CIO, written testimony to the USITC, December 29, 2015, 47; USITC, hearing transcript, January 13, 2016, 204–5 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers).

¹⁰⁰⁶ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 21.

¹⁰⁰⁷ AFL-CIO, written testimony to the USITC, December 29, 2015, 45. Emphasis in original.

¹⁰⁰⁸ USTR, “Chapter 12, Temporary Entry for Business Persons: Chapter Summary,” November 5, 2015.

observance of these obligations will likely not have a significant impact on U.S. business persons' access to foreign markets.

Summary of Provisions

The TPP chapter on temporary entry obligates parties to approve or disapprove applications for temporary entry in an expeditious manner, provide timely responses to requests for information on an application's status, and maintain reasonable application processing fees (Article 12.3). Parties agree to confirm commitments under the Asia-Pacific Economic Cooperation Forum (APEC) regarding the development or improvement of business travel programs, including programs for trusted travelers and the APEC Business Travel Card program (Article 12.5). Parties are also required to publish information on their respective temporary entry requirements and application processing times, and must maintain mechanisms for addressing inquiries on their temporary entry provisions (Article 12.6).

Article 12.4 requires each party to set out in Annex 12-A the commitments it makes with regard to temporary entry of business persons, which must specify the conditions and limitations for entry and temporary stay, including length of stay, for each category of business persons specified by that party. Most parties have submitted commitments and those commitments apply only to visitors from countries that have also scheduled commitments on the entry of certain types of business persons. However, Japan's schedule specifically indicates that its commitments will be extended to all TPP member countries, while Brunei, Malaysia, and Singapore submitted commitments that are not limited to TPP countries that also have scheduled such commitments. The United States has not submitted commitments to date.

The chapter establishes a Committee on Temporary Entry for Business Persons which is charged with considering and reviewing issues that are pertinent to the chapter. These include, among other things, the chapter's implementation and efforts to facilitate temporary entry (Article 12.7). The chapter also encourages cooperation among parties on border security and visa processing procedures (Article 12.8).

A party may have recourse to dispute settlement under Chapter 28 of TPP, but only if a refusal to grant temporary entry involves a pattern of practice and the business persons affected have exhausted all available administrative remedies regarding the particular matter (Article 12.10).

Summary of Views of Interested Parties

One hearing witness indicated that the United States may derive some benefit from the TPP chapter on temporary entry through the improved operation of partner countries' systems for processing transferees. However, he was uncertain if this chapter would have an impact on the U.S. economy, and stated that U.S. business persons do not currently face any obstacles to entering TPP member countries.¹⁰⁰⁹ The Commission received very few comments from industry, NGOs, or other interested parties regarding the provisions included in the TPP temporary entry chapter, and Commission staff found no third-party analyses of the potential impact of these provisions on the U.S. economy.

Government Procurement

Assessment

Under TPP, the most significant new government procurement opportunities for U.S. businesses would likely be in the markets of Brunei, Vietnam, and Malaysia, which are currently not covered by an existing U.S. FTA or the WTO Government Procurement Agreement (GPA). The procedural and legal changes required by the chapter to the procurement processes in those countries would likely make their markets more transparent and enable U.S. companies to compete more effectively there.

In addition, Canada and the United States have agreed to use TPP Government Procurement chapter to replace the government procurement commitments in NAFTA, essentially updating those prior commitments to incorporate the higher-level commitments of TPP.¹⁰¹⁰ TPP would not significantly affect the government procurement commitments of the other TPP member countries because several have already committed to the GPA, including the United States, Singapore, Japan, and New Zealand (2015 accession). Others, including Mexico, Chile, Peru, and Australia, will maintain their commitments under existing FTAs with the United States.

According to USTR, the commitments in the Government Procurement chapter would apply only to procurement that each country has agreed to cover. The chapter would continue to exclude from coverage the same elements of U.S. government procurement that are excluded from past U.S. agreements, including Buy America requirements attached to federal funds for state and local mass transit and highway projects and water projects; small business and other set-asides; procurement of transportation services; food programs for people; and sensitive

¹⁰⁰⁹ USITC, hearing transcript, January 14, 2016, 660–661 (testimony of Robert Vastine, Georgetown University).

¹⁰¹⁰ The TPP chapter is based upon the WTO 2014 Revised Government Procurement Agreement, which provides stronger commitments than the NAFTA or the prior Uruguay Round Government Procurement Agreement (1994).

elements of Department of Defense procurement, including defense systems, materials and textiles. USTR also stated that the United States had made no commitments to cover state or local government procurement at this time.¹⁰¹¹

Summary of Provisions

Article 15.2 of the chapter lists the activities that are covered and not covered by the chapter. It states that the chapter applies to any measure regarding “covered procurement.” It defines “covered procurement” to mean government procurement (a) of a good, service or any combination thereof as specified in each party’s Schedule to Annex 15-A; (b) by any contractual means; (c) for which the value equals or exceeds the relevant threshold specified in a Party’s Schedule to Annex 15-A; (d) by a procuring entity; and (e) that is not otherwise excluded from coverage under this Agreement. Article 15.2 states that the chapter does not apply to (unless otherwise provided in a party’s Schedule to Annex 15-A): (a) the acquisition or rental of land, existing buildings or other immovable property or the rights thereon; (b) non-contractual agreements or any form of assistance that a party, including its procuring entities, provides, including cooperative agreements, grants, loans, and certain other fiscal benefits; (c) the procurement or acquisition of fiscal agency or depository services and certain other enumerated financial activities; (d) public employment contracts; and (e) procurement relating to providing international assistance, funding related to an international organization or under an international agreement, or procurement of a good or service outside the territory of the party of the procuring entity, for consumption outside the territory of that party. Article 15.2 also addresses the contents of party schedules.

Article 15.3 lists other exceptions, and clarifies that nothing in the chapter shall be construed to prevent a party, including its procuring entities, from adopting or maintaining a measure that is (a) necessary to protect public morals, order or safety; (b) necessary to protect human, animal or plant life or health; (c) necessary to protect intellectual property; or (d) relating to the good or service of a person with disabilities, of philanthropic or not-for-profit institutions, or of prison labor.

Articles 15.4 sets out general principles with regard to national treatment and non-discrimination, procurement, rules of origin, offsets, measures not specific to procurement, and use of electronic means. Other articles address transitional measures for parties that are developing countries (Article 15.5), publication of procurement information (Article 15.6), notices of intended procurement (Article 15.7), conditions for participation (Article 15.8), qualification of suppliers (Article 15.9), limited tendering (for the purpose of avoiding

¹⁰¹¹ USTR Chapter Summary, Buy America and Other Exclusions, found at <https://medium.com/the-trans-pacific-partnership/government-procurement-ac9def5bba92#.9mtg2tknn> March 29, 2016.

competition between suppliers) (Article 15.10), negotiations (Article 15.11), technical specifications (Article 15.12), tender documentation (Article 15.13), time periods relating to the time that a supplier is given to obtain the tender documentation and to prepare and submit a request for participation and a responsive tender (Article 15.14), treatment of tender and awarding of contracts (Article 15.15), post-award information (Article 15.16), disclosure of information (Article 15.17), ensuring integrity in procurement practices (Article 15.18), domestic review (Article 15.19), modification and rectifications of the Annex (Article 15.20), facilitation of participation by small and medium-sized enterprises (Article 15.21), and cooperation between the parties (Article 15.22).

Article 15.23 would establish a Committee on Government Procurement composed of government representatives of each party. At the request of a party, the Committee would meet to address matters related to the implementation and operation of the chapter, such as (a) cooperation between the parties; (b) facilitation of participation by SMEs in covered procurement; (c) use of transitional measures; and (d) consideration of further negotiations as provided for in Article 15.24.

Article 15.24 requires the Committee to review the chapter and provides that it may decide to hold further negotiations with a view to (a) improving market access coverage through enlargement of procuring entity lists and reduction of exclusions and exceptions as set out in Annex 15-A; (b) revising the thresholds set out in Annex 15-A; (c) revising the Threshold Adjustment Formula in Section H of Annex 15-A; and (d) reducing and eliminating discriminatory measures. Article 15.24 requires the parties, no later than three years after the date of entry into force of the Agreement, to commence negotiations with a view to achieving expanded coverage, including sub-central coverage.

Summary of Views of Interested Parties

Several business trade associations expressed concerns that no commitments were made to open procurement at the state and local government (“sub-central”) level.¹⁰¹² Generally, however, these associations viewed the TPP commitments as beneficial to U.S. interests. As expressed by the National Association of Manufacturers, “The new access provided to these government procurement markets will expand opportunities to U.S. manufactured goods exports significantly and represents a significant step forward given many developing countries’ reluctance to engage in more reciprocal government procurement obligations.”¹⁰¹³

¹⁰¹² See statements by the U.S. Chamber of Commerce, NAM, and CSI.

¹⁰¹³ Dempsey, written testimony to the USITC, January 8, 2016, 8.

In a written submission, the Peterson Institute for International Economics provided an analysis of the strengths and shortcomings of the TPP government procurement chapter.¹⁰¹⁴ The institute noted the political difficulties for the United States of negotiating any procurement covered by the Buy America Act, and expressed concern about the inefficiencies that it stated were caused by the Act's provisions.

The AFL-CIO and the International Association of Machinists and Aerospace Workers expressed reservations concerning the government procurement commitments of TPP. One area of concern was the continued use of "offsets" by Vietnam and Malaysia under the terms of TPP,¹⁰¹⁵ which could induce manufacturers to build plants in TPP partners' territory to satisfy government procurement requirements, leading to a loss of U.S. jobs. Another concern is that foreign call centers would be able to supplant U.S. call centers providing government services, displacing U.S. workers with few options for alternative employment.¹⁰¹⁶ The AFL-CIO also pointed out the possibility that government economic stimulus actions to fight recession might be diminished if foreign firms share in the funds.

Competition

Assessment

Chapter 16 of the TPP Agreement addresses a range of topics: competition law and authorities, anticompetitive business practices, procedural fairness in competition law enforcement, private rights of action, cooperation, technical cooperation, consumer protection, transparency in competition enforcement policies, and consultations. The Competition provisions are similar in most respects to those in previous FTAs. New features in the TPP chapter include establishing detailed rules on procedural fairness in competition law enforcement, consistent with U.S. law and practice. USTR also notes that the chapter provides a regional standard that requires parties to adopt or maintain laws proscribing fraudulent and deceptive commercial activities.¹⁰¹⁷ None of the provisions of the Competition chapter would be subject to the TPP Dispute Settlement process.

The TPP Competition chapter includes more specifics on the elements of competition than existing U.S. FTAs. For example, the consumer protection provisions of the TPP chapter recognize that fraudulent and deceptive commercial activities can harm consumers, and TPP

¹⁰¹⁴ Moran, PIIIE, "Government Procurement," February 2016.

¹⁰¹⁵ Drake, written testimony to the USITC, December 29, 2015, 12; Olsson, written testimony to the USITC, January 13, 2016, 1, 3.

¹⁰¹⁶ Drake, written testimony to the USITC, December 29, 2015, 23–24.

¹⁰¹⁷ USTR, Trans-Pacific Partnership Agreement, Chapter 16, Chapter Summary, downloaded from USTR website on April 8, 2016.

also requires each party to adopt or maintain consumer protection laws. However, the TPP commitments to address fraudulent and deceptive activities and to cooperate with each party's respective laws and enforcement are not binding. In addition, unlike the consumer protection provisions in some other U.S. trade agreements, those in TPP do not support implementation of the Organisation for Economic Co-operation and Development (OECD) Guidelines for Protecting Consumers from Fraudulent and Deceptive Commercial Practices across Borders (2003).¹⁰¹⁸

Brunei is exempt from certain sections of the competition policy for a period of no longer than 10 years after the date of EIF of the agreement because Brunei does not currently have domestic competition law and authority. Before the end of the 10-year period, it must endeavor to comply with these obligations.

Summary of Provisions

Chapter 16 addresses matters that encourage fair competition rules and behaviors. Article 16.1 requires that each party adopt or maintain national competition laws that proscribe anticompetitive business conduct, with the objective of promoting economic efficiency and consumer welfare, and shall take appropriate action with respect to that conduct. It states that these laws should take into account the APEC Principles to Enhance Competition and Regulatory Reform.¹⁰¹⁹ Article 16.1 also requires that each party “endeavor” to apply its national competition laws to all commercial activities in its territory, but allows each party to provide for certain exemptions. Article 16.1 also requires that each party maintain an authority or authorities responsible for the enforcement of its national competition laws.

Article 16.2 lists nine aspects of procedural fairness that parties must observe before imposing a sanction or remedy against a person violating a party's national competition laws. These items include notification and a reasonable opportunity to be represented by counsel, to seek review, to resolve allegations, to consult, and to exchange information.

Article 16.3 provides that each party “should” adopt or maintain laws or other measures that provide an independent private right of action. It states further that if a party does not do this, it must adopt or maintain laws or other measures that provide a right that allows a person: (a) to request that the national competition authority initiate an investigation into an alleged violation of national competition laws; and (b) to seek redress from a court or other independent tribunal following a finding of violation by the national competition authority.

¹⁰¹⁸ In TPP, several provisions covering monopolies and state-owned enterprises, which were included in the Competition chapter of some existing U.S. FTAs, are found in TPP Chapter 17, “State-Owned Enterprises and Designated Monopolies.”

¹⁰¹⁹ Auckland, September 13, 1999.

Article 16.3 also requires each party to ensure that such rights are available to persons of another party on terms that are no less favorable than those available to its own persons.

The chapter also requires that parties cooperate in the area of competition policy by exchanging information on the development of competition policy, and cooperate, as appropriate, on issues of competition law enforcement (Article 16.4). It also provides that parties should consider undertaking mutually agreed technical cooperation activities, subject to available resources, including providing advice or training on relevant issues, exchanging information and experiences on competition advocacy, including ways to promote a culture of competition, and assisting a party as it implements a new national competition law (Article 16.5).

The chapter sets out certain other requirements including consumer protection and transparency. For example, Article 16.6 requires that each party adopt or maintain consumer protection laws or other laws or regulations that proscribe fraudulent and deceptive commercial activities. Article 16.7 provides that at the request of another Party, a Party shall make available public information concerning competition law enforcement policies and practices. It also requires that each party ensure that a final decision finding a violation of its national competition laws is made in writing and sets out, in non-criminal matters, findings of fact and the reasoning, including legal and, if applicable, economic analysis, on which the decision is based; and that each party further ensure that final decisions and any order implementing that decision are published, or if publication is not practicable, are otherwise made available to the public in a manner that enables interested persons and other parties to become acquainted with them.

Article 16.8 requires that parties agree to enter into consultation with a requesting Party and afford them full and sympathetic consideration to the concerns of the other. Article 16.9 provides that no Party will have recourse to dispute settlement for any matter arising under this Chapter.

Summary of Views of Interested Parties

The National Association of Manufacturers stated that TPP's competition provisions "are important to reduce anti-competitive conduct in local markets and to prevent the abuse of competition policy systems in a discriminatory manner that will aid manufacturers in the United States that are doing business in these TPP markets."¹⁰²⁰ The U.S. Chamber of Commerce also

¹⁰²⁰ Dempsey, written testimony to the USITC, January 8, 2016, 9.

supports TPP's efforts to strengthen the competition rules "through notification, consultation and exchange of information."¹⁰²¹

State-Owned Enterprises and Designated Monopolies

Assessment

TPP would be the first U.S. FTA to include a separate chapter on state-owned enterprises (SOEs), and goes beyond previous agreements in addressing the distortions that SOEs can cause in the market. It is the first U.S. FTA to seek to comprehensively address the commercial activities of SOEs that compete with private companies in international trade and investment. According to USTR, the chapter's commitments build on principles found in the WTO agreements and in previous U.S. FTAs, but go beyond them in important ways, including by applying subsidies rules to services exports of SOEs and to the operations of SOE manufacturers outside their home territory.¹⁰²² According to one commentator, "Chapter 17 signals a new strategy to discipline SOEs through trade law commitments as distinct from antitrust principles."¹⁰²³

Generally, the Trade Advisory Committees and those who submitted statements and testimony to the Commission agreed that the provisions of the SOE chapter would be beneficial to U.S. firms.¹⁰²⁴ The interested parties that provided views to the Commission for the most part viewed the chapter as a positive step towards disciplining SOEs to assure that they compete fairly when engaged in commercial activities.

Summary of Provisions

Chapter 17 applies to both goods and services, and the provisions of the chapter apply to both designated monopolies and SOEs. Article 17.1 defines key terms used in the chapter. One is the term "state-owned enterprise" or SOE, defined as an enterprise that is principally engaged in commercial activities and in which any of three indicators of TPP party control are met: (1) the party owns more than 50 percent share of capital, or (2) the party controls, through ownership

¹⁰²¹ Murphy, written testimony to the USITC, January 13, 2016, 9.

¹⁰²² USTR, "Chapter 17, State-owned Enterprises: Chapter Summary," November 5, 2015. In some previous FTAs, including some with other TPP countries, the competition chapters have included provisions that reference SOEs, designated monopolies, or government enterprises. See the U.S.-Singapore FTA, Chapter 12; U.S.-Australia FTA, Chapter 14; U.S.-Peru FTA, Chapter 13; U.S.-Chile FTA, Chapter 16. See also United States-Columbia FTA, Chapter 13; United States-Korea FTA, Chapter 16.

¹⁰²³ Gadbow, "Competition Policy," March 2016.

¹⁰²⁴ See, e.g., ITAC-12, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015.

interests, the exercise of more than 50 percent of the voting rights, or (3) the party holds “the power” to appoint a majority of members of the board of directors or other equivalent management body. SOE is distinguished from another important term, “designated monopoly,” defined as a privately owned or governmental sole provider or purchaser of a good or service that a TPP party designates as such.

Article 17.2 defines the scope of the chapter. Nothing in the chapter would prevent financial regulators from exercising regulatory or supervisory authority over financial policy or financial services suppliers. The chapter would not apply to sovereign wealth funds or independent pension funds of the parties, with certain exceptions, nor to government procurement. Under this chapter, SOEs and designated monopolies must “act in accordance with commercial considerations” in the sale and purchase of goods and services, and parties must give nondiscriminatory treatment to enterprises, goods, and services of other TPP parties (Article 17.4).

The provisions of this chapter would apply anywhere the SOE/monopoly operates in the free trade area, including in their home or other TPP countries. One example of the way these rules may apply beyond the territory of the home country is contained in a provision that is unique to TPP. The provision obliges each party to assure that its provision of noncommercial assistance to an SOE that produces and sells goods in another party’s territory will not cause injury to a domestic industry in that territory (Article 17.6). The Chapter would also prohibit parties from providing non-commercial assistance to SOEs that would cause adverse effects to the interests of other TPP parties (Articles 17.6 and 17.7).

Under this chapter, the parties would be required to ensure that their SOEs make purchases and sales on the basis of commercial considerations, except when doing so would be inconsistent with any mandate under which the SOE is operating that would require it to provide public services (Article 17.4). Parties would agree to provide their courts with jurisdiction over commercial activities of foreign SOEs in their territory, and to ensure that administrative bodies regulating both SOEs and private companies do so in an impartial way (Article 17.5).

The SOE chapter also contains a number of detailed transparency and notification requirements (Article 17.10). The provisions of the chapter are subject to the provisions of the Dispute Settlement Chapter (TPP Chapter 28). The Chapter also establishes a Committee on SOEs and designated monopolies (Article 17.12) and provides for parties to engage in mutually agreed technical cooperation activities (Article 17.11).

Under Annex 17-D, the nondiscriminatory treatment and commercial considerations provisions, and some of the transparency provisions, do not apply to companies owned by regional and

local governments. The exemptions in that Annex only apply to the original 12 parties and apply for five years, after which the parties agree to conduct further negotiations on extending these exceptions. Any countries that join the TPP Agreement in the future would have to negotiate specific exemptions.

Summary of Views of Interested Parties

A number of interested parties agreed that the inclusion of an SOE chapter in the TPP Agreement is a positive and significant achievement and would help address the increasing importance and growth of SOEs in global markets, where they often compete with U.S. companies. Observers also noted that TPP's restrictions on SOEs could encourage investment among TPP members and set an important precedent for future agreements, especially those that might include China.¹⁰²⁵ In contrast, several labor unions and Robert Scott, representing the Economic Policy Institute, stated that TPP does not do enough to regulate SOEs and would promote the growth of U.S. trade deficits. These parties also expressed concern about the effects the SOE provisions might have, or that they might fall short of having, on potential future TPP partners, in particular China.¹⁰²⁶

Both interested parties who expressed generally favorable views about this chapter and interested parties who objected to the SOE provisions saw three areas as potential loopholes: (1) the perceived narrowness of the definition of "SOE" in requiring majority ownership; (2) the granting (in the annex) of certain exemptions for sub-central SOEs; and (3) other exemptions taken by TPP parties, particularly Vietnam and Malaysia.

Definition of an SOE: While TPP would extend the reach of existing subsidies disciplines in the WTO by broadening the definition of what constitutes an SOE, some interested parties expressed concern that the definition as applied to other competitive activities is narrower than that contained in existing U.S. FTAs with other TPP members. In particular, several commenters compared the TPP definitional provisions on SOEs to those of the U.S.-Singapore FTA. Nova Daly of Wiley Rein LLP viewed the Singapore definition of "government enterprises" as being broader than the TPP SOE definition; while recognizing the desire for clear definitions and the difficulties in negotiating a multicountry agreement, Mr. Daly expressed concern that what he viewed as TPP's more limited definition could in practice permit governments to avoid the

¹⁰²⁵ See, e.g., Emergency Committee on American Trade, written submission to the USITC, December 28, 2015; USITC, hearing transcript, January 13, 2016, 245-46 (testimony of Alan Wolff, National Foreign Trade Council); PIIE, *Assessing the Trans-Pacific Partnership*, Vol. 1: *Market Access and Sectoral Issues*, February 2016; Schmid, written testimony to the USITC, January 15, 2016.

¹⁰²⁶ See, e.g., written testimony of AFL-CIO; Gerard, written submission to the USITC, December 29, 2015; USITC, hearing transcript, (testimony of Robert E. Scott, Economic Policy Institute, January 13, 2016.

chapter's disciplines, while maintaining effective control over nominally commercial enterprises.¹⁰²⁷

Exceptions taken by TPP parties: Several interested parties, including some who viewed the SOE chapter in a generally favorable light, expressed concern that the exceptions taken by various countries would limit the benefits to U.S. firms of the chapter's obligations.¹⁰²⁸ They focused particularly on the exceptions taken by Malaysia and Vietnam, which have many SOEs operating across their economies.¹⁰²⁹ Another observer stated that the chapter's commitments on SOEs would likely have only a small effect on countries where SOEs have a less prominent role, but that countries like Vietnam, with a larger state sector, would need to drastically change their behavior under TPP.¹⁰³⁰ The AFL-CIO said that allowing existing SOEs, particularly in Malaysia, Vietnam, and Singapore, to continue to benefit from the government support they have been receiving would allow these SOEs to compete unfairly against firms based in the United States and elsewhere.¹⁰³¹

With regard to the United States, some commenters noted that the United States also obtained exceptions for Freddie Mac and Fannie Mae, which would be able to continue to provide government guarantees for timely payment on mortgage-backed securities.¹⁰³² The Intergovernmental Policy Advisory Committee (IGPAC), in its Advisory Committee report, stated that it welcomed TPP's establishment of rules for SOEs in an effort to help level the playing field for U.S. firms, but also welcomed the postponement of sub-federal coverage of SOEs, because it is not clear how TPP would impact U.S. sub-federal SOEs.¹⁰³³

Effects on U.S. industries: In written testimony to the Commission, Nova Daly stated that manufacturing sectors, particularly steel, aluminum, and solar energy, are the U.S. industries that have been hurt most by the activities of SOEs, and are thus the industries that potentially have the most to gain from TPP's SOE provisions. According to Mr. Daly, governments have used unprofitable SOEs to provide domestic employment and tax revenue, and shielded these firms from bankruptcy. This has led to global overcapacity in certain industries, with effects that have spread throughout the global economy. Mr. Daly also stated that SOEs often make investments outside of their home economies, relying on extensive financial support from their domestic governments, and that such investments may be driven by political or strategic

¹⁰²⁷ Daly, written testimony to the USITC, January 10, 2016, citing U.S.-Singapore FTA, Article 12.8(5).

¹⁰²⁸ ECAT, written submission to the USITC, December 28, 2015, 7.

¹⁰²⁹ Linda Schmid, representing Trade in Services International (TISI), noted that in Vietnam, SOEs accounted for 30 percent of GDP in 2013. USITC, written testimony to the USITC, January 15, 2016, 4; PIIE, *Market Access and Sectoral Issues*, February 2016 (submitted with PIIE submission).

¹⁰³⁰ Miner, "Commitments on State Owned Enterprises," March 2016.

¹⁰³¹ AFL-CIO, written submission to the USITC, December 29, 2015.

¹⁰³² PIIE, written submission to the USITC, February 11, 2016.

¹⁰³³ IGPAC, "The Trans-Pacific Partnership Agreement (TPP)," December 2, 2015, 15.

objectives rather than commercial considerations. According to Mr. Daly, TPP's SOE provisions are "useful in seeking to address these issues," but the chapter also has weaknesses that would limit the impact of the new provisions.¹⁰³⁴

Although not specifically addressing the provisions of TPP Chapter 17, UPS noted that TPP's Express Delivery Services (EDS) Annex¹⁰³⁵ protects express delivery providers that compete against state-owned postal service providers by ensuring that private companies providing services are not regulated by a government entity that is also a competitor. UPS added that this annex prohibits abuse of a public postal operator's monopoly position and insists on "impartial, non-discriminatory, and transparent" regulation.¹⁰³⁶

In written submissions and direct testimony, labor unions expressed the view that the SOE chapter is unlikely to have beneficial effects for U.S. jobs and trade. Leo Gerard, representing the United Steelworkers (USW), recommended evaluating TPP's SOE provisions under the framework they create for potential future TPP partners, especially China. According to the USW, the SOE provisions fail to provide sufficient guidance and disciplines to address the anticompetitive impact of existing SOEs. The USW expressed concern that, if China joins TPP, the SOE chapter would do little to curb the advantages afforded to China's SOEs, given the preponderance of sub-federal entities operating in China.¹⁰³⁷ Both the USW and the AFL-CIO objected to the requirement that economic injury would have to occur for more than a year to be actionable under TPP. While various witnesses expressed concerns about the perceived lack of clarity in defining "commercial considerations" in TPP's SOE chapter, the AFL-CIO said that it viewed this as a "fatal flaw," focusing on the absence of "specific guidance on how that term is to be applied."¹⁰³⁸

Intellectual Property Rights

Assessment

Full and effective implementation and enforcement of the provisions of the TPP's intellectual property chapter would likely benefit U.S. industries that rely on trademarks, patents, copyrights, trade secrets, and other intellectual property rights (IPR or IPRs). It would do so by reducing their losses from infringement and increasing exports of IPR-intensive services and

¹⁰³⁴ Daly, written testimony to the USITC, January 15, 2016, 1–2.

¹⁰³⁵ The EDS Annex is part of TPP, Chapter 10, Cross-border Trade in Services, addressed further in chapter 5 of this report.

¹⁰³⁶ Lane, written testimony to the USITC, December 29, 2015.

¹⁰³⁷ Gerard, written testimony to the USITC, January 13, 2015, 5–6.

¹⁰³⁸ Gerard, written testimony to the USITC, January 13, 2015, 5–6; Drake, written testimony to the USITC, December 29, 2015, 43.

goods, as well as foreign affiliate sales opportunities. This assessment relies on a review and analysis of the regulatory commitments required by the chapter, perspectives from hearing testimony and written submissions, the empirical literature, and an econometric estimate of the effects of strengthened patent protection on the income U.S. firms receive for the use of their intellectual property in TPP countries.

With regard to regulatory changes, the chapter incorporates IPR provisions already in force in other trade agreements—in particular, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and U.S. FTAs with Australia, Canada, Chile, Mexico, Peru, and Singapore—and builds on these standards to take into account experiences to date. The amount of regulatory change in each country that would be required by the chapter can be estimated based on the “transition periods.” Unless a transition period applies, the chapter’s obligations must be complied with on entry into force (EIF) of the agreement in that country. For six countries—Australia, Canada, Chile, Japan, Singapore, and the United States—there are no transition periods, suggesting substantial overlap between regulations currently in place and TPP’s requirements. The six remaining countries—Brunei, Malaysia, Mexico, Peru, New Zealand, and Vietnam—negotiated transition periods, with most related to test data protections and patents (table 6.8).¹⁰³⁹

Table 6.8: Transition Periods for TPP IPR Provisions

	Patent and test data provisions	Trademark provisions	Copyright and ISP provisions	Enforcement provisions	Ratification of international agreements
Australia	None	None	None	None	None
Brunei	1.5–4 years	3 years	3 years	None	3 years
Canada	None	None	None	None	None
Chile	None	None	None	None	None
Japan	None	None	None	None	None
Malaysia	4.5–5 years	3 years	2 years	4 years	4 years
Mexico	4.5–5 years	None	3 years	None	4 years
Peru	5–10 years	None	None	None	None
New Zealand	3 years	None	8 years	None	3 years
Singapore	None	None	None	None	None
United States	None	None	None	None	None
Vietnam	3–10 years	3 years	3–5 years	3 years	2–3 years

Source: TPP, article 18.83, annexes 18-A to 18-F.

Note: These transition periods are subject to additional conditions and limitations set forth in the relevant article and annexes. ISP = Internet service provider.

¹⁰³⁹ The term “data protection” generally refers to the period during which generic firms are precluded from using or relying on data on safety, efficacy, or other product characteristics that innovator firms submit to regulatory authorities to obtain marketing approval for their products. See TPP, Art. 18.50; PIIE, *Assessing the Trans-Pacific Partnership*, Vol. 2, March 2016, 22, n.7.

According to most witnesses who testified or made written submissions to the Commission or USTR, the chapter promotes the effective protection of U.S. intellectual property.¹⁰⁴⁰ For example, representatives of copyrighted content industries (such as movies, music, and books) and companies that provide Internet services supported provisions that foster digital services and a rules-based system for addressing online piracy. In the area of trademarks and geographical indications (GIs), new due process and transparency requirements were particularly important to the U.S. dairy sector. Similarly, representatives of U.S. manufacturing and semiconductor firms supported the chapter's requirement for enhanced trade secret protections to address the growing international problem of trade secret theft.

Opinions were mixed, however, on protections for pharmaceuticals and biologic products.¹⁰⁴¹ Representatives of firms that make innovative products objected to the data protection provision for biologics on the grounds that it provides fewer years of protection than is available in the United States. By contrast, representatives of nongovernmental organizations (NGOs) stated that data protection and patent requirements are too stringent. A middle ground was suggested by some commentators and representatives of generic firms, who stated that the provisions reflect a reasonable compromise on a difficult topic.¹⁰⁴²

In addition to these perspectives, there is a substantial body of empirical literature on the effects of IPR strengthening on trade and investment patterns. According to this literature, patent reforms undertaken since TRIPS have had a strong and positive effect on licensing, trade in high-technology goods, and FDI, particularly in larger countries and middle-income countries.¹⁰⁴³ The Commission's econometric estimate builds on this literature by examining the effects of increased patent protections on one type of IPR-sensitive trade—income that U.S. firms receive for the use of their intellectual property (IP receipts) in TPP countries.¹⁰⁴⁴ Based on this estimate, in 2010, U.S. IP receipts were \$2.9 billion dollars (or 11 percent) higher than they would have been had TPP partner countries not improved their patent regimes post-TRIPS, and would increase further as reforms continue (see table 6.10 below). This analysis does not take into account the effects of data protection, copyright, trademark, trade secret, or other non-patent protections in the IPR chapter, nor does it include effects on other types of IPR-sensitive trade or investment.

¹⁰⁴⁰ Citations to particular submissions and hearing testimony are provided in the relevant sections below.

¹⁰⁴¹ Article 18.52.2 defines a biologic as, at a minimum, a product that is or contains a protein produced using biotechnology processes, for use in human beings for the prevention, treatment, or cure of a disease or condition. As set forth below, biologic products represent a major area of U.S. biopharmaceutical innovation and investment.

¹⁰⁴² See ITAC-15, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 17–18; PIIE, *Assessing the Trans-Pacific Partnership*, Vol. 2, March 2016, 28.

¹⁰⁴³ See, e.g., Maskus, *Private Rights and Public Problems*, 2012, 74–81, summarizing the empirical literature on the effects of patent reforms on trade in IPR-sensitive goods, services, and FDI.

¹⁰⁴⁴ In official U.S. services trade statistics, this category is called “charges for the use of intellectual property.” See chapter 5 of this report for an overview of U.S. services trade trends.

Summary of Provisions

This summary highlights key provisions in the IPR chapter. The chapter is divided into 11 sections (sections A–K) and covers general obligations, trademarks and GIs, patents, copyrights, trade secrets, and other forms of intellectual property, as well as IPR enforcement. In annexes, it also sets out the transition periods that some of the TPP countries obtained to comply with particular obligations.

Sections A and B set out general provisions and commitments, including:

- A requirement that the parties give effect to the minimum standards set out in the chapter, while also permitting more extensive protections in domestic laws;
- Recognition that the parties may take measures to protect public health and promote access to medicine for all, consistent with the Declaration on TRIPS and Public Health;
- A requirement that the parties ratify or accede to key multilateral IPR treaties;
- A requirement that the parties provide national treatment on IPR matters (that is, treatment no less favorable than a party gives to its own nationals), subject to certain narrow exceptions;
- A transparency requirement that public information on IPRs be made available on the Internet; and
- A requirement that the parties endeavor to cooperate and engage in work sharing—for example, in patent processing—as appropriate.¹⁰⁴⁵

The only commitment in these sections that includes transition periods is the requirement to ratify or accede to international IPR agreements. Five countries obtained extensions of time to comply, as shown in table 6.9.

¹⁰⁴⁵ Articles 18.1–18.17.

Table 6.9: Transition periods for ratification or accession to international agreements

	Budapest Treaty^a	Madrid Protocol^b	Singapore Treaty^c	UPOV 1991^d	WIPO Copyright Treaty^e	WIPO Performances and Phonograms Treaty^f
Brunei	None	None	None	3 years	None	None
Malaysia	4 years	4 years	4 years	4 years	None	None
Mexico	None	None	None	4 years	None	None
New Zealand	None	None	None	3 years for UPOV 1991 or a sui generis system	None	None
Vietnam	2 years	None	None	None	3 years	3 years

Source: TPP, Article 18.83.

Note: New Zealand may enter UPOV 1991 or adopt a unique or sui generis plant protection system that gives effect to the requirements of UPOV 1991.

^aThe Budapest Treaty requires that all parties recognize microorganisms deposited as a part of the patent procedure, regardless of where the depository authority is located.

^bThe Madrid Protocol is one of two treaties comprising the Madrid System for the international registration of trademarks.

^cThe Singapore Treaty establishes common standards for procedural aspects of trademark registration and licensing.

^dThe International Union for the Protection of New Varieties of Plants or UPOV was established in 1961 and most recently revised in 1991. UPOV 1991 protects new varieties of plants as intellectual property rights.

^eThe WIPO Copyright Treaty deals with the protection of works and the rights of their authors in the digital environment.

^fThe WIPO Performances and Phonograms Treaty addresses the rights of performers and producers of phonograms, particularly in the digital environment.

Trademarks and GIs

The sections on trademarks and GIs provide substantive and procedural protections for the brand names and other signs that businesses and individuals use to distinguish their products in the marketplace (table 6.10).¹⁰⁴⁶ Particularly noteworthy is a series of provisions not contained in previous U.S. trade agreements that require due process and transparency procedures for proposed GIs.¹⁰⁴⁷ These provisions generally require the parties to publish new GI applications, provide opposition procedures, and allow the rejection of a GI under specific circumstances—for example, that it is a common name or is likely to be confused with an existing trademark application or registration.¹⁰⁴⁸

¹⁰⁴⁶ The chapter defines a GI as “an indication that defines a good as originating in the territory, region, or locality of a Party, where a given quality, reputation or other characteristics is essentially attributable to that geographical origin.” TPP, Art. 18.1.

¹⁰⁴⁷ TPP, Arts. 18.31–18.36

¹⁰⁴⁸ In side letters, Chile, Mexico, and Vietnam agree that they will not take actions that are contrary to the purpose of the TPP’s provision on the protection of GIs under international agreements during the period before the entry into force of the agreement.

Table 6.10: Key TPP commitments related to trademarks and GIs

Subject matter	Commitments
Trademarks	Requires protection for sound, certification, and collective trademarks, and best efforts to protect scent marks. Requires trademark protections in relevant circumstances, including confusing uses of identical or similar trademarks or GIs. Strengthens protections for well-known trademarks. Requires procedural fairness in examination, opposition, and cancellation processes, and the use of electronic systems. Requires a renewable term of protection of at least 10 years. Prohibits a requirement that trademark licenses be recorded.
Domain names	Requires parties to manage country code top-level domain names by making available appropriate procedures for the settlement of domain name disputes. Requires online public access to a reliable and accurate database of contact information for domain-name registrants. Requires that appropriate remedies be available for cases in which a person holds in bad faith a domain name that is identical or confusingly similar to a trademark.
GIs	Requires transparent procedures for GIs, including those linked to international agreements that are completed or under negotiation. Requires additional protections when a GI is likely to cause confusion with an earlier trademark or GI or with a generic or common name. Establishes guidelines for determining whether a term is generic. Prohibits the overprotection of generic individual components of multi-component terms.

Source: TPP, Arts. 18.18–18.36.

Note: Country code top-level domain names are unique two-letter sequences of characters assigned to a country or other geographical area to identify them in a domain name, such as “.jp” for Japan or “.nz” for New Zealand.

TPP countries would give effect to all of the trademark and GI provisions upon EIF of the agreement, with the exception of Brunei, Malaysia, and Vietnam. These countries would have 3 additional years to provide protections for trademarks that rely on sounds.¹⁰⁴⁹

Patents and Data Protection

The chapter next describes TPP countries’ commitments related to patents and test data protection. These include standards for criteria under which patents must be made available, the extension of patent terms to account for patent-office or regulatory delays, and the protection of data used to obtain marketing approval for new agricultural chemicals, pharmaceuticals, new uses for known products, and biologics (table 6.11).

¹⁰⁴⁹ TPP, Arts. 18.83.4(a),(b), and (f).

Table 6.11: Key TPP commitments related to patents and data protection

Subject matter	Commitments
Patents	<ul style="list-style-type: none"> • Patents must be available in all fields of technology when the invention is new, involves an inventive step, and is capable of industrial application, subject to limited exceptions. • Patents must be available for new uses for a known product, or new methods or processes for using a known product. • Parties must allow a grace period of 12 months during which certain public disclosures about the invention will not invalidate the patent. • Requires parties to limit reasons for patent revocations to certain identified grounds. • Requires best efforts to publish patent applications within 18 months from filing or priority date. • Requires adjustment of patent terms to account for unreasonable delays at the patent office.
Data protection and other measures for regulated products	<ul style="list-style-type: none"> • Requires a 10-year period of protection for safety and efficacy data generated for approval of new agricultural chemical products. • Requires parties to compensate for the unreasonable curtailment of the patent terms as a result of the marketing approval process for pharmaceutical products. • Requires a 5-year period of protection for safety or efficacy data supporting new pharmaceutical products. • Requires a 3-year period of protection for new clinical information supporting approval of new indications, formulations, or methods of administration. • Requires at least 8 years of protection, or at least 5 years of protection plus other measures to deliver a comparable outcome, for a new pharmaceutical product that is or contains a biologic. • Permits parties to take measures to protect public health in accordance with the Declaration on TRIPS and Public Health. • Establishes a system for addressing patent issues expeditiously in connection with applications to market pharmaceutical products. • Requires consultation on biologics data protections at least 10 years from EIF.

Source: TPP, Arts. 18.37–18.54.

Transition periods would apply for five countries to comply with particular patent and data protection provisions (table 6.12). Vietnam would have the longest periods, with 10 years and the potential of 2 additional years, to provide data protection for biologics, pharmaceuticals, and new indications or uses for known products.¹⁰⁵⁰

¹⁰⁵⁰ In addition, Brunei, Malaysia, Peru, and Vietnam may implement measures that incentivize the timely filing of applications for regulatory approval of biologics, pharmaceuticals, and new indications in their countries. TPP, Art. 18.83, and Annex 18-C and 18-D.

Table 6.12: Transition periods for patent and data protection commitments

	Data protection for biologics	Data protection for pharmaceuticals	Data protection for new indications	Data protection for agricultural chemicals	Patent term adjustment (regulatory approval delays)	Patent term adjustment (patent office delays)	Patent linkage
Brunei	4 years	4 years	4 years	1.5 years	None	None	2 years
Malaysia	5 years	None	None	None	4.5 years	None	4.5 years
Mexico	5 years	5 years	5 years	5 years	4.5 years	None	None
Peru	10 years	None	5 years	None	None	None	None
Vietnam	10 years*	10 years*	10 years*	5 years	5 years**	3 years	3 years

Source: TPP, Article 18.83.

Notes: *The parties also will consider a 2-year extension of this period based on justified requests from Vietnam.

** The parties also will consider a justified request from Vietnam for an extension of this period for an additional year.

Copyright Protections and Internet Service Providers

The chapter next addresses the scope of protections for copyrights and related rights.¹⁰⁵¹ Separate provisions address the issue of the remedies and safe harbors applicable to Internet service providers (ISPs) for infringement online (table 6.13).¹⁰⁵² Key new provisions would require that the parties seek to achieve an appropriate balance between liability for copyright infringement and exceptions to liability, including for purposes such as criticism, comment, news reporting, teaching, scholarship, and research.¹⁰⁵³ This section also requires a copyright term of protection of life plus 70 years or 70 years from publication. While this is the standard in the United States and many other countries, it represents a substantial increase from current 50-year terms in Brunei, Japan, Malaysia, New Zealand, and Vietnam.¹⁰⁵⁴

Table 6.13: Key TPP commitments related to copyrights and ISPs

Subject matter	Commitments
Copyrights and related rights	<ul style="list-style-type: none"> Requires that parties provide certain rights such as reproduction, communication to the public, and distribution, including in electronic form. Requires protections for the rights of performers and producers of phonograms. Requires a term of protection of at least the life of the author plus 70 years, or 70 years from publication for corporate works. Confines copyright limitations to special cases that do not conflict with the normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the rights holder, consistent with international agreements.

¹⁰⁵¹ “Related rights” are those related to copyrights. They include the rights of performers (e.g., actors, singers, and musicians), producers of phonograms (sound recordings), and broadcasting organizations. WTO, “What Are Intellectual Property Rights?” n.d. (accessed April 10, 2016). For the legal definition in TPP, see Art. 18.62.

¹⁰⁵² ISPs are defined as providers of online services for the transmission, routing, or providing of connections for digital online communications, as well as providers of online services who store material at the direction of a user or refer or link uses to an online location by using information location tools. TPP, Arts. 18.81 and 18.82.

¹⁰⁵³ TPP, Art. 18.66.

¹⁰⁵⁴ ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 20.

Subject matter	Commitments
	<ul style="list-style-type: none"> Requires an appropriate balance in copyright systems by means of limitations that consider legitimate purposes such as criticism, comment, news reporting, teaching, scholarship, research, and facilitating access for persons who are print disabled.
Technological protection measures (TPMs) and Rights Management Information (RMI)	<ul style="list-style-type: none"> Requires effective remedies for tampering with the TPMs used to protect access to and use of copyrighted works, including trafficking in circumvention technologies, subject to certain exceptions. Requires effective remedies for the knowing removal or alteration of the RMI used to identify digital works.
ISPs	<ul style="list-style-type: none"> Requires parties to ensure that legal remedies are available for rights holders to address online infringement. Requires parties to establish safe harbors that include legal incentives for ISPs to cooperate with copyright owners to deter the unauthorized storage and transmission of copyrighted materials. Precludes monetary relief against ISPs for copyright infringement on their systems that they do not control, initiate, or direct, subject to certain conditions. Provides that limitations of liability with respect to storage or linking must require ISPs to expeditiously disable access to material on their networks upon obtaining actual or red flag knowledge of infringement. Provides that limitations of liability cannot be conditioned on requiring ISPs to monitor services or affirmatively seek out infringing activity. In separate annexes (18-E and 18-F), describes requirements for ISPs in Canada and Chile.

Source: TPP, Arts. 18.57-18.70, 18.81-18.82, and Annexes 18-E and 18-F.

Three countries—Brunei, Mexico, and Vietnam—would obtain 3-year transition periods to implement laws providing ISP legal remedies and safe harbors. For extension of the copyright term of protection to 70 years, Malaysia would obtain a 2-year transition period, Vietnam 5 years, and New Zealand 8 years, subject to various conditions.¹⁰⁵⁵

Enforcement, Trade Secrets, and Other Provisions

This section of the chapter unites diverse topics, including civil, criminal, and border enforcement measures; trade secrets; and prohibitions on unauthorized camcording of movies in theaters (table 6.14). Key provisions new in TPP include the requirement that the parties provide criminal penalties for trade secret theft, including theft by state-owned entities.

¹⁰⁵⁵ TPP, Art. 18.83.

Table 6.14: Key TPP commitments related to enforcement, trade secrets, and other provisions

Subject matter	Commitments
Enforcement	<ul style="list-style-type: none"> • Requires parties to ensure that equivalent enforcement procedures are available for digital and physical goods (with the exception of border measures). • Promotes transparency and public accessibility to rulings and data. • Requires certain rebuttable presumptions in enforcement proceedings.
Civil remedies	<ul style="list-style-type: none"> • Requires remedies that reflect adequate compensation and, as an alternative, preestablished or additional damages. • Requires that judges have the authority to order injunctions and/or destruction of infringing goods and materials. • Requires that remedies be available for circumvention of TPMs and RMIs. • Requires expeditious response to requests for provisional measures, including the seizure of suspect goods.
Border measures	<ul style="list-style-type: none"> • Requires parties to provide a mechanism for border agencies to detain suspected infringing goods upon application and reasonable security by the rights holder. • Establishes measures for border enforcement so that officials may act on their own initiative to identify and seize infringing goods destined for import, export, or goods in-transit. • Requires parties to maintain procedures for determining infringement and to permit penalties, including fines, seizure, and/or destruction of infringing goods. • Requires parties to apply border measures to commercial goods sent in small consignments.
Criminal procedures	<ul style="list-style-type: none"> • Requires criminal procedures and penalties for certain cases of trademark and copyright infringement on a commercial scale. • Requires criminal penalties to be available for aiding and abetting infringement. • Requires the establishment of a criminal enforcement framework with deterrent penalties that are proportional to the gravity of the crime. • Requires criminal remedies for unauthorized camcording in movie theaters.
Trade secrets	<ul style="list-style-type: none"> • Requires parties to provide legal means to prevent misappropriation of trade secrets, including when conducted by state-owned enterprises. • Requires criminal procedures and penalties for misappropriation of trade secrets under certain circumstances, including by means of a computer system.
Protection of encrypted program-carrying signals	<ul style="list-style-type: none"> • Requires that criminal penalties be available to address piracy of encrypted satellite or cable signals and criminal or civil remedies for encrypted cable signal theft.
Government use of software	<ul style="list-style-type: none"> • Requires parties to issue rules requiring central government agencies to use only legitimate computer software.

Source: TPP, Arts. 18.71–18.80.

With the exception of Malaysia and Vietnam, all countries must implement the requirements of this section upon EIF. Vietnam would receive 3 years to implement a number of commitments including particular border measures, criminal procedures and penalties, camcording prohibitions, and protections for TPMs and RMIs, trade secrets, and encrypted program-

carrying signals. Malaysia would have 4 years to implement certain border measures and protections for encrypted signals.¹⁰⁵⁶

Summary of Views of Interested Parties

Representatives from a wide range of industry sectors have expressed support for the IPR chapter. For example, Industry Trade Advisory Committees (ITACs) that include representatives of IPR-intensive industries support the chapter to the extent it enhances U.S. economic interests and modernizes standards for IPR protection and enforcement, particularly in countries that do not have an FTA with the United States.¹⁰⁵⁷ According to the U.S. Conference of Mayors, the IPR chapter creates strong institutional “rules of the game” that make it possible for more companies, including small and medium-sized enterprises (SMEs), to engage in exports, expand their work, and help grow the U.S. economy.¹⁰⁵⁸ High standards of IPR protection are particularly important for U.S. manufacturers, who state that international IPR theft threatens large and small companies in every sector and every state.¹⁰⁵⁹ In contrast to this general support, opposition to the IPR chapter generally focuses on protections applicable to pharmaceuticals and biologics.¹⁰⁶⁰ Views of interested parties on particular provisions of the IPR chapter are set forth below.

Trademarks and Geographical Indications

Representatives of U.S. brand owners support provisions that assist in protecting trademarks.¹⁰⁶¹ For example, according to the American Apparel and Footwear Association

¹⁰⁵⁶ TPP, Art. 18.83.

¹⁰⁵⁷ See ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 15; ITAC-10, *The Trans-Pacific Partnership Trade Agreement (TPP)*, December 3, 2015, 1–2; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 3; ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 3; ACTPN, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 9. See also USCIB, written submission to the USITC, February 15, 2016, 5–6; Dow Chemical Company, written submission to the USITC, February 15, 2016, 3; ECAT, written submission to the USITC, December 28, 2015, 6.

¹⁰⁵⁸ USITC, hearing transcript, January 13, 2016, 119–20 (testimony of Christopher Cabaldon, U.S. Conference of Mayors); USITC, hearing transcript, January 14, 2016, 534–35 (testimony of Jay Steinmetz, Barcoding Inc.); USITC hearing transcript, January 14, 2016, 611–13 (testimony of Devi Keller, Semiconductor Industry Association (SIA)).

¹⁰⁵⁹ NAM, written submission to the USITC, January 8, 2016, 7; USITC, hearing transcript, January 14, 2016, 611–13 (testimony of Devi Keller, Semiconductor Industry Association (SIA)); USITC, hearing transcript, January 14, 2016, 534–35 (testimony of Jay Steinmetz, Barcoding Inc.).

¹⁰⁶⁰ For the position that protections are too strong, see Medecins San Frontieres/Doctors Without Borders (MSF), written submission to the USITC, February 16, 2016, 3; Knowledge Ecology International, written submission to the USITC, December 29, 2015, 1; and Union for Affordable Cancer Treatment, written submission to the USITC, December 29, 2015, 2. For the perspective that protections are not strong enough, see PhRMA, written submission to the USITC, February 11, 2016, 2; BIO, written submission to the USITC, February 16, 2016, 4; ITIF, written submission to the USITC, February 15, 2016, 6.

¹⁰⁶¹ ITAC-15, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 6–8; Wine Institute, written submission to the USITC, February 12, 2016, 3.

(AAFA), useful provisions include those that harmonize registration and enforcement procedures, and those that require countries to manage their country code top-level domain name systems so that brand owners can obtain information and remedies in cases in which a domain name that conflicts with a trademark is registered in bad faith. AAFA particularly notes the need to improve trademark procedures and enforcement in Canada and Mexico, where they have experienced difficulties.¹⁰⁶²

U.S. dairy and wine producers have expressed support for new due-process and transparency provisions governing the recognition of GIs, particularly GIs that may conflict with trademarks or common food names in TPP markets.¹⁰⁶³ The U.S. Dairy Export Council (USDEC) and the National Milk Producers Federation (NMPF), for example, state that prior FTAs left a vacuum in this area and that TPP's new requirements provide an "equitable international model" for resolving disputes between GIs and trademarks. They favorably contrast this model with the "horse-trading protection" the European Union has sought for common names (such as asiago, feta, fontina, and gorgonzola) in trade agreement negotiations with Canada, Japan, Malaysia, Mexico, Peru, Vietnam, Singapore, and others.¹⁰⁶⁴ They state that the new provisions will "significantly strengthen" the ability of the United States to combat barriers and help to preserve market access opportunities for U.S. companies.¹⁰⁶⁵

Patent and Data Protection Provisions

Data Protection for Biologics

The most contested provision in this section requires a period of protection for the safety and efficacy data that innovator biopharmaceutical companies submit to obtain marketing approval for new biologic products.¹⁰⁶⁶ While data protection provisions are common in U.S. FTAs—for example, Article 18.9 of the U.S.-Korea FTA requires a data protection period of at least 5 years for data supporting a pharmaceutical product that contains a new chemical entity and 10 years

¹⁰⁶² AAFA, written submission to the U.S. Trade Representative, February 5, 2016, 2–6.

¹⁰⁶³ Wine Institute, written submission to the USITC, February 12, 2016, 3; International Dairy Foods Association, written submission to the USITC, February 12, 2016, 15–16; Fonterra (USA), written submission to the USITC, February 12, 2016.

¹⁰⁶⁴ NMPF and USDEC, written submission to the USITC, December 22, 2015, 6–7; USDEC and NMPF, written submission to the USTR, February 5, 2016, 3–10.

¹⁰⁶⁵ NMPF, "NMPF Board Endorses TPP," March 8, 2016.

¹⁰⁶⁶ Section 18.52.1 requires the parties to provide "effective market protection" for 8 years from the date of marketing approval of a new pharmaceutical product that contains a biologic, or 5 years of protection plus other measures and market circumstances to deliver a comparable outcome. TPP, Art. 18.52.1.

for data supporting new agricultural products—TPP is the first trade agreement to explicitly extend protection to biologics data.¹⁰⁶⁷

Different constituencies object to this requirement on different grounds. NGO representatives state that early competition between generic and innovator companies is critical to reducing prices so that more patients in developed and developing countries can obtain access to medicines needed to treat HIV, hepatitis C, cancer, and other life-threatening illnesses. In the view of these groups, data protection and patent provisions delay access and increase the price of medicines.¹⁰⁶⁸ NGO representatives also state that data protection and patent provisions are not effective at stimulating biomedical innovation, particularly for diseases that disproportionately affect patients in developing countries. They further state that even in the United States and other developed countries, the high drug prices enabled by data and patent protections are not sustainable, particularly in the context of aging populations with a high incidence of serious diseases.¹⁰⁶⁹

In opposition to these arguments, some industry representatives state that while access to medicines is vitally important, it presumes the existence of effective medicines in the first place, and that this requires a system that enables the profits from one generation of innovation to fund investments in the next. For example, as the Information Technology and Innovation Foundation (ITIF) stated in a written submission, “more revenues means more R&D, more medical discovery, more innovative biologics drugs, and ultimately more generics competition.”¹⁰⁷⁰ Industry representatives further note that the United States has become a leading biologic innovator while also supporting a thriving generics market (generics reportedly accounted for 88 percent of prescriptions filed in 2015), suggesting that U.S. protection periods strike an appropriate balance between incentivizing innovation and access to medicine. Accordingly, representatives of innovator biopharmaceutical companies state that TPP’s

¹⁰⁶⁷ Previous FTAs contain a 5-year data protection period for new chemical entities, which most FTA partners interpret to require the protection of biologics data as well. However, non-FTA partners Vietnam, Malaysia, and Brunei also do not protect biologics data. Mahn and Francis, “Will the TPP Derail Biologics?” December 4, 2015.

¹⁰⁶⁸ According to studies cited by MSF, data protection requirements in Colombia, Guatemala, and Jordan have delayed the entry of generic medicines and substantially increased medicine prices and government spending on healthcare. MSF also cites language in the White House’s 2017 budget proposal estimating that reducing the U.S. data protection period for biologics by 5 years (from 12 to 7 years) would result in savings of nearly \$7 billion dollars over 10 years. See MSF, written submission to the USITC, February 16, 2016, 6.

¹⁰⁶⁹ MSF, written submission to the USITC, February 16, 2016, 6–7; Public Citizen, written submission to the USITC, December 29, 2015, 6–7; Ress, written testimony to the USITC, December 29, 2015, 5–6; KEI, written submission to the USITC, December 29, 2015, 1–4.

¹⁰⁷⁰ ITIF, written submission to the USITC, February 15, 2016, 5.

biologics data protection period is too short, and that the proper period is the 12 years enacted by Congress in 2010.¹⁰⁷¹

Industry representatives also point to the large role that the innovative biopharmaceutical industry plays in the U.S. economy as an important reason for not upsetting a balance that has worked well to date. They state that the sector generated \$97 billion in economic value added, produced \$54 billion in exports, and supported more than 3.4 million direct and indirect jobs in 2014. Moreover, the U.S. biopharmaceutical sector is research-intensive, reportedly investing over 21 percent of sales in R&D to support more than 3,400 drugs under clinical development. Industry representatives state that strong IPR protections are integral to this success.¹⁰⁷²

A middle ground is suggested by the position of some commentators and representatives of the U.S. generic pharmaceutical sector. These groups supported the biologics provision as a reasonable compromise, given the divergent levels of protection currently available in TPP countries, the ongoing debate within the United States about whether the 12-year period should be reduced to 7 years, and the fact that this is the first time that a protection period for biologics has been included in an FTA.¹⁰⁷³

Testimony at the Commission hearing by the Ambassador of Peru suggests that the potential effects of TPP's provisions on access to medicine may not be as negative as has been suggested. According to the Ambassador, arguments made several years ago that the patent and data protection provisions in the U.S.-Peru FTA would lead to higher drug prices and diminished access to medicines have not been borne out. To the contrary, after the FTA's EIF in 2009, the price of medicines reportedly increased less than inflation, and the retail market grew substantially. The Ambassador further stated that the FTA contributed to the strengthening of institutions and processes in Peru, as well as to more bilateral trade and investment.¹⁰⁷⁴

Other Patent Provisions

Representatives of the biopharmaceutical sector have expressed support for TPP provisions that require patents to be made available for new uses, methods, or processes related to known products; that extend patent terms to compensate for regulatory or patent office

¹⁰⁷¹ BIO, written submission to the USITC, February 15, 2016, 3–4; PhRMA, written submission to the USITC, February 11, 2016, 2; ITIF, written submission to the USITC, February 15, 2016, 5–6.

¹⁰⁷² BIO, written submission to the USITC, February 15, 2016, 2; PhRMA, written submission to the USITC, February 11, 2016, 1; ITIF, written submission to the USITC, February 15, 2016, 2.

¹⁰⁷³ ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 18–19; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 13; PIIE, *Assessing the Trans-Pacific Partnership*, Vol. 2, March 2016, 28.

¹⁰⁷⁴ USITC, hearing transcript, January 13, 2016, 72–73, 89 (testimony of Luis Miguel Castilla, Ambassador of Peru in the United States).

delays; and that require linkage between marketing approval and patent status so that rights owners have an opportunity to enforce their patents prior to approval of a generic product.¹⁰⁷⁵ By contrast, NGO representatives¹⁰⁷⁶ state that they oppose these provisions on the ground that they may delay the entry of generic medicines onto the market.¹⁰⁷⁷

Patent provisions that would harmonize regulations across TPP members—for example, by requiring accession to international treaties and by clarifying when there is a “grace period,” meaning that disclosure of information within a patent application will not defeat a patent—also are considered particularly useful by U.S. biopharmaceutical firms.¹⁰⁷⁸

Copyright Protections and Internet Service Providers

Representatives of content industries (including movies, music, books, and software) and of providers of digital services endorse the IPR chapter as a whole, given the different interests of industries active in the copyright space and the complexity of the subject matter.¹⁰⁷⁹ Digital service providers state that they support new provisions that require countries to seek an appropriate balance between liability and limitations or to make exceptions to liability for copyright infringement in the online environment.¹⁰⁸⁰ Representatives of content industries state that they expect that, if effectively implemented, the overall impact of TPP’s IPR provisions on U.S. creative sectors would be “substantial and positive.”¹⁰⁸¹

The copyright industries consider several commitments particularly valuable. First, they state that enhanced criminal and civil protections for TPMs reportedly would assist U.S. firms in

¹⁰⁷⁵ ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 18–19; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 13.

¹⁰⁷⁶ MSF, written submission to the USITC, February 16, 2016, 4–6; Public Citizen, written submission to the USITC, December 29, 2015, 7–9; UACT, written submission to the USITC, December 29, 2015, 3–6.

¹⁰⁷⁷ Although the generics industry did not state objections to these provisions in the ITAC reports, they have since stated that these provisions will result in new barriers to entry in foreign markets. See ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 18–19; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 13; Generic Pharmaceutical Association, written submission to USTR, February 5, 2016.

¹⁰⁷⁸ NAM, written submission to the USITC, January 22, 2016, 11; GE, written submission to the USITC, January 28, 2016; Leading Biosciences, written submission to the USITC, February 11, 2016, 1.

¹⁰⁷⁹ ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 21, 27; ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 15; ITAC-10, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 11.

¹⁰⁸⁰ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 15 (first-time obligations to balance the protection of copyrighted material with innovations in digital trade are important); ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 21 (all members support the concept of balance in the copyright system, although there is disagreement about how the balance should be struck); Internet Association, “Statement in Support of the TPP,” March 30, 2016; but see EFF, written submission to the USITC, February 17, 2016, 1–2 (the fair use obligations in the TPP are not sufficiently robust).

¹⁰⁸¹ USITC, hearing transcript, January 13, 2016, 287 (testimony of Steven Metalitz, International Intellectual Property Alliance); Copyright Alliance, written submission to the USITC, February 12, 2016, 2; ITAC-10, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 11.

protecting their content from unauthorized access and use, while also permitting exceptions to enable non-infringing use.¹⁰⁸² The Entertainment Software Association and the Motion Picture Association of America, Inc. (MPAA) state that online business models rely on TPMs to provide customers with a diversity of price points and offerings; without effective protections, these business models would not succeed.¹⁰⁸³ ITIF states that the TPM requirements would be particularly valuable in Brunei, Chile, Japan, Mexico, New Zealand, and Vietnam, where legal protections have been inadequate.¹⁰⁸⁴

Content industry representatives also state that they see particular value in the extension of copyright terms to 70 years from the life of the author or publication.¹⁰⁸⁵ They state that this provision would increase copyright terms in Brunei, Canada, Japan, Malaysia, New Zealand, and Vietnam. Increased terms are expected to increase returns for the content industries in key markets; Japan, for example, is the world's second-largest market (behind the United States) for recorded music.¹⁰⁸⁶ With regard to the obligations of ISPs, content industry representatives state that strong implementation and monitoring will be essential going forward, particularly in Canada and Chile, where online piracy and weak mechanisms for ISP liability reportedly present substantial problems.¹⁰⁸⁷

Enforcement and Trade Secret Provisions

In written submissions and at the Commission's public hearing, interested parties generally praised TPP's enforcement commitments.¹⁰⁸⁸ Some industry representatives, however, have raised the concern that ineffective IPR enforcement is a longstanding problem in many TPP countries, notwithstanding detailed commitments in TRIPS and prior FTAs. They emphasize that

¹⁰⁸² TPP, Art. 18.68.4. Notwithstanding, EFF states that the TPM provisions may be used to punish innovators even when the circumvention is for a lawful purpose. EFF, written submission to the USITC, February 17, 2016, 1.

¹⁰⁸³ ESA, written submission to the USITC, February 11, 2016, 4; MPAA, written submission to the USITC, February 16, 2016, 4.

¹⁰⁸⁴ ITIF, written submission to the USITC, December 29, 2015, 6–7. See also IIPA, “2016 Special 301 Report,” February 5, 2016 (requesting that Chile and Vietnam remain on the Special 301 priority watch list and that Canada and Mexico remain on the watch list for problems with TPMs and other copyright-related issues).

¹⁰⁸⁵ ESA, written submission to the USITC, February 11, 2016, 4; MPAA, written submission to the USITC, February 16, 2016, 4.

¹⁰⁸⁶ ITIF, written submission to the USITC, December 29, 2015, 6–7; USITC, hearing transcript, January 13, 2016, 132 (testimony of John Murphy, U.S. Chamber of Commerce); IFPI, “IFPI Publishes Recording Industry in Numbers,” April 20, 2015.

¹⁰⁸⁷ ITIF, written submission to the USITC, December 29, 2015, 7; see also IIPA, “2016 Special 301 Report,” February 5, 2016, 11–12, 81–82 (noting problems with ISP mechanisms in Canada and Chile).

¹⁰⁸⁸ USITC, hearing transcript, January 14, 2016, 559–60 (testimony of Linda Dempsey, NAM); ITIF, written submission to the USITC, December 29, 2015, 4; ECAT, written submission to the USITC, December 28, 2015, 6; USCIB, written submission to the USITC, February 15, 2016, 6; ESA, written submission to the USITC, February 11, 2016, 3–4; Intel, written submission to the USITC, February 16, 2016, 8; IIPA, written submission to the USITC, December 29, 2015, 1–2; MPAA, written submission to the USITC, February 16, 2016, 4–5. But see EFF, written submission to the USITC, February 17, 2016 (online enforcement provisions are expensive and harmful).

it is critical to ensure the effective implementation of enforcement commitments in TPP, including through training and capacity building as well as compliance reviews and monitoring.¹⁰⁸⁹

Provisions identified as particularly valuable include the recognition that enforcement measures should be equally available for digital and physical goods; the extension of criminal penalties to the aiding and abetting of IPR infringement; prohibitions on camcording in movie theaters; border protections for in-transit goods; and the granting of authority to border agents to act on their own to identify and seize infringing imports and exports.¹⁰⁹⁰ These new enforcement provisions are expected to be particularly useful to improve legal regimes and address ongoing challenges in Brunei, Canada, Chile, Malaysia, Mexico, New Zealand, Peru, and Vietnam.¹⁰⁹¹

U.S. firms in a range of industry sectors also state that they support the chapter's new protections for trade secrets.¹⁰⁹² According to the National Association of Manufacturers, the theft of trade secrets is a significant threat in the TPP region, particularly because manufacturers rely on them to protect everything from product formulas to manufacturing processes.¹⁰⁹³ Similarly, industry sectors with substantial exports to and investments in the region—including aerospace and semiconductors—state that the protections would help them to address substantial risks to trade secrets.¹⁰⁹⁴ As noted by the Entertainment Software Association, as industries undergo digital transformations, protecting against the misappropriation of trade secrets through the use of computer systems is increasingly important.¹⁰⁹⁵

In this regard, TPP's requirements that the parties make available criminal procedures and penalties when misappropriation occurs through a computer system, as well as the explicit

¹⁰⁸⁹ ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 22; USITC, hearing transcript, January 14, 2016, 559–60 (testimony of Linda Dempsey, NAM); ESA, written submission to the USITC, February 11, 2016, 3.

¹⁰⁹⁰ ITIF, written submission to the USITC, December 29, 2015, 4–5; Intel, written submission to the USITC, February 16, 2016, 8; ESA, written submission to the USITC, February 11, 2016, 3–4; MPAA, written submission to the USITC, February 16, 2016, 4.

¹⁰⁹¹ ITIF, written submission to the USITC, December 29, 2015, 4–5; IIPA, “2016 Special 301 Report,” February 5, 2016 (recommending the inclusion of Canada, Chile, Mexico, and Vietnam on USTR's watch lists for copyright enforcement-related problems).

¹⁰⁹² USITC, hearing transcript, January 13, 2016, 141 (testimony of Vanessa Sciarra, Emergency Committee for American Trade); ITIF, written submission to the USITC, December 29, 2015, 5–6.

¹⁰⁹³ NAM, written submission to the USITC, January 8, 2016, 7; see also Cummins, written submission to the USITC, February 15, 2016, 2; GE, written submission to the USITC, January 2016, 2.

¹⁰⁹⁴ The semiconductor industry also supports prohibitions on the forced disclosure of software and encryption source code, described above. SIA, written submissions to the USITC, January 14, 2016, 3–4; SIA, written submission to the USITC, January 22, 2016, 6; Intel, written submission to the USITC, February 16, 2016, 8–9; ITAC-1, *Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 10.

¹⁰⁹⁵ ESA, written submission to the USITC, February 11, 2016, 5. But see EFF, written submission to the USITC, February 17, 2016, 2 (the trade secret provisions are too broad).

extension of trade secret protection to misappropriation by state-owned entities, have been identified as particularly useful.¹⁰⁹⁶ Criminal liability would appear to be a new penalty for trade secret misappropriation in Australia, Brunei, and Malaysia.¹⁰⁹⁷

Economic Impacts of Strengthened Patent Protections

TPP contains provisions that would require members to strengthen their patent protections, as set forth above. This section uses an econometric model to estimate the relationship between countries' patent protections and U.S. IP receipts. While this model cannot directly estimate the effects of TPP on U.S. IP receipts, it can provide valuable context by examining the impact of increased patent protections in the past, using two scenarios. The first considers the historical effects of increased patent protection in TPP countries, and the second looks at what would have happened if TPP countries had more substantially increased their patent protections. The scenarios do not consider the effects of new patent protections required by TPP. They also do not address the effects of other provisions in the IPR chapter or effects on other types of IPR-sensitive trade and investment.

Since TRIPS entered into force in 1995, TPP countries have improved their patent protections in order to meet their TRIPS obligations, as well as those in FTAs and domestic initiatives. Due to these historical improvements, U.S. IP receipts from these countries in 2010 were an estimated \$2.9 billion dollars or 11 percent higher in 2010 than they would have been otherwise. Countries in the TPP region, however, still had weaker patent protections than did the United States and other developed countries. Under a counterfactual scenario in which TPP partners more substantially increased their levels of patent protection, U.S. IP receipts from TPP countries would have been 17 percent or \$5.0 billion dollars higher than they actually were in 2010.

Background

There is a substantial economic literature measuring the effects of changes in IPR protection on international trade of IPR-intensive goods, services, and foreign direct investment. One of the first studies of the trade effects of TRIPS analyzed the growth of high-technology exports from developed to developing countries. It found that TRIPS reforms contributed to a significant increase in exports by developed countries' IPR-intensive industries, including pharmaceuticals, chemicals, and ICT, to developing countries.¹⁰⁹⁸ Later studies have confirmed the positive

¹⁰⁹⁶ TPP, Art. 18.78; ITAC-15, *The Trans-Pacific Partnership Agreement*, December 3, 2015, 25.

¹⁰⁹⁷ U.S. Chamber of Commerce, "The Case for Enhanced Protection," n.d., 25–35 (accessed April 8, 2016).

¹⁰⁹⁸ Ivus, "Do Stronger Patent Rights?" 2010, 2; see also Maskus, *Private Rights and Public Problems*, 2012, 77.

effects of patent reforms, in particular, on trade in high-tech goods and services.¹⁰⁹⁹ Strong patent protections also can stimulate domestic innovation and investments in research and development.¹¹⁰⁰

Empirical studies of the effects of IPR strengthening have focused on patent reforms, due in large part to a consistent index of patent protection covering 122 countries developed by researchers Juan Ginarte and Walter Park (the Park Index).¹¹⁰¹ The index measures changes in each country's level of legislative patent protection at 5-year intervals during the period from 1960 to 2010. It scores countries' laws based on equally weighted categories that generally track requirements in five areas: scope of patent coverage, membership in international treaties, duration of coverage, enforcement mechanisms, and restrictions on patent rights.¹¹⁰²

This analysis focuses on the period 1995–2010, which encompasses important changes in patent protections under TRIPS.¹¹⁰³ This period also encompassed the negotiation and/or EIF of a number of FTAs. According to the Park Index, developed countries, including Australia, Canada, Japan, and the United States, generally saw a relatively modest increase in their patent rights during this period, as TRIPS did not require them to substantially change their laws (table 6.15). By contrast, more substantial changes were made by developing countries, including Malaysia, Mexico, Peru, and Vietnam, to address the requirements of TRIPS, NAFTA, and other FTAs.¹¹⁰⁴

The average value of the Park Index across all 122 measured countries rose 32 percent (from 2.5 to 3.3) during the period from 1995 to 2010. This increase was higher (a 44 percent

¹⁰⁹⁹ Maskus, "The New Globalisation of Intellectual Property Rights," 2014, 276 (based on more than 15 recent studies, patent reforms have strong positive effects on licensing, high-tech goods trade, and foreign direct investment, particularly for large and middle-income countries); Smith, "Are Weak Patent Rights Barriers?" 1999 (strong IPR protection has both a market-power and market-expansion effect on U.S. exports); Branstetter, Fisman, and Foley, "Do Stronger Intellectual Property Rights," 2006, 321 (U.S. firms expanded their sales, employment, investment, and production abroad in response to patent reforms); Briggs and Park, "There Will Be Exports and Licensing," 2014 (strong patent rights in developed countries have a positive impact on exports and licensing of developed country firms); Cavazos Cepeda, Lippoldt, and Senft, "Policy Complements," 2010 (increases in IPR protection are associated with increased foreign direct investment, trade, and domestic innovation in developed and developing countries).

¹¹⁰⁰ Park and Lippoldt, "Technology Transfer," 2008, 12; Arora, Branstetter, and Chatterjee, "Strong Medicine," 2011, 22; Haber, "Patents and the Wealth of Nations," 2016 (historical and econometric evidence establishes a causal relationship between patent rights and innovation and economic growth).

¹¹⁰¹ Ginarte and Park, "Determinants of Patent Rights," 1997; Park, "International Patent Protection," 2008, 761; and Park, "Patent Index 1960–2010," n.d. (accessed February 22, 2016).

¹¹⁰² Park, "International Patent Protection," 2008, 765.

¹¹⁰³ TRIPS entered into force in 1995 and included transition periods for some developing countries until 2005, and still later for least-developed countries.

¹¹⁰⁴ We cannot attribute these effects exclusively to these agreements, as FTAs with other trading partners and domestic initiatives also have played a role in reforms. Maskus, "The New Globalisation of Intellectual Property Rights," 2014, 271–73.

increase) for those countries that entered into an FTA with the United States than for those that did not (a 30 percent increase), suggesting that the FTAs had additional positive impacts on patent protections.¹¹⁰⁵

Table 6.15: The Park index for TPP countries, 1995-2010

	1995	2000	2005	2010	Percent change, 1995–2010
Australia	4.33	4.33	4.33	4.33	0
Canada	4.34	4.54	4.54	4.54	5
Chile	3.91	4.48	4.48	4.68	20
Japan	4.42	4.67	4.67	4.67	6
Malaysia	2.70	3.03	3.48	3.68	36
Mexico	2.68	3.22	3.42	3.75	40
New Zealand	3.68	3.68	3.68	3.68	0
Peru	2.57	3.03	3.03	3.43	33
Singapore	3.88	4.01	4.21	4.21	9
United States	4.88	4.88	4.88	4.88	0
Vietnam	2.65	2.65	2.78	3.43	29

Source: Park, “Patent Index 1960–2010,” n.d. (accessed February 22, 2016).

Note: Data not available for Brunei.

Modeling Description

In this econometric model, the amount of IP receipts that the United States receives from a particular country is determined by that country’s level of patent protection (measured by the Park Index), the size of the economy of the foreign country (measured by its GDP), many other country factors that do not vary over time (represented by a set of country fixed effects), and U.S. factors that do vary over time (represented by a set of year fixed effects). Regression results from the model indicate that the increase in patent protection in countries during the 1995–2010 period had a significant positive effect on U.S. IP receipts.¹¹⁰⁶

Estimated Impact of Increases in Patent Protections

This section describes the results of the Commission's IPR model, which show how increased patent protections in TPP countries are linked with increased U.S. IP receipts. The coefficient estimated by the regression is used to quantify the impact of the changes in patent protection under two different scenarios. Results are presented in table 6.16.

Under the first or historical scenario, the model calculates how much higher actual U.S. IP receipts were in 2010 relative to what they would have been if the Park index for TPP countries had remained at 1995 values (rather than rising to actual 2010 values). The effects ranged from

¹¹⁰⁵ Park, “Patent Index 1960–2010,” n.d. (accessed February 22, 2016).

¹¹⁰⁶ See Technical Appendix I for additional details about the model methodology, results, and sensitivity tests.

zero for Australia and New Zealand, because their Park index values did not change from 1995 to 2010, to a 45 percent increase for Mexico. The estimated value of the rise in U.S. IP receipts in 2010 from the 8 TPP countries for which data were available was \$2.9 billion, or 11 percent higher than the receipts would have been had reforms not occurred.¹¹⁰⁷

Table 6.16: Effect on US IP receipts of increases in patent protections for TPP countries

Country	Actual IP receipts in 2010 (billion \$)	Change in Park index of Patent Protection, 1995–2010	Historical effect ^a		Counterfactual effect ^b	
			Absolute (billion \$)	Percent	Absolute (billion \$)	Percent
Australia	2.7	0	0	0	0.6	21
Brunei	–	–	–	–	–	–
Canada	8.7	0.20	0.6	7	1.1	12
Chile	0.3	0.77	0.1	31	0.0	7
Japan	10.6	0.25	0.9	9	0.8	8
Malaysia	0.3	0.99	0.1	41	0.2	51
Mexico	2.6	1.07	0.8	45	1.2	48
New Zealand	0.3	0	0	0	0.1	52
Peru	–	0.86	–	35	–	65
Singapore	4.0	0.33	0.4	12	1.0	26
Vietnam	–	0.78	–	31	–	65
Simple average	–	0.58	–	21	–	36
Total	29.4	–	2.9	–	5.0	–

Source: USITC calculations.

Notes: Data on IP receipts and the Park index are not available for Brunei. Data on IP receipts are not available for Vietnam or Peru.

^a The historical effect is how much higher actual U.S. IP receipts were in 2010 relative to what they would have been if the Park index for TPP countries in 2010 had remained at 1995 values (rather than rising to actual 2010 values).

^b The counterfactual effect is the additional effects on U.S. IP receipts if TPP partner countries had further increased their patent protections to U.S. levels on the variables measured by the Park index.

In the second or counterfactual scenario, the model estimates what the additional effects on U.S. IP receipts would have been if TPP partner countries had further increased their patent protections to U.S. levels on the variables as measured by the Park Index (scope of patent coverage, membership in international treaties, duration of coverage, enforcement mechanisms, and restrictions on patent rights). Under this scenario, U.S. IP receipts from TPP countries would have increased above actual 2010 receipts by \$5.0 billion, or 17 percent.¹¹⁰⁸ This scenario does not take into account new patent protections in the TPP, the effects of other IPR provisions, or effects on other types of IPR-sensitive trade or investment.

¹¹⁰⁷ Note that there are no data available for Brunei. For Vietnam and Peru, percent changes in U.S. IP receipts can be predicted because their Park values are available, even though the IP receipts from them are not in the BEA dataset. Because the IP receipts from these countries are likely non-zero, and Vietnam and Peru experienced large percent increases in their patent protections, the average percent and total absolute IP charge increases in table 6.15 underestimate the actual gains which likely would occur.

¹¹⁰⁸ Note that the historical scenario uses a baseline in which countries kept their patent protections in 2010 at their 1995 values, while the baseline for the counterfactual is the actual 2010 patent protections.

Labor

Assessment

While a few organizations have suggested that the TPP labor provisions may have some impact on U.S. investment in other TPP countries, available evidence seems to suggest that the provisions included in this agreement’s Labor chapter will not have a substantial effect on the U.S. economy. As discussed in more detail below, several groups expressed the view that the TPP labor provisions are inadequate and unlikely to be enforced, and thus will do little to improve labor conditions or raise wages in partner countries that compete with the United States. Further, these groups argued that TPP labor obligations would not require changes in U.S. law, so they would likely have little effect on working conditions in the United States.

Many of the TPP provisions that would be expected to have the most significant impact on the U.S. workforce—such as the agreement’s rules of origin provisions—are found in other sections of the agreement and are therefore discussed elsewhere in this report.

Summary of Provisions

On May 10, 2007, the Bush Administration and Congressional leaders reached an agreement to include certain labor obligations in forthcoming U.S. trade agreements. These measures were first included in the U.S.-Peru TPA, and subsequently (and in a very similar form) in U.S. trade agreements with South Korea, Panama, and Colombia.¹¹⁰⁹ The TPP Labor chapter follows the basic template established with the U.S.-Peru TPA, and also includes several provisions not contained in any previous U.S. trade agreement.

As in the U.S.-Peru TPA, the TPP Labor chapter would obligate parties to maintain regulations that uphold the labor rights specified in the International Labour Organization (ILO) *Declaration on Fundamental Principles and Rights at Work and Its Follow-up* (Article 19.3.1). Also as in the U.S.-Peru TPA, it prohibits parties from weakening their labor laws (Article 19.4) and requires that parties effectively enforce their respective labor laws (Article 19.5).¹¹¹⁰ TPP’s Labor chapter adds to these obligations by requiring that all parties maintain laws that govern acceptable work conditions, including regulations and statutes on health and safety at the workplace, work hours, and minimum wage (Article 19.3.2). The TPP Labor chapter also extends the prohibition

¹¹⁰⁹ CRS, *Overview of Labor Enforcement Issues*, February 22, 2016, 3–4; Weisman, “Bush and Democrats in Accord on Trade Deals,” May 11, 2007; USTR, “Trade Facts: Bipartisan Trade Deal,” May 2007.

¹¹¹⁰ This provision allows for a reasonable exercise of discretion about enforcement, and allows parties to decide how to distribute resources among enforcement tasks so long as these decisions remain consistent with their TPP labor obligations.

on weakening worker protections to cover export processing zones and other trade zones (Article 19.4). Further, it calls on parties to discourage imports produced using forced labor (Article 19.6) and to encourage firms to establish social responsibility programs addressing labor issues (Article 19.7).

As in the U.S.-Peru TPA, TPP calls on parties to ensure the public availability of information about their respective labor laws and procedures for compliance and enforcement. Parties agree to provide access to tribunal proceedings, allowing interested persons to seek enforcement of labor laws. Among other things, such proceedings must be transparent and fair, and must offer an opportunity for persons involved in such proceedings to present evidence in support of their positions. Parties agree to provide for the review of tribunal actions and provide legal remedies to ensure enforcement. In addition to these provisions, TPP includes new language that calls on parties to maintain procedures for the enforcement of tribunal decisions (Article 19.8).

TPP provisions on public submissions and labor cooperation also build on the U.S.-Peru model. Like the U.S.-Peru TPA, TPP calls on parties to designate points of contact that will, among other things, receive and consider submissions on labor-related matters from persons of a member country. TPP expands on this obligation by establishing guidelines for the contents of a submission, enabling parties to request additional information from entities that have made a submission, requiring parties to publicize their timelines and procedures for receiving and considering submissions, and calling on parties to respond to submissions in a timely way and, if appropriate, in writing (Article 19.9). Further, while both the U.S.-Peru TPA and TPP include provisions on cooperation and labor consultations, TPP adds to the U.S.-Peru model by providing for the involvement of entities outside of TPP—such as the ILO or other international or regional organizations—in labor cooperation efforts (Article 19.10.3). TPP also establishes a process for cooperative labor dialogue, a new mechanism for addressing issues that arise under the agreement’s labor provisions (Article 19.11).

In keeping with the U.S.-Peru model, TPP includes provisions on labor consultations (Article 19.15) and establishes a Labor Council. Among its responsibilities, the TPP Labor Council is tasked with considering and discussing matters pertaining to the chapter and issues of mutual interest; establishing priorities and a work program for capacity building and labor cooperation efforts undertaken under Chapter 19; overseeing the work program; reviewing reports submitted by the designated contact points; and facilitating public awareness of, and participation in, efforts to implement Chapter 19 provisions (Article 19.12). Further, as under the U.S.-Peru TPA, parties would have recourse to dispute settlement (under Chapter 28 of the Agreement) for all matters arising under the Labor Chapter, provided that they have first sought to resolve the matter (Article 19.15.12).

The TPP Labor chapter also includes three separate bilateral side agreements on labor which require Brunei, Malaysia, and Vietnam to undertake certain labor reforms before the agreement would take effect between the United States and these countries (box 6.3).

Box 6.3: TPP Side Agreements on Labor

As part of the TPP labor negotiations, the United States concluded side agreements with Brunei, Malaysia, and Vietnam obligating these countries to undertake reforms addressing several labor rights issues, such as collective bargaining, forced labor, and discrimination.^a More specifically:

- Brunei must clarify and make certain changes to its labor legislation to expand workers' rights to associate and bargain collectively, ensure that measures which prohibit employers from retaining a worker's passport are enforced effectively, amend legislation to forbid employment discrimination and to specify which occupations are limited to persons aged 18 or older, and establish a minimum wage, among other things.
- The bilateral side agreement with Malaysia also specifies changes that must be made to that country's laws on collective bargaining and union organization. It also requires Malaysia to reinforce prohibitions on holding an employee's passport; mandates the amendment or establishment of regulations regarding fees for foreign worker recruitment, the protection of victims of forced labor, and the housing and movement of foreign workers; and obligates the country to prohibit employment discrimination, to limit light work^b to persons aged 13 or older, and to specify which occupations are limited to persons aged 18 or older.
- The U.S. bilateral side agreement with Vietnam obligates that country to establish laws allowing workers to form unions and ensuring the autonomy of those unions, to allow workers to strike and bargain collectively, to criminalize the employment of forced labor, and to prohibit employment discrimination. Further, the side agreement gives Vietnam 5 years to allow labor unions to join or establish workers' organizations, including regional and sectoral organizations. If the United States determines that Vietnam fails to make these reforms, it may hold back tariff reductions that were scheduled to occur after that time.

All three side agreements include provisions requiring these U.S. trading partners to establish procedures, provide resources, and make other necessary changes to implement the labor reforms specified in their respective side agreements. All three of these side agreements also include measures on information sharing and transparency and technical assistance, as well as implementation provisions stating that all or most of the reforms specified in these agreements must be enacted before the TPP comes into force between each of these countries and the United States. Further, the obligations contained in these side agreements are enforceable under TPP's dispute settlement processes.^c

^a USTR, "Chapter 19, Labour: Chapter Summary," November 5, 2015).

^b In International Labour Organization (ILO) convention No. 138, light work is considered to be any occupation that is not expected to have a detrimental impact on the development or health of an employee, and will not interfere with an individual's ability to attend of benefit from school or other approved training. ILO, C138—Minimum Age Convention, 1973 (No. 138) Article 7, http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C138#A7 (accessed February 22, 2016).

^c USTR, "Chapter 19, Labour: Chapter Summary," November 5, 2015).

Summary of Views of Interested Parties

U.S. organizations have expressed differing views regarding the potential impact of TPP on labor conditions in member countries. Some industry representatives and at least one think tank expressed support for TPP's labor provisions, characterizing them as strong and enforceable.¹¹¹¹ For example, Third Way asserted that TPP labor provisions are more stringent and more enforceable than the provisions in any existing trade agreement, thus committing six current U.S. FTA partners to more robust labor obligations.¹¹¹² Representatives of the apparel, outdoor products, and cosmetics industries indicated that the agreement's labor chapter corresponds with industry values, practices, and labor initiatives.¹¹¹³ Further, a report published by the Peterson Institute provides a qualified but generally favorable assessment of TPP labor provisions. Specifically, this report asserts that while some labor concerns remain unaddressed and that the success of TPP's labor provisions will rely on their implementation, the TPP labor chapter's bilateral side agreements "are a major innovative component" and the chapter's provisions improve upon the obligations included in previous U.S. trade agreements.¹¹¹⁴

By contrast, unions and other labor rights advocates contended that while the existence of labor obligations in trade agreements creates a forum for discussing labor issues, TPP labor provisions are inadequate.¹¹¹⁵ These groups asserted that there is little difference between TPP labor provisions and the labor provisions included in previous U.S. trade agreements negotiated after May 10, 2007, which they believe to be weak, vague, and ineffective.¹¹¹⁶ Additionally, they asserted that some new provisions are not mandatory or enforceable, as they merely "encourage" or "discourage" certain practices.¹¹¹⁷

However, labor advocates indicated that their principal concern was that the U.S. government would be unwilling to enforce TPP's labor provisions, with one representative suggesting that the likelihood of competing diplomatic, commercial, and security interests discourages enforcement.¹¹¹⁸ They contended that the United States has not adequately enforced the labor

¹¹¹¹ USITC, hearing transcript, January 14, 2016, 635 (testimony of Gabriel Horowitz, Third Way); USITC hearing transcript, January 15, 2016, 727, 731 (testimony of Stephanie Lester, Gap Inc.), 739 (testimony of Rich Harper, Outdoor Industry Association), 754 (testimony of Francine Lamoriello, Personal Care Products Council).

¹¹¹² USITC, hearing transcript, January 14, 2016, 635 (testimony of Gabriel Horowitz, Third Way).

¹¹¹³ USITC, hearing transcript, January 15, 2016, 731 (testimony of Stephanie Lester, Gap Inc.), 739 (testimony of Rich Harper, Outdoor Industry Association), 754 (testimony of Francine Lamoriello, Personal Care Products Council).

¹¹¹⁴ Cimino-Issacs, "Labor Standards in the TPP," March 2016, 41, 53.

¹¹¹⁵ USITC, hearing transcript, January 13, 2016, 248–49, 250 (testimony of Celeste Drake, AFL-CIO).

¹¹¹⁶ USITC, hearing transcript, January 13, 2016, 152, 234, 236 (testimony of Celeste Drake, AFL-CIO), 170–1 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers); DePillis, "The New Trade Deal Could Help Millions," October 6, 2015; BCTGM, written submission to the USITC, February 8, 2016, 5.

¹¹¹⁷ USITC, hearing transcript, January 13, 2016, 234 (testimony of Celeste Drake, AFL-CIO).

¹¹¹⁸ *Ibid.*, 235.

provisions in existing FTAs, despite reports of labor rights abuses in certain U.S. FTA partner countries, such as Colombia, Guatemala, Honduras, and Mexico.¹¹¹⁹ Similarly, a report published by the U.S. Government Accountability Office concluded that there are weaknesses in the enforcement and monitoring of partner countries' compliance with labor obligations under U.S. bilateral and regional trade agreements. The report stated that while the implementation of these obligations has advanced, labor conditions in certain countries continue to be of concern.¹¹²⁰ Labor advocates indicated that the lack of a mechanism through which unions and workers could bring cases against countries that fail to comply with the agreement's labor standards—much like the mechanism TPP's ISDS measures provide for investors—limits the potential effectiveness of the agreement.¹¹²¹

Senator Sherrod Brown said that recent history tells us that FTA provisions are “rarely enforced.” He explained that members of Congress “need to understand how current labor conditions in TPP countries and the enforcement or lack thereof of TPP's labor standards will influence business decisions on sourcing and on investment within the TPP region and how these business decisions will in fact affect American workers.”¹¹²² By comparison, Congressman Henry Cuellar said that TPP establishes more effective enforcement mechanisms for labor issues.¹¹²³

Comments regarding the potential impact of TPP labor provisions on the U.S. economy were also mixed. One industry representative indicated that these provisions will contribute to improving opportunities for trade and investment.¹¹²⁴ However, other industry representatives said that the provisions contained in the U.S. side agreement with Vietnam may have a negative effect on the industry. They stated that the lack of clarity about how the United States might implement tariff suspensions—a possible penalty under this agreement—may discourage investment in Vietnam.¹¹²⁵ Labor rights advocates contended that TPP labor provisions will do

¹¹¹⁹ USITC, hearing transcript, January 13, 2016, 238 (testimony of Leo W. Gerard, United Steel Workers), 239 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers); Staff of Sen. Elizabeth Warren, “Broken Promises: Decades of Failure to Enforce,” May 18, 2015, 2, 12; BCTGM, written submission to the USITC, February 8, 2016, 4; AFL-CIO, “Ten Critical Problems with the Trans-Pacific Partnership,” n.d. (accessed December 2, 2015).

¹¹²⁰ GAO, *Free Trade Agreements*, November 2014, 18, 46.

¹¹²¹ USITC, hearing transcript, January 13, 2016, 204–5 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers), 237–38 (testimony of Leo Gerard, United Steel Workers); DePillis, “The New Trade Deal Could Help Millions,” October 6, 2015; Prokop, “Why Obama Says TPP Is Historic for Workers,” November 12, 2015.

¹¹²² USITC, hearing transcript, January 14, 2016, 378 (testimony of Sherrod Brown, United States Senator).

¹¹²³ USITC, hearing transcript, January 13, 2016, 28 (testimony of Henry Cuellar, United States Representative).

¹¹²⁴ USITC, hearing transcript, January 15, 2016, 754 (testimony of Francine Lamoriello, Personal Care Products Council).

¹¹²⁵ USITC, hearing transcript, January 15, 2016, 716–17, 829–30 (testimony of Stephen Lamar, American Apparel and Footwear Association), 830–831 (testimony of Julia Hughes, U.S. Fashion Industry Association), 831–2 (testimony of Stephanie Lester, Gap Inc.).

nothing to improve labor conditions in TPP partner countries, and that weak labor protections depress wages in certain markets and put downward pressure on wages and benefits in competing countries, such as the United States.¹¹²⁶

Additionally, labor groups asserted that measures included in other chapters of the agreement—such as provisions on ISDS; rules of origin, particularly for automobiles; and state-owned enterprises, among others—as well as TPP’s lack of disciplines on currency manipulation may encourage outsourcing and depress wages, thus having a negative effect on U.S. workers.¹¹²⁷ A more detailed discussion of the potential impacts of these provisions can be found elsewhere in this report.¹¹²⁸

Environment

Assessment

The TPP Environment chapter is unlikely to have significant effects on the U.S. economy or on U.S. consumers. The goals of the Environment chapter are to promote mutually supportive trade and environmental policies, promote high levels of environmental protections and effective enforcement of environmental laws, and enhance the capacities of the parties to address trade-related environmental issues (Article 20.2). Overall, the consensus among interested parties is that the provisions of the chapter do meet these objectives, and that TPP goes further than any other major trade agreement to address environmental concerns.

Under TPP, parties would agree to enforce the obligations of the Environment chapter through the same dispute settlement process used for the commercial obligations of the treaty; enforce their own environmental laws; take measures to combat illegal trade in wild flora and fauna; combat illegal, unreported, and unregulated (IUU) fishing practices; operate fisheries management systems in a sustainable manner; promote conservation of endangered marine creatures; and eliminate certain fishing subsidies.¹¹²⁹ However, some observers remain concerned that the provisions of the chapter may not be adequately funded or effectively enforced. Others have voiced concerns that the ISDS provisions of the Investment chapter will

¹¹²⁶ USITC, hearing transcript, January 13, 2016, 716–17 (testimony of Stephen Lamar, American Apparel and Footwear Association), 174 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers), 235 (testimony of Celeste Drake, AFL-CIO).

¹¹²⁷ USITC, hearing transcript, January 15, 2016, 716–17 (testimony of Stephen Lamar, American Apparel and Footwear Association), 157–62 (testimony of Josh Nassar, (UAW), 163–69 (testimony of Leo W. Gerard, United Steel Workers), 169–75 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers).

¹¹²⁸ Discussions of ISDS and state-owned enterprises can be found in prior sections of this chapter of the report. Currency issues are discussed in chapter 1 of the report, and rules of origin are discussed in chapter 4.

¹¹²⁹ Provisions of the TPP Environment chapter; World Wildlife Fund-US, written testimony to the House Ways and Means Committee, November 17, 2015, 2–3.

have an adverse impact on the environment and on environmental regulations in TPP countries.¹¹³⁰

The TPP environmental commitments would represent a significant change for Malaysia, where many environmental regulations fall under the state governments and are often not effectively enforced.¹¹³¹ As part of TPP, in a side agreement with the United States, Malaysia lays out its plans to create a central coordinating committee for its sub-central governments, aimed at effectively implementing the Environment chapter of TPP.¹¹³²

The commitments under the Environment chapter do not represent significant changes for existing U.S. FTA partners, with the notable exception of the commitments related to marine fisheries subsidies, as summarized below. Other provisions that are new to TPP's Environment chapter, compared with other U.S. bilateral FTAs, include those related to transitioning to a low-emissions environment, language related to removing barriers to environmental goods and services, and language linking the Environment chapter to the SPS chapter (Chapter 7) in the effort to combat invasive alien species.¹¹³³

Summary of Provisions

The TPP Environment chapter (Chapter 20) would commit all parties to recognize the importance of trade and environmental policies and practices to improve environmental protection towards sustainable development; to recognize the right of each Party to establish its own level of environmental protections, and corresponding laws and policies; to strive to provide high levels of environmental protection, and continue to improve; to not fail to effectively enforce its own environmental laws; to recognize that each party retains the right to exercise discretion over enforcement of its environmental laws and allocation of environmental resources. Each party would agree not to waive its environmental laws in order to encourage trade or investment between the parties (Article 20.3). Each party would commit to implement the multilateral environmental agreements (MEAs) to which it is a party (Article 20.4).¹¹³⁴

Each party would also agree to promote public awareness of its environmental laws, and to ensure that domestic procedures are in place to enforce them. Such proceedings would be

¹¹³⁰ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 2–3; World Wildlife Fund-US, written testimony to the House Ways and Means Committee, November 17, 2015, 3–4; Sierra Club, written submission to the USITC, February 12, 2016, 5–6; NGO representative, interview by USITC staff, Washington, DC, February 3, 2016.

¹¹³¹ Memon, “Devolution of Environmental Regulation,” n.d., 47–48 (accessed March 18, 2016).

¹¹³² U.S.-Malaysia Agreement on Committee to Coordinate Implementation of Environment Chapter.

¹¹³³ The SPS Chapter is summarized in more detail earlier in this chapter.

¹¹³⁴ Unlike other U.S. FTAs, there is no general list of MEAs provided, although three specific MEAs are mentioned in later articles of the chapter.

required to be fair, transparent, and equitable, to comply with due process of law, and to provide access to persons with recognizable legal interests (Article 20.7). Each party would permit public participation in implementing the Environment chapter, in a transparent way that is open to review by other parties to the FTA (Articles 20.8 and 20.9).

Each party would commit to encourage enterprises operating within its territory to voluntarily adopt principles of corporate social responsibility, and to promote voluntary mechanisms to enhance environmental performance (Articles 20.10 and 20.11).

The Environment chapter addresses several specific environmental issues:

- *Protection of the ozone layer:* Each party would commit to take measures to control substances that harm the ozone layer, and to implement its obligations under the Montreal Protocol (Article 20.5).¹¹³⁵
- *Protection of the marine environment from ship pollution:* Each party would commit to take measures to prevent the pollution of the marine environment from ships (Article 20.6).¹¹³⁶
- *Trade and biodiversity:* Each party would recognize the importance of conservation and sustainable use of biological diversity and commit to cooperating to address matters of mutual interest (Article 20.13).
- *Invasive alien species:* Each party would recognize the problems posed by invasive alien species and commit to coordinating with the Committee on Sanitary and Phytosanitary (SPS) Measures to identify avenues for cooperation in dealing with such species (Article 20.14).
- *Transition to a low emissions and resilient economy:* Each party would agree to cooperate to address matters of joint or common interest, reflecting domestic circumstances and capabilities, including cooperative and capacity-building activities (Article 20.15).
- *Marine capture fisheries:* Each party would commit to operating a fisheries management system that would regulate marine wild-capture fishing. The system would be designed to prevent overfishing, reduce fish bycatch, and promote the recovery of overfished stocks in all fisheries in which that party's persons conduct fishing activities. In addition, each party would commit to promote the long-term conservation of sharks, marine turtles, seabirds, and marine mammals, and would commit to eliminate certain subsidies that negatively affect fish stocks (Article 20.16).¹¹³⁷

¹¹³⁵ Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, September 16, 1987.

¹¹³⁶ As defined by the International Convention for the Prevention of Pollution from Ships, London, November 2, 1973, and as amended (MARPOL).

¹¹³⁷ See below for a more detailed discussion of TPP's marine fisheries provisions.

- *Conservation and trade:* Each party would commit to fulfilling its obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Convention¹¹³⁸ through exchange of information and joint activities on issues of mutual interest, to take domestic conservation measures, and maintain or strengthen government capacity related to conservation. Parties would also commit to take measures to combat the illegal take of wild flora and fauna taken in violation of that party's law, as well as trade in and transshipment of wild flora and fauna through its territory (Article 20.17) (box 6.4).
- *Environmental goods and services:* Each party would endeavor to reduce potential barriers to trade in environmental goods and services (Article 20.18).

Box 6.4: Illegal Logging and the TPP Agreement

In TPP, illegal logging is covered under Article 20.17 (Conservation and Trade) of the Environment chapter. TPP parties would agree to take measures to fulfill their obligations under the CITES Convention, to combat the illegal take of, and illegal trade in, wild fauna and flora. To do so, TPP parties would commit to exchange information and experiences on combating illegal logging and associated illegal trade, and promote legal trade in associated products. TPP parties also would commit to strengthening government capacity to promote sustainable forest management and to identifying opportunities to enhance law enforcement cooperation and information sharing.

A number of TPP parties have significant trade in wood products, including the United States, Canada, Japan, Malaysia, Peru, and Vietnam. In 2014, TPP countries accounted for 38 percent of the value of global trade in wood products, making illegal logging a concern in the region.^a Despite recent efforts to combat illegal logging, it continues to account for a sizable portion of many countries' total log harvest, with studies showing millions of cubic meters of timber illegally logged around the world in recent years.^b Illegally sourced logs are frequently exported to other countries for processing into finished wood products, then exported again for final sale, often commingled with legally sourced logs along the supply chain, making it difficult for the final consumer to verify the source of the logs.^c

The Environment chapter of the TPP Agreement would represent an expansion of provisions with respect to illegal logging, compared to existing U.S. FTAs and particularly to NAFTA. Under NAFTA, environmental provisions were not included in the main body of the text; rather, they were included as a side agreement, which committed the parties only to effectively enforce their own environmental laws. Unlike the TPP Agreement, NAFTA parties did not agree to take measures to fulfill their obligations under CITES.^d TPP commitments on illegal logging are not as far-reaching as those included in the U.S.-Peru TPA, which included a unique Annex on Forest Sector Governance under which Peru committed to undertake a series of binding obligations to combat illegal logging and illegal trade in timber and to promote sustainable forest management practices.^e Under the TPP Agreement, Peru's commitments with respect to the Annex on Forest Sector Governance would remain in place, but other TPP parties would not assume similar commitments.

The Environment chapter of TPP would provide a strong basis for these countries to cooperate in combating illegal logging and associated trade, and in promoting sustainable forest management.

¹¹³⁸ Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Nonetheless, observers have called on U.S. trade agencies to carefully monitor TPP parties' implementation and enforcement of the chapter's provisions.^f U.S. assistance in building capacity for TPP parties to implement and enforce the chapter's provisions, including providing resources, may be a critical factor in determining whether TPP succeeds in mitigating illegal logging in the region.^g According to another observer, although much of the world's illegal logging occurs in countries not party to TPP, the large number and economic size of TPP parties may act to limit global market opportunities for illegally sourced logs.^h

^a GTIS, Global Trade Atlas database (accessed February 18, 2016).

^b See, e.g., Hoare, "Tackling Illegal Logging and the Related Trade," July 2015, viii.

^c Industry representative, interview by USITC staff, Washington, DC, February 3, 2016.

^d USTR and USDOS, "Standing Up for the Environment," May 2015, 3, 8–9.

^e USTR and USDOS, "Standing Up for the Environment," May 2015, 49.

^f ITAC-7, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 7.

^g TEPAAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 2.

^h NGO representative, telephone interview by USITC staff, January 29, 2016.

An Environment Committee and contact points would be established to oversee implementation of the chapter (Article 20.19). The chapter also outlines the process for consultations between parties on the interpretation and application of the chapter, and procedures for resolving disputes (Article 20.20).

The TPP Environment chapter would follow the model of the May 10, 2007, agreement between the U.S. Congress and the Executive Branch, under which all FTA environmental obligations would be enforced on the same bases as the commercial provisions of the agreement, and would be subject to the same remedies, procedures, and sanctions.¹¹³⁹ Specific dispute settlement procedures are established in Article 20.23.

Four side agreements are relevant to the Environment chapter:

- In a bilateral understanding, the United States and Chile would agree that notwithstanding the chapter's prohibitions on certain fisheries subsidies, a party may grant time-limited subsidies to assist its fishermen to recover from a natural disaster, such as a tsunami or an earthquake.¹¹⁴⁰

The United States and Malaysia agreed that Malaysia would establish a "National Committee to Coordinate the Implementation of Environment Chapters under our Free Trade Agreements," including the TPP Agreement. In addition, the two governments noted their shared understanding that access to traditional knowledge, and the sharing

¹¹³⁹ USTR, "Chapter 20, Environment: Chapter Summary," November 5, 2015; USTR, "Standing Up for the Environment," May 2015, 3–4. For additional information on such remedies, procedures, and sanctions, see the section on dispute settlement in this chapter, or Chapter 28 of the TPP Agreement.

¹¹⁴⁰ Bilateral Understanding between the U.S. and Chile on Fisheries Subsidies and Natural Disasters.

of benefits resulting from that knowledge, can be adequately addressed through contracts that reflect mutually agreed terms between users and providers.¹¹⁴¹

- The United States and Peru reached a similar understanding concerning biodiversity and traditional knowledge.¹¹⁴²
- The United States and Peru reached an understanding, consistent with Article 20.17.5 (Environment Chapter, Conservation and Trade), in which the parties would agree to address illegal trade in wild fauna and flora. The understanding recognizes that Peru's Forest and Wildlife Law requires proof of legal origin for wild fauna and flora, and that failure to provide such proof is subject to legal penalties. The understanding further notes that each party retains the right to determine what constitutes "credible evidence" under the law.¹¹⁴³

Marine Fisheries Provisions

The environment chapter contains several provisions related to marine fisheries, all of which are contained in Article 20.16:

- Parties would agree to operate a fisheries management system that regulates catch at sustainable levels;
- Parties would agree to take conservation measures to protect sharks, turtles, seabirds, and marine mammals;
- Parties would be prohibited from providing fishing subsidies to vessels that engage in overfishing or illegal fishing, and would agree to refrain from introducing new fishing subsidies and to report on the subsidies they provide;
- Parties would agree on certain cooperative measures designed to reduce IUU fishing.

The TPP's marine fisheries provisions are more specific than those included in the environment chapters of other FTAs. In particular, it is significant that TPP includes a binding commitment on fishing subsidies, as this had not appeared in prior FTAs; TPP represents the first time that a trade agreement would make fishing subsidy guidelines enforceable. Views of interested parties on the subsidy provisions are included in the section below.

¹¹⁴¹ U.S.-Malaysia Agreement on Committee to Coordinate Implementation of Environment Chapter. Under Malaysia's constitution, many environmental matters fall under the jurisdiction of the state governments. Therefore, a committee comprising all federal and state government representatives is required to coordinate and oversee the implementation of Malaysia's obligations under the Environment chapter, such as commitments to address illegal logging, fishing, and wildlife trafficking. See Memon, "Devolution of Environmental Regulation," 2003.

¹¹⁴² Bilateral Understanding between the U.S. and Peru on Biodiversity and Traditional Knowledge.

¹¹⁴³ Bilateral Understanding between the U.S. and Peru on Conservation and Trade.

The marine fisheries provisions may necessitate changes in countries' fisheries management systems, subsidy programs (discussed below), or systems in place to address IUU fishing. TPP-related changes to fisheries management systems are likely to affect Vietnam, because that country does not have any such comprehensive system in place at present, as acknowledged in the TPP Agreement. Vietnam was granted an additional 2 years to comply with the fisheries subsidy provisions in the chapter because it is in the process of completing a stock assessment to evaluate the populations of fish in its waters, which must be done before a management system can be put in place (Article 20.16, n. 18).¹¹⁴⁴

One change that the United States has made that is linked to the fisheries provisions in Environment chapter is its February 2016 ratification of the Port State Measures Agreement (PSMA). This is an agreement under the Food and Agriculture Organization of the United Nations designed to curtail IUU fishing. While enforcement of IUU prohibitions has usually been taken against vessels by the countries issuing their flags, the PSMA shifts some of the responsibility to the country in which the vessels land. By inspecting these vessels more closely in their ports and preventing any IUU fish that are found from entering commercial channels, PSMA-party countries seek to reduce IUU. TPP would require parties to implement port state measures, though it does not specify that they must join PSMA.

Summary of Views of Interested Parties

With regard to the Environment chapter as a whole, observers are split in their opinions. On one side, some observers have expressed satisfaction that the chapter breaks substantial new ground for an Environment chapter in trade agreements, addressing topics such as environmental conservation and marine fisheries subsidies (box 6.5) that have not been previously addressed in U.S. trade agreements. Observers caution that the effectiveness of the new provisions will depend on their implementation, and that the United States needs to help other TPP parties build enforcement capacity, particularly with respect to the new fisheries and biodiversity provisions.¹¹⁴⁵

¹¹⁴⁴ While fisheries management programs can significantly affect a country's production levels and the mix of species harvested in its waters, such changes would be unlikely to have a major effect on Vietnam's seafood exports to the United States, because most of those exports are the products of aquaculture rather than wild-capture fisheries.

¹¹⁴⁵ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 2; World Wildlife Fund-US, Written Testimony for the House Ways and Means committee, November 17, 2015, 2–4; NGO representative, interview with USITC staff, Washington, DC, February 9, 2016.

Box 6.5: Interested Parties' Views on Fishing Subsidy Provisions

Many observers pointed to the binding, enforceable provisions prohibiting subsidies to fishing vessels that engage in overfishing or IUU fishing as a major accomplishment of the environment chapter, though views were mixed about how much change could reasonably be expected from those provisions. According to the Trade and Environment Policy Advisory Committee (TEPAC), obtaining a binding commitment on fishing subsidies was a significant step forward. But TEPAC contended that in the future, the United States should seek to expand the scope of such provisions to include prohibitions on subsidies that damage stocks before a species is designated as overfished.^a

Other interested parties agreed with TEPAC, emphasizing that TPP sets an important precedent and may lead to additional commitments in the future.^b One observer was particularly pleased that the TPP subsidy prohibition would discourage countries from starting new fishing subsidy programs.^c Another said that much depends on how the subsidy prohibitions are implemented. For example, according to this observer, it is unclear exactly how a subsidy that contributes to overfishing (prohibited under TPP rules) will be defined.^d

Most observers agreed that there are no immediately apparent changes to countries' laws that will be made as a result of the subsidy provisions. For example, one Canadian observer said that approximately 30 percent of the world's fisheries subsidies are given by TPP countries, and Japan is the single largest provider of them, and said that it is not clear what share of these would be eliminated under TPP.^e

^a TEPAC *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 12.

^b NGO representatives, interviews by USITC staff, Washington, DC, February 3 and 9, 2016.

^c NGO representative, interview by USITC staff, Washington, DC, February 9, 2016.

^d *Ibid.*, February 3, 2016.

^e Canadian academic representative, telephone interview with USITC staff, March 3, 2016.

In contrast, others have expressed disappointment that much of this new language is not enforceable under the agreement, and is largely characterized by parties' agreements to "encourage" or "promote" higher environmental standards.¹¹⁴⁶ The Trade and Environment Policy Advisory Committee (TEPAC) specifically pointed to the provisions addressing marine fisheries management and illegal trade in wild flora and fauna in this regard.¹¹⁴⁷

Another point of disagreement lies with the potential for enforcement of the chapter under TPP's dispute settlement process (Chapter 28 of the agreement). The chapter meets the standard developed under the May 10, 2007, executive-congressional agreement to make the environment provisions fully enforceable under the agreement's dispute settlement process. In

¹¹⁴⁶ Center for International Environmental Law, "The Trans-Pacific Partnership and the Environment," November 2015, 2; NGO representative, interview by USITC staff, Washington, DC, February 3, 2016; NGO representative, telephone interview by USITC staff, February 3, 2016.

¹¹⁴⁷ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 3.

addition, the new public submissions process will permit environmental NGOs to become involved in enforcing the agreement's Environment chapter.¹¹⁴⁸

However, a number of groups have argued that the dispute settlement process is unlikely to be an effective means of safeguarding the environment in TPP parties. For example, in a written submission to the Commission, the Sierra Club noted that the state-to-state dispute settlement process requires the U.S. government or another party to bring the dispute to a formal dispute settlement panel, and that this is unlikely to happen, as demonstrated by past experience.¹¹⁴⁹ Furthermore, several organizations have pointed out that even if states were persuaded to bring environmental concerns to dispute settlement, the process is more onerous for the environment chapter, as it requires three rounds of consultations before a formal dispute settlement panel can be formed, compared with one round for disputes in most other areas.¹¹⁵⁰

The AFL-CIO expressed concerns that the Environment chapter does not specifically call out all seven of the May 10 global conventions, and that it does not sufficiently address climate change.¹¹⁵¹ TEPAC stated that TPP's commitments to address climate change should have been much stronger, and that this was an area that might profit from capacity-building efforts. However, in a dissent to the majority report, Frances B. Smith of the Competitive Enterprise Institute stated that climate change should not be addressed in TPP at all, and is better addressed in other international forums.¹¹⁵² A majority of the TEPAC also welcomed the Environment chapter's commitment to transparency and public participation at a number of places within the Chapter.¹¹⁵³

Finally, outside of the provisions of the Environment chapter, many organizations have raised concerns about the impact of the ISDS process on the environment.¹¹⁵⁴ Concerns center around the potential of ISDS arbitration to cause a rollback of environmental laws, or to create a "chilling" effect, whereby parties to investment agreements that include ISDS decline to impose environmental regulations out of concern about being sued, leading to required compensation

¹¹⁴⁸ NGO representative, interview by USITC staff, Washington, DC, February 9, 2016; NGO representative, telephone interview by USITC staff, February 3, 2016.

¹¹⁴⁹ Sierra Club, written submission to the USITC, February 12, 2016, 8. See also, Center for International Environmental Law, "The Trans-Pacific Partnership and the Environment," November 2015, 1, 3–5.

¹¹⁵⁰ AFL-CIO, written testimony to the USITC, December 29, 2015, 48–9.

¹¹⁵¹ AFL-CIO, written testimony to the USITC, December 29, 2015, 48–50; Center for International Environmental Law, "The Trans-Pacific Partnership and the Environment," November 2015, 2; Sierra Club, "TPP Text Analysis," n.d., 2–3 (accessed March 14, 2016).

¹¹⁵² TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 15.

¹¹⁵³ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 17–18.

¹¹⁵⁴ The ISDS process is outlined in TPP's Investment chapter (chapter 9); it is described earlier in this chapter, in the section on investment.

payments to foreign investors.¹¹⁵⁵ The impact of ISDS on public regulations is a subject of heated dispute, with proponents of the mechanism arguing that public environmental, health, and safety regulations are not subject to changes as a result of ISDS arbitration,¹¹⁵⁶ and opponents countering that the provisions of the Investment chapter do permit investors to challenge such regulations under ISDS.¹¹⁵⁷ In its report, the TEPAC noted that some members were concerned about ISDS, while others supported it. The majority of the committee stated that TPP addressed some of the concerns raised about ISDS more clearly in TPP than in past U.S. FTAs.¹¹⁵⁸

Cooperation and Capacity Building

Assessment

The Cooperation and Capacity Building chapter (TPP Chapter 21) recognizes that the parties may cooperate to enhance each party's ability to implement the TPP Agreement, take advantage of the economic opportunities created by TPP, and promote and facilitate trade and investment between the parties. The chapter offers several examples of areas open to cooperation and capacity-building activities, including the agricultural, industrial and services sectors; promotion of education, culture and gender equality; and disaster risk management. The chapter would also establish a TPP Cooperation and Capacity Building Committee that would meet regularly to promote capacity building among all TPP parties. TPP is the first U.S. free trade agreement to include such a chapter. This chapter is unlikely to have a direct impact on the U.S. economy or U.S. consumers.

Summary of Provisions

Under TPP Chapter 21, the parties would acknowledge the importance of cooperation and capacity building activities and agree to undertake such activities, which may involve two or more TPP partners, on a mutually agreed basis. The parties would recognize that the involvement of the private sector is an important part of these activities, and that SMEs in particular may need assistance in participating in global markets (Article 21.1).

¹¹⁵⁵ Center for International Environmental Law, "The Trans-Pacific Partnership and the Environment," November 2015, 9–12; NGO representative, telephone interview by USITC staff, February 3, 2016; Mann, "The TPP Part 1," January 2016, 3. USITC, hearing transcript, January 13, 2016, 246-47 (testimony of Roger Johnson, National Farmers Union).

¹¹⁵⁶ USITC, hearing transcript, January 13, 2016, 245–46 (testimony of Alan Wolff, National Foreign Trade Council).

¹¹⁵⁷ USITC, hearing transcript, January 13, 2016, 244 (testimony of Celeste Drake, AFL-CIO).

¹¹⁵⁸ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 20–21.

The Cooperation and Capacity Building Committee established under this chapter would meet regularly to promote cooperation and capacity-building activities among the TPP parties. The committee would help the parties exchange information about lessons learned; provide a forum for considering proposals for future cooperation and capacity building activities; assist with donor coordination and development of public-private partnerships for these activities; work with international donor institutions, private sector entities, non-governmental organizations, or other relevant institutions, to help develop and implement the activities; and coordinate with other bodies established under TPP in support of the development and implementation of these activities to benefit all TPP parties (Article 21.4).

The parties would work to provide the appropriate financial or in-kind resources for cooperation and capacity-building activities, subject to the availability of resources and differences among parties' capabilities (Article 21.5). Nothing in the chapter would be subject to Dispute Settlement under TPP Chapter 28 (Article 21.6).

Summary of Views of Interested Parties

Linda Schmid, in testimony before the Commission, highlighted the possibility of parties' pursuing gender equality activities under this chapter, explaining that "the U.S. and TPP members will . . . gain from deepening women's engagement in the economy."¹¹⁵⁹ Luis Castilla, also in testimony before the Commission, called capacity building "a key area for [TPP members] to work upon, because the enforcement and implementation mechanisms of these trade agreements are critical."¹¹⁶⁰

Competitiveness and Business Facilitation

Assessment

Chapter 22 would establish a new Committee on Competitiveness and Business Facilitation, which would be composed of representatives of each party. The committee would focus on trade facilitation within the free trade area, including the development and strengthening of supply chains. According to USTR, this chapter draws from experience with APEC initiatives on regional competitiveness and supply chain development, and TPP is the first U.S. FTA to include new stand-alone commitments promoting the development and strengthening of supply chains among its members.¹¹⁶¹ Interested parties expressed the view that the chapter will be

¹¹⁵⁹ USITC, hearing transcript, January 15, 2016, 835 (testimony of Linda Schmid, Trade in Services International).

¹¹⁶⁰ USITC, hearing transcript, January 13, 2016, 78 (testimony of Luis Miguel Castilla, Ambassador of Peru).

¹¹⁶¹ USTR, Chapter 22, "Competitiveness and Business Facilitation: Chapter Summary," November 5, 2015.

beneficial in promoting regional competitiveness, including through the development of supply chains.

Summary of Provisions

This is a relatively short chapter with only five articles. The principal purpose of the chapter, as set out in Article 22.2.1–2, is to establish a Committee on Competitiveness and Business Facilitation, which would be composed of government representatives of each party. The committee would be expected to discuss effective approaches and develop information-sharing activities to support efforts to establish a competitive environment that is conducive to the establishment of businesses, facilitates trade and investment between the parties, and promotes economic integration and development within the free trade area. The committee would therefore explore ways to take advantage of the trade and investment opportunities that this TPP creates; give the Trans-Pacific Partnership Commission advice and recommendations on ways to bolster the competitiveness of the parties' economies, including through enhancing the participation of SMEs in regional supply chains; explore ways to promote the development and strengthening of supply chains within the free trade area in accordance with Article 22.3 (supply chains); and engage in other activities as the parties may decide (Article 22.2.3).

As set out in Article 22.3, a principal function of the committee would be to explore how the agreement may be implemented so as to promote the development and strengthening of supply chains in order to integrate production, facilitate trade, and reduce the costs of doing business within the free trade area. The committee would also be required to develop recommendations and promote seminars, workshops, or other capacity-building activities with appropriate experts, including private sector and international donor organizations, to help SMEs take part in supply chains in the free trade area. The committee would be expected to work with other committees, working groups, and any other subsidiary body established under TPP, including through joint meetings, to identify and discuss measures affecting the development and strengthening of supply chains (Article 22.3). The term “supply chain” is defined in Article 22.1. No TPP party would have recourse to dispute settlement under TPP Chapter 28 for any matter arising under the chapter (Article 22.5).

Summary of Views of Interested Parties

At the Commission hearing, Singapore's ambassador, Ashok Kumar Mirpuri, stated that “supply chains will be critical” to his country as well as to the United States, “not just for large multinationals, but also small and medium-sized enterprises who are quite excited about the

new opportunities that [TPP] will present to them.”¹¹⁶² On its website, the US-ASEAN Business Council expressed the view that the chapter “will enhance the domestic and regional competitiveness of each TPP country’s economy and promote economic integration and jobs in the region, including through the development of regional production and supply chains.”¹¹⁶³

Development

Assessment

The Development chapter affirms the parties’ goal of improving economic opportunities in support of development, inclusive growth, and regional economic integration. It identifies three specific areas to be considered for collaborative work once TPP enters into force, including (1) broad-based economic growth, (2) women and economic growth, and (3) education, science and technology, and research and innovation. The chapter also establishes a TPP Development Committee that will meet regularly to promote voluntary cooperative work to identify and potentially support ways for TPP’s developing economies to tap new opportunities. According to USTR, TPP is the first U.S. agreement to include such a chapter.¹¹⁶⁴

Summary of Provisions

The chapter contains nine articles. In Article 23.1–2 the parties affirm their commitment to promote and strengthen an open trade and investment environment that seeks to improve welfare, reduce poverty, raise living standards, and create new employment opportunities in support of development, among other goals. They acknowledge the importance of development in promoting inclusive economic growth, as well as the key role of each party’s leadership in carrying out development objectives. In Articles 23.3–23.5 the parties set out certain acknowledgements and objectives relating to broad-based economic growth, women and economic growth, and education, science and technology, and research and innovation.

Articles 23.7 provides for the establishment of a Committee on Development, to be composed of government representatives of each party, that will (a) facilitate the exchange of information on parties’ experiences regarding the formulation and implementation of national policies intended to derive the greatest possible benefits from TPP; (b) facilitate the exchange of information on parties’ experiences and lessons learned through joint development activities undertaken under Article 23.6; (c) discuss any proposals for future joint development activities supporting development policies related to trade and investment; (d) invite, as appropriate,

¹¹⁶² USITC, hearing transcript, January 13, 2016, 39.

¹¹⁶³ US-ASEAN Business Council, <https://www.usasean.org/regions/tpp/about> (accessed March 9, 2016).

¹¹⁶⁴ USTR, “Chapter 23, Development: Chapter Summary,” November 5, 2015.

international donor institutions, private sector entities, NGOs, or other relevant institutions to assist in developing and implementing such activities; (e) carry out other functions as the parties may decide; and (f) consider issues associated with the implementation and operation of the chapter. No party under the agreement would have recourse to dispute settlement under TPP's Chapter 28 for any matter arising under the chapter (Article 23.9).

Summary of Views of Interested Parties

In testimony at the Commission hearing, Linda Schmid, international trade and development advisor for Trade in Services International, expressed the view that the TPP Development chapter will encourage parties to “work to strengthen women’s leadership networks” which will “help expand female labor force participation rates in each TPP country.”¹¹⁶⁵

Small and Medium-Sized Enterprises

Assessment

Chapter 24 consists of two principal articles. The first relates to information sharing and requires that each party establish a website containing information that would help facilitate trade. The second requires that a Committee on Small and Medium-Sized Enterprises be established and that it be composed of representatives of TPP parties. According to USTR, TPP is the first U.S. free trade agreement to include a separate chapter focusing on issues specific to SMEs.¹¹⁶⁶ It should also be noted that matters relating to SMEs are also addressed in other TPP chapters, including the chapters on Customs Administration and Trade Facilitation (Article 5.7), Electronic Commerce (Article 14.15), Labour (Article 19.10), Development (Article 23.3), Regulatory Coherence (Article 25.5), and Transparency and Anti-Corruption (Article 26.1).

Summary of Provisions

Article 24.1 relates to information sharing. It requires that each party establish or maintain its own publicly accessible website containing information regarding the TPP Agreement, including certain specified types of information about the agreement designed for SMEs. It also requires that each party include on its website links to (a) the equivalent websites of the other parties; and (b) the websites of its government agencies and other appropriate entities that provide information the party considers useful to any person interested in trading, investing, or doing business in that party’s territory. Examples of such information may include customs regulations and procedures; regulations and procedures concerning IPRs; technical regulations,

¹¹⁶⁵ USITC, hearing transcript, January 15, 2016, 838.

¹¹⁶⁶ USTR, “Chapter 24, Small and Medium-sized Businesses: Chapter Summary,” November 5, 2015.

standards, and SPS measures relating to importation and exportation; foreign investment regulations; business registration procedures; employment regulations; and taxation information (Article 24.1).

Article 24.2 provides the establishment of a Committee on SMEs that would be composed of government representatives of each party. Among other things, the committee would be required to (a) identify ways to help SMEs of the parties take advantage of the commercial opportunities under TPP; (b) exchange and discuss each party's experiences and best practices in supporting and assisting SME exporters with respect to training programs, trade education, trade finance, finding commercial partners in other parties, establishing good business credentials, and more; (c) develop and promote relevant seminars, workshops, or other activities; (d) explore opportunities for capacity building; (e) recommend additional information that a party may include on the information-sharing website referred to in Article 24.1; and (f) review and coordinate the Committee's work program with those of other committees, working groups, and any subsidiary body established under TPP, as well as those of other relevant international bodies. Other required functions would include submitting a report on its activities and making appropriate recommendations to the Trans-Pacific Partnership Commission.

Article 24.3 provides that no party under the agreement would have recourse to dispute settlement under TPP's Chapter 28 for any matter arising under the chapter.

Summary of Views of Interested Parties

According to written submissions and witness testimony before the Commission, SMEs face particular burdens with regard to international trade. In her written submission, Laura Lane, representing UPS, said that onerous customs procedures have a disproportionate effect on small businesses. She added that reductions in tariff rates, the removal of customs barriers, the liberalization of express delivery and e-payment services, and guarantees of free data flows resulting from TPP would further enable e-commerce and unlock opportunities from which small businesses will benefit.¹¹⁶⁷

Ambassador Mirpuri of Singapore stated that the enterprises of developing countries are composed in large part of SMEs, so any features of TPP that benefit SMEs will be of particular importance to developing countries.¹¹⁶⁸ He noted that SMEs are important to developed countries as well, and said that of 300,000 exporters in the United States, 98 percent are SMEs,

¹¹⁶⁷ Lane, written testimony to the USITC, December 29, 2015, 3.

¹¹⁶⁸ USITC, hearing transcript, January 13, 2016, 33, 56 (testimony of Ashok Kumar Mirpuri, Ambassador of the Republic of Singapore).

adding that SMEs account for 35 percent of U.S. export revenue.¹¹⁶⁹ Ambassador Castilla of Peru noted the importance of TPP to Peruvian SMEs, which he said would benefit from the rules of origin mechanism allowing them to insert the value of their production into global supply chains.¹¹⁷⁰ According to George Judd of Cask LLC, the transparency in foreign markets that would result from TPP would be of particular value to U.S. SMEs trying to conduct business in developing Asian countries.¹¹⁷¹

In a written statement, Peter Allgeier, representing the Coalition of Services Industries, highlighted the value to SMEs of a single web portal for accessing information on the agreement, as outlined in Chapter 24 of TPP.¹¹⁷² In another written statement, John Murphy of the U.S. Chamber of Commerce noted that more than 96 percent of the over 3 million Chamber members had less than 100 employees. He said that by opening up government procurement markets and by making the bidding process more transparent, TPP will benefit SMEs in particular. Murphy stated that the cost of nontariff barriers that could more readily be borne by large enterprises might be prohibitive to SMEs, and he said that TPP would benefit SMEs by reducing or eliminating some of these barriers.¹¹⁷³ Edward Gerwin of the Progressive Policy Institute (PPI) expressed views similar to those of the Chamber in his written statement.¹¹⁷⁴

In its written report to the USTR, the Industry Trade Advisory Committee on Small and Minority Business generally supported TPP, but provided multiple comments on potential improvements.¹¹⁷⁵ The committee expressed concerns about specific provisions, “including the complexity of, and some inconsistency in, the Rules of Origin as well as the allowance of increased non-originating content; provisions in the Environmental Chapter that may create trade barriers; ambiguous text on the Scope of Covered Regulatory Measures; and the inclusion of a product-specific exemption pertaining to public health measures in the Investment Chapter.”¹¹⁷⁶

¹¹⁶⁹ Citing USITC, *Small and Medium-Sized Enterprises*, 2010, 2-1 to 2-7.

¹¹⁷⁰ USITC, hearing transcript, January 13, 2016, 72 (testimony of Luis Miguel Castilla, Ambassador of Peru).

¹¹⁷¹ USITC, hearing transcript, January 13, 2016, 345.

¹¹⁷² Allgeier, written testimony to the USITC, January 11, 2016, 10.

¹¹⁷³ Murphy, written testimony to the USITC, January 13, 2016, 4-5, 11, 15.

¹¹⁷⁴ PPI, written submission to the USITC, January 5, 2016, 1-2, 4, 8.

¹¹⁷⁵ ITAC-11, *The Trans-Pacific Partnership (TPP)*, December 1, 2015, 4-10.

¹¹⁷⁶ *Ibid.*, 2.

Regulatory Coherence

Assessment

TPP is the first U.S. FTA to include a chapter on regulatory coherence. The chapter encourages the use of good regulatory practices in developing and implementing domestic regulatory measures, and seeks to foster an open, fair, and predictable regulatory environment in the TPP region (Article 25.2). According to USTR, the chapter's provisions would benefit service providers, goods manufacturers, and agricultural exporters, and would not affect the rights of the United States or other TPP parties to regulate for public health and safety, worker and environmental protections, security, financial stability, or other public interest reasons, nor would anything in it require changes to U.S. regulations or U.S. regulatory procedures.¹¹⁷⁷

Interested parties indicate that the Regulatory Coherence chapter would likely have a positive impact on U.S. companies investing in and exporting to TPP countries,¹¹⁷⁸ but the effects would be limited. There would be no recourse to TPP's dispute settlement process for matters arising under the chapter. The chapter's transparency and notification provisions would be more limited than many industry representatives would prefer, with much of the impact of the provisions determined by the level of political support for them in TPP countries.¹¹⁷⁹

Summary of Provisions

Article 25.2 of Chapter 25 defines regulatory coherence as referring "to the use of good regulatory practices in the process of planning, designing, issuing, implementing and reviewing regulatory measures to facilitate achievement of domestic policy objectives, and in efforts across governments to enhance regulatory cooperation in order to further those objectives and promote international trade and investment, economic growth and employment." Article 25.2 also states, among other things, that the parties affirm the importance of "each Party's sovereign right to identify its regulatory priorities and establish and implement regulatory measures to address these priorities, at the levels that the Party considers appropriate."

¹¹⁷⁷ USTR, "Chapter 25, Regulatory Coherence: Chapter Summary," November 5, 2015.

¹¹⁷⁸ ITAC-4, *The Trans-Pacific Partnership*, December 3, 2015, 6; ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 10; PCI, written submission to the USITC, February 12, 2016, 2; PPI, written submission to the USITC, January 5, 2016, 9; GE, written submission to the USITC, January 28, 2016, 1,3; Schmid, written testimony to the USITC, January 15, 2016, 1, 4.

¹¹⁷⁹ ITAC-16, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 11; TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 19-20; ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 10; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 14; ITAC-2, *Trans-Pacific Partnership Agreement*, December 2, 2015, 13-14; ITAC-7, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 9.

Article 25.3 would require each party promptly, and no later than one year after entry into force of the Agreement, to determine and make publicly available the scope of its covered regulatory measures. The Chapter aims to facilitate regulatory coherence in each TPP country by promoting mechanisms for effective interagency consultation and coordination (Article 25.4). It also encourages implementation of a core group of good regulatory practices, including regulatory impact assessments that assess the need for a regulatory proposal, examine feasible alternatives, explain the grounds for concluding that the selected alternative achieves the policy objective in an efficient manner, and rely on the best reasonably obtainable existing information, including relevant scientific, technical, economic, or other information. Each party would be encouraged to provide an annual public notice of all regulatory measures it expects to take (Article 25.5).

Article 25.6 provides for the establishment of a Committee on Regulatory Coherence, composed of government representatives of the parties. The Committee would be expected to consider issues associated with the implementation and operation of the chapter and also identify future priorities. The Committee would also be required, at least once every five years after the date of entry into force of the Agreement, to consider developments in the area of good regulatory practices and in best practices in maintaining processes or mechanisms as well as the parties' experiences in implementing the chapter, with a view to making recommendations to the Commission for improving the provisions of this Chapter so as to further enhance the benefits of this Agreement.

The chapter also calls upon the parties to cooperate in order to facilitate the implementation of the chapter through information exchanges, dialogues, and meetings (Article 25.7), and to engage with interested persons of the parties to provide input on matters relevant to enhancing regulatory coherence (Article 25.8). It also requires parties to make periodic notifications to the Committee of steps it has taken to implement the chapter and to improve its adherence to it (Article 25.9). Article 25.11 states that no party would have recourse to dispute settlement under Chapter 28 of the Agreement for any matter arising under the chapter.

Summary of Views of Interested Parties

In public reports and statements to the Commission, a number of interested parties expressed strong support for chapter provisions that would encourage parties to streamline their regulations and encourage the implementation of regulatory best practices similar to U.S. practices. They stated that improved regulatory systems would help to make U.S. firms more

competitive and bring down barriers to trade and investment.¹¹⁸⁰ Stakeholders said that commitments to transparency and fairness of regulatory procedures help to strengthen the rule of law and are among the most important provisions in any trade agreement.¹¹⁸¹

At the same time, many stakeholders also qualified their support by noting that the benefits of the chapter would depend on the extent to which parties chose to implement the provisions.¹¹⁸² ITAC-2 (Automotive Equipment and Capital Goods) stated in its report that auto industry firms currently face an “overlapping web of incompatible foreign motor vehicle regulations” that serve as a major obstacle to U.S. car and truck exports, but said that the Regulatory Coherence chapter would not be particularly helpful in solving the problem, as it does not obligate parties “to do much more than talk.”¹¹⁸³

Several observers said that the chapter would significantly help SMEs,¹¹⁸⁴ although others disagreed on this point.¹¹⁸⁵ Members of several advisory committees also noted that TPP does not require regulatory agencies to consider the impact on small businesses.¹¹⁸⁶ TEPAC noted that the chapter does not explicitly call out the need for environmental impact analysis, and does not apply to voluntary guidance documents or to regulatory matters that are not of general application, such as the issuance of specific licenses or permits.¹¹⁸⁷

The American Chemistry Council (ACC) testified that it “strongly supports the objective of pursuing closer regulatory cooperation between the U.S. and TPP countries,” and that a trend toward less regulatory coherence in the chemicals industry is increasing trade costs for chemicals companies.¹¹⁸⁸ According to the Dow Chemical Company, the chapter would help industry deal with regulatory market access barriers by engaging directly with government agencies. Dow sees the Regulatory Coherence chapter as a model for countries to pursue

¹¹⁸⁰ ITAC-4, *The Trans-Pacific Partnership*, December 3, 2015, 6; ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 10; PCI, written submission to the USITC, February 12, 2016, 2; PPI, written submission to the USITC, January 5, 2016, 9; GE, written submission to the USITC, January 28, 2016, 1,3; Schmid, written testimony to the USITC, January 15, 2016, 1, 4.

¹¹⁸¹ USITC, hearing transcript, January 13, 2016, 8 (testimony of Peter Allgeier, Coalition of Service Industries).

¹¹⁸² ITAC-16, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 11; TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 19–20; ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 10; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 14; ITAC-2, *Trans-Pacific Partnership Agreement*, December 2, 2015, 13–14; ITAC-7, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 9.

¹¹⁸³ ITAC-2, *Trans-Pacific Partnership Agreement*, December 2, 2015, 13–14.

¹¹⁸⁴ ITAC-16, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 10; TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 19–20; ECAT, written submission to the USITC, December 18, 2015, 8; industry representative, interview by USITC staff, Washington, DC, February 23, 2016.

¹¹⁸⁵ ITAC-11, *The Trans-Pacific Partnership (TPP)*, December 1, 2015, 10.

¹¹⁸⁶ ITAC-7, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 9; TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 19–20.

¹¹⁸⁷ TEPAC, *The U.S.-Trans-Pacific Partnership Free Trade Agreement*, December 3, 2015, 19–20.

¹¹⁸⁸ Skelton, written testimony to the USITC, December 29, 2015, 2–3.

“transparent regulatory drafting processes, meaningful consultation with industry, and regulatory rigor based on sound science and risk.”¹¹⁸⁹

Several services sector representatives also stated that they support the Regulatory Coherence provisions, particularly efforts aimed at improving transparency about the role of local versus national regulators.¹¹⁹⁰ Another U.S. service provider, however, stated that the regulatory coherence provisions would likely be helpful only in the long run, as they set expectations for good regulatory practice. In the near term, the chapter would likely have only minimal impact.¹¹⁹¹ In a written statement, Trade in Services International stated that the chapter supports Malaysia’s 2013 national policy to ensure that the public sector adheres to certain rules and procedures in the creation of regulations that influence business, trade, and investment.¹¹⁹²

One advisory committee urged the U.S. government and NGOs to provide resources for training and other capacity development to TPP parties in this area.¹¹⁹³ ITAC-5 cautioned that U.S. companies might use the Regulatory Coherence Committee to seek the revision of U.S. regulations.¹¹⁹⁴

Transparency and Anticorruption

Assessment

TPP’s transparency provisions cover investment and trade in both goods and services, and would likely improve the overall business environment for U.S. firms in the region. This is particularly true for U.S. firms operating in Brunei, Japan, Malaysia, New Zealand, and Vietnam, where the United States does not have an existing FTA. However, the overall level of transparency commitments is not expected to change significantly for existing U.S. FTA partners (Australia, Canada, Chile, Mexico, Peru, and Singapore). The anticorruption section of the chapter includes dedicated provisions, not found in existing U.S. FTAs, to combat tax evasion and raise the standards for bookkeeping in the private sector.¹¹⁹⁵ Most of the provisions in this section are subject to a modified TPP dispute resolution process; along with the anticorruption requirements, the chapter aims to help TPP parties to combat corruption within their borders.

¹¹⁸⁹ Dow Chemical Company, written submission to the USITC, February 15, 2016, 2.

¹¹⁹⁰ Industry representative, telephone interview with USITC staff, February 24, 2016; industry representative, interview by USITC staff, Washington, DC, February 2, 2016.

¹¹⁹¹ Industry representative, interview by USITC staff, Washington, DC, February 23, 2016.

¹¹⁹² TISI, written submission to the USITC, December 26, 2015, 4.

¹¹⁹³ ITAC-8, *The Trans-Pacific Partnership Trade Agreement*, December 3, 2015, 4.

¹¹⁹⁴ ITAC-5, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 10.

¹¹⁹⁵ TPP, Art. 26.7(4)–(5).

Summary of Provisions

The chapter consists of three sections. Section A defines terms used in the chapter, Section B contains provisions related to transparency, and Section C contains provisions related to anticorruption. Under Section B, TPP parties would ensure that their laws, regulations, and administrative rulings of general application with respect to any matter covered by TPP are publicly available (Article 26.2). To the extent possible, regulations that are likely to affect trade or investment between the parties should be subject to notice and comment. Publication of proposed regulations should occur in a single official journal (preferably online), with sufficient time for public comment, and should include an explanation of the purpose and rationale of the regulation. Publication of final regulations also should occur in a single official journal, and parties should consider comments received and explain revisions, preferably on an official website or online journal.¹¹⁹⁶

Section B also provides for administrative proceedings' transparency. Under Section B, parties would ensure, whenever possible, that persons directly affected by a proceeding are given reasonable notice of when that proceeding is initiated, and are permitted to present facts in support of their position (Article 26.3). Parties must establish or maintain tribunals or procedures for the prompt review and, if warranted, correction of a final administrative action with respect to any matter covered by the agreement. Such tribunals must be impartial and independent of the office or authority entrusted with administrative enforcement and must not have any substantial interest in the outcome of the matter. Parties to a proceeding should have the right to defend their positions, and a decision should be based on the evidence, submissions of record or, where required by law, the record compiled by the relevant authority (Article 26.4).

The provisions of Section C seek to eliminate bribery and corruption in international trade, similar to existing U.S. FTAs. TPP would require all parties to ratify or accede to the UN Convention Against Corruption (Article 26.6), and each party would be required to establish, as a criminal offense under its domestic law, a list of acts enumerated in the chapter. These acts would include promising to a public official, directly or indirectly, undue advantages in exchange for promises to act or to refrain from acting in the performance of their official duties, and solicitation or acceptance by a public official of such an undue advantage (Article 26.7).

¹¹⁹⁶ TPP's Article 26.2 offers two options regarding the period of time in which publication of proposed regulations should occur. TPP Article 26.2(4) states that parties should try to provide 60 days for the submission of comments, but also gives the option of publishing within an unspecified period of time. The Technical Barriers to Trade chapter (TPP Chapter 8) calls for parties to allow 60 days for comment on proposed regulations (Article 8.7).

Further, parties would agree to consider a number of policy proposals to promote integrity among public officials via training, codes of conduct, and disciplinary actions (Article 26.8). While making explicit each party’s right to enforce its laws and to make its own decisions about allocating its resources, this section requires that no party must fail to effectively enforce its anticorruption laws (Article 26.9). Finally, this section requires parties to take appropriate measures to promote the active participation of individuals and groups outside the public sector in the fight against corruption, including individuals, enterprises, civil society, NGOs, and community-based organizations (Article 26.10). TPP Chapter 28 (Dispute Settlement) would apply to Section C of the Transparency and Anti-Corruption chapter, as specified in the chapter (Article 26.12).

Summary of Views of Interested Parties

The National Association of Manufacturers and several ITAC committees stated their support for the chapter, saying that the provisions would strengthen overall good governance in the TPP region. ITAC-11 particularly expressed support for measures to increase transparency through online publication of regulations.¹¹⁹⁷ ITAC-3 stated in its report that it was disappointed that the transparency rules were not binding on TPP parties.¹¹⁹⁸ Trade in Services International (TiSI) cited the transparency provisions contained in Chapter 26 as supportive of domestic initiatives already underway in Malaysia, Mexico, Vietnam, and Peru.¹¹⁹⁹ The Property Casualty Insurers Association of America said that transparency regulations such as regulatory notice and comment procedures “are important for regulated entities to assure that regulation is fact-based and not unduly influenced against our companies.”¹²⁰⁰

In testimony before Commission, Linda Schmid of Trade in Services International lauded TPP members for “[agreeing] to combat corruption, promote integrity among public officials and strengthen enforcement of anti-corruption laws,” adding that “the TPP sets the standard for trade rules . . . on anti-corruption.”¹²⁰¹

¹¹⁹⁷ ITAC-2, *Trans-Pacific Partnership Agreement*, December 2, 2015, 14; ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 14; ITAC-11, *The Trans-Pacific Partnership (TPP)*, December 2, 2015, 10; NAM, written submission to the USITC, January 15, 2016, 5–6.

¹¹⁹⁸ ITAC-3, *The Trans-Pacific Partnership Trade Agreement*, December 2, 2015, 14.

¹¹⁹⁹ TiSI, written testimony to the USITC, January 15, 2016, 2015, 4.

¹²⁰⁰ Property Casualty Insurers Association, written submission to the USITC, February 12, 2016, 2.

¹²⁰¹ USITC, hearing transcript, January 15, 2016, 838–39.

Dispute Settlement

Summary of Provisions

Under Article 28.3, the TPP dispute settlement mechanism applies to disputes across TPP, except as otherwise provided, including the Labor, Environment, and State-Owned Enterprises chapters and a number of additional chapters. Articles 28.2, 28.4, and 28.5 provide for consultations among TPP parties, the option for undertaking alternative methods of dispute resolution, and a rule regarding choice of forum. Articles 28.7, 28.8, 28.9, 28.11, and 28.12 set forth procedures for establishing a panel as well as the terms of reference, functions, and rules of procedure for such panels. Articles 28.16 and 28.17 set forth timeframes for consultations, for the establishment and composition of panels, for panel reports, and for party submissions.

Articles 28.9.9 and 28.10.1(d) provide for the establishment of a code of conduct for panelists and rules of procedures for panels. Article 28.9 includes a lengthy description of panel composition procedures. Article 28.12 also provides additional transparency for disputes than currently provided for under the WTO Dispute Settlement Understanding, such as the requirement that parties release relevant documents as soon as possible after filing or at least by the time the final panel report is issued.¹²⁰²

Summary of Views of Interested Parties

Several hearing participants expressed their general support for the TPP dispute settlement mechanism. The time-limited and binding characteristics were seen as benefits,¹²⁰³ as were the consultations and alternative dispute resolution mechanisms available before formal dispute settlement is initiated. They also voiced support for the ability of the public to access submissions, hearings, and final reports of disputes.¹²⁰⁴

Several hearing participants commented on the issue of enforceability. Cargill said that it supported TPP in part because of its “enforceable WTO-plus provisions.”¹²⁰⁵ The International Intellectual Property Alliance said that TPP’s value depends on how well it is implemented and

¹²⁰² For example, compare TPP Article 28.16 with, e.g., WTO DSU Article 20.

¹²⁰³ USITC, hearing transcript, January 14, 2016, 514, 559–60 (testimony of Linda Dempsey, National Association of Manufacturers); National Association of Manufacturers, post-hearing submission to the Commission, 6.

¹²⁰⁴ U.S. Chamber of Commerce, written testimony to the Commission, January 13, 2016, 11.

¹²⁰⁵ Cargill’s prehearing statement Commerce, written testimony to the USITC, January, 2.

enforced,¹²⁰⁶ and the Personal Care Products Association emphasized the need for the U.S. government to allocate resources to enforcement.¹²⁰⁷

Writing for a publication of the Peterson Institute for International Economics, Jennifer Hillman observed that the TPP dispute settlement mechanism is “designed to be broader, deeper, faster, and more transparent than either the WTO’s Dispute Settlement Understanding or any prior bilateral or regional free trade agreement. It covers more chapters and issues than prior dispute settlement systems (including systems on labor, the environment, cross-border data flows, and state-owned enterprises) but leaves out some key issues, including the side agreement on currency manipulation, trade remedies, and many of the new issues included in TPP itself, such as capacity building, competitiveness and business facilitation, and regulatory coherence.”¹²⁰⁸ In its report, the Industry Trade Advisory Committee on Steel observed that TPP’s dispute settlement provisions would likely promote U.S. economic interests by providing effective, timely, and transparent dispute settlement.

The Commission received diverging views on the efficacy of the Chapter 28 mechanism to enforce specific categories of TPP provisions. For example, the Outdoor Industry Association and Third Way said that they support TPP in part due to its enforceable environmental provisions.¹²⁰⁹ The United Steelworkers said the TPP enforcement provisions are inadequate to deal with state-owned enterprises and the excess capacity that other countries regularly direct to the United States. Moreover, it said, if there were no TPP, then the United States would be able to require countries or companies that desire access to the U.S. market to meet certain standards.¹²¹⁰

As discussed in the labor section earlier in this chapter, several organizations disagreed about the utility of the TPP dispute settlement mechanism to enforce labor provisions. Labor groups contended that enforcement of TPP’s labor provisions remains wholly discretionary. They maintained that there is a fundamental difference between the private right of action for the business community under the TPP ISDS mechanism and the “ineffective” mechanism that provides the labor community with “no private right of action to complain against a

¹²⁰⁶ USITC, hearing transcript, January 13, 2015, 287–88, 342–43 (testimony of Steven Metalitz, International Intellectual Property Alliance).

¹²⁰⁷ USITC, hearing transcript, January 15, 2016, 762 (testimony of Francine Lamoriello, Personal Care Products Council).

¹²⁰⁸ Hillman, “Dispute Settlement Mechanism,” March 2016.

¹²⁰⁹ Third Way, written testimony to the USITC, January 13, 2016, 2; Outdoor Industry Association, written testimony to the USITC, January 13, 2016, 6–7; USITC, hearing transcript, January 15, 2016, 739–40 (testimony of Rich Harper, Outdoor Industry Association).

¹²¹⁰ USITC, hearing transcript, January 13, 2015, 166, 215, 237–38 (testimony of Leo Gerard, USW).

government, particularly an undeveloped government with horrendous labor rights.”¹²¹¹ In contrast, other organizations applauded the TPP’s enforceable labor commitments.¹²¹²

Initial Provisions, Administrative and Institutional Provisions, Exceptions, and Final Provisions

Summary of Provisions

Initial Provisions and General Definitions

The Initial Provisions and General Definitions chapter (TPP Chapter1) establishes a free trade agreement and defines terms used in more than one chapter of the TPP Agreement. Article 1.2 affirms the parties’ existing rights and obligations with respect to each other in relation to existing international agreements and in relation to existing international agreements to which two or more TPP parties are party.

Administrative and Institutional Provisions

The agreement establishes a TPP Commission composed of Ministers or senior officials designated by the parties (Article 27.1). The TPP Commission would take all decisions by consensus, except as otherwise provided; be chaired successively by each party; and meet within one year of the agreement’s EIF and thereafter as the parties may decide (Articles 27.3, 27.4). Article 27.7 establishes mechanisms for individual parties to report to the TPP Commission on their plans for and progress towards implementing each of their obligations with specific transition periods. The TPP Commission’s other functions include considering any matter relating to the implementation or operation of the agreement, considering any proposal to amend or modify it, supervising the work of all committees and working groups, and performing certain functions related to dispute settlement (Articles 27.2, 27.6).

¹²¹¹ USITC, hearing transcript, January 13, 2015, 154–55, 234–35, 248–50 (AFL-CIO), testimony of Celeste Drake; USITC, hearing transcript, January 13, 2015, 170, 201, 205 (testimony of Bruce Olsson, International Association of Machinists and Aerospace Workers); USITC, hearing transcript, January 13, 2016, 166, 215, 237–38 (testimony of Leo Gerard, United Steelworkers).

¹²¹² Third Way, written testimony to the USITC, January 13, 2016, 2; Outdoor Industry Association, written testimony to the USITC, January 13, 2016, 6–7; USITC, hearing transcript, January 15, 2016; 739–40 (testimony of Rich Harper, Outdoor Industry Association).

Exceptions Chapter

The Exceptions chapter lists exceptions to the TPP obligations and contains certain general provisions. The agreement incorporates Article XX of GATT 1994 and its interpretive notes and makes them part of the TPP Agreement for purposes of certain listed TPP chapters (Article 29.1). For general exceptions, Articles 29.1.2 and 29.1.3 incorporate the GATT Article XX provisions related to “goods trade” and the GATS Article XIV provisions related to “services trade”, consistent with other U.S. FTAs. Articles 29.2, 29.4 and 29.6 describe exceptions for essential security interests, taxation, and certain measures adopted by New Zealand to accord more favorable treatment to the Maori under the Treaty of Waitangi. Article 29.4 also defines the circumstances and conditions under which a party may impose temporary safeguard measures restricting certain transfers related to covered investments.

Nothing in the agreement may be construed to prevent a Party from taking action that is authorized by the World Trade Organization (WTO) Dispute Settlement Body or is taken as a result of a decision by a dispute settlement panel under an FTA to which the party taking the action and the party against which the action is taken are a party (Article 29.1). Article 29.5 and n.13 also permit a party to elect to deny the benefits of the TPP Chapter 9 investor state dispute settlement (ISDS) mechanism for certain types of tobacco control measure claims.

The chapter contains two general provisions. Article 29.7 emphasizes that nothing in the TPP Agreement shall be construed to require a party to furnish or allow access to information when disclosing the information would be contrary to its law, would impede law enforcement, or otherwise be contrary to the public interest, or which would prejudice the legitimate commercial interests of particular enterprises, public or private. The other provision (Article 29.8), not included in existing U.S. FTAs, provides that, subject to each party’s international obligations, each party may establish appropriate measures to respect, preserve, and promote traditional knowledge and traditional cultural expressions.

Final Provisions Chapter

The Final Provisions chapter provides that the TPP Agreement will enter into force 60 days after the date on which all original signatories have notified New Zealand, as the TPP’s official Depository, in writing of the completion of their applicable legal procedures (Article 30.5).¹²¹³ Article 30.2 describes the procedures for amending the agreement. The agreement is open to accession by any state or separate customs territory that is a member of the Asia-Pacific

¹²¹³ Article 30.5 also provides procedures in the event that not all original signatories have notified the Depository in writing that they have completed their applicable legal procedures.

Economic Forum¹²¹⁴ and other states as agreed by the parties (Article 30.4). Article 30.6 describes the procedures and effect of any party's notification of its decision to withdraw from the agreement. Articles 30.1, 30.6, and 30.7 include provisions indicating that the annexes, appendixes, and footnotes to the agreement shall constitute an integral part of the agreement; affirming that the English, Spanish, and French texts of the agreement are equally authentic, and that in the event of any divergence, the English text shall prevail; and designating the functions of New Zealand as the agreement's Depository.

Summary of Views of Interested Parties

Exceptions Chapter

As described above in the Investment section of this chapter of the report, in written submissions to the Commission or advisory reports to USTR, several organizations expressed frustration that Article 29.5 of the Exceptions chapter permits a party to elect to deny the benefits of the chapter 9 ISDS mechanism with respect to certain tobacco control measures. Some said that by singling out a single product, this provision alters the effectiveness of a "rule of law" approach to trade regulation and sets a dangerous precedent by denying ISDS to firms that are economically harmed by violations of the agreement. They expressed concerns that the provision would allow other parties to use health or other non-science- and non-evidence-based reasons to restrict access for other U.S. agricultural or non-agricultural products in an unfair and discriminatory way without any requirement that the actions are necessary or promote public welfare. Some indicated that the provision would harm growers, tobacco companies, and tobacco product marketing and potentially risk exports and foreign investment by other industries.¹²¹⁵

Final Provisions Chapter

Some of the hearing participants expressed concerns about the so-called "docking" provisions that permit additional countries to accede to TPP in the future. Some expressed reservations

¹²¹⁴ APEC members that did not participate in the TPP negotiations included China, Hong Kong (China), Indonesia, South Korea, Papua New Guinea, Russia, Taiwan, and Thailand. See <http://www.apec.org/About-Us/About-APEC/Member-Economies.aspx>.

¹²¹⁵ American Farm Bureau Federation, written submission to the USITC, February 26, 2016, 25; Universal Leaf Tobacco, written submission to the USITC, February 12, 2016, 3; ECAT, written submission to the USITC, December 28, 2015, 6; NFTC, written submission to the USITC, January 15, 2016, 2; USITC, hearing transcript, January 13, 2016, 126–27 (testimony of John Murphy, U.S. Chamber of Commerce), 140–41 (testimony of Vanessa Sciarra, Emergency Committee for American Trade), 145–46 and 259–60 (testimony of Alan Wolff, National Foreign Trade Council); USITC, hearing transcript, January 14, 2016, 513–14 (testimony of Linda Dempsey, National Association of Manufacturers); ATAC for Trade in Tobacco, Cotton, and Peanuts, *The Trans-Pacific Partnership Trade Agreement*, November 25, 2015, 2-9; ATAC for Trade in Processed Foods, *The Trans-Pacific Partnership (TPP) Agreement*, December 3, 2015, 10.

that the docking provisions will allow others who “are not yet ready,” including additional “currency manipulators” (such as South Korea, Taiwan, and China) to join. They contended that such developments would expand TPP benefits to other countries, including Indonesia, Thailand, South Korea, and China, while multiplying TPP's negative effects.¹²¹⁶ Some questioned the extent to which Congress would be consulted about modifications of the agreement and expansion of its membership.¹²¹⁷ The United Steelworkers and the UAW said that the docking clause will make it difficult to analyze the likely effects of the agreement, asking the Commission to evaluate its impact on TPP countries and potential future TPP partners, especially China.¹²¹⁸ According to Richard Cunningham, a specialist in international trade law, large emerging markets like China, India, and Russia are unlikely to join TPP. He asserted that TPP has the potential to forestall future multilateral trade negotiations in the WTO and to perpetuate, maybe aggravate, the gap between developing countries that want a development agenda and developed countries that want a trade liberalization agenda.¹²¹⁹

Other participants in the hearing expressed the view that the TPP's negotiators had always intended to include additional signatories to TPP; they viewed the docking provisions as making the benefits of TPP even more meaningful and impactful as membership expanded, and as a “springboard” to engage other Asian economies.¹²²⁰ Ambassador Castilla from Peru observed that Colombia is considering joining APEC in order to join TPP.¹²²¹ Ambassador Sasai from Japan reported that the ability to bring others into the TPP Agreement will have an effect on standards in other regional agreements that are envisioned and under negotiation.¹²²²

¹²¹⁶ USITC, hearing transcript, January 15, 2016, 840 (testimony of Robert Scott, Economic Policy Institute); USITC, hearing transcript, January 14, 2015, 492 (testimony of Thomas Suber, U.S. Dairy Export Council); Teamsters, written submission to the USITC, December 29, 2015, 3; Nassar, written testimony to the USITC, December 23, 2015; USITC, hearing transcript, January 13, 2015, 162, 260–61 (testimony of Josh Nassar, UAW).

¹²¹⁷ USITC, hearing transcript January 13, 2016, 162 (testimony of Josh Nassar, UAW), 260–61 (also observing that a possible vote on lowering tariffs once a deal has already been reached is woefully insufficient for working families) (testimony of Josh Nassar, UAW), 636 (testimony of Jesse Richman, Ideal Taxes Association); Teamsters, written submission to the USITC, December 29, 2015, 3; Nassar, written testimony to the USITC, December 23, 2015, 2.

¹²¹⁸ Gerard, written submission to the USITC, December 29, 2015 7–8; hearing transcript, 166–67 (testimony of Leo Gerard, United Steelworkers); Nassar, written testimony to the USITC, December 23, 2015, 2; USITC, hearing transcript, January 13, 2015, 162, 260–61 (testimony of Josh Nassar, UAW).

¹²¹⁹ USITC, hearing transcript, January 14, 2016, 627 (testimony of Richard Cunningham); Cunningham, written submission to the USITC, February 12, 2016, 1–2.

¹²²⁰ USITC, hearing transcript, January 13–15, 2016, 271 (testimony of Stephen Simchak, American Insurance Association), 285 (testimony of Christopher Padilla, IBM), 341–42 (IBM), 518 (testimony of C. Devi Keller, Semiconductor Industry Association), 643 (testimony of Bob Vastine, Georgetown Center for Business and Public Policy), 817 (testimony of Francine Lamoriello, Personal Products Council); IBM, written testimony to the USITC, January 13, 2016, 3; American Insurance Association, written testimony to the USITC, January 13, 2016, 1–2; National Foreign Trade Council, written testimony to the USITC, January 13, 2016, 3; National Potato Council, written testimony to the USITC, December 23, 2015, 2.

¹²²¹ USITC, hearing transcript, January 13, 2016, 81–82 (testimony of Luis Miguel Castilla, Ambassador of Peru).

¹²²² USITC, hearing transcript, January 13, 2016, 66–68 (testimony of Kenichiro Sasae, Ambassador of Japan).

Ambassador Mirpuri of Singapore stated that TPP establishes a way forward for other countries that intend to join and is not meant to contain or exclude anyone.¹²²³

Several participants in the Commission’s hearing embraced the expansion of TPP to additional signatories, but cautioned that new entrants must be held to the highest standards and must have few or narrowly tailored nonconforming measures before they are admitted.¹²²⁴ The National Foreign Trade Council expressed the view that it is important for the United States to participate, given TPP’s “open architecture.”¹²²⁵ Walmart said that TPP’s investment rules that remove restrictions on retail and distribution services serve as a template for new entrants to TPP and a benchmark for other services negotiations.¹²²⁶

¹²²³ USITC, hearing transcript, January 13, 2016, 48–53 (testimony of Ashok Kumar Mirpuri, Ambassador of Singapore).

¹²²⁴ USITC, hearing transcript, January 13, 2016, 271, 285, 341–42 (testimony of Christopher Padilla, IBM); American Insurance Association, written testimony to the USITC, January 13, 2016, 1–2; IBM, written testimony to the USITC, January 13, 2016, 3; Pet Food Institute, written testimony to the USITC, December 29, 2015, 2–3.

¹²²⁵ National Foreign Trade Council, written testimony to the USITC, January 13, 2016, 3.

¹²²⁶ Walmart Stores, Inc., written testimony to the USITC, December 29, 2015, 1.

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Additional Views of Commissioner Kieff

I appreciate the extensive and careful work of the staff and my colleagues, as well as the many helpful submissions by those participating in our hearing and the rest of our public process. I concur with the thoughtful discussion of patents in the report. I write here to further elaborate some ideas about the admittedly subtle and somewhat arcane nuances in the role patents can play in both domestic and foreign economies in the hope of helping all of us who are interested in analyzing the various options for approaching patent systems.

Many discussions of patents, including many offered by those testifying at our hearing, and many in the contemporary literature focus on the role patents can play on the one hand in providing beneficial incentives to invent, and on the other hand in enabling harmful concentration of market power leading to increased prices and reduced output. Such discussions often then focus essentially on how much of the good is enough, how much of the bad is too much, and tradeoffs between them.

In effect, those discussions highlight a direct tension between patents as causes of helpful incentives to invent and patents as causes of deleterious anticompetitive monopoly effects that can be especially harmful to the poor. They then offer various approaches to legal regimes to address both sides of the tension. One set of approaches includes the use of other inducements or rewards for invention in the place of or in addition to patents, such as regulatory exclusivity, tax credits, grants, prizes, and the like. A second set of approaches exempts particular fields of technology from eligibility for patent protection, such as those having to do with healthcare, software, or finance, usually with the expectation of significant frequent and ongoing updates to the boundaries of these exempted fields. A third set of approaches decreases the remedies available for patent infringement, including damages, injunctions, and exclusion orders. A fourth set of approaches directly addresses interactions between patentees and users of patented technologies, including heightened antitrust scrutiny, compulsory licenses, and governmental takings of patent licenses or patents. Many other ideas are also offered.

A common theme across these sets of approaches is to view patents more in the tradition of public law, or as regulatory entitlements, by focusing more on the use of more extensive interactions between governmental bodies and private parties. The overarching goals across perspectives in the literature are generally shared and laudatory: fostering access to inventive technologies, competition, economic growth, and diverse and inclusive participation; improving both efficiency and fairness for all.

These shared goals also are championed by an intellectual approach to patents that is different than those briefly mentioned above. This different approach—a commercialization approach—has been embraced across the American political spectrum, including both the Carter

administration and the Reagan administration, as well as by celebrated jurists of the last century coming from diverse philosophical perspectives, including Circuit Judges Learned Hand, Jerome Frank, and Giles Rich, who saw it as important to helping the economy and society. The roots of a commercialization approach to patents reach back even further into American history, including Abraham Lincoln's view that the patent system "added the fuel of interest to the fire of genius, in the discovery and production of new and useful things."¹²²⁷ Its study has also long extended far beyond our nation.

A commercialization approach to patents views patents more in the tradition of private law, as property rights, by focusing on the use of more extensive interactions between private parties, including contracts. Centered on the relationships among private parties, this approach to patents emphasizes a different target and a different mechanism by which patents can operate. Rather than target individuals who are likely to respond to patents as incentives to invent in particular, this approach targets a broad, diverse set of market actors in general. This broad set of target actors encompasses the inventor as well as all those complementary users of an invention who can help bring it to market, such as investors (including venture capitalists), entrepreneurs, managers, marketers, developers, laborers, and owners of other key assets, tangible and intangible, including other inventions. Another key difference in this approach to patents lies in the mechanism by which the patent and these private actors interact. This approach sees patents as tools for facilitating coordination among these diverse private actors, in furtherance of their own private interests in commercializing the technology.

This commercialization approach sees property rights in patents serving a role akin to beacons in the dark, drawing to themselves all of those potential complementary users of the patented technology to interact with the patentee and each other, exploring through the bargaining process the possibility of striking contracts with each other. Focusing on such a beacon-and-bargain effect can relieve the governmental side of the patent system of the need to amass the detailed information required to reasonably tailor a direct targeted incentive, such as each actors' relative interests and contributions, needs, skills, or the like. Not only is amassing all of that information hard for the government to do, but large, established market actors may be better able than smaller market entrants to wield the political influence needed to get the government to act, increasing risk of concerns about political economy, public choice, and fairness. Instead, each private party can bring its own expertise and other assets to the negotiating table while knowing—without necessarily having to reveal it to other parties or the government—enough about its own level of interest and capability when it decides whether to strike a deal or not.

¹²²⁷ Abraham Lincoln, "Second Lecture on Discoveries and Inventions" (February 11, 1859), 3, in *The Collected Works of Abraham Lincoln*, edited by Roy P. Basler, Rutgers University Press, 1953, 356, 363 (emphasis added and omitted).

Such successful coordination may help bring new business models, products, and services to market. It also can allow patentees and their contracting parties to appropriate the returns to any of the rival inputs they invested towards developing and commercializing innovation—labor, lab space, capital, and the like. At the same time, the government can avoid having to then go back to evaluate and trace the actual relative contributions that each participant brought to an invention’s successful commercialization—including, again, the cost of obtaining and using that information and the associated risks of political influence—by enforcing the terms of the contracts these parties strike with each other to allocate any value resulting from the invention’s commercialization. In addition, significant economic theory and empirical evidence suggests this can all happen while the quality-adjusted prices paid by many end users actually decline and public access is high. In keeping with this commercialization approach, patents can be important antimonopoly devices, helping a smaller “David” come to market and compete against a larger “Goliath.”¹²²⁸

A commercialization approach thereby mitigates many of the challenges raised by the tension that is the focus of the other intellectual approaches to patents, as well as by their responses to that tension. Many of the alternatives to patents that are often suggested by other approaches to patents, such as rewards or tax credits, can face significant challenges in facilitating the private sector coordination benefits envisioned by the commercialization approach to patents. In addition, the commercialization approach can embrace many of the practical checks on the market power of a patent that are often suggested by other approaches to patents, such as antitrust review, government takings, and compulsory licensing, while at the same time showing the importance of maintaining self-limiting principles within each such check to maintain commercialization benefits and mitigate concerns about dynamic efficiency, public choice, fairness, and the like.

To be sure, a focus on commercialization does not ignore inventors or inventions themselves. A system successful in commercializing inventions can have the collateral benefit of providing positive incentives to those who do invent through the possibility of sharing in the many rewards associated with successful commercialization. Nor does a focus on commercialization guarantee that patents cause more help than harm. Significant theoretical and empirical questions remain open about benefits and costs of each approach to patents.

One size rarely fits all, and each approach typically involves benefits as well as costs. Nevertheless, there are good reasons to think that a rules-based trading system can embrace a combination of the many diverse approaches to patents explored here, and others, within a national economy, as well as across international borders. It can be attentive to concerns about efficiency and fairness. The brief discussion here is designed to shed some added light on an

¹²²⁸ See *Picard v. United Aircraft Corp.*, 128 F.2d 632, 643 (2d Cir. 1942) (Frank, J., concurring).

Additional Views of Commissioner Kieff

approach that has not been as thoroughly explored as other approaches in witness testimony at our hearing or in other contemporary literature. It takes no position on any pending or proposed governmental actions. It is offered in the hope it might help empower and enable ongoing analysis by those studying any patent system as they work to ensure the best fit for themselves.

Appendix A

Request Letter

Appendix A: Request Letter

DOCKET
NUMBER

3097

Office of the
Secretary
Int'l Trade Commission

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

EXECUTIVE OFFICE OF THE PRESIDENT
THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON, D.C. 20508

November 5, 2015

RECEIVED

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OFFICE OF THE SECRETARY
U.S. INTL. TRADE COMMISSION

The Honorable Meredith Broadbent
Chairman
United States International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

Dear Chairman Broadbent:

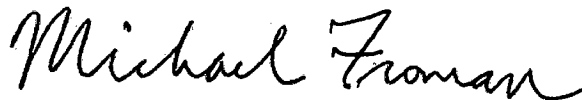
As you know, the United States has completed the negotiation of the Trans-Pacific Partnership Agreement (TPP Agreement), a comprehensive free trade agreement with 11 nations in the Asia-Pacific region. The advice that the U.S. International Trade Commission ("Commission") provided over the course of these negotiations assisted us greatly in bringing the negotiations to a successful conclusion.

The President notified Congress of his intent to enter into the agreement on November 5, 2015. Pursuant to authority delegated to me by the President and in accordance with section 105(c) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 ("Trade Priorities Act") I request the Commission to prepare a report as specified in section 105(c)(2)-(3) of the Trade Priorities Act assessing the likely impact of the TPP Agreement on the United States economy as a whole and on specific industry sectors and the interests of U.S. consumers.

I would greatly appreciate it if the Commission could issue its report as soon as possible. I am providing the Commission with the details of the TPP Agreement as it exists at this time and will continue to keep the Commission current with respect to the details of the Agreement. In addition, I have instructed my staff to be available to answer questions or provide additional information on the Agreement.

Thank you for your continued cooperation and assistance in this matter.

Sincerely,



Ambassador Michael B. G. Froman

Appendix A: Request Letter

Appendix B

Federal Register Notice

Appendix B: Federal Register Notice

(202) 205–2000. Hearing impaired individuals are advised that information on this matter can be obtained by contacting the Commission’s TDD terminal on (202) 205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205–2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission’s electronic docket (EDIS) at <http://edis.usitc.gov>.

FOR FURTHER INFORMATION CONTACT: The Office of Docket Services, U.S. International Trade Commission, telephone (202) 205–1802.

SUPPLEMENTARY INFORMATION:

Authority: The authority for institution of this investigation is contained in section 337 of the Tariff Act of 1930, as amended, and in section 210.10 of the Commission’s Rules of Practice and Procedure, 19 CFR 210.10 (2015).

Scope of Investigation: Having considered the complaint, the U.S. International Trade Commission, on November 16, 2015, *ordered that—*

(1) Pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, an investigation be instituted to determine whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain automated teller machines, ATM modules, components thereof, and products containing the same by reason of infringement of one or more of claims 1, 2, 5–8, 10, 16–18, 20, 22, 23, 26, and 27 of the ’616 patent; claims 1–8, 12–18, and 21–27 of the ’461 patent; claims 1–15, 18–20, 22–26, and 28–30 of the ’010 patent; claims 1–4, 6, 14, 15, and 19 of the ’761 patent; claims 1–5 and 13–24 of the ’163 patent; and claims 1–8 and 12–20 of the ’631 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337;

(2) For the purpose of the investigation so instituted, the following are hereby named as parties upon which this notice of investigation shall be served:

(a) The complainants are:
 Diebold, Incorporated, 5995 Mayfair Road, North Canton, OH 44720.
 Diebold Self-Service Systems, 5995 Mayfair Road, North Canton, OH 44720.

(b) The respondents are the following entities alleged to be in violation of

section 337, and are the parties upon which the complaint is to be served:

Nautilus Hyosung Inc., 281 Gwangpyeong-ro, Gangnam-gu Gu, Seoul, Republic of Korea.

Nautilus Hyosung America Inc., 6641 N. Beltline Road, Suite 100, Irving, TX 75061.

HS Global, Inc., 381 Thor Pl., Brea, CA 92821.

(3) For the investigation so instituted, the Chief Administrative Law Judge, U.S. International Trade Commission, shall designate the presiding Administrative Law Judge.

The Office of Unfair Import Investigations will not participate as a party in this investigation.

Responses to the complaint and the notice of investigation must be submitted by the named respondents in accordance with section 210.13 of the Commission’s Rules of Practice and Procedure, 19 CFR 210.13. Pursuant to 19 CFR 201.16(e) and 210.13(a), such responses will be considered by the Commission if received not later than 20 days after the date of service by the Commission of the complaint and the notice of investigation. Extensions of time for submitting responses to the complaint and the notice of investigation will not be granted unless good cause therefor is shown.

Failure of a respondent to file a timely response to each allegation in the complaint and in this notice may be deemed to constitute a waiver of the right to appear and contest the allegations of the complaint and this notice, and to authorize the administrative law judge and the Commission, without further notice to the respondent, to find the facts to be as alleged in the complaint and this notice and to enter an initial determination and a final determination containing such findings, and may result in the issuance of an exclusion order or a cease and desist order or both directed against the respondent.

By order of the Commission.

Issued: November 17, 2015.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2015–29669 Filed 11–19–15; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. TPA–105–001]

Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

AGENCY: United States International Trade Commission.

ACTION: Institution of investigation and scheduling of public hearing.

SUMMARY: Following receipt on November 5, 2015 of a request from the U.S. Trade Representative (USTR), the Commission has instituted investigation No. TPA–105–001, *Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors*, under section 105(c) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (19 U.S.C. 4204(c)), for the purpose of assessing the likely impact of the Agreement on the U.S. economy as a whole and on specific industry sectors and the interests of U.S. consumers. In addition to the United States, the Agreement includes Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam.

DATES:

December 22, 2015: Deadline for filing requests to appear at the public hearing.

December 29, 2015: Deadline for filing pre-hearing briefs and statements.

January 13, 2016: Public hearing.

January 22, 2016: Deadline for filing post-hearing briefs and statements.

February 15, 2016: Deadline for filing all other written submissions.

May 18, 2016: Anticipated date for transmitting Commission report to the President and Congress.

ADDRESSES: All Commission offices, including the Commission’s hearing rooms, are located in the United States International Trade Commission Building, 500 E Street SW., Washington, DC. All written submissions should be addressed to the Secretary, United States International Trade Commission, 500 E Street SW., Washington, DC 20436. The public record for this investigation may be viewed on the Commission’s electronic docket (EDIS) at <https://edis.usitc.gov>.

FOR FURTHER INFORMATION CONTACT: Project Leader Jose Signoret (202–205–3125 or jose.signoret@usitc.gov) or Deputy Project Leader Laura Bloodgood (202–708–4726 or laura.bloodgood@usitc.gov) for information specific to this investigation. For information on the legal aspects of this investigation, contact William Gearhart of the

Commission's Office of the General Counsel (202-205-3091 or william.gearhart@usitc.gov). The media should contact Margaret O'Laughlin, Office of External Relations (202-205-1819 or margaret.olaughlin@usitc.gov). Hearing-impaired individuals may obtain information on this matter by contacting the Commission's TDD terminal at 202-205-1810. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

Background

On November 5, 2015, the Commission received a letter from the USTR stating that the President notified Congress, also on November 5, 2015, of his intent to enter into the Trans-Pacific Partnership Agreement with the countries of Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. As requested by the USTR and as required by section 105(c) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (2015 Act), the Commission will submit to the President and Congress a report assessing the likely impact of the Trans-Pacific Partnership (TPP) Agreement on the U.S. economy as a whole and on specific industry sectors and the interests of U.S. consumers. In assessing the likely impact, the Commission will include the impact the agreement will have on the U.S. gross domestic product; exports and imports; aggregate employment and employment opportunities; and the production, employment, and competitive position of industries likely to be significantly affected by the agreement. In preparing its assessment, the Commission will also review available economic assessments regarding the Agreement, including literature concerning any substantially equivalent proposed agreement. The Commission will provide a description of the analytical methods used and conclusions drawn in such literature, and a discussion of areas of consensus and divergence between the Commission's analyses and conclusions and other economic assessments reviewed.

Section 105(c)(2) of the 2015 Act requires that the Commission submit its report to the President and the Congress not later than 105 days after the President enters into the agreement. The USTR requested that the Commission provide the report as soon as possible.

Section 105(c)(4) of the 2015 Act requires the President to make the Commission's assessment under section 105(c)(2) available to the public.

Public Hearing

The Commission will hold a public hearing in connection with this investigation at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC, beginning at 9:30 a.m. on January 13, 2016, and continuing on additional days, if necessary. Requests to appear at the public hearing should be filed with the Secretary no later than 5:15 p.m., December 22, 2015. All pre-hearing briefs and statements must be filed not later than 5:15 p.m., December 29, 2015; and all post-hearing briefs and statements, which should focus on matters raised at the hearing, must be filed not later than 5:15 p.m., January 22, 2016. In order to appear at the hearing, all interested parties and other persons appearing must file a pre-hearing brief or statement that sets forth the information and arguments they intend to present at the hearing. An extension of time for filing requests to appear, pre-hearing and post-hearing statements, and all other written submissions will not be granted unless the Chairman determines that the condition for granting an extension of time in section 201.14(b)(2) of the *Commission Rules of Practice and Procedure* (19 CFR 201.14(b)(2)) is met. All requests to appear and all pre-hearing and post-hearing briefs and statements should otherwise be filed in accordance with the requirements in the "Written Submissions" section below. In the event that, as of the close of business on December 22, 2015, no witnesses are scheduled to appear at the hearing, the hearing will be canceled. Any person interested in attending the hearing as an observer or nonparticipant should contact the Office of the Secretary at 202-205-2000 after December 22, 2015, for information concerning whether the hearing will be held.

Written Submissions

In lieu of or in addition to participating in the hearing, interested parties are invited to file written submissions concerning this investigation. All written submissions should be addressed to the Secretary. Except in the case of requests to appear at the hearing and pre-hearing and post-hearing briefs and statements, all written submissions should be received not later than 5:15 p.m., February 15, 2016. All written submissions must conform with the provisions of section

201.8 of the *Commission Rules of Practice and Procedure* (19 CFR 201.8). Section 201.8 and the Commission's Handbook on Filing Procedures requires that interested parties file documents electronically on or before the filing deadline and submit eight (8) true paper copies by 12:00 p.m. eastern time on the next business day. In the event that confidential treatment of a document is requested, interested parties must file, at the same time as the eight paper copies, at least four (4) additional true paper copies in which the confidential information must be deleted (see the following paragraph for further information regarding confidential business information). Persons with questions regarding electronic filing should contact the Secretary (202-205-2000).

Any submissions that contain confidential business information (CBI) must also conform with the requirements of section 201.6 of the *Commission Rules of Practice and Procedure* (19 CFR 201.6). Section 201.6 of the rules requires that the cover of the document and the individual pages be clearly marked as to whether they are the "confidential" or "non-confidential" version, and that the confidential business information be clearly identified by means of brackets. All written submissions, except for confidential business information, will be made available for inspection by interested parties. Any confidential business information received by the Commission in this investigation and used in preparing this report will not be published in a manner that would reveal the operations of the firm supplying the information.

Summaries of Written Submissions

The Commission intends to publish summaries of the positions of interested persons in an appendix to its report. Persons wishing to have a summary of their position included in the appendix should include a summary with either their pre-hearing or post-hearing brief or another written submission, or as a separate written submission, and the summary must be clearly marked on its front page as being their "summary of position for inclusion in the appendix to the Commission's report." The summary may not exceed 500 words, should be in MSWord format or a format that can be easily converted to MSWord, and should not include any confidential business information. The summary will be published as provided if it meets these requirements and is germane to the subject matter of the investigation. In the appendix the Commission will identify the name of the organization

furnishing the summary, and will include a link to the Commission's Electronic Document Information System (EDIS) where the full written submission can be found.

By order of the Commission.

Issued: November 17, 2015.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2015-29659 Filed 11-19-15; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337-TA-971]

Certain Air Mattress Systems, Components Thereof, and Methods of Using the Same; Institution of Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that a complaint was filed with the U.S. International Trade Commission on October 16, 2015, under section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, on behalf of Select Comfort Corporation of Minneapolis, Minnesota and Select Comfort SC Corporation of Greenville, South Carolina. Supplements were filed on October 28, 2015 and November 5, 2015. The complaint, as supplemented, alleges violations of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain air mattress systems, components thereof, and methods of using the same by reason of infringement of certain claims of U.S. Patent No. 5,904,172 ("the '172 patent") and U.S. Patent No. 7,389,554 ("the '554 patent"). The complaint further alleges that an industry in the United States exists as required by subsection (a)(2) of section 337.

The complainants request that the Commission institute an investigation and, after the investigation, issue a limited exclusion order and cease and desist orders.

ADDRESSES: The complaint, except for any confidential information contained therein, is available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Room 112, Washington, DC 20436, telephone (202) 205-2000. Hearing impaired individuals are advised that information on this matter can be obtained by

contacting the Commission's TDD terminal on (202) 205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

FOR FURTHER INFORMATION CONTACT: The Office of Unfair Import Investigations, U.S. International Trade Commission, telephone (202) 205-2560.

Authority: The authority for institution of this investigation is contained in section 337 of the Tariff Act of 1930, as amended, and in section 210.10 of the Commission's Rules of Practice and Procedure, 19 CFR 210.10 (2015).

Scope of Investigation: Having considered the complaint, the U.S. International Trade Commission, on November 16, 2015, ORDERED THAT—

(1) Pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, an investigation be instituted to determine whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain air mattress systems, components thereof, and methods of using the same by reason of infringement of one or more of claims 2, 6, 9, 12, 16, 20 and 22-24 of the '172 patent and claims 1, 5, 6, 16, 22, and 26 of the '554 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337;

(2) Pursuant to Commission Rule 210.50(b)(1), 19 CFR 210.50(b)(1), the presiding administrative law judge shall take evidence or other information and hear arguments from the parties and other interested persons with respect to the public interest in this investigation, as appropriate, and provide the Commission with findings of fact and a recommended determination on this issue, which shall be limited to the statutory public interest factors set forth in 19 U.S.C. 1337(d)(1), (f)(1), (g)(1);

(3) For the purpose of the investigation so instituted, the following are hereby named as parties upon which this notice of investigation shall be served:

(a) The complainants are: Select Comfort Corporation, 9800 59th Avenue North, Minneapolis, MN 55442; Select Comfort SC Corporation, 103 Shaw Street, Greenville, SC 29609.

(b) The respondents are the following entities alleged to be in violation of section 337, and are the parties upon which the complaint is to be served: Sizewise Rentals LLC, 1600 Genessee, Suite 950, Kansas City, MO 64102; American National Manufacturing Inc., 252 Mariah Circle, Corona, CA 92879; Dires LLC and Dires LLC d/b/a Personal Comfort Beds, 3411 Lake Breeze Drive, Bldg. 601, Ste. E/F, Orlando, FL 32808.

(c) The Office of Unfair Import Investigations, U.S. International Trade Commission, 500 E Street SW., Suite 401, Washington, DC 20436; and

(4) For the investigation so instituted, the Chief Administrative Law Judge, U.S. International Trade Commission, shall designate the presiding Administrative Law Judge.

Responses to the complaint and the notice of investigation must be submitted by the named respondents in accordance with section 210.13 of the Commission's Rules of Practice and Procedure, 19 CFR 210.13. Pursuant to 19 CFR 201.16(e) and 210.13(a), such responses will be considered by the Commission if received not later than 20 days after the date of service by the Commission of the complaint and the notice of investigation. Extensions of time for submitting responses to the complaint and the notice of investigation will not be granted unless good cause therefor is shown.

Failure of a respondent to file a timely response to each allegation in the complaint and in this notice may be deemed to constitute a waiver of the right to appear and contest the allegations of the complaint and this notice, and to authorize the administrative law judge and the Commission, without further notice to the respondent, to find the facts to be as alleged in the complaint and this notice and to enter an initial determination and a final determination containing such findings, and may result in the issuance of an exclusion order or a cease and desist order or both directed against the respondent.

By order of the Commission.

Issued: November 17, 2015.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2015-29670 Filed 11-19-15; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

Foreign Claims Settlement Commission

AGENCY: Foreign Claims Settlement Commission of the United States, DOJ.

Appendix B: Federal Register Notice

Appendix C

Calendar of Hearing Witnesses

Appendix C: Calendar of Hearing Witnesses

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Trans-Pacific Partnership Agreement: Likely Impact on the
U.S. Economy and on Specific Industry Sectors

Inv. No.: TPA-105-001

Dates and Time: January 13, 2016 – 9:30 a.m. (DAY 1)

Sessions were held in connection with this investigation in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

PANEL 1: Congressional, Embassy, and State Government Witnesses

CONGRESSIONAL APPEARANCES:

The Honorable Sander M. Levin, U.S. Representative, 9th District, Michigan

The Honorable Henry Cuellar, Ph.D., U.S. Representative, 28th District, Texas

EMBASSY APPEARANCES:

Embassy of the Republic of Singapore

Washington, DC

His Excellency Ashok Kumar Mirpuri, Ambassador of the Republic of Singapore to the United States of America

Embassy of Japan

Washington, DC

His Excellency Ken Ichiro Sasae, Ambassador of Japan to the United States of America

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Embassy of Peru

Washington, DC

His Excellency Luis Miguel Castilla, Ambassador of Peru to the United States of America

STATE GOVERNMENT WITNESS:

U.S. Conference of Mayors

Washington, DC

The Honorable Christopher Cabaldon, Mayor of West Sacramento, CA

PANEL 2: Business and Labor Views

ORGANIZATION AND WITNESS:

Chamber of Commerce of the United States of America

Washington, DC

John Murphy, Senior Vice President, International Policy

U.S.-Japan Business Council

Washington, DC

James W. Fatheree, President

Emergency Committee for American Trade (“ECAT”)

Washington, DC

Vanessa Sciarra, Vice President

National Foreign Trade Council (“NFTC”)

Washington, DC

Alan Wm. Wolff, Chairman

National Farmers Union

Washington, DC

Roger Johnson, President

American Federation of Labor and Congress of Industrial Organizations (“AFL-CIO”)

Washington, DC

Celeste Drake, Policy Specialist for Trade and International Economics

International Union, United Automobile, Aerospace & Agricultural Implement Workers of America (“UAW”)

Washington, DC

Josh Nassar, Legislative Director

United Steel Workers (“USW”)

Pittsburgh, PA

Leo W. Gerard, International President

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International Association of Machinists and Aerospace Workers (“IAM”)

Upper Marlboro, MD

Bruce Olsson, Assistant Legislative Director

PANEL 3: Services and Digital Trade

ORGANIZATION AND WITNESS:

Coalition of Services Industries (“CSI”)

Washington, DC

Peter Allgeier, President

American Insurance Association (“AIA”)

Washington, DC

Stephen Simchak, Director, International Affairs

Information Technology Industry Council (“ITIC”)

Washington, DC

Ed Brzytwa, Director of Global Policy for Localization, Trade and Multilateral Affairs

IBM Corporation

Washington, DC

Christopher A. Padilla, Vice President, IBM Government and Regulatory Affairs

International Intellectual Property Alliance (“IIPA”)

Washington, DC

Steven J. Metalitz, Counsel

Wal-Mart Stores, Inc.

Washington, DC

Sarah Thorn, Senior Director, International Trade

Cask LLC

Stafford, VA

George Judd, Vice President

Software & Information Industry Association (“SIIA”)

Washington, DC

Carl Schonander, Senior Director for International Public Policy

- END -

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Inv. No.: TPA-105-001

Dates and Time: January 14, 2016 – 9:30 a.m. (DAY 2)

Sessions were held in connection with this investigation in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

CONGRESSIONAL APPEARANCE:

The Honorable Sherrod Brown, United States Senator, Ohio

PANEL 1: Agriculture

ORGANIZATION AND WITNESS:

U.S. Dairy Export Council

Arlington, VA

Thomas M. Suber, President

National Cattlemen’s Beef Association

Washington, DC

Kevin Kester, Policy Division Chair

R-CALF United Stockgrowers of America (“R-CALF USA”)

Billings, MT

Bill Bullard, CEO, The Ranchers-Cattlemen Action Legal Fund

United States Hide, Skin and Leather Association (an affiliate of the North American Meat Institute)

Washington, DC

Stephen M. Sothmann, President

BroschTrade LLC

Woodville, VA

on behalf of

The National Chicken Council of the United States (“NCC”)

USA Poultry & Egg Export Council (“USAPEEC”)

Michael Brown, President, NCC

Kevin J. Brosch) – OF COUNSEL

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Cargill, Incorporated

Washington, DC

Devry Boughner Vorwerk, Vice President, Corporate Affairs

Tuttle Taylor & Heron

Washington, DC

on behalf of

Blue Diamond Growers

Julian B. Heron) – Of Counsel

American Olive Oil Producers Association

Clovis, CA

Kimberly Houlding, President and CEO

Sweetener Users Association (“SUA”)

Washington, DC

Tom Earley, Vice President, Agralytica & SUA consultant

Pet Food Institute

Washington, DC

Peter Tabor, Vice President, Regulatory and International Affairs

PANEL 2: Manufacturing

ORGANIZATION AND WITNESS:

National Association of Manufacturers (“NAM”)

Washington, DC

Linda M. Dempsey, Vice President, International

Semiconductor Industry Association (“SIA”)

Washington, DC

C. Devi Bengfort Keller, Director of Global Policy

The Tile Council of North America

Washington, DC

Eric Astrachan, Executive Director

The General Electric Company (“GE”)

Washington, DC

Karan K. Bhatia, Vice President and Senior Counsel, Global Government Affairs & Policy

Barcoding, Inc.

Baltimore, MD

Jay Steinmetz, CEO and Founder

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ASTM International

West Conshohocken, PA

Anthony R. Quinn, Director, Public Policy and International Trade

Sandler, Travis & Rosenberg, P.A.

Washington, DC

Nicole Bivens Collinson, President, Trade Negotiations and Legislative Affairs

PANEL 3: Academics and Think Tanks

ORGANIZATION AND WITNESS:

Richard O. Cunningham

National Graduate Institute for Policy Studies (“GRIPS”)

Tokyo, Japan

Kenichi Kawasaki, Senior Fellow

Third Way

Washington, DC

Gabriel Horwitz, Vice President of the Economic Program

Ideal Taxes Association

Pittsburgh, PA

Dr. Jesse T. Richman, Associate Professor of Political Science, Old Dominion University

Dr. Howard Richman, Research Associate

Georgetown University

Center for Business and Public Policy

Washington, DC

Bob Vastine, Senior Industry Fellow

- END -

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission’s hearing:

Subject: Trans-Pacific Partnership Agreement: Likely Impact on the
U.S. Economy and on Specific Industry Sectors

Inv. No.: TPA-105-001

Dates and Time: January 15, 2016 – 9:30 a.m. (DAY 3)

Sessions were held in connection with this investigation in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

PANEL 1: Textiles, Apparel, and Chemicals

ORGANIZATION AND WITNESS:

American Apparel & Footwear Association (“AAFA”)
Arlington, VA

Stephen Lamar, Executive Vice President

Barnes & Thornburg LLP
Washington, DC

on behalf of

U.S. Fashion Industry Association

Julia Hughes, President

David M. Spooner) – Of Counsel

Gap Inc.

San Francisco, CA

Stephanie Lester, Director, Government Affairs

Outdoor Industry Association

Boulder, CO

Rich Harper, Policy Advisor for Trade

Footwear Distribution and Retailers of America (“FDRA”)

Washington, DC

Matt Priest, President

ORGANIZATION AND WITNESS:

American Chemistry Council (“ACC”)

Washington, DC

Greg Skelton, Senior Director

Personal Care Products Council

Washington, DC

Francine Lamoriello, Executive Vice President

Halosil International, Inc.

New Castle, DE

Maryalice Panarello StClair, Vice President, Business Development

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PANEL 2: Various Topics

ORGANIZATION AND WITNESS:

Trade in Services International (“TISI”)

Chevy Chase, MD

Linda Schmid, International Trade and Development Adviser

Economic Policy Institute

Washington, DC

Robert E. Scott, Director of Trade and Manufacturing Policy Research

Americans Backing a Competitive Dollar – Now!

John R. Hansen, Ph.D., Founding Director

Coalition for a Prosperous America (“CPA”)

Washington, DC

Michael Stumo, Chief Executive Officer

Industrial Energy Consumers of America

Washington, DC

Paul N. Cicio, President

WileyRein LLP

Washington, DC

Nova Daly, Senior Public Policy Advisor

PANEL 3: IP and Pharmaceuticals

Information Technology and Innovation Foundation (“ITIF”)

Washington, DC

Stephen Ezell, Vice President, Global Innovation Policy

Doctors Without Borders

New York, NY

Judit Rius Sanjuan, U.S. Manager & Legal Policy Adviser, Access Campaign

Knowledge Ecology International (“KEI”)

Washington, DC

James Love, Director

Union for Affordable Cancer Treatment (“UACT”)

Washington, DC

Manon Ress, Representative

-END-

Appendix C: Calendar of Hearing Witnesses

Appendix D

Summary of the Views of Interested Parties

Appendix D: Summary of the Views of Interested Parties

Views of Interested Parties

Interested parties had the opportunity to file written submissions to the Commission in the course of this investigation and to provide summaries of the positions expressed in the submissions for inclusion in this report. This appendix contains these written summaries, provided that they meet certain requirements set out in the notice of investigation. The Commission has not edited these summaries. This appendix also contains the names of other interested parties who filed written submissions during investigation but did not provide written summaries. A copy of each written submission is available in the Commission's Electronic Docket Information System (EDIS).¹²²⁹ The Commission also held a public hearing in connection with this investigation on January 13–15, 2016. The full text of the transcript of the Commission's hearing is also available on EDIS.

Written Submissions

Senator Sherrod Brown

No written summary. Please see EDIS for full submission.

Representative Henry Cuellar, Ph.D.

No written summary. Please see EDIS for full submission.

Representatives Rosa DeLauro, Louise Slaughter, Peter DeFazio, and Barbara Lee

The USITC's TPP report will only be relevant if the content reflects the realities of our modern economy. With respect to past USITC studies, projections have been contradicted by actual trade agreement outcomes. The US Congress must have reliable data to understand the impact the TPP may have on American families, domestic businesses, and farmers. The primary concern that the USITC must consider with regard to the economic impact of the TPP is its role in sending American jobs overseas, flooding our markets with more imports, and thus suppressing wages at home.

We urge you to consider not only projected gains from any increase in exports under the agreement, but also the impact of projected increases in imports. The TPP was modeled on the US-Korea Free Trade Agreement (KORUS). The 2007 USITC KORUS report projected a negligible

¹²²⁹ Available online at <http://edis.usitc.gov>.

positive impact on American output and an improved trade balance with Korea. However, the US-Korea goods trade deficit grew between 2011 and 2015 by at least 93 percent.

Additionally, the study must assess how the TPP will impact aggregate demand. Which regions of the country will be particularly devastated? How will the agreement's intellectual property provisions increase the price of medicine and information technology? How will USITC calculate the effect of the TPP's investor protections with respect to the promotion of outward capital flows and the implications it would have for displacing investment in US production capacity and, as a result, job creation? How will the agreement's investor protections expand U.S. liability to damage awards for investor-state dispute settlement challenges?

As the USITC considers the design of its TPP analysis, how will it take into consideration that the TPP's rules of origin are very weak? Only 45 percent of a vehicle must be made in a TPP country for it to receive the tariff benefits of the trade agreement. With potentially 55 percent of motor vehicle parts originating in a non-TPP country like China, the threat to the American auto industry is serious.

We urge USITC to adopt a new model for evaluating the impact of trade agreements. As researchers at the Global Development and Environment Institute at Tufts University have pointed out, many of the modest growth projections for the U.S. under the TPP are premised on unrealistic economic assumptions in their analysis. Indeed, past projections by the USITC have relied upon similar computable general equilibrium (CGE) models. The primary problems with CGE models are the assumptions of full employment, a stable trade balance, and constant income distribution.

Finally, there are no enforceable currency management disciplines in the TPP text. Japan, in particular, has an extensive history of currency management. Former IMF Chief Economist Simon Johnson has labeled the separate currency "declaration" among TPP nations as "window dressing".

The costs of the TPP are likely to fall asymmetrically on the American middle class, low income men and women, and communities of color. Congress must know the full price of TPP's burden on working families in America's economy.

Representative Sander M. Levin

We all recognize that trade can be beneficial: the issue is not whether someone can pass an Econ 101 class. Instead, the issue is whether we are going to face up to the fact that our trading system today is much more complex than the simplistic trade model presented in an Econ 101 class. As Joseph Stiglitz pointed out recently, nineteenth century economics and the theory of

comparative advantage assumed a fixed level of technology and full employment. Those assumptions do not fit very well in today's world.

Further, one of the most critical economic issues facing our country today is growing economic inequality and a stagnant middle class. There is growing agreement among economists today that trade contributes to economic inequality in the United States. But some try to downplay that fact by pointing out that other factors may contribute more to the problem, as if that means we should not worry about the impact trade is having. This underscores that the substance of the trade agreements – the international rules – matter. Our trade agreements must be designed to shape trade and spread its benefits more broadly.

We also need to stop pretending that trade only has benefits and few costs. We need to stop talking exclusively about exports and downplaying the negative impact that some imports have. Of course, imports can help to lower prices for manufacturers and consumers. But lower prices do not do you much good if you have lost your job or seen your wage decline or stagnate. Again, as Jeffrey Sachs has said, "It's true that the benefits often outweigh the costs, leading to the argument that winners can compensate losers. But in America, winners rarely compensate losers; more often than not, the winners attempt to trounce the losers."

The Commission is charged with undertaking an economic analysis of the TPP and its broader context. It must cut through the simplistic generalizations in the debate today that trade is categorically good or bad. So often the main message from those who favor a trade agreement is their focus on exports and how jobs relating to them pay higher than the average. Analyses in opposition to trade often do mainly the opposite, positing the number of jobs mathematically for each quantum of the trade deficit. In its report on TPP, it is critical that the Commission dig far deeper into the likely economic impact of TPP and assess the impact of provisions related to labor, environment, currency manipulation, and many others.

The importance of the Commission's report is highlighted by the lack of detailed analysis on many of these economic issues. However, the impact of U.S. trade agreements is no longer a hypothetical issue, and no longer can we simply assume that the benefits of trade will outweigh its costs or that those who benefit will compensate those who lose. I expect the Commission, in its unique position, to produce a thorough and nuanced analysis of the TPP. We need new models – and new thinking.

Representative Daniel Lipinski

In his testimony, Congressman Daniel Lipinski outlined the past issues with the International Trade Commission's analysis of the United States-Korea Free Trade Agreement. Congressman Lipinski also outlined areas that he believes the International Trade Commission should take

into consideration when completing its economic analysis of the TPP, specifically rules of origin provisions, currency manipulation and the potential for depressed wages and job losses.

Republic of El Salvador

No written summary. Please see EDIS for full submission.

Embassy of Japan

No written summary. Please see EDIS for full submission.

Embassy of Peru

No written summary. Please see EDIS for full submission.

Republic of Singapore

No written summary. Please see EDIS for full submission.

3-C Technology

No written summary. Please see EDIS for full submission.

Professor Susan Aaronson

TPP is the first trade agreement to include binding commitments to facilitate cross-border information flows and to limit digital protectionism. On one hand, the Obama Administration asserts that “TPP will help preserve the open Internet and prevent its breakup into multiple, balkanized networks in which data flows are more expensive and more frequently blocked.” The Obama Administration overstates its case: TPP can’t maintain the Open Internet nor can it prevent intranets or other nation’s blocking or filtering. On the other hand, critics have said that the agreement undermines Internet freedom and access to information. They too are exaggerating the negatives of the agreement, basing their arguments on the copyright chapter, but downplaying the potential benefits derived from making the free flow of information a default for the trade agreement.

In this testimony, I use the e-commerce, services, and transparency chapters of TPP to argue that proponents and opponents alike are exaggerating the costs and benefits to the Internet. It is true that TPP will have an impact on Internet governance simply because it covers so many Internet providers and users and because its commitments will affect how governments can

behave when regulating cross-border information flows. TPP parties have a population of some 800 million people, or 11.4% of the Earth's total.

Moreover, TPP includes important and growing markets for digital products and services such as Vietnam, Colombia, Indonesia, the Philippines, South Korea, Taiwan, and Thailand have expressed interest in joining TPP should it come into effect. Moreover, if TPP is approved, it could have significant spillover effects upon how other governments deal with cross-border information flows. They will have to comply with TPP rules when they exchange information with TPP parties. At minimum, the US will want to use TPP as a guidepost for other trade agreements including TTIP and TISA under negotiation.

While it can't keep the Internet open, TPP has provisions which would allow the US to challenge censorship and filtering as trade barriers. Moreover, the agreement contains transparency requirements that could bring much needed sunshine, due process, and increased political participation to trade (and Internet related) policymaking in countries such as Vietnam and Malaysia.

But TPP critics make some important points that should not be ignored including its effects on freedom of expression and on cyber-security.

In sum, TPP is a big if; but TPP could have positive effects on the Internet if three things happen:

- First, the agreement must go into effect and other countries sign on;
- Secondly, if policymakers use its provisions to enhance human welfare—as example, to maintain Internet openness and challenge Internet censorship and filtering as barriers to trade, and
- if other nations build on TPP's language in their free trade agreements and/or at the WTO.

Aerospace Industries Association

The Aerospace Industries Association urges Congress to approve the Trans-Pacific Partnership and increase international trade substantially in the Pacific Rim region. Nearly 40 percent of U.S. exports and imports are made with the countries participating in this agreement.

Trade in the Pacific region is particularly important to the U.S. Aerospace and Defense industry, as demonstrated by the commitment of companies to participating in the upcoming Singapore Airshow. According to Kallman International, in 2014 the U.S. International Pavilion at the Singapore Airshow was the largest ever. This year more than 125 American companies are exhibiting at Singapore, ranging from publicly traded stalwarts to privately held small and

medium enterprises. That presence is a strong indicator of how important the region is to the U.S. aviation and aerospace business, and how interested countries in the region are to work with U.S. companies to further their security and economic interests.

With federal budgets still constrained by austerity measures imposed under the Budget Control Act of 2010, international trade is more critical than ever to the U.S. Aerospace and Defense industry. We strongly urge Congress to pass this important tool for expanding trade in a region that is rapidly growing in importance to our country.

Alignment Simple Solutions

Introduction

I'm a big proponent of trade agreements like the Trans-Pacific Partnership, because they help small businesses like mine. My company, Alignment Simple Solutions, manufactures QuickTrick Alignment Tools in the United States. Our products improve performance and lengthen tire life for safer and more effective transportation. QuickTrick provides the ability to reduce risk and damage through early detection without cumbersome equipment. We have five employees and we manufacture our products in-house, with components mostly made in the United States.

The Trans-Pacific Partnership would reduce barriers, simplify procedures, and expand market opportunities that would allow us to grow and create more jobs.

Barriers to Trade

Currently international trade is challenging, because high tariffs and shipping costs inhibit our customers. Our product is designed for people who want to save money by keeping their car on the road longer, so they're sensitive to the price.

Additionally, on a regular basis, we have things disappear in Customs. When this happens we have to reimburse the customer and we lose the sale. So, sometimes we have to stop selling to certain countries.

Benefits to Trade

Our core business is with racers and customizers. Many men in Australia are racing enthusiasts and it's become our biggest market, second only to Canada. When it's cold here, it's warm there, so this seasonal flip gives us a more steady revenue line.

The internet makes it possible to do things that would have been impossible in the past. A few years ago my company first started to sell things on eBay to test the market and it just so happened that we sold internationally in the first week.

I'm proud to say that now we have sold our products in over 105 countries. It's time for America's policies to match our potential. I hope Congress passes the Trans-Pacific Partnership to open more doors for U.S. companies.

Allegheny Technologies Incorporated

No written summary. Please see EDIS for full submission.

Aluminum Association

The U.S. aluminum industry has manufacturing operations in nearly every state, supports more than 670,000 direct, indirect and induced jobs, and, with \$154 billion in economic output, represents almost one percent of the nation's Gross Domestic Production. In 2014, U.S. aluminum product exports totaled \$12 billion and imports totaled \$17 billion. About 60 percent of U.S. aluminum trade is with TPP countries, mostly Canada and Mexico.

U.S. tariffs on aluminum products are generally low. For the bulk of U.S. aluminum trade with TPP partners, duties are currently zero because of provisions in NAFTA and the other existing FTAs. U.S. aluminum trade with Canada, Mexico, and the four other countries with which the U.S. has existing free trade agreements (Australia, Chile, Peru, and Singapore) will be largely unaffected by the TPP although certain provisions are designed to further facilitate trade with these existing FTA partners.

The TPP will have the most significant impact on U.S. trade with the five countries that TPP adds to America's FTA network: Japan, Vietnam, Malaysia, Brunei, and New Zealand. These countries currently account for less than 6 percent of U.S. aluminum trade, but they are growing markets for U.S. exports as well as sources of increasing U.S. imports. Currently, the value of U.S. aluminum product exports to those five countries is nearly \$500 million. Of that amount, over \$400 million are products that carry duties ranging as high as 27 percent. While going to zero tariffs will make it easier for U.S. exports to those countries, trade in aluminum products between non-partner countries and TPP countries also has the potential to adversely affect U.S. aluminum producers.

There is a high risk that exports of aluminum products from non-TPP countries, most notably China, can be mislabeled as to their origin or will be fabricated in the TPP country to avoid U.S. duties. This is already a problem for the U.S. aluminum industry and one that might be further exacerbated under the TPP. Primary aluminum that is minimally processed in China to qualify as a fabricated product, and thus avoid high export and value-added taxes, is then re-melted along with primary aluminum in a TPP country. Those fabricated products are shipped to the United States with no or low duties now, and would be completely duty-free under TPP. Optimistically,

the TPP offers the opportunity to influence and eliminate this kind of illegal and deceptive trade practice.

Other positive TPP outcomes for the U.S. aluminum industry include: customs administration rules that require transparency and more expedient processing of shipments; measures that place some parameters around state-owned enterprises (SOE) to temper the harmful competitive advantages of those companies; and improved market access for U.S. products made with aluminum. However, it is critical that the United States devote the resources necessary for implementation and enforcement.

In summary, the agreement offers potential opportunities to improve trade among the TPP partners, but only if non-party countries do not take advantage of facilities in TPP countries to manipulate their trade to the detriment of U.S. producers.

American Apparel & Footwear Association

The American Apparel & Footwear Association (AAFA), the Travel Goods Association (TGA), and the Fashion Accessories Shippers Association (FASA) collectively represent many U.S. companies that make, market, and sell travel goods for the \$36.5 billion market. In addition, AAFA represents U.S. companies that make, market, and sell apparel and footwear for the \$360 billion apparel and footwear market. These combined industries employ more than 4 million U.S. workers. All three organizations strongly support the TPP for the following reasons:

1. TPP's reach alone presents opportunities for our industry to enter new markets and reach new consumers. When fully implemented, TPP will represent 40 percent of the world's Gross Domestic Product (GDP) and 800 million consumers.
2. The potential for significant U.S. duty savings – approximately \$2.8 billion based on 2015 figures – create opportunities to lower costs, which in turn support U.S. jobs and spur innovations.
 - Flexible rules of origin combined with immediate duty elimination mean there will be immediate cost saving benefits on travel goods.
 - Workable rules of origin combined with immediate duty free access for many goods mean strong opportunities in the footwear sector.
 - While there are some immediate benefits for apparel, other benefits will take longer to materialize due to longer duty phase outs and restrictive rules of origin.
3. TPP provides opportunities to increase exports of U.S.-made or U.S.-branded products to other TPP countries. Through the elimination of duties or other restrictive measures, such

as a tariff rate quota Japan currently imposed on U.S. leather footwear exports, U.S. companies will be able to enter markets that currently restrict access.

4. TPP will also enable companies to reconfigure current supply chains to take advantage of fresh sourcing opportunities because more countries make up the TPP than stand-alone free trade agreements, such as the North American Free Trade Agreement (NAFTA).

We note that some apparel and footwear members are still concerned about the impact of the TPP due to:

5. Long duty phase outs that delay cost savings;
6. Restrictive rules of origin that may discourage U.S. exports (such as exports of U.S. legwear); and
7. Uncertainties related to the U.S./Vietnam labor provisions.

American Chemistry Council

No written summary. Please see EDIS for full submission.

American Farm Bureau Federation

No written summary. Please see EDIS for full submission.

American Federation of Labor & Congress of Industrial Organizations

The TPP is likely to harm the U.S. economy, cost jobs, and lower wages. The primary measure of the success of our trade policies should be increasing jobs, rising wages, and broadly shared prosperity, not higher corporate profits and increased offshoring of America's jobs and productive capacity. Trade rules that enhance the already formidable economic and political power of global corporations—including investor-to-state dispute settlement, excessive monopoly rights for pharmaceutical products, and deregulatory financial services and food safety rules—will continue to undermine worker bargaining power, here and abroad, as well as weaken democratic processes and regulatory capacity across all 12 TPP countries.

While once hopeful that the TPP would finally be the trade agreement that broke the elite stranglehold on trade policy and put working families at the front and center, the AFL-CIO concludes that the TPP fails to strike the proper balance: it puts profits over people and provides more leverage to defend investor rights than human rights. Given the misguided values enshrined in the TPP, it will actually make it harder to create a virtuous cycle of rising wages and demand in all 12 TPP countries.

While the TPP may create some limited opportunities for increased exports, there is a substantial likelihood that it will increase our trade deficit, which has been a substantial drag on job growth for more than twenty years. Especially at risk are jobs and wages in the auto, aerospace, aluminum and steel, apparel and textile, call center, and electronic and electrical machinery industries. The critical failure to address currency misalignment, feeble auto rules of origin and inadequate state-owned enterprise provisions, extraordinary rights provided to foreign investors and pharmaceutical companies, the undermining of Buy American, and the inclusion of a labor framework that has proved itself ineffective are key among the mistakes that contribute to our conclusion that the certain risks of TPP outweigh its speculative and limited benefits.

It is unfortunate that many of the debates around the TPP mirror those made 20 years ago about NAFTA. The AFL-CIO and our allies in the environmental, human rights, faith, and small business communities have marshaled the evidence amassed over the 20 years and attempted to shape trade policy to respond to lessons learned. Too many U.S. communities have lost their economic engines, too many American workers are told they can't have a union in the workplace because the employer will move overseas, too many workers in Mexico and Peru are abused and exploited, and too many companies view trade deals weapons with which they can impose their preferred deregulatory agenda over citizen wishes to contrary. We were unable to secure needed changes to fix these shortcomings to trade rules in the TPP.

On behalf of the millions of working people we represent, the AFL-CIO urges the U.S. ITC to provide a thorough and balanced review of the TPP, including a comprehensive examination of its unbalanced provisions that skew benefits to economic elites while leaving workers to bear the brunt of the TPP's downside.

American Federation of Labor & Congress of Industrial Organizations Action Network

No written summary. Please see EDIS for full submission.

American Insurance Association

The TPP will create significant access for U.S. insurers in a vitally important region. The low insurance penetration rates (an indicator of insurance sector development) and relatively high growth rates of many TPP countries demonstrate that there is enormous potential for U.S. insurers in those countries. To illustrate the growth potential outside of the U.S., the U.S. insurance penetration rate is 10.7%, well above the OECD average of 8.4%, and far above the 1.42% penetration rate of Vietnam, and the 1.7% penetration rate of Peru. The U.S.'s insurance penetration rate is by far the highest of all of the TPP markets. Liberalizing trade and

investment rules in those countries through the TPP will permit U.S. insurers to compete more effectively. The TPP extends standard FTA commitments that are the bedrock of open insurance markets, including National Treatment (NT), Most-Favored Nation (MFN), market access commitments, cross-border commitments, new financial services commitments, senior management and boards of directors commitments, expedited availability of insurance commitments, investment protections, and others. The TPP also expands new types of commitments, such as commitments that limit the anti-competitive advantages enjoyed by state-owned post offices that underwrite insurance. Furthermore, we believe that the TPP will create more economic growth in all of the TPP markets, which in turn will generate more demand for insurance.

The benefits of TPP for the U.S. should not end with our eleven trading partners, however. The TPP has always been intended to allow countries to “dock” into the agreement, and we believe that TPP should be expanded to new Parties when possible, which will multiply the benefits of the TPP for U.S. insurers. However, new entrants to the TPP must be held to the highest standards and must have few and very narrowly tailored non-conforming measures (NCMs).

However, there are areas of the TPP that are not as strong as we had hoped. We are concerned that financial institutions will receive commitments on transfer of information (“data flows”) and data server locations that are weaker than those that other sectors will receive. Furthermore, it is clear that significant exceptions were taken by some of the TPP Parties in which there was the most potential for liberalization.

To summarize, though it has flaws that should be addressed, we believe that the TPP will create significant access for U.S. P&C insurers in markets with enormous potential. Furthermore, we believe that the TPP will create more overall economic growth in all of the TPP markets, which in turn will generate more demand for insurance. We also believe that the benefits of the TPP can be increased exponentially when new countries join the existing twelve TPP Parties.

American Natural Soda Ash Corporation

No written summary. Please see EDIS for full submission.

American Olive Oil Producers Association

The AOOPA is pleased with the removal of olive oil tariffs and non-tariff barriers by the TPP membership. The AOOPA membership supports the sanitary and phytosanitary agreement, and is pleased with trade facilitation language.

Like the U.S. wine industry in the 1970's, today the olive oil industry has small, medium, and large entities. Small and medium sized entities will take advantage of the small- and medium-sized enterprises program (SMEs).

The USITC Olive Oil Report (Inv. No. 332-537) provides comprehensive information on the world's olive oil producing countries, the consumer markets, and the obstacles U.S. olive oil producers face as the domestic industry develops. USTR should review this and the directives in the Federal Agriculture Reform and Risk Management Act of 2013 (Agricultural Act of 2014) Managers' Statements as they begin to implement the agreement and address additional trade problems through the TPP Technical Barriers to Trade process outlined in Chapter Eight of the agreement.

The AOOPA is disappointed that the TPP did not specifically include olive oil in the Technical Barriers to Trade Annex among other industries listed including: wine and distilled spirits, medical devices, cosmetics, pharmaceuticals, and information and communication technology. The exclusion of olive oil may require the TPP olive oil industries to organize, develop, enhance cooperation and implement their agenda outside the TPP's framework. Having no forum in TPP to address the harmonization of grade standards limits new world producers' ability to affect change. Currently, the International Olive Council (IOC), which is controlled by European producers, is responsible for international olive oil standards. TPP olive oil producing countries are not members of the IOC. Nevertheless, to enhance TPP trade, TPP olive oil industries plan to harmonize their grade standards, labeling and packaging, so trade within TPP countries will not be obstructed by different grade standards, labeling and packaging requirements.

American Peanut Product Manufacturers, Inc.

No written summary. Please see EDIS for full submission.

American Pistachio Growers

The Trans-Pacific Partnership is the next agreement that holds the potential for the industry to expand trade. In 2009, American Pistachio Growers, formally the Western Pistachio Association, requested the United States Trade Representative's office seek the elimination of tariffs for all TPP member countries with a focus on Vietnam. At that time, Vietnam's tariff for raw pistachios was 40 percent ad valorem. During the course of the negotiations, Vietnam unilaterally reduced their applied tariff from 40 to 15 percent. As a result, the industry has already seen market growth in Vietnam. Upon implementation of the agreement, Vietnam will reduce its tariffs by a third, with all duties being completely eliminated beginning year three of the agreement. Ultimately, the elimination of all duties are estimated to develop Vietnam into a \$25 million market.

American Soybean Association and U.S. Soybean Export Council

After 5 years of negotiations the United States concluded the Trans-Pacific Partnership (TPP) with Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam on October 5, 2015. TPP seeks to lower trade barriers such as tariffs, establish a common framework for intellectual property, enforce standards for labor law and environmental law, and establish an investor-state dispute settlement mechanism. TPP makes sure U.S. farmers, ranchers, manufacturers, and small businesses can compete—and win—in some of the fastest-growing markets in the world.

With more than 95 percent of the world’s consumers living outside our borders, TPP will significantly expand the export of Made-in-America goods such as agricultural products that support American jobs. The TPP agreement grants new and enhanced market access in Japan, Vietnam, Malaysia, New Zealand and Brunei, countries where the United States does not currently have a free trade agreement (FTA). As such the TPP agreement is necessary for U.S. exports to remain competitive. Countries in the TPP currently account for up to 42% of all U.S. agricultural exports—that’s \$59.4 billion for the last marketing year (September-August).

Soybeans and soybean products will be minimally but positively impacted by the TPP agreement through the elimination of tariffs and an increase in direct sales of soybean and soybean products in TPP countries. In the 2014/2015 marketing year, the United States exported \$5 billion of soybeans and soybean products to the TPP region and \$27.7 billion to the rest of the world. This number is likely to grow under the new agreement. The TPP strengthens trade rules and provides new market access for U.S. agricultural exports to Japan, Malaysia, Vietnam, New Zealand and Brunei.

While the direct impact of TPP on soybeans will be relatively small, soybeans and the soybean products have a good chance of being indirectly benefited by the increase in U.S. meat exports likely to be accomplished through the TPP.

American Sugar Alliance

No written summary. Please see EDIS for full submission.

Americans Backing a Competitive Dollar

Implementing the TPP at this time is difficult to justify. The [Petri-Plummer](#) analysis indicates a net TPP benefit that would not be statistically different from zero after fifteen years, and their analysis ignores substantial job loss and income distribution costs. [Tufts research](#) indicates even

smaller, probably negative, net TPP benefits and highlights costs ignored by Petri-Plummer. The biggest downside risk is that the TPP will significantly increase America's already excessive trade deficits because it does nothing to fix the overvalued dollar.

The dollar's overvaluation has been driving the loss of thousands of American factories and millions of American jobs for nearly 40 years, yet no mechanisms have been put in place in the TPP or through parallel legislation to bring the dollar back to its trade-balancing equilibrium level and keep it there. By expanding trade without fixing the dollar's value, the TPP would make existing deficits even worse.

Many have called for "tough language" in the TPP or in parallel legislation to prevent currency manipulation. However, such language would not fix the overvalued dollar because currency manipulation has contributed very little to the problem.

Currency manipulators have been the favorite scapegoat for U.S. trade deficits since the 1970s. However, U.S. laws designed to fight currency manipulation have never solved the problem. Even the IMF, which has had rules against currency manipulation since it was founded almost seventy years ago, has never once managed to "convict" a country of currency manipulation.

As defined by the IMF, currency manipulation means that a member government is manipulating the exchange rate of its currency and thus the international monetary system.

However, only 22 percent of all foreign purchases of U.S. securities and other portfolio investments in America between 1990 and 2015 were by official bodies ([USTIC 2016](#)). The remaining 78 percent were made by foreign private investors. Since 2000, the share of official purchases accounted for only 10 percent of the total. And as [Fred Bergsten recently noted](#), "manipulation declined substantially in 2014 ... and almost disappeared in 2015."

These facts seriously undermine the argument that "currency manipulation" is the cause of America's trade deficits. In fact, as shown by the recent work of [Hansen \(2016\)](#), currency manipulation may never have been the key reason for America's trade deficits. The problem instead has been currency misalignment caused primarily by excessive private foreign capital inflows driving up the dollar's value.

Implications for the TPP: The cost-benefit case for implementing the TPP is already exceedingly weak, and absent any effective mechanism to return the dollar to its trade-balancing equilibrium rate and keep it there, growing trade deficits will inevitably turn the small estimated TPP net benefits into substantial net losses for America.

The TPP should therefore be put on hold until an appropriate mechanism linking the dollar's value to balanced trade is established.

Apfelbaum Industrial

Introduction

My company manufactures high and medium voltage equipment and accessories and Oil Transformers Reclaiming Equipment used for Utility, Oil and for a variety of other industries. One of the biggest obstacles we face is the difficulty in creating international alliances to facilitate the successfully export business in today's highly competitive market. The Trans-Pacific Partnership will open a wide window of opportunities to grow our business and other small businesses, especially in Asian countries.

Barriers to Trade

While my company is interested in expanding internationally, opening up new markets for the Oil Transformer Reclaiming Machinery, our goal remains a challenge. Much of the challenge comes down to tariffs: currently, American-made machinery is taxed as high as 70 percent in TPP member countries. By nearly doubling the cost of our products, these tariffs make it virtually impossible to compete with domestic and manufacturers in those countries, pricing us out of the market.

Benefits of Trans-Pacific Partnership

The recently finalized Trans-Pacific Partnership will strengthen our economy by opening new markets for Texas businesses, farmers, and workers. More specifically, the TPP will eliminate all tariffs on American manufactured products like mine, allowing us to compete in countries where it is currently too costly to do business. Without this agreement, growth opportunities in other countries, especially in the Asia Pacific, will remain out of reach for us.

Conclusion

The TPP will support more trade to help more small businesses like mine compete in the global marketplace and create jobs for Texas workers. It is an increasingly global world, and we simply need these agreements to keep us competitive.

Arkema Inc.

No written summary. Please see EDIS for full submission.

Association of Global Automakers

No written summary. Please see EDIS for full submission.

ASTM International

No written summary. Please see EDIS for full submission.

AZCA, Inc.

Introduction

My company, AZCA, Inc., is a management consulting and investment banking firm that assists companies interested in expanding into Japan and other Asia-Pacific markets. In an increasingly interdependent global economy, many of America's businesses are reassessing their direction and expanding beyond our borders, as 95 percent of the world's customers live outside of the United States. Trade agreements like the Trans-Pacific Partnership (TPP) will reduce barriers to trade, allowing more American companies to increase their exporting to the Pacific Rim nations, thereby creating jobs for American workers and growing our economy.

Barriers to Trade

The challenges businesses face when seeking to do business in a new country depend on the kind of products or services they're exporting. Many of our clients are emerging, high-growth companies in the high-technology sector, including electronics, information technology, environmental technology, and life sciences.

Currently, high tariffs on American-made technology products make it difficult for American businesses to compete with domestic suppliers in Asian markets. For example, IT products are taxed up to 35 percent in TPP member countries, and high-tech instruments are taxed up to 25 percent.

Additionally, every country has different Customs requirements and processes, creating administrative hurdles that can be particularly burdensome for a small business. The more complicated the Customs process is, the more likely something will go wrong, causing a delay at the border and making that supplier a less attractive option for foreign buyers.

Benefits of the Trans-Pacific Partnership

TPP will level the playing field for American companies doing business in the Pacific Rim. The agreement eliminates all tariffs in the member countries on products manufactured in America, including the high-technology products made by my clients. In doing so, TPP will open doors for American businesses into markets they were previously unable to compete in.

Additionally, TPP will harmonize the 12 countries' Customs processes so that America's small businesses won't have to spend the time and administrative costs necessary to ensure

compliance in each individual country. The less time our businesses have to spend navigating the intricate web of international trade systems, the more time they can spend selling their products to foreign buyers.

In my state of California, businesses have already seen the benefit of trading in the Pacific Rim. Japan is the United States' fourth largest export market, and California exported \$12.2 billion in goods to Japan in 2014. Goods exported from California worldwide have supported over 775,000 U.S. jobs. Trade agreements make it easier to do business abroad and will expand on this success, allowing businesses to create even more jobs.

Conclusion

The more our businesses can export, the more they can create jobs in the United States, growing our economy. TPP will reduce or eliminate 18,000 tariffs and other barriers to trade, opening up new markets to American companies so that they continue contributing to our economic growth.

Bakery, Confectionery, Tobacco Workers and Grain Millers International Union

No written summary. Please see EDIS for full submission.

Barcoding, Inc.

Introduction

I am the CEO of Barcoding, Inc. a \$50-million company, headquartered in Baltimore, Maryland with about 70 employees in offices across the country. We design, develop, and deploy software, hardware, and accompanying technologies for automatic identification.

We grease the wheels for U.S. commerce. If you distribute or manufacture products, there's a chance you work with us in a way. Our customers include companies like Dick's Sporting Goods, Enterprise Rent-a-Car, Georgia Pacific, and Toyota.

Barriers to Trade

We are failing to keep up our ability to do business internationally. Every time we do business overseas we experience several challenges, which impede our profitability and make those experiences less desirable than just offering products in the United States. And as a small company, we are learning how these international processes work on the fly— we do not have the resources to manage most of these issues to the depth of large multi-national corporations.

Appendix D: Summary of the Views of Interested Parties

We constantly have products stuck in customs. Many of our customers are manufacturers who have just-in-time operations—we can't afford for items to be late.

The tariffs on our products are complicated and expensive. Whether the customer pays for the tariff or we do, we lose money.

Different countries have different standards for power supplies and wireless technology. These variations are another burden for our small business to overcome.

We are also concerned about intellectual property protections in other countries. We developed a technology jointly with Europeans, but are nervous to show this product to the Chinese, because we have heard horror stories about Chinese businesses stealing U.S. ideas without any repercussions. The effect is we lose the opportunity to reach customers throughout Asia.

Previous Trade Agreement Successes

In our experience, it is easier to do business in countries where the United States has trade agreements in place. For example, it is easiest for us to work in Mexico and Canada, because of NAFTA. We have fewer challenges shipping our products there, largely because U.S. package delivery companies like UPS have clear shipping processes. It should be noted that we typically get money upfront when shipping to Mexico.

Benefits of Trans-Pacific Partnership

The Trans-Pacific Partnership would reduce many of the barriers we face with doing business in Asia Pacific countries, help increase our sales, and hire more workers.

It would fast-track shipping requirements, reduce tariffs, simplify customs and regulations, protect intellectual property, and safeguard intellectual property.

Conclusion

While my company would benefit from doing more work internationally, the sad reality is it is just so much easier to do work domestically.

But the world is changing and increasingly, there are more opportunities for growth outside the United States. It is time our trade policies reflect this reality and make it easier for U.S. businesses, particularly small business, to do business internationally.

Big Apple Coffee Party

To perform a fair assessment of the Trans-Pacific Partnership, the ITC must avoid the analytical pitfalls that assessments of past trade agreements have falling into leading to failed agreements that we are living with. In addition, to fulfill your responsibility, the ITC must consider the impact of increased inequality the TPP would cause both on the poorest Americans and also on society as a whole. The ITC report must discuss the possibility of severe adverse impacts including the risk of financial crises, the worsening of global warming and the adverse effects on our citizens' health. We urge the U.S. International Trade Commission to perform such a fair and comprehensive assessment.

Biotech Innovation Organization

No written summary. Please see EDIS for full submission.

Ms. Nicole Bivens Collinson

The Trans Pacific Partnership (TPP) is hailed as a 21st Century agreement however, one could argue that it is a 22nd Century agreement is what is needed to move trade forward. There are key elements of this agreement that should be applauded yet the traditional way of negotiating agreements has not changed to accommodate modern global supply and value chains. The TPP as a trading bloc will greatly enhance manufacturers' ability to employ a more global supply chain, but it is limited by excluding key free trade partners with which we have existing free trade agreements and in which U.S. companies have invested.

In the textile and apparel sectors specifically, the TPP should be modified to accommodate existing free trade partners that are vital to the value supply chains of apparel manufacturing. The European Union has lead the way for including such accommodations in its most recent free trade agreements and thereby has given its manufacturers an advantage over many U.S. manufacturers in markets where each party has a free trade agreement. The United States needs to adjust its traditional application of the rules of origin established in 1994 with the NAFTA and recognize that over the past twenty five years, manufacturing has developed in these markets. The TPP will pose significant challenges to many U.S. free trade partners that are not a TPP party. We need to recognize the negative impact to key free trade partners and more importantly to U.S. manufacturing that is disadvantaged by excluding vital sourcing options that have developed under the U.S. free trade agreements.

Further, compliance with the TPP will be extremely difficult in many instances. Several of the TPP partners have already admitted that some of the provisions particularly in the textile and apparel chapters are not administrable. These countries have stated that they do not have the

experience, expertise, training or knowhow necessary to make some determinations that are set forth in the short supply list. Further, because some of the terminology used in the short supply list is not defined, there is opportunity for much mischief by all parties to use and apply different interpretations. This lack of consistency will impose significant barriers to U.S. companies as they enter these new markets.

While the TPP is useful in linking existing free trade partners Australia, Mexico, Canada, Peru, Chile, and Singapore, it leaves out essential suppliers of the apparel industry such as CAFTA, Colombia, and Israel. During this time of consideration, a focus should be placed on rule of origin accumulation with free trade partners and agreed definitions and applications of compliance in the apparel chapters of the agreement.

Blue Diamond Growers

Blue Diamond Growers supports the TPP agreement. Blue Diamond Growers looks forward to the elimination of all barriers for almonds with the completion of TPP in the countries that are participating in this agreement. It is our belief that the completion of TPP will be beneficial to the California almond industry.

Blue Diamond Growers is a non-profit, farmer-owned, marketing cooperative. It is headquartered in Sacramento, California. It markets almonds for its members. The almonds are grown exclusively in California and are the largest tree crop in the state. Almonds are the number one agricultural export from California with approximately \$4.2 billion of almonds exported from California to the world last year.

Blue Diamond Growers is the world's largest processor and marketer of almonds. Blue Diamond Growers exports almonds for the majority of the almond growers in the state of California. The company obtains its supply of almonds from its members/owners and sells them to retail chains and food processing, confectionery and food service companies in nearly 100 nations around the world. More than 40 countries sell Blue Diamond branded products. Almonds are projected to account for about 25 percent of California farm exports alone.

TPP is an important achievement for not only the almond industry, but for agriculture as a whole. The TPP will eliminate tariffs on a vast majority of U.S. agricultural products and all agricultural export subsidies, resulting in better foreign market access and an increase in rural economic activity. The Asian-Pacific region accounts for almost 40 percent of the global GDP, and holds the world's largest agricultural and food market. The creation of the TPP emphasizes the significant opportunities within this region and will allow for future success for the almond industry and Blue Diamond Growers.

Blue Diamond Growers extends a sincere thank you to the United States negotiators whose hard work and dedication provided successful results. Blue Diamond Growers believes the TPP is necessary to ensure the almond and agricultural industries continue to thrive domestically and internationally. Therefore it encourages the approval of the agreement as soon as possible.

TPP will allow for continued expansion of trade that will then result in job creation and growth within the almond industry and, by default, other industries supported by the almond industry. Currently, 30,000 jobs are generated by almond exports alone. Removal of all almond duties imposed would result in increased jobs in the range of 15% to 25%.

Ms. Carol Buller and Mr. Michael Buller

I do NOT want the Trans-Pacific Partnership (TPP) to go into effect. I want it to be cancelled and never implemented.

I am fully aware of the damage that NAFTA has caused the United States, and I am fully aware of the additional damage that TPP would cause to the United States and its citizens.

As a result of the public comment period that ends January 13, 2016, documentation from others has been submitted that documents concerns about the TPP in detail.

Please include me in your count of very concerned citizens who are against the TPP.

Campbell Soup

While Campbell and its subsidiary, Pepperidge Farm, continue to assess the impact of the TPP Agreement on its operations, the company will benefit from the TPP through the elimination of 10 tariff lines in Japan and Vietnam, including Japan's 8.4% tariff on canned soups with meat and Vietnam's 15% tariff on cookies. The agreement will strengthen Campbell's ability to expand into fast-growing markets in Asia by removing both tariff and non-tariff barriers. Elimination of the tariffs maintained by Japan will directly benefit hundreds of U.S. jobs, both at Campbell and its suppliers, including the U.S. farmers and ranchers that support the company's processed food exports.

About Campbell Soup

Campbell was founded in Camden, New Jersey and still has its global headquarters there today, employing over 1,100 full time employees and approximately 500 contractors in Camden. Campbell's portfolio includes retail and food service brands including Campbell's, Pace™, Prego™, Swanson, V8, Pepperidge Farm and Bolthouse Farms. Campbell employs more than 17,000 workers and its products are sold in 120 countries around the world. Pepperidge Farm

cookies and crackers are shipped to Asia come from a number of facilities across the country, including Willard, Ohio; Denver, Pennsylvania; Lakeland, Florida; and Richmond, Utah, each of which employs hundreds of workers.

TPP Would Eliminate Japan's High Tariffs

Despite its high tariffs, Japan is a leading consumer of U.S. cookies, savory snacks, and soups. Specifically, Japan maintains a 7-8.4% tariff on canned soups, 15% tariff on cookies, 13% tariff on Goldfish™, 7.2% tariff on Prego™ and Pace™ sauces, 5.4% tariff on vegetable juice, and 21.3% tariff on tomato juice. These tariffs are among the highest in Asia and among TPP countries. Campbell Soup, Pepperidge Farm, and their suppliers in the U.S. will secure significant benefits by the elimination of these tariffs.

Fewer Barriers to Vietnam's Growing Market

Vietnam is a growing market within Asia but its 15% tariff on cookies, 13% tariff on savory snacks (such as Goldfish™ snack crackers), and 40% tariff on canned soups are significant barriers to U.S. exports. Elimination of these duties would result in meaningful cost savings, which would lead to increased demand and sales in Vietnam for several of the company's key U.S. exports.

Cange International

Introduction

As the Vice President (and co-owner) of Cange International, Inc., an export management company based in San Diego, California, I am dedicated to establishing and maintaining international distribution networks for US-based small and mid- sized companies.

I firmly believe that the recently finalized Trans-Pacific Partnership will be hugely beneficial for US SME exporters.

Barriers to Trade

Many SMEs find that exporting is too difficult and costly. Having a small number of employees means they don't have staff solely dedicated to exploring, entering and managing foreign markets in the way larger companies do. Exporting involves a large amount of tasks, including paperwork associated with registrations, approvals, trademarks, licensing, etc. Small companies often do not have staff available to determine the best international market entry strategies or to keep up with changing regulations. Several countries have different standards and tariffs that make trading with them very expensive and time consuming.

Benefits of Trans-Pacific Partnership

The Trans-Pacific Partnership will significantly improve the ability of US SMEs to become actively engaged in international markets. Under the TPP regulations will be streamlined in a number of different categories including safety, labor and environment. These changes will enable SMEs to access new markets in the region more quickly and easily than ever before, enabling them to expand their customer bases, increase their profits and hire more employees.

Conclusion

The TPP will unlock the potential for small businesses which are missing out on growth opportunities. It will increase their competitiveness and ensure that America maintains its leadership in the global economy. Giving small businesses this boost will allow their businesses to grow abroad and boost our economy here at home.

Cargill

Cargill is in full support of the TPP agreement and believes the agreement benefits American farmers, businesses and the overall American economy. The TPP agreement is not only economically significant for the United States – covering nearly 40% of the world’s GDP – but it also establishes rules to govern trade and investment issues previously not covered by other trade agreements.

Since its inception Cargill has supported three core principles that are essential to a commercially-meaningful TPP agreement: 1) TPP must include the right subset of Pacific economies (Asian, Latin American, and North American); 2) TPP must be a comprehensive undertaking, meaning all products, all sectors are included; and 3) TPP must address longstanding trade and investment barriers with new solutions. We believe the negotiated agreement upholds these three principles.

To the first principle, the right subset of economies, the U.S. food and agriculture industry exports over 40% of our overall exports to TPP countries. Further opening of these markets will build on our pre-existing trade flows. Exports drive the agriculture industry. In essence, TPP allows the United States to export food security across the region while securing our industry’s economic security here at home.

To the second principle, comprehensive undertaking, the TPP agreement covers all agricultural products and all sectors, including the most sensitive ones. The agreement provides greater market access for important export products, such as coarse grain and beef, into markets such as Japan, Vietnam and Malaysia. For example, Japan was the number one destination market for U.S. beef products in 2014, valued at \$1.6 billion despite facing a 38.5 percent import tariff

on fresh and frozen cuts. Currently, U.S. beef faces a 7 to 10% disadvantage against Australian beef. TPP puts the U.S. industry on par with its Australian competition upon entry into force.

To the third principle, new solutions to trade and investment barriers, Cargill firmly believes trade agreements must include strong, enforceable SPS provisions to achieve meaningful trade liberalization. TPP accomplishes this goal. One example of note is the establishment of cooperative technical consultations (CTC), or “rapid-response mechanism,” between countries to address SPS disputes in an expedited manner. CTC provide an additional mechanism for countries to address SPS issues outside of the WTO dispute settlement process and offer a pathway to resolution that occurs in a days or months and not years.

The United States must lock in commercially meaningful trade agreements that allow U.S. producers and manufacturers to compete on a level playing field in the global marketplace. We believe the TPP accomplishes just that – it opens markets to U.S. exports and allow for American farmers and businesses to compete on a level playing field, enhancing food security and consumer choice for both Americans and our TPP trading partners. In summary, Cargill is strongly supportive of the Administration’s efforts to conclude the historic TPP negotiations.

Cask LLC

Introduction

My name is George Judd and I am a Vice President at Cask LLC, an economically disadvantaged, woman-owned small business and Small Business Administration Certified 8a in Stafford, Virginia. For more than 10 years, we have provided business and technology management advisory and consulting services to government, public and private organizations both large and small across the United States and around the world.

As a recent graduate of Virginia’s Leaders in Export Trade (VALET) mentor program, we have begun our successful journey into the global market.

Barriers to Trade

In doing work internationally, it has been very challenging to understand the cost of doing business; there are many rules and regulations that impact our ability to operate overseas, both U.S. and foreign guidelines. While we don’t have some of the same issues U.S. companies exporting tangible goods have, our service exports still face known and some unknown taxes and revenue challenges.

Benefits of the Trans-Pacific Partnership (TPP)

The recently finalized TPP would be immensely helpful as our small business expands the work we do overseas. It would reduce the barriers we've faced, including simplifying complicated regulations through greater transparency.

When I was recently in Vietnam, there was discussion regarding TPP. A lot of people asked us about the agreement and it is clear that we would be able to expand business opportunities if it passes. In addition to easing barriers, the trade agreement will also open up greater lines of communication, so the network of businesses can operate more openly.

Conclusion

In the global twenty-first century, to quote Paddy Ashdown who worked on behalf of the British Government on international issues, "...we must do business with those whom we share common interests, not necessarily common values." Those common interests include sharing best practices, increased management and economic transparency, and support for improved standards of living through technology and infrastructure investments.

Agreements like the TPP create new opportunities for dialogue and the ability to export our services to businesses worldwide. The efforts made to date have opened communications across not just the TPP countries but many others and created an awareness that trade agreements are good for small and large business here in Virginia and across the country.

Trade is critical for Virginia; the Commonwealth of Virginia was founded as a business venture more than 400 years ago. Just last year, the total export merchandise from Virginia was \$19.3 billion which supports more than 90,000 jobs in our state. With the Trans Pacific Partnership helping more small businesses like ours open markets and expand internationally, we can expect to see both of these numbers grow tremendously.

Central American-Dominican Republic Apparel and Textile Council

No written summary. Please see EDIS for full submission.

Central American Sugar Association

No written summary. Please see EDIS for full submission.

Citizens Trade Campaign

Citizens Trade Campaign and 2,056 individual supporters submitted written testimony that the Trans-Pacific Partnership (TPP) would make it easier for corporations to offshore American jobs

and push down American wages due, among other reasons, to the trading partners in the agreement, investor protections that promote offshoring, weak rules of origin, absent currency safeguards and inadequate labor and environmental provisions.

They specifically urged the International Trade Commission in studying the TPP to (1) avoid unrealistic assumptions in its economic modeling, such as full employment, neutral trade balances and static income inequality; (2) assess how anticipated export gains under the TPP could be wiped out by currency manipulation; (3) take into account how weak rules of origin in the TPP could affect U.S. jobs and wages; and (4) investigate how increased fossil fuel exports could increase energy costs for U.S. producers and consumers.

They also added that the ITC's requirement that 8 hard copies of any testimony be submitted to its Washington, DC office is a barrier to public comment and public participation.

Coalition for a Prosperous America

The Coalition for a Prosperous America is a nonprofit organization representing the shared interests of 2.7 million households through our agricultural, manufacturing and labor members. CPA opposes the TPP because it will reduce economic growth, cause net job destruction, and worsen the US trade balance. CPA favors a national trade policy that pursues an overall balance of trade within a reasonable period of time which is the free market ideal.

We urge the USITC to cease using the computable general equilibrium (CGE) model in its analysis because that model is irrevocably flawed. The model, by its design, rests on a series of core assumptions including (1) full employment, (2) no change to trade balance, (3) no divergence between wages and productivity, (4) equilibrium currency values, and (5) perfectly rational free market behavior by signatory countries rather than strategic behavior. Instead of assuming these as facts, the USITC should test for them.

Instead of assuming "full employment," the Commission should be testing for whether there is likely to be a net job gain or loss. In the real world, full employment is not a consistent phenomenon. Instead of assuming "no change to trade balance," the Commission should recognize that trade balances do change in relation to strategic, non-tariff actions by countries as well as changes in productivity, technological advancement, product quality, supply gluts and many other factors. Instead of assuming "no divergence between wages and productivity," the Commission should acknowledge the history of such divergences over the past forty years.

Instead of assuming "equilibrium currency values," the Commission should recognize that undervaluation (and US dollar overvaluation) has been common and, at times, persistent. Instead of implicitly assuming "perfectly rational free market behavior by signatory countries," the Commission should acknowledge that strategic behavior is common in a world of national

interests. Some countries use state-influenced enterprises, industrial policy, tax policy, fiscal policy, regulatory changes, and many non-tariff tactics to nullify and impair any benefits expected from the agreement. A case in point is the lack of increased automotive import penetration in the Japanese market after substantial tariff reductions in the past.

The Commission's report should, at the very least, include analysis of how the results of the CGE model can be invalidated when the assumptions are not true. What happens if currencies are misaligned? What happens if there is no full employment? What happens when wages do not keep up with productivity? The Commission should also utilize the UN Global Policy Model in its analysis to compare and contrast results with any use of the CGE model.

Lastly, the Commission should include an analysis as to why its economic projections as to permanent normalized trade relations status with China and South Korea trade agreement were so drastically in error. Correcting those errors are crucial for policymakers and the public to have confidence in future Commission results.

Coalition of Services Industries

No written summary. Please see EDIS for full submission.

Color Pigments Manufacturers Association, Inc.

No written summary. Please see EDIS for full submission.

Communications Workers of America

The members and officers of the Communications Workers of America (CWA) are deeply concerned about the negative impacts that the Trans-Pacific Partnership (TPP) would have on U.S. employment and wages. The TPP provides robust protections for companies looking to outsource jobs to low-wage, low-standard countries, while failing to provide commensurately strong labor and environmental standards. Instead, the TPP's labor and environmental policies largely replicate the models of past trade agreements that have failed to uphold those standards.

CWA is deeply concerned about provisions in the TPP that would allow large banking firms to challenge basic protections designed to protect the stability of the U.S. financial system. As such, the TPP would increase the likelihood of financial crises in the future and the severity of those crises, thereby harming American jobs and savings.

CWA is also very concerned about the impacts of the TPP on U.S. call center and manufacturing workers. The TPP's Investment, Government Procurement, and Electronic Commerce Chapters

provide call center companies with substantial incentives to shift work to other TPP countries with lower wages and fewer worker protections than the U.S. has. Meanwhile, the complete absence of provisions to combat currency manipulation and the exceedingly weak provisions on state-owned enterprises in the TPP will allow other TPP nations to utilize non-tariff barriers to keep out American-manufactured products at the same time that they gain easier access to the U.S. market. As such, the TPP is likely to have strong negative impacts on U.S. work in these sectors.

The last two decades have provided ample evidence that assumptions of permanent full employment are not reflective of reality, thus leading to the ITC's failure to accurately predict the hugely negative impacts of past trade agreements on American working people. The ITC should take consideration of the past two decades of evidence, which shows that the trade model upon which the TPP is built is a complete failure for our middle class.

While the TPP would likely increase the profits of large multinational corporations, it would put significant downward pressure on the wages of working people in the U.S. Over 2,600 of CWA's members have also raised their own individual concerns about the TPP's negative impacts on their own jobs and wages, which can be found at <http://go.cwa.net/usitc-comments>.

Connect + Trade LLC

No written summary. Please see EDIS for full submission.

Copyright Alliance

No written summary. Please see EDIS for full submission.

Cummins Inc.

No written summary. Please see EDIS for full submission.

Mr. Richard O. Cunningham

Mr. Cunningham is Senior International Trade Partner at the Washington-based law firm of Steptoe & Johnson LLP. He also serves as Chairman of the Cordell Hull Institute.

Mr. Cunningham argued that TPP differs from previous FTAs in two important ways that raise additional issues that should be considered in the Commission's analysis:

First, TPP is by far the largest regional FTA ever negotiated. It will therefore create a regional area that will stimulate trade flows among TPP members, but will also divert trade away from non-members.

Second, TPP is not just a trade agreement. Equally if not more important, it will create a very large area that will be hospitable to investment by companies for the purpose of establishing and maintaining global value chains. By the same token, it will divert investment away from non-member countries.

Because of these characteristics, TPP will have important consequences for future U.S. economic interests that go far beyond the immediate effect on U.S. exports, imports and investment.

Impact of TPP on U.S. Trade with Non-Member Countries

While TPP includes countries representing some 40% of current world GDP, it does not include - and likely will not expand to include - countries that represent a majority of the world's population and that are forecast to produce a substantial majority of growth in global demand. That list includes China, India, Russia, Central Asia (the "Stans"), the Middle East, Mercosur, South Africa and the rest of sub-Saharan Africa.

Many of these countries have reacted to TPP (and TTIP) with intense hostility, seeing it as a move away from the developing world's trade agenda as embodied in the Doha Round.

Moreover, the most significant of these countries would experience insuperable difficulty in obtaining ratification. Congressional acceptance of joinder, by China, India, Russia, etc. is simply not in the cards in the foreseeable future.

Mr. Cunningham urged the Commission to consider the likely economic impact of a deterioration of U.S. trade and investment relationships with these non-member nations. In particular, the Commission should assess the likelihood and impact of a "balkanization" of trade as countries turn to other, competing trade initiatives, as China is doing with the RCEP, the "New Silk Road," etc.

Impact of TPP on the World Trade Organization

Since World War II, the United States has led the GATT/WTO process of multilateral trade negotiations. The U.S. turn away from multilateral negotiations—of which TPP (along with TTIP) is the major embodiment—has widened an already-existing gap between developed and developing country WTO Members. The recent Nairobi Ministerial illustrated the effect of that schism on the WTO's negotiating function. The Commission should consider in its TPP

assessment the prospects—or lack thereof—for resuscitation of the WTO and of multilateralism, together with the economic consequences for the United States.

Dart Global Logistics

Introduction

My company, Dart Global Logistics, offers international and domestic transportation and supply chain compliance management services for importers and exporters.

Our core strength is in Far East and subcontinental trade lanes. We are particularly interested in expanding our export operations. Our organization currently generates 85% of its profits from import activities and 15% from exports. Our two-year objective is to increase our growth in export handling.

Having worked in the freight industry over 20 years, I have seen how international trade agreements open new markets to American-made products, allowing American companies to create more jobs and contribute to our country's economic growth. The Trans-Pacific Partnership (TPP) will similarly help America's businesses increase their exports.

Success of Past Trade Agreements

When we pass trade agreements, we open up new markets to allow more U.S. exports. After the passage of the North American Free Trade Agreement (NAFTA), we saw more activity in Mexico than we had in the past. There remains a great deal of potential for increased U.S. exports to Mexico because of lower tariffs and the reduction of other, non-tariff barriers. TPP will build upon this success by extending favorable trade policies to more countries.

Barriers to Trade

Labor standards in the U.S. are some of the highest in the world. Unfortunately, labor standards are much lower in many of the TPP member countries. This is both a human rights issue and an economic issue: right now, firms operating in those countries can make their products more cheaply due to these lower standards, passing those savings on to the customer and making it difficult for American businesses to compete.

Additionally, every country has different Customs requirements and processes, and it can be difficult to know every aspect of each country's processes. Occasionally, our shipment will get stuck in Customs at its destination, delaying delivery to our customer. The more complicated the Customs process is, the more likely something will go wrong, causing a delay and making us a less attractive option for foreign buyers.

Potential Benefits of TPP

TPP will level the playing field for American businesses. By establishing strong labor standards in the Pacific Rim – from eliminating forced labor and child labor, to establishing minimum wage and employment discrimination laws – it will ensure domestic companies in those markets aren't gaining an unfair advantage against U.S. companies at their workers' expense.

Additionally, TPP will harmonize the Customs processes so that America's small businesses won't have to spend the time and administrative costs ensuring compliance with each individual country's own process. The less time our businesses have to spend navigating complex international trade systems, the more time they can spend selling their products to foreign buyers.

Conclusion

The more our businesses can export, the more they can create jobs in the U.S. TPP will reduce barriers to trade, opening up new markets and allowing businesses to contribute to our economic growth.

Distilled Spirits Council of the United States

No written summary. Please see EDIS for full submission.

Doctors Without Borders

Doctors Without Borders/ Médecins Sans Frontières (MSF) has provided oral testimony and a written submission regarding the negative impact that the Trans-Pacific Partnership (TPP) will have on access to affordable medicines and biomedical innovation.

MSF is an international independent humanitarian organization that provides medical assistance in over 60 countries, in need of both affordable access to and innovation for medical technologies.

Competition has a proven record as a critical tool to lower drug prices and help deliver effective medical care. Intellectual property trade obligations and other protections for pharmaceutical companies that limit price-lowering generic competition are driving up drug prices.

The TPP puts in place far-reaching new government obligations that lengthen, strengthen and broaden patents and other pharmaceutical monopolies. The effect will be to further delay access to generic medicines beyond current requirements of international trade law. The provisions also undermine public health safeguards that governments and others have to

promote access to medicines and limit abuse. The TPP represent a departure from previous U.S. global health commitments towards developing countries, including the 2007 New Trade Policy or May 10th Deal.

Unless is modified, the TPP will exacerbate the global crisis of high drug prices. For example, the TPP will not allow national regulatory authorities to use existing clinical data demonstrating a pharmaceutical product's safety and efficacy to authorize the sale of competitor products, even in the absence of patents. The additional monopoly protection provided for biologic drugs and vaccines will keep already very expensive products out of the hands of millions. The TPP would also force governments to extend existing patent monopolies beyond current 20-year terms at the request of pharmaceutical companies, and to redefine what type of medicine deserves a patent, including mandating the granting of new patents for modifications of existing medicines.

The TPP also fails to address the urgent need for reform in the biomedical innovation system. The sole reliance on high medicine prices, backed by exclusivities and monopolies, is a flawed paradigm for funding innovation. This leads to unaffordable prices while failing to stimulate innovation for diseases where patients have limited purchasing power like neglected tropical diseases or where drugs have to be used sparsely like antibiotics.

The negative impact of the TPP on public health will be felt for years to come, and will not be limited to the 800 million people in the current 12 TPP countries. It is a dangerous blueprint for future agreements and aims at being a standard-setting agreement and to create new global trade norms. Instead of doubling down on a broken model, the U.S. Government should collaborate with other governments to introduce new approaches that promote both innovation and access.

It isn't too late to prevent the further restrictions on access to affordable medicines that would be created through the TPP. MSF urges the United States government to protect the right to health of millions of people that will be negatively impacted if the TPP is approved in its current form. The TPP should be modified or rejected.

Dow Chemical Company

No written summary. Please see EDIS for full submission.

Emergency Committee for American Trade

These comments on the Trans-Pacific Partnership Agreement (TPP) are submitted on behalf of the Emergency Committee for American Trade (ECAT), an association of the chief executives of leading U.S. business enterprises with global operations. Recognizing the importance of the

Asia-Pacific region to the U.S. economy, as well as the many existing trade barriers in the region, ECAT worked vigorously before and during the TPP negotiations to promote the negotiation of a comprehensive, high-standard and commercially meaningful agreement that would create new trade and investment opportunities for U.S. companies, farmers, workers and their families.

ECAT has extensively reviewed the draft text of the TPP. ECAT finds that, while there is room for improvement, the TPP will advance U.S. global competitiveness in the Asia-Pacific region and set in place modernized rules for the benefit of many industries and their workers in the United States. As detailed further in our written submission, the TPP will (i) increase market access for U.S. agriculture products, while requiring science-based risk assessment to improve sanitary standards and reduce non-tariff barriers to agriculture trade; (ii) reduce discriminatory tariffs and non-tariff barriers throughout the region, including elimination of tariffs on qualifying industrial goods and textiles exports; (iii) create new, high-standard commitments which will address long-standing trade concerns for services companies on a cross-sectoral basis and will increase market access opportunities for many services companies; (iv) provide new standards in electronic commerce that will promote innovation, while protecting consumers, including important commitments regarding the free flow of data; (v) provide strong provisions on protection for U.S. investments in the TPP region, similar to the high standards found in U.S. law and practice for domestic investors in the United States; (vi) provide strong provisions for the protection of patents, trademarks, copyrights and trade secrets, including improved provisions on enforcement; (vii) provide provisions to streamline and simplify the movement and release of goods across borders and to provide much-needed business predictability on the treatment of goods at the border; (viii) provide stricter controls for state-owned enterprises; and (ix) promote regulatory transparency and cooperation to help address barriers imposed by inconsistent regulatory regimes. At the same time, ECAT recognizes that the TPP does not address all of the issues sought by ECAT or the broader business community. ECAT urges the Administration to work with U.S. Congress and with the 11 TPP partner countries to strengthen the agreement further, thereby expanding support for this important agreement. ECAT supports passage of the TPP by the U.S. Congress and looks forward to working with the Administration and members of Congress towards accomplishing this goal as soon as possible.

Economic Policy Institute

Currency manipulation distorts trade flows by artificially lowering the cost of U.S. imports and raising the cost of U.S. exports, and is the leading cause of stubbornly high U.S. trade deficits over the past 15 years. More than 20 countries, led by China, have, together, been spending about \$1 trillion per year buying foreign assets to artificially suppress the value of their currencies. Several members of the proposed Trans-Pacific Partnership (TPP)—including Japan,

Malaysia, and Singapore—are well known currency manipulators, and others—including South Korea, Taiwan, and China—have expressed interest in joining the agreement.

Despite widespread calls from a majority of members of both houses of Congress, and many economists, the TPP includes no enforceable disciplines on currency manipulation. This has important implications for how the Commission should evaluate the likely impact of the TPP. Key recommendations and conclusions of this analysis are:

- Currency Manipulation can nullify the benefits of the TPP. The Commission should develop a range of estimates of the costs and benefits of the TPP under different levels of currency manipulation.
- Purchases and holdings of foreign exchange reserves (broadly defined) will have a direct impact on exchange rates and trade flows in the TPP.
- China is the world's largest currency manipulator, which can affect trade in the TPP in at least two ways. First, as a result of relatively weak rules of origin, the U.S. and other countries are vulnerable to increased imports from China through the TPP. Second, currency manipulation by China can influence other TPP members to adjust or manipulate the value of their currencies, in order to remain competitive with China, and thereby nullify some or all of the benefits of the TPP to the United States.
- Japan is also an important currency manipulator, which is the leading cause of the U.S. trade deficit with Japan, which displaced 896,600 U.S. jobs in 2013.
- Models used by the Commission staff to evaluate the effects of past free trade agreements, which assume full employment, cannot be used to evaluate the potential demand shifting effects of currency manipulation on the members of the TPP.
- Even if the TPP were a true free trade agreement it would likely be hard on non-college educated American workers who make up more than two-thirds of the U.S. labor force. Therefore, Commission staff should carefully evaluate the winners and losers from the TPP. Growing trade with low wage countries is one of the leading causes of the increase in U.S. income inequality. The TPP is likely to reinforce these trends.
- The TPP isn't principally about free trade, it's about providing increased protection for intellectual property rights for pharmaceutical makers, software vendors and others, and stronger property rights for foreign investors, which encourages outsourcing, job loss and the decline in labor's share of national income.
- Finally, the TPP will likely result in growing trade deficits, trade-related job losses and downward pressure on the wages of the majority of U.S. workers.

Electronic Frontier Foundation

No written summary. Please see EDIS for full submission.

Entertainment Software Association

No written summary. Please see EDIS for full submission.

Farm and Ranch Freedom Alliance

The Farm and Ranch Freedom Alliance (FARFA) is a national nonprofit that represents independent farmers and ranchers, as well as consumers who support local food systems. FARFA opposes the TPP because it undermines American sovereignty while hurting both farmers and consumers.

First, the TPP poses a serious threat to our sovereignty due to the Investor-State Dispute Settlement (ISDS) provisions. The TPP vastly increases the number of foreign entities who can bring an ISDS challenge to American laws, at a time when we are seeing a significantly increased use of ISDS challenges as compared with previous decades. The combination makes the TPP a significant threat to Americans' ability to effectively determine our own laws.

Second, the TPP offers few benefits to farmers. Large corporations will be able to source raw ingredients, such as wheat, cattle, milk powder, wherever they are cheapest. Rather than promoting American agriculture, this will pit American farmers against farmers in other countries in a race to the bottom on prices. This has already occurred to some degree under previous free trade agreements, and the TPP will accelerate the problem.

Third, consumers will be actively harmed by the threat to our food safety standards. The food safety standards for several TPP countries are significantly lower than those in the U.S., particularly with respect to what drugs and antibiotics may be used. The FDA currently inspects only a small fraction of imported food shipments. And under the TPP, foreign companies would be allowed to challenge our food safety inspectors, further undermining our food safety system. In addition, the ability to challenge restrictions on antibiotics under the SPS provisions could accelerate the spread of antibiotic-resistant bacteria. This threatens to undermine one of the major medical advances of the 20th century.

Fourth, the TPP prevents our government from using our own tax dollars to promote American business, by giving companies in any TPP country equal access to U.S. government procurement contracts. While this initially only covers federal procurement policy, the TPP countries are

required to negotiate to expand it to the state and local levels. This could destroy popular programs that benefit both consumers and farmers, such as buying local food for our schools.

Fifth, the TPP provisions for on genetic engineering harm both farmers and consumers. By allowing biotech companies to challenge laws that require testing for contamination or a meaningful pre-approval process, the TPP threatens farmers raising non-GMO crops in response to consumer demand. Biotech companies will also be able to challenge popular, consumer-driven laws for GMO labeling; domestic laws such as those of Vermont could be challenged in international tribunals rather than being judged by the standards of the U.S. Constitution in U.S. courts.

Footwear Distribution and Retailers of America

No written summary. Please see EDIS for full submission.

Fonterra (USA), Inc.

The Trans-Pacific Partnership Agreement ("TPP") achieves some notable success in adopting sanitary and phytosanitary provisions stronger than those currently applicable under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures, and in addressing as an intellectual property issue the question of the use and protection of geographical indications. However, with respect to dairy market access it falls well short of the desired outcome of a comprehensive agreement with major market-opening opportunities. As such, Fonterra shares the disappointment in the market access outcomes expressed by the U.S. Dairy Export Council and the National Milk Producers Federation ("USDEC/NMPF") in their joint statement before the Commission. However, we believe that the analytical metrics suggested in the USDEC/NMPF submission - essentially a zero sum analysis - does not account for the full dynamics of trade agreement outcomes and consequently the potential benefits that TPP holds for the US dairy industry. Those benefits can only be understood in the context of the US dairy industry's competitive position vis-a-vie the other dairy exporting countries in the TPP, namely Australia and New Zealand.

Similarly, while we agree that highly aggregated economic models are not well suited to the evaluation of TPP's dairy trade impacts, we also believe that it is not possible to capture the impacts of reduced trade barriers with static models that attempt a high level of detail and product specificity. Thus, we ask that the Commission adopt an analytical framework that captures the flexibility of dairy producers to move production within certain product (e.g. cheese) or component (e.g. milkfat) categories, particularly over the timeframe of the TPP's implementation period, and considers the relative ability of supplying countries to respond to increased market access opportunities.

Fujifilm SonoSite

Introduction

Our company, SonoSite, is a manufacturer of ultrasound systems. Our portable ultrasound equipment have proven to be an important tool for healthcare providers who need a practical way to diagnose health problems in hard-to-reach areas. The Trans-Pacific Partnership would help our high-quality medical equipment reach healthcare providers and patients all over the world.

Barriers to Trade

It is challenging for us to sell our life-saving medical products in countries that have high tariffs and complicated customs procedures. There are lot of risks and uncertainties when it comes to exporting products to foreign markets, especially when it comes to the safety and efficacy of the equipment.

Benefits to Trade

The Trans-Pacific Partnership (TPP) would encourage companies to innovate and manufacture in the United States by diminishing the risks and uncertainties that come with exporting products to foreign markets, while at the same time ensuring high standards of the equipment. By eliminating all tariffs on products manufactured in the U.S., the TPP would make a significant impact on our ability to trade with our countries by lowering tariffs. It further streamlines the regulatory process for doing business in member countries, thereby reducing delays and the administrative costs associated with entering new markets.

Conclusion

Increased international trade will help bring higher-quality medical equipment within the reach of healthcare providers in countries where health budgets are constantly strained. Moreover, the trade agreement would create more opportunities for our business and all Puget Sound businesses, big and small.

GAP, Inc.

No written summary. Please see EDIS for full submission.

General Electric Company

No written summary. Please see EDIS for full submission.

Global Fruition Inc.

Introduction

My company, Global Fruition Inc., supports California's export powerhouse. We help growers directly export U.S. produce to top supermarkets in Central America, Asia, and the Middle East, as well as to importers and wholesalers from around the world. We are burdened by high tariffs, but the Trans-Pacific Partnership would ensure an even playing field.

Barriers to Trade

High tariffs put my business at a disadvantage when it comes to competing with countries like China, because China negotiates zero tariff import duties with other Asian countries. Fresh fruit from the U.S., meanwhile, faces tariffs as high as 40% in some TPP member countries. As a result, American farmers are losing ground to China's farmers. I used to ship 400 containers of grapes into Asia annually, but China has taken a majority of that business because they have zero tariffs.

Benefits to Trade

The TPP would help open up new markets to exports by reducing tariffs and other trade barriers and establishing common, enforceable standards and protection for U.S. companies. This trade agreement would help keep us competitive in international markets and create jobs here in California and across the country.

Conclusion

Small businesses make up 96 percent of all of California's exporters. The TPP will lower barriers to international trade, enabling my company and others to export more California-grown produce abroad, remain competitive in the global market, generate jobs, and expand more at home.

Graymills Corporation

Introduction

My company, Graymills, builds specialized parts for printing presses. We are a small manufacturing firm, but there is a high demand for our pumps around the world.

International trade is thus especially important to our business. Our success as a company depends on our ability to export our product.

Barriers to Trade

Currently, non-tariff barriers pose a significant problem for small companies like mine. For instance, industrial safety standards, part of the certification process for our products, vary in each new market we sell to, for instance CE, UL, CSA, and ATEX. Meeting each new standard costs us valuable time and resources, making it difficult – at times prohibitively so – for us to enter new markets.

Benefits of Trans-Pacific Partnership

International trade helps small exporters like my business enter new markets, making our economy more competitive and allowing us to create new, good-paying jobs, just as we've been able to do at Graymills. By streamlining certification processes across member countries, the Trans-Pacific Partnership (TPP) will enable us to compete overseas and grow our business.

Conclusion

My business's success depends on strong trade agreements that make doing business in other countries easier. TPP will have a significant and positive effect on the American economy by allowing small businesses like mine to enter new markets, increasing our exports and creating jobs here in America.

Ms. Lynn Haiducek and Mr. Robert Haiducek

I do NOT want the Trans-Pacific Partnership (TPP) to go into effect. I want it to be cancelled and never implemented.

I am fully aware of the damage that NAFTA has caused the United States, and I am fully aware of the additional damage that TPP would cause to the United States and its citizens.

As a result of the public comment period that ends January 13, 2016, documentation from others has been submitted that documents concerns about the TPP in detail.

Please include me in your count of very concerned citizens who are against the TPP.

Halosil International

Introduction

My company, Halosil International, manufactures a specialty chemical used as a disinfectant and biocide to kill deadly germs. We are a small company, but a global one. There's a strong

Appendix D: Summary of the Views of Interested Parties

need for products to control infections overseas, so international trade is extremely important to us. Our success as a company depends on our ability to export our product.

Currently, we do business here in the U.S. and with Europe, the Middle East, Ivory Coast, China, Mexico, Panama and Colombia, and our global operations are always expanding. We hope to start exporting soon to Chile, Peru, Australia, New Zealand, Vietnam and Brunei – all member countries of the new trade agreement.

Barriers to Trade

Currently, the cost of doing business in most of the aforementioned countries is too high. Tariffs on our product make it artificially cheaper for buyers to purchase from domestic suppliers or from countries with whom they have a free trade agreement. Without those tariffs, we'd be more able to compete in those markets – and win.

Moreover, we work in a regulated market. Foreign countries' sanitary authorities have similar regulations to those the Environmental Protection Agency has on our product here, but there are still a lot of additional rules and registration procedures that make it difficult for us to enter those markets. For a small company where everyone wears many hats, wading through the mountains of regulation and paperwork can add months to the export process and add to our administrative costs.

Benefits of Trans-Pacific Partnership

International trade helps American businesses grow and create jobs. The recently finalized Trans-Pacific Partnership (TPP) would help companies like mine enter new markets and grow the Delaware economy, benefiting us all.

TPP will reduce tariffs on products manufactured in America, allowing us to be price-competitive in countries that currently tax us out of the market. It will also standardize the Customs and registration processes across member countries, reducing the delays and administrative costs associated with overly burdensome regulation.

Success of Previous Trade Agreements

My company has already seen how trade agreements make it easier for American companies to do business abroad. My company can export to Mexico because of the North American Free Trade Agreement (NAFTA), which reduced tariffs on our product in that country. TPP will expand those benefits to other Pacific Rim countries, allowing us to continue to grow our business and create jobs.

Conclusion

My business, and many others like it in Delaware and across the country, depends on trade agreements to level the playing field for American businesses. TPP will have a positive effect on the American economy by allowing businesses like mine to enter new markets, increasing our exports and creating jobs here in the U.S.

Herbalife Nutrition

No written summary. Please see EDIS for full submission.

HERO Assemblers

Introduction

I am the owner and manager of two tier-one suppliers to the Toyota Tundra and Tacoma assembly plant in San Antonio. We provide an assembly process service, mounting the wheels and tires. Toyota is our one customer. The 47 employees at our plant build all of the Tundras and most of the Tacomas in the United States. After the products leave our plant, they are put onto the bigger Toyota assembly line.

Being part of an international supply chain, I understand the value of reducing barriers to international trade. The Trans-Pacific Partnership will facilitate more global commerce and support more small businesses like mine.

Opportunities with International Trade

Our business would benefit from increasing international trade flows, particularly between the United States and the Asia Pacific. While almost all of the cars we contribute to are sold to the United States, some are sold to Mexico and South America. The Trans-Pacific Partnership would reduce barriers and help sell more cars around the world. Selling more cars will help me hire more workers here in San Antonio.

Conclusion

My assembly plant is a great example of the way that small businesses benefit from broader shifts in the dynamic world economy. As the Trans-Pacific Partnership helps the United States compete with countries around the world, the positive effects will ripple throughout supply chains.

When you watch the news, you often see examples of larger companies who benefit from increasing international trade. When you see that, remember the 47 employees I have in San

Antonio who are an essential part of a global supply chain. What's good for international trade is good for smaller companies like mine across the country and good for the U.S. economy.

High Impact Technology

Introduction

At High Impact Technology, LLC (HIT) we design proven, engineered solutions, including ballistic coatings for fuel tanks and armored kits for vehicles. Our customers are primarily military and law enforcement.

Over the last 12 years, HIT has taken great pride knowing that our solutions and products are protecting the men and women of the United States Armed Forces. Of our 40 employees, many are veterans.

Increasing international trade would help us continue to employ these hard working, creative, and team-focused people.

Benefits of International Trade

Selling our products internationally helps keep our revenue streams more stable, and that's important for keeping our business operating smoothly. When military and law enforcement budgets might be down in one country, they could be up in another.

About 30 percent of our sales are international. More than half of our employees work on the international side of the business. Because of our international sales, we've been able to retain more employees and our suppliers have been able to hire and retain more than 150 workers.

HIT has sold products to Germany, Canada, United Kingdom, and South Africa. We are in the process of expanding to Poland, Singapore, and the United Arab Emirates.

Our company has already benefitted greatly from the U.S. government's export assistance programs, including the U.S. Commercial Service, local Export Assistance Centers, and the STEP grant. It's time to make it even easier for small businesses like ours to take advantage of international trade by creating a more level playing field.

Barriers to International Trade

We have several significant barriers we must overcome to do business in other countries, including high tariffs and intellectual property violations. Sometimes tariffs from other countries can be as high as 30 percent on our products, and that's very onerous on our small business. We also fear patent infringement in some Asian countries that have weaker

intellectual property protections than we hold in the United States. We have put significant efforts into developing our innovative protective products and we do not want others to steal our innovations.

The Trans-Pacific Partnership would give our small business the weight and authority of the United States government when it comes to managing challenges in the Asia Pacific. It would reduce tariffs, protect intellectual property and facilitate our success abroad.

Conclusion

We believe America's true strength is our innovative spirit and hard work. By exporting our innovative products abroad, we are better able to compete in the global economy. U.S. small businesses like ours have the potential to expand around the world; we just need a more level playing field. The Trans-Pacific Partnership would help stabilize our sales and provide transparency to build a cross-ocean conduit for our goods and services to help us build a better future.

IBM Corporation

No written summary. Please see EDIS for full submission.

Ideal Taxes

Our testimony is divided into two parts: (1) the effect of TPP upon congressional authority and (2) the effect of TPP upon American power. With regard to congressional authority, we simply quote the agreement itself to establish that TPP could allow a President to negotiate Multilateral Environmental Agreements, and then with the consent of the TPP Commission, but not the consent of Congress, bind the U.S. to those commitments. With regard to American power, we cite our own research which has found a strong relationship between trade balances and global power. Countries with trade surpluses tend to gain in global power, while countries with trade deficits tend to lose power. TPP enables currency manipulation, the chief mechanism already being used by several TPP countries in order to run trade surpluses with the United States. As a result, it will likely increase U.S. trade deficits and cause a long-term decline in U.S. global power.

Industrial Cooling Solutions

No written summary. Please see EDIS for full submission.

Industrial Energy Consumers of America

Appendix D: Summary of the Views of Interested Parties

The Trans-Pacific Partnership Agreement (TPP) would pave the way for all DOE approved LNG export applications to ship to TPP countries, and would result in substantial LNG export volumes to Asia.

Excessive LNG exports are not in the public interest and will significantly damage U.S. manufacturing, which competes with Asian competitors.

A DOE report “The Macroeconomic Impact of Increasing U.S. LNG Exports,”¹²³⁰ states that “in every case, greater LNG exports raise domestic prices and lower prices internationally.

The report says that LNG exports increasing from 12 to 20 Bcf/d during 2026 and 2040, reduces prices in the Asian-Pacific market by 73 cents per million Btu, while increasing U.S. prices by 15 cents per million Btu – a combined net negative impact to competitiveness of 88 cents, or a 40 % increase, as compared to current prices. These costs do not include the impact of increasing LNG exports from 0 to 12 Bcf/d.

Natural gas is not a renewable resource and LNG exports significantly accelerate the consumption of U.S. low-cost natural gas.

The DOE has approved 14 Bcf/d for exports to countries without a free trade agreement. Looking at figure B7 of the DOE report entitled, “Shale Breakeven Curves for North America by Country,” cumulative demand of 14 Bcf/d of LNG exports, plus domestic demand in 2040 would consume 799.15 Tcf of gas. Demand at this level would consume all low-cost natural gas under \$9.00 per mcf. Today’s Henry Hub price is safely under \$3.00 mcf. The point is very clear that the TPP would have a significant increase to domestic natural gas prices.

A DOE/NERA report, “The Macroeconomic Impacts of LNG Export from the United States,”¹²³¹ describes how “households with income solely from wages or transfers, in particular, will not participate in these benefits.” It goes on to explain how “[h]igher natural gas prices can also be expected to have negative effects on output and employment, particularly in sectors that make intensive use of natural gas.”

Even more startling is the meager so-called “net economic gain” under any of the scenarios. NERA projects only a net \$10 billion net economic gain in 2015 and a \$20 billion net gain in 2020, but this declines going forward. Given the size of the \$16.7 trillion U.S. economy, a \$20 billion gain is less than one hour of GDP work, an insignificant economic gain. The most recent

¹²³⁰ “The Macroeconomic Impact of Increasing U.S. LNG Exports,” U.S. Department of Energy, October 29, 2015, http://energy.gov/sites/prod/files/2015/12/f27/20151113_macro_impact_of_lng_exports_0.pdf.

¹²³¹ “Macroeconomic Impacts of LNG Export from the United States,” NERA Economic Consulting, December 3, 2012, <http://energy.gov/sites/prod/files/2013/04/f0/nera-lng-report.pdf>.

DOE study forecasts an even smaller economic gain of between \$7-20 billion annually from 2026 to 2040.

A study by Charles River Associates¹²³² illustrates that consuming natural gas in the manufacturing sector increases GDP by two times and increases eight times more jobs versus exporting natural gas.

Information Technology Industry Council

No written summary. Please see EDIS for full submission.

Institute for Agriculture and Trade Policy

The U.S. agricultural trade performance of so called “Free Trade Agreements” (FTAs) since 1994 has been anemic. A recent review of six FTAs puts their collective agricultural trade deficit at \$1.6 billion. U.S. agricultural exports have not delivered prosperity to farmers and ranchers. Instead, they depend Farm Bill subsidies to survive, e.g. a Congressional Budget Office FY 2017 projected \$3.37 billion to compensate corn and soybean farmers for market price failure.

The Commission should not discount agricultural trade data that lead to a negative evaluation of the Trans-Pacific Partnership Agreement (TPP). TPP agribusiness advocates extol projected export increases while asking the Commission to model tariff-line specific import impacts. The Institute for Agriculture and Trade Policy (IATP) requests the Commission to use current methodologies for evaluating the agri-environmental, social and labor cost impacts of trade liberalization in the TPP. We urge the Commission not to externalize TPP agriculture input and food trade-related costs, particularly in sectors, such as dairy, where imports are redundant to the huge surplus in U.S. and global dairy production.

The Commission also should also evaluate U.S. regulatory capacity and resources to manage safely agricultural trade derived not just from current technologies, but from emerging technologies, such as agri-nanotechnology and synthetic biology. The terms of the TPP chapter on Sanitary and Phytosanitary Measures (SPS), weak U.S. capacity to manage TPP trade safely and the consequences of that diminished capacity is the focus of the following analysis.

¹²³² “US Manufacturing and LNG Exports,” Charles River Associates, February 25, 2013, http://www.crai.com/sites/default/files/publications/CRA_LNG_Study.pdf.

Intel Corporation

No written summary. Please see EDIS for full submission.

International Association of Machinists and Aerospace Workers

No written summary. Please see EDIS for full submission.

International Brotherhood of Teamsters

Six years ago, in response to a request from the USTR (74 Fed Reg 66720), the Teamsters filed Comments in which we described the conditions for our support of a final Trans-Pacific Partnership. Now that the pact is finally published and recently signed, we can compare it to those criteria.

We called for a TPP that rewards the work that creates wealth, with real protections for our workers and our planet – an agreement that is free and fair for all. Unfortunately, the TPP does not meet this fundamental policy goal. If the Commission utilizes a realistic macroeconomic model – like the Global Policy Model preferred by the United Nations – to predict the socioeconomic effects of the TPP, your Final Report will reveal that the deal will exacerbate income inequality in the U.S. A recent report by the Global Development and Environment Institute at Tufts University anticipates that labor’s share of national income – the fundamental metric of income inequality – will decrease 1.31 percent over ten years. The Teamsters cannot support another trade deal that continues a trend of growing inequality.

In our original Comments, we insisted on a TPP with binding obligations to protect the right to collective bargaining and other core labor standards recognized by the International Labor Organization. Sadly, the TPP fails to sufficiently advance labor rights and offers only false promises of progress. Our Comments specified eight ILO Conventions that we suggested should be explicitly incorporated into the TPP, but to no avail. Furthermore, the Labor Chapter repeatedly includes aspirational terms such as ‘may’, ‘endeavor’ and ‘as appropriate’. The impact of those terms, combined with the wholly discretionary nature of the enforcement provisions is clear - countries will have to do little, if anything, to comply with the commitments of the Labor Chapter.

Six years ago, we hoped for a TPP that would not grant foreign investors any rights in the U.S. greater than those of Americans, but the final agreement dashed that hope. The Investment Chapter disadvantages Teamster employers – many of them small and medium sized companies- that only manufacture in the U.S. because they will have no rights under, nor

access to, the investor-state (ISDS) mechanism that is reserved for their TPP competitors and foreign investors. Furthermore, this aspect of the Investment Chapter makes it more attractive for larger manufacturing companies to send production and investment to other TPP countries, where the additional legal protections of ISDS would obtain.

On the Labor Advisory Committee and the Advisory Committee on Trade Policy and Negotiations, our General President has called for enforceable disciplines against currency manipulation in the core text of the TPP, a demand that we share with bi-partisan majorities on both sides of Capitol Hill. Fatally, as with the ILO core labor Conventions, the final agreement is missing a key component that could make it work for working families. The Commission cannot ignore these basic flaws in the TPP pact, and should describe the damage that it could do to the American middle class.

International Dairy Foods Association

No written summary. Please see EDIS for full submission.

International Institute for Guided-Image Radio Therapy

Introduction

My company, the International Institute for Image-Guided Radio Therapy (IIGRT), works in emerging markets to bring in new technologies to treat cancer patients. Our success as a company depends on our ability to export our product.

My business is expanding every day, and we're currently interested in exporting to Vietnam and Chile, two countries that are members of the Trans-Pacific Partnership (TPP). These countries represent enormous market opportunities, but we currently face a number of challenges whenever we enter new markets.

Barriers to Trade

Right now, the tariffs on the kinds of technologies we export are very high – as high as 30 percent or more. This puts us at a competitive disadvantage against those countries' domestic suppliers, pricing us out of the market. There are a myriad of regulations to follow when we ship our products to those countries. Every country has its own regulations and customs processes for different parts of our equipment, so it can take weeks for our products to clear customs. These delays and other hurdles are a real impediment to trade.

Benefits to Trade

Appendix D: Summary of the Views of Interested Parties

The recently negotiated TPP would help reduce those barriers, making it financially feasible for us to enter those markets. Under TPP, tariffs on all products manufactured in the U.S. would fall to zero. This eliminates tariffs and dramatically increases high-tech U.S. exports to those regions, sustaining or creating tens of thousands of jobs across the U.S. manufacturing sector.

Success of Previous Trade Agreements

The U.S.-Korea Free Trade Agreement has made it easier for companies we supply parts for to export to Korea, which is a big market for our medical equipment. TPP will similarly help us export more than ever before to countries like Japan, Malaysia, and New Zealand where demand for U.S. products is increasing.

Conclusion

The future of the U.S. economy is global. With 95 percent of the world's consumers living outside of our borders, TPP will be a boon for business like mine, and others across the country. The recently finalized TPP would help my company enter new markets and grow the Connecticut economy, benefiting us all.

International Institute for Sustainable Development

No written summary. Please see EDIS for full submission.

International Intellectual Property Alliance

The International Intellectual Property Alliance (IIPA), representing the U.S. copyright industries, believes that the overall impact of the Trans-Pacific Partnership Agreement (TPP) on the industry sector it represents will be substantial and positive. If fully implemented and vigorously enforced, TPP will enable the creators, publishers, and distributors of U.S. music, movies, TV programs, videogames, books, journals, databases, and other creative works to reach more listeners, viewers, readers, gamers and other consumers in eleven important overseas markets, and will allow this sector to enhance its already substantial contribution to U.S. economic growth, foreign sales and exports, and overall U.S. global competitiveness.

Based on IIPA's three decades of experience with the role of U.S. trade agreements in opening up foreign markets to U.S. goods and services protected by copyright, we believe that agreements that incorporate evolving global norms and best practices for copyright protection and enforcement; that include other provisions aimed at dismantling barriers to U.S. participation in digital marketplaces around the world; that are faithfully implemented by our trading partners; and whose obligations are vigorously enforced, have played a critical role in

U.S. jobs, exports and foreign sales, and will continue to do so in the future. While some aspects of the TPP Agreement are disappointing, on balance we believe that it will fit this description if fully implemented.

The resulting positive impacts will vary across the range of TPP partner markets. We expect them to be greatest in trade with those TPP countries with whom a comprehensive and modern Free Trade Agreement with the U.S. is not currently in force. Focusing on the intellectual property chapter of TPP, the benefits for U.S. copyright industry participants are likely to flow from three overarching categories of obligations taken on by our TPP partners:

- To implement new legal protections or enforcement tools: for instance, by prohibiting circumvention of technological protection measures used to control access to copyrighted materials (a key enabling technology for digital trade in creative works), and by providing criminal penalties for unauthorized recording of films in theaters;
- To strengthen or extend existing legal protections, including harmonizing the duration of copyright protection; and
- To enhance both civil and criminal enforcement mechanisms against copyright infringement, notably in the online environment, such as through making more fully deterrent damages available, and through imposing criminal liability on aiders and abettors of criminal copyright infringement.

Full implementation of these obligations in the laws and regulations of our TPP partners should deliver concrete benefits for the U.S. copyright industries and the millions of good U.S. jobs they provide.

International Union, United Automobile, Aerospace and Agricultural Implement Workers of America

The TPP encompasses well over a third of the world's economy and the scope of the agreement could increase over time as several large nations have expressed an interest in joining. If ratified, the TPP will impact our nation for generations to come. It will impact the food we eat, air we breathe, medicines we take, and cars we drive. UAW urges the ITC to comprehensively analyze the likely impact of the TPP on the U.S. economy and working families.

After carefully analyzing the final text, the UAW's executive board unanimously voted to oppose the TPP because it favors the interests of corporations and their pursuit of overseas profits. The extraordinary investor protections and inadequate labor standards provide incentives for companies to move operations to low wage countries. Foreign direct investment (FDI) has increased dramatically in many countries following the passage of prior free trade agreements. For example, FDI has tripled in Mexico since NAFTA according to the IMF.

The TPP repeats mistakes of prior trade agreements that contributed to massive job losses, rising income inequality, and tens of thousands of plant closings in the US. I urge the ITC to adjust its economic models to account for real-world trade impacts, including investment, currency, and wages.

The Auto Rules of Origin (ROO) standard is weak. Over half of the value of a car could be built by countries that are not in the agreement and still receive preferential treatment. By comparison, NAFTA's ROO standard is 62.5%. Even more troubling is that the threshold for many auto parts is only 35%. This just one of ways in which the TPP is worse than NAFTA.

Countries around the world sell cars and other goods in the US without unfair trade barriers. The same cannot be said for many countries in the TPP. Several have closed markets and long histories of undervaluing their currencies. Currency manipulation has already cost millions of American jobs. Imported vehicles are routinely several thousand dollars cheaper because of undervalued currencies. Unfortunately, enforceable measures against currency manipulation are absent from the TPP.

The TPP also fails to address the detrimental impact of Value Added Taxes (VATs). The U.S. is one of the few nations that does not charge a VAT on incoming goods. Meanwhile, our manufactures still face double digit VATs in several TPP countries. Most countries also rebate VAT taxes on their exported goods.

Since NAFTA, our trade surplus with Mexico has vanished and hundreds of thousands of U.S. jobs have been lost, mostly in manufacturing. Manufacturers continue to take advantage of NAFTA's investor protections and Mexico's low wages to outsource U.S. jobs. The TPP also provides extraordinary investor protections. Several countries in the TPP are extremely low wage.

Mexican workers are often threatened for exercising their most basic rights as company unions dominate. Currently, most make less than \$4.00 an hour in the auto industry despite booming profits and record growth. The TPP will not end this injustice.

International Wood Products Association

No written summary. Please see EDIS for full submission.

Information Technology and Innovation Foundation

No written summary. Please see EDIS for full submission.

Dr. Kenichi Kawasaki

The economic impacts of structural reforms measures, including those by Trans-Pacific Partnership (TPP) and other Economic Partnership Agreements (EPAs) will be achieved over the medium-term and will contribute to sustainable growth.

Estimates of the economy-wide impacts of tariff removals and the reductions of nontariff measures (NTMs) (using a Computable General Equilibrium (CGE) model of global trade incorporating the dynamic aspects of capital formation and productivity improvements) indicate that United States (US) potential macroeconomic income gains from TPP would account for 0.8 per cent of US Gross Domestic Product (GDP). This rate is smaller than estimated gains in the other TPP member countries, which range from one to two per cent in Australia, Canada, Chile, Japan and Peru to around 20 per cent in Malaysia and Vietnam, but in terms of absolute values, US income gains, amounting to 113 billion US dollars, would be the largest among the gains of the twelve TPP member countries, with the second largest gains being in Japan (87 billion US dollars). On the other hand, US tariff removals and NTMs reductions would generate larger income gains than in any other TPP member country.

Among the sources of US economic benefits, the impacts of tariff reductions would be limited, accounting for less than 0.1 per cent of GDP, even assuming 100 per cent tariff removals without exemption, which was not actually agreed in the TPP negotiations concluded in October 2015. The vast majority of US income gains would derive from NTMs reductions in goods and services. Moreover, those US benefits would be driven primarily by US own NTMs reductions. It will be essential to reform domestic markets to achieve larger economic benefits from international EPAs.

Meanwhile, US income gains from the Free Trade Area of the Asia-Pacific (FTAAP) are estimated to account for 1.7 per cent of GDP, double the estimated benefits from TPP. The wider the coverage of EPAs, the larger the economic benefits will be. TPP would be a step forward for Asia-Pacific wide EPAs and for global trade and investment liberalization and facilitation and would lay a foundation for larger economic benefits.

The actual impacts of TPP will be reviewed in light of the TPP agreement. In addition to precise evaluations of partial tariff reductions and levels of NTMs reductions, including degree of spill-over to non-member third economics, further study dynamic economic impacts will be

conducted. Estimates incorporating the effects on endogenous labor supply and the “extensive margins” of trade, i.e. exports by companies not involved in international markets before liberalization, indicate that the impacts could be much larger than estimated in earlier studies, including the current version of my model simulations, discussed above.

Knowledge Ecology International

No written summary. Please see EDIS for full submission.

Lancer Corporation

Introduction

My company, Lancer Corporation, provides draught beverage and soft drink dispensing equipment worldwide and we have a distinct advantage in the marketplace. While international distribution is critical to my company’s strategy, my company currently faces challenges with selling our beverage dispensers abroad. The Trans-Pacific Partnership would allow us to compete with foreign competitors and make it easier to comply with certification standards in various countries.

Barriers to Trade

Currently, it is burdensome to comply with different certification standards for the various countries that our company serves. Because each country has different standards, filling out the necessary paperwork and ensuring compliance with the separate standards costs us in time and administrative overhead. In addition, it becomes increasingly more difficult to compete with foreign competitors if new markets are not opening.

Benefits of Trans-Pacific Partnership

The recently finalized Trans-Pacific Partnership (TPP) would streamline these certification standards, harmonizing the certification process across member countries to eliminate burdensome and often redundant paperwork. In doing so, the agreement would allow us and other businesses to enter into new markets more easily, creating more jobs in Texas while providing us with a more prosperous economy. Approximately 1.2 million jobs are supported by international trade agreements, and the San Antonio metropolitan area generated a total of \$25.8 million in merchandise exports last year. The TPP will make it easier for my company to sell our beverage dispensers abroad and compete with foreign competitors.

Conclusion

The TPP will remove a number of challenges my company and others face in trying to do business abroad. The TPP will strengthen our economy, open new markets for Texas businesses and workers, and continue to support jobs.

Leading Biosciences

Introduction

My company, Leading Biosciences, is in the human clinical trial phase on a therapeutic drug that will address multi-organ failure caused by shock, the most critical unmet need in the U.S. right now. We are a small biotechnology company with hopes of bringing the next generation of medicine worldwide. The recently finalized Trans-Pacific Partnership would allow for strengthened intellectual property protection and global expansion.

Barriers to Trade

Currently, intellectual property protection poses a challenge for us. Due to the proprietary nature of our drug's formula, intellectual property protections will be critical to generating partnerships with Pharma companies outside the United States. Method patents are a big part of our portfolio, but they are not currently recognized in all countries. Additionally, some countries don't allow a patent to be filed once there's been a disclosure, preventing pharmaceutical companies from realizing the profits from years of research and investment.

Benefits to Trade

We will be partnering with a multinational company in the future, and the company could be headquartered abroad due to the competitive international marketplace. The Trans-Pacific Partnership (TPP) will enable us to make the best decision for expanding our company, regardless of country border lines. TPP will also lead to increased sales of our product, a significant increase of jobs in the U.S., and improved patient outcomes worldwide.

Conclusion

My business, and many others like ours in California, depends on trade agreements to level the playing field for American businesses. The TPP will provide significant benefits to the United States, particularly in supporting the innovative scientific industries and bringing the next generation of medicines to the global marketplace.

Leather Specialty Company

No written summary. Please see EDIS for full submission.

Professors John McLaren and Shushanik Hakobyan

We review research on the effects of past trade agreements to extrapolate the likely effects of trade portions of the TPP. If the effects of the trade portions of the TPP are similar to the US experience with trade agreements in the past, the agreement should: (i) Dramatically increase trade volumes between the US and the other partner countries in the TPP; (ii) Slightly increase aggregate real income in the US, with larger but still small increases in income in the lower-income partner countries; (iii) Dislocate some US workers in vulnerable industries, throwing some workers into unemployment, but create jobs in other industries, resulting in a small positive long-run effect on total job creation; (iv) Reduce incomes of blue-collar workers in manufacturing, particularly in offshorable occupations, and in many cases permanently; (v) Raise incomes of low-income households in Vietnam and Malaysia, and lower poverty rates there.

Motion Picture Association of America, Inc.

No written summary. Please see EDIS for full submission.

Mulvaney's B&L

Introduction

My restaurant, Mulvaney's B&L, is dedicated to farm-to-table services and we have many close relationships with the farmers who grow the food that feeds our customers. I know their businesses depend not only on restaurants like mine, but also on selling their California produce and livestock to customers overseas. The Trans-Pacific Partnership would reduce the barriers that would allow these companies to engage in international trade.

Barriers to Trade

Currently, many Sacramento businesses face high tariffs when it comes to selling produce and livestock overseas. This makes it difficult to remain competitive in the international marketplace.

Benefits to Trade

The Trans-Pacific Partnership will support local business, especially within the agricultural industry, by reducing barriers. Increasing participation in the global economy helps grow, strengthen, and diversify our economy. More jobs will be generated in the Sacramento region and across the state.

Conclusion

The future of the U.S. economy is global and trade agreements are vital to economic growth. The recently finalized Trans-Pacific Partnership will help restaurants and farmers enter new markets and grow the California economy, benefiting us all.

National Association of Manufacturers

The National Association of Manufacturers (NAM) is the largest manufacturing association in the United States, representing over 14,000 manufacturers small and large in every industrial sector and in all 50 states. The NAM has been actively involved in advocating for comprehensive, high-standard and ambitious market-opening and enforceable commitments in the TPP throughout the entire negotiation. After an intensive review of the final TPP agreement, overall, the NAM finds that the TPP agreement will substantially open the TPP markets to U.S. manufactured goods exports, create a more level playing field in a part of the world where manufacturers are losing market share and set higher than status quo standards that will benefit many broad U.S. manufacturing sectors. By eliminating all foreign tariffs on U.S. manufactured goods exports, the TPP achieves a top priority of manufacturers in the United States that will create substantial new export opportunities for manufacturers that face high tariffs and competition from other producers that already enjoy trade agreement preferences. In addition, the NAM finds that the following provisions will be particularly beneficial to manufacturers seeking entry into the TPP markets: provisions eliminating and reducing non-tariff barriers; standards on important issues of non-discrimination, intellectual property and investment protection, digital commerce and data flows, transparency, and anti-corruption; and binding and time-limited dispute. These outcomes will provide manufacturers in the United States with important new opportunities to improve their competitiveness and, thereby, increase sales and exports in the growing Asia-Pacific region, particularly with those countries where the United States does not currently have a free trade agreement. It will also be important for the administration and congressional leaders to work closely with industry to address remaining barriers, to raise standards, to promote the rule of law and to further level the playing field for all.

National Cattlemen's Beef Association

The National Cattlemen's Beef Association (NCBA) is the oldest and largest national trade association representing America's cattle producers. NCBA strongly supports the Trans-Pacific Partnership (TPP) because it tears down massive tariff and non-tariff trade barriers that prevent U.S. beef producers from meeting foreign demand for U.S. beef. Most importantly, TPP removes the massive 38.5% tariff on U.S. beef in Japan and levels the playing field with our

Australian competitors who currently enjoy a significant tariff rate advantage over U.S. beef in Japan. Without TPP, the U.S. beef industry will continue to lose market share in Japan, our largest export market at \$1.6 billion in sales in 2014. TPP establishes a Pacific framework founded on science-based and market-driven principles and limits the disruption of politics in trade.

National Chicken Council and USA Poultry & Egg Export Council

No written summary. Please see EDIS for full submission.

National Corn Growers Association

TPP is a high level 21st century trade agreement that provides new and groundbreaking trade architecture that will drastically reduce tariff and non-tariff barriers for U.S. agriculture and provides the foundation for a global Free Trade of the Americas plurilateral trade pact.

TPP has the ability to shape other major trade agreements such as the Trans-Atlantic Trade and Investment Partnership Agreement and influence the World Trade Organization in their efforts to address broad domestic subsidies, market access and export competition pillars under the previous DOHA Round Negotiations.

National Council of Textile Organizations

No written summary. Please see EDIS for full submission.

National Farmers Union

No written summary. Please see EDIS for full submission.

National Foreign Trade Council

The two preconditions for Congressional approval of TPP are: (1) the resolution of outstanding issues of importance to the Congress that are need to be addressed by the Administration and (2) Congress' consideration of the Commission' report on the probable economic effects of TPP.

The traditional point of entry for measurement of benefits is a review of the thousands of foreign tariffs being eliminated, or in some cases markedly reduced. In doing so, account must be taken of the rate of growth of foreign markets newly opened. Vietnam is growing at twice the U.S. rate. As TPP is the primary path for future access to the bulk of the world's new and increasingly affluent customers in Asia, this also is a highly relevant factor.

Arguably even more important is the opening of wholly new fields of market access. Major liberalization will take place for the cross-border supply of services (including financial services). TPP will further promote the explosive growth of e-commerce, providing for the free flow of data across borders, prohibiting forced localization of data storage and enabling the expansion of express delivery and electronic payment services. In all of these areas, America has a competitive advantage. Evaluating TPP's benefits requires a comparison among competitors. It must always be kept in mind that with any FTA that trade liberalization is preferential – granting advantages that non-parties' businesses do not enjoy.

In the world of digital commerce, the benefits in TPP for small and medium sized businesses are likely to be very large. As most employment in America is provided by small and medium-sized businesses, the gains in jobs should also be large. Trade facilitation, with emphasis on serving the needs of micro, small and medium sized American businesses, holds great promise.

Although a more mature market, due to its size, any additional access to the Japanese market can have a very positive effect.

The rules sections of the agreement can have dramatic positive effects. A prime example is the inclusion of disciplines designed to curb unfair competition from state-owned enterprises (SOEs). SOEs are increasingly important in world trade.

Where the US did make concessions, they were limited with respect to sensitive industries and often staged over an extended period of time.

It is imperative that the ITC also examine the economic costs of failing to join TPP. The default case is not the status quo, it is much, much worse. In a world governed by preferential trading arrangements, U.S. companies will not only face current barriers, but their major competitors will benefit from preferential access under the other trade agreements – in place and being negotiated – to which the U.S. is not a party.

The bottom line: There are strong positive net benefits for U.S. businesses and workers from TPP entering into force, and strikingly negative consequences if it does not do so.

National Pork Producers Council

The most important benefit from TPP for U.S. pork producers would be from increased access to the Japanese market. Japan has been viewed for many years by the U.S. agriculture community as a market of enormous potential. Japan's economy is second only to China's in the region, and Japan is our fourth largest agricultural export market overall. U.S. food and agricultural exports to Japan in 2014 totaled \$13.1 billion. Japan is the top U.S. market for pork, valued in 2014 at nearly \$1.8 billion.

Even so, a substantial barrier to pork imports remained in Japan that had to be addressed satisfactorily in TPP for it to be considered a success: a complex system of tariffs commonly referred to as the “Gate Price.” Under the Gate Price system, pork entering Japan priced above a pre-established “Gate Price” is assessed a low import duty in percentage terms, while pork priced below the Gate Price is assessed a higher variable specific duty (yen per kilogram).

The effect of this system has been that almost all pork shipments to Japan had to be priced above the Gate Price to get the lower percentage tariff and avoid the higher variable charge. This accounts for the fact that most U.S. exports to Japan have been in the high-end categories (loins and tenderloins). Shipments of lower-priced cuts, where U.S. product is highly competitive (hams), have been limited. In the absence of the Gate Price system, the United States would be much better positioned to compete fairly for a share of the Japanese market in lower-priced pork cuts.

National Potato Council

No written summary. Please see EDIS for full submission.

National Retail Federation

No written summary. Please see EDIS for full submission.

New Grand Ocean International

Introduction

My company, New Grand Ocean International LLC, exports a variety of meat products to Asia. We also provide consulting for other companies who want to find new exporting opportunities in Asia. We currently do business with Vietnam, Japan, and Malaysia – all members of the Trans-Pacific Partnership (TPP) – and we are always expanding. TPP will help companies like mine compete in the Pacific Rim, increasing our exports and creating jobs.

Barriers to Trade

Unfortunately, high tariffs price many of America’s small businesses out of East Asian markets. Currently, some TPP countries tax imports of poultry products as high as 300%, beef products as high as 50%, and pork products as high as 25%. These tariffs make American products artificially more expensive than domestic suppliers in those markets, making it difficult for us to compete.

Beyond tariffs, each country also has different import licensing requirements. Filling out the necessary paperwork and ensuring compliance with those separate requirements costs us in

time and administrative overhead. This is particularly burdensome for a small business. Additionally, some countries' Sanitary and Phytosanitary Measures (SPS) are designed to make it harder for U.S. businesses to sell our products in their markets.

Benefits of the Trans-Pacific Partnership

TPP will reduce or eliminate many of the tariffs currently pricing us out of the market, allowing us to be cost-competitive with domestic suppliers in those countries. The agreement also addresses non-tariff barriers to entry in those markets, harmonizing import licensing requirements across member countries to reduce burdensome and often redundant paperwork, allowing us to enter new markets more easily. Finally, TPP will ensure that foreign countries' SPS measures are science-based, and not just used to discriminate against American food products.

Already, my company is benefiting from the prospect of a trade agreement in the Pacific Rim. We have met with Vietnamese business leaders who are interested in importing our products, which will mean more jobs for Omaha workers. We have also found several Vietnamese investors who are interested in funding projects here in Omaha.

Conclusion

All of the aforementioned benefits of a trade agreement in the Pacific Rim depend on swift passage of TPP. The longer Congress waits, the more America's businesses will have to pay to do business overseas, and the longer we will be kept at a competitive disadvantage. TPP will open new markets to businesses like mine, enabling us to export more of our products overseas and create jobs in the U.S.

North American Meat Institute and the U.S. Hide, Skin and Leather Association

No written summary. Please see EDIS for full submission.

Northwest Door LLC

Introduction

My small business, Northwest Door, has been making, selling, and installing garage doors out of Tacoma for 70 years. Over the past several years, we have expanded our business to nine countries and have identified more growth opportunity in the Asia Pacific. The recently finalized Trans-Pacific Partnership is critical for us to reach customers in other countries.

Barriers to Trade

Currently, we can barely compete with Chinese companies because they face lower tariffs in the Pacific Rim countries than we do. Tariffs increase the cost of our doors by 5 to 25 percent, so when customers can buy garage doors from Chinese companies at far lower prices, it is hard for us to compete and remain competitive.

Benefits to Trade

The Trans-Pacific Partnership would reduce tariffs and lower other barriers to international trade in the Asia Pacific. Ten percent of our sales are exported to four TPP member countries, and at least four other countries are potential markets for our business. Doing more business overseas would help us add even more jobs and increase wages for our local employees and providers.

Conclusion

The Seattle metropolitan area is the fourth largest exporting market in the United States. Nearly a quarter of the countries that local businesses currently export to are members of the TPP agreement. With the passage of the TPP, Puget Sound's businesses will grow and continue to add jobs at home.

OMA Industries

Introduction

I founded my small business in 2007 and we sell maintenance, repair, and operations parts for machinery, systems and equipment. Our primary market is manufacturers in the United States, but a significant portion of our sales come from outside the country, as much as half a million dollars per year. We currently sell to customers in Mexico, Brazil and Luxemburg. We would like to do more business internationally, but there are a lot of barriers for us that are hard to overcome with our limited resources.

Benefits to International Trade

We are a small company (it's just me and two other employees) and we compete a lot with larger companies. One of our successful strategies for competing with these larger companies is to go to places in the world where they aren't selling as much. We would really like to sell more to countries in Latin America, including Colombia, Chile, and Peru. We see a lot of opportunity there. As we expand, we would also like to sell our products in Asia, but we have not been able to yet.

Barriers to International Trade

It feels like the rules to doing business in other countries change all the time and it is hard to keep up. My company has trouble with Customs regulations frequently. We lose business when there are high tariffs on our products and it becomes very expensive to compete. We also have trouble with expensive shipping costs. If there were fewer barriers to doing business internationally, our revenue would be higher and I would be able to hire another employee.

Conclusion

McAllen is on the border with Mexico and it's obvious to our community that businesses should be able to sell products there; NAFTA has been a valuable tool in enabling that expansion and creating U.S. jobs. My small business has learned that exporting to Mexico and other foreign countries is a critical strategy for diversifying and strengthening our business. As the world becomes increasingly global, the United States should reduce barriers for more small businesses like mine by passing international trade agreements like the Trans-Pacific Partnership.

Outdoor Industry Association

No written summary. Please see EDIS for full submission.

Personal Care Products Council

No written summary. Please see EDIS for full submission.

Pet Food Institute

No written summary. Please see EDIS for full submission.

Peterson Institute for International Economics

No written summary. Please see EDIS for full submission.

Professors Peter Petri and Michael Plummer

No written summary. Please see EDIS for full submission.

Pharmaceutical Research and Manufacturers of America

No written summary. Please see EDIS for full submission.

Portland Made

No written summary. Please see EDIS for full submission.

Procter & Gamble

P&G is a global leader in fast-moving consumer goods, focused on providing branded consumer packaged goods of superior quality and value to our consumers around the world. With \$76.3 billion in global sales, P&G sells products in more than 180 countries and territories, with manufacturing sites spread throughout the U.S. and international markets. We own and operate 26 manufacturing sites located in 20 U.S. states and territories, as well as some 100 manufacturing sites in foreign countries. Nearly 5 billion consumers use our products.

Commerce and trade is part of P&G's corporate DNA, and we actively support implementation of high-quality multilateral, regional and bilateral trade agreements as policy tools to accelerate economic growth, reduce tariff and non-tariff barriers to trade, and to promote regulatory coherence across geographical borders. Existing free trade agreements have helped to increase wealth and eliminate or reduce trade barriers globally. P&G benefits from these agreements because they have allowed us to create efficient, reliable supply chains that have expanded our access to markets around the world.

The TPP region includes some of P&G's largest and fastest-growing markets in Asia Pacific and Latin America and we anticipate major benefits from TPP member countries' agreement to establish or enhance new protections for investors and reduce non-tariff barriers. The TPP Agreement will serve as the first U.S. trade agreement with five of the member countries, including Japan, the world's third largest economy, as well as Vietnam and Malaysia, two of P&G's fast-growing emerging markets.

TPP goes even further than previous trade agreements by addressing 21st century trade issues through chapters within the agreement on electronic commerce, customs administration, and small- and medium-sized businesses. These chapters complement our company's future business growth in all of the TPP member countries as online and non-traditional distribution models and sales channels rapidly expand. Today's consumers, especially those in the Asia Pacific Region, increasingly shop online and purchase our products via computers, phones, and other mobile devices. By ensuring the freedom of cross-border data flows, generally prohibiting

data localization and protecting personal information, TPP will help boost electronic commerce among the 12 participating countries.

P&G expects some of our most important long term gains to stem from increased regulatory coherence. The TPP agreement's Cosmetics Annex commits partner countries to important underlying principles of "Good Regulatory Practices." The reduction in regulatory barriers will reduce costs and simplify business processes as duplicative and ineffective regulations are eliminated between member countries and increase the speed in which we can deliver the safest, newest and most innovative beauty and personal care products to consumers.

The TPP Agreement represents an important opportunity for P&G, our employees, shareholders, and for the communities where we live and work. P&G supports immediate passage of the TPP Agreement because it will not only benefit our current and future operations in member countries, but it lays the groundwork for P&G to enjoy similar benefits in countries that subsequently join this important trade agreement.

Progressive Policy Institute

The Progressive Policy Institute (PPI) strongly supports the Trans-Pacific Partnership and believes that the agreement is in the economic interests of the United States. PPI believes that slow growth is America's fundamental challenge and that expanding trade under liberal rules is integral to a progressive, pro-growth economic strategy.

PPI notes, in particular, that the TPP includes significant, groundbreaking provisions that will support and deepen two transformative trends that will help Americans benefit more broadly from expanded trade: 1) increasing exports by America's small and medium-sized enterprises (SMEs), and 2) the growth of the digital economy and global e-commerce.:

PPI urges the Commission to focus on the following points in its analysis of the TPP's economic impact:

1. Studies show that digitally enabled trade—including trade through Internet platforms like eBay and PayPal and logistics firms like FedEx and UPS—is rapidly "democratizing" trade, making it increasingly possible for America's small firms and nontraditional traders to sell to customers around the world—often as easily as large, established traders.
2. America's small and medium-sized exporters are key economic contributors, accounting for about a third of U.S. goods exports. Numerous studies show that SMEs that export, on average, are more productive and resilient, hire more employees, and pay higher wages than non-exporting SMEs.

3. The United States has significant potential to grow SME exports. Exporting SMEs currently account for only about one percent of America's 29 million SMEs and about five percent of America's six million employment-providing SMEs. There is growing interest among American SMEs in exporting.
4. Expanding opportunities for small business exporters could enable a broader—and more diverse—group of American small business owners and workers to share in the higher returns that trade can generate. The TPP would provide particular opportunities, for example, for Asian-American and Hispanic-owned exporters, whose U.S. export sales are often highly concentrated in TPP markets, and would support woman-owned and other minority-owned exporters, who, on average, employ more workers and pay significantly higher wages than their non-exporting counterparts.
5. The TPP includes groundbreaking provisions to support the growth of digitally enabled trade. Among other things, the agreement would: (i) require countries to allow electronic data flows for business purposes, (ii) restrict data localization and similar rules that mandate where businesses locate servers, databases, or other digital infrastructure, and (iii) require privacy, consumer protection, and other key rules to foster regional e-commerce.
6. The TPP includes groundbreaking provisions to support the growth of U.S. small business exports. Among other things, the agreement would: (i) create a special committee to assure that the agreement works for SMEs; (ii) require countries to create user-friendly trade information portals to assist SME traders; and (iii) eliminate or significantly reduce high duties, regulatory barriers, and customs delays that studies by the Commission and others show can place particular burdens on small business exporters.

Property Casualty Insurers Association

No written summary. Please see EDIS for full submission.

Public Citizen

No written summary. Please see EDIS for full submission.

Ranchers-Cattlemen Action Legal Fund, United Stockgrowers of America

R-CALF USA is the largest U.S. trade association that exclusively represents the live cattle segment of the multi-segmented beef supply chain. Its members are seed-stock, cow/calf, background and stocker, and feedlot operators. Because they sell cattle while meatpackers buy cattle, R-CALF USA members are impacted differently by the Trans-Pacific Partnership free

trade agreement (TPP) than are multinational meatpackers. The TPP benefits multinational meatpackers at the expense of independent U.S. cattle producers.

The TPP adopts the mantra coined by the meatpackers' trade association, the National Cattlemen's Beef Association (NCBA), which states "beef is beef whether the cattle were born in Montana, Manitoba, or Mazatlán." The TPP accomplishes this under its product-specific rules of origin by declaring the origin of beef to be wherever the animal is slaughtered. This renders the origin of cattle irrelevant. It relegates the U.S. cattle industry to nothing more than an undifferentiated raw-product supplier to the multinational meatpackers' global supply chain.

Thus, the TPP allows multinational meatpackers to ship live cattle from Australia (the U.S. already ships about 60,000 cattle long-distance from Hawaii to the mainland each year), Brazil, Mexico, Argentina, Canada or Nicaragua to the U.S. for slaughter. The resulting beef can then be shipped duty-free to Japan or any other TPP country as a "Product of the USA." This extinguishes competition between U.S. cattle producers and cattle producers from around the world. The TPP effectively grants multinational meatpackers a license to seize the reputation of the U.S. cattle producer and put it on beef from cattle born and raised anywhere in the world, in the form of a USA label. The TPP gifts the reputations of U.S. cattle producers to the multinational meatpackers; but, U.S. cattle producers receive nothing in return.

The TPP also discriminates against U.S. cattle producers by granting special safeguards to Japanese cattle producers and U.S. dairy producers, which protects them from price-depressing import surges, while granting no safeguards to U.S. cattle producers. The U.S. commercial sheep industry was severely damaged by a lack of safeguards. Lower-cost Australian lamb imports depressed U.S. lamb prices so severely that by 2006 the U.S. began importing more lamb than the injured domestic sheep industry could produce. Because no safeguards were provided, the sheep industry became the first U.S. livestock industry to have the majority of its production offshored. The TPP leads the cattle industry in the same direction.

In addition, the TPP will further weaken U.S. import standards by interfering with the ability of U.S. citizens to establish essential import requirements through the participatory, democratic process. The TPP accomplishes this by inviting foreign corporations and foreign governments to challenge U.S. health and safety laws when they deviate from international standards. To facilitate even more imports from countries that lack the will, infrastructure, or resources to meet U.S. standards, the TPP authorizes unaccountable attorney practitioners, who are not judges, to adjudicate formal challenges against U.S. health and safety laws. In short, the TPP requires the U.S. to unacceptably cede a wide swath of its national sovereignty.

Retail Industry Leaders Association

No written summary. Please see EDIS for full submission.

Salewa North America

Introduction

Salewa North America is a wholly owned subsidiary of Oberalp, and includes a portfolio of four international outdoor brands with products for skiing, climbing, mountaineering, trekking, trail running, and more. Oberalp acts as a distributor for other brands in some countries. The approach is not simply quantitative: the goal is to increase brand value and positive impact on the sporting community.

The Oberalp Group was founded in 1981 by Heiner Oberrauch and now employs almost 600 people. Over the last few decades, we have expanded beyond the North American and European markets and found great potential in Asia. The Trans-Pacific Partnership would help my company and the brands we support as we expand internationally.

Opportunities with International Trade

A significant share of our business is international and these international sales have been essential in our business's growth and success. In the outdoor industry, it is valuable to sell our products to markets around the world, as the climates vary and the demand for various goods changes from season to season. When it is cold enough to ski on the mountains in one place, it is warm enough to run on trails in another. This keeps our revenue streams more stable and stability is always good for business.

Barriers to International Trade

When we sell our products in other countries, and manage our supply chain between countries, we regularly have to manage difficulties with complicated regulations and high tariffs. Customs regulations in other countries require valuable staff time to coordinate. Sometimes our products get stuck in Customs and these delays can be costly. Often the tariffs on our goods are so high in other countries that it's difficult to compete with sellers from that country's domestic market. That requires us to sell our products with narrower margins or we can't sell them at all there.

Conclusion

Small businesses like ours stand to benefit significantly from reducing barriers to international trade. While larger companies can manage hurdles like Customs regulations and they can

absorb higher tariff costs, small businesses make sacrifices every day to go through the efforts required to benefit from international trade. I believe the Trans-Pacific Partnership would greatly reduce these barriers, so that more small businesses can grow, create new jobs, and reduce unnecessary duties and pricing pressure for our American consumers.

Semiconductor Industry Association

The Semiconductor Industry Association (SIA) is the voice of the U.S. semiconductor industry, one of America's top export industries and a key driver of America's economic strength, national security, and global competitiveness. For U.S. semiconductor companies -which design and manufacture the microchips that control all modern electronics- international trade is vital for our industry to compete, innovate and grow.

This is because while most of the manufacturing done by U.S. semiconductor companies is done in the United States, 82% of our products are sold to customers overseas. In fact, semiconductors are the nation's 3rd largest manufactured goods export, after automobiles and airplanes.

Access to global markets has enabled our industry to compete successfully and maintain a leading market position with more than half of the \$336 billion global semiconductor market share in 2014. Revenues from overseas semiconductor sales support 1.25 million jobs and billions of dollars of R&D and capital investments here in the United States.

The TPP is incredibly important to our industry in three main aspects: 1) it enhances access to the huge and fast growing global markets in Asia 2) it strengthens the global semiconductor supply chain on which our industry depends and 3) it aligns global trade rules with how trade is done in today's digital economy and sends an important message to our competitors that fairness and collaboration – not inequity and isolationism- will be the hallmarks of 21st century trade.

The TPP sets the rules for cross-cutting issues not previously included in trade agreements that will lay own important precedents for other trading partners, particularly China. There are several key provisions that will positively impact the U.S. semiconductor industry, including:

- Rules preventing market-access restrictions on commercial products with encryption
- Increased penalties to protect trade secrets and other forms of IP.
- Tariff elimination on semiconductor-rich products and applications (i.e. autos/auto parts)
- Simplification and harmonization of customs and trade procedures and removal of impediments to e-commerce

- Rules that require state-owned enterprises to compete fairly and transparently without undue government advantage

Successful ratification of the TPP will promote free and open trade upon which our industry has thrived, thus reaffirming America’s global technology and trade leadership, and ensuring that more products made in America – including technology products like semiconductors – can be shipped to customers around the world.

ServerLIFT Corporation

Introduction

My company, ServerLIFT, provides server lifting solutions designed to effectively handle servers and networking equipment in today’s data center environment. The success of our company depends on international trade, and the recently finalized Trans-Pacific Partnership will help small businesses like mine expand our export operations into new markets.

Barriers to Trade

It is hard for us to establish a foothold in the global market with high tariffs that are very costly for our business. Small businesses lack the resources to handle credit risks so we are not able to export effectively.

Benefits to Trade

The Trans-Pacific Partnership (TPP) would help us increase our revenue and employ more workers here at home. The TPP would enable us to export superior quality products, have better pricing options and run the business more effectively, while having the resources to do so.

Conclusion

The TPP will strengthen America’s small businesses, create more jobs, raise our GDP, and safeguard our nation’s influence within the global marketplace. My company’s story illustrates the enormous potential TPP offers small American businesses hoping to venture into the global marketplace.

Sierra Club

To accurately reflect the interests of U.S. consumers, workers, and businesses, this USITC investigation should include a robust focus on the TPP's likely impacts on protection of the environment and climate. After a thorough review of the TPP text, Sierra Club concludes that the TPP would likely exacerbate climate disruption, undermine environmental protections, increase threats to certain endangered species and ecosystems, and allow existing environmental abuses to continue. Many of the TPP provisions that pose these environmental threats, and the threats themselves, also would undermine the employment opportunities of U.S. workers and the competitiveness of U.S. businesses.

The USITC should calculate and report the TPP's likely impact on greenhouse gas emissions, as the agreement likely would contribute to increased climate disruption, spelling costs for U.S. consumers, ecosystems, and businesses. For example, by spurring a shift in manufacturing from the U.S. to low-wage countries like Vietnam and Malaysia, the TPP not only would displace U.S. businesses and workers, but also result in more carbon-intensive production and greater greenhouse gas emissions from shipping.

The TPP also would facilitate increased production of, and dependence on, liquefied natural gas (LNG) – a fossil fuel with high life-cycle greenhouse gas emissions. Under the TPP, the U.S. Department of Energy would be required to automatically approve LNG exports to TPP countries like Japan, the world's largest LNG importer. Based on projections from the U.S. Energy Information Administration, a resulting rise in LNG exports would increase energy costs for U.S. consumers and businesses, costing the equivalent of tens of thousands of lost jobs each year, while spurring an increase in the dangerous practice of fracking. Automatic approval of LNG exports also would deter renewable energy investments while locking in decades' worth of climate-disrupting U.S. fossil fuel production.

The USITC also should conduct and report a thorough assessment of the financial, health, and environmental costs that U.S. consumers could bear under the TPP's expansion of the investor-state dispute settlement (ISDS) system. The TPP would roughly double the number of foreign firms empowered to challenge U.S. environmental protections in private ISDS tribunals. If the U.S. were to lose a case, U.S. taxpayers would have to pay up to billions of dollars. The unprecedented expansion of ISDS liability could also chill new environmental protections, exposing U.S. consumers to costly health and environmental risks. Other TPP provisions could similarly undermine U.S. environmental policies, such as environmental labels supported by U.S. consumers and businesses, and U.S. programs that cultivate local employment and business opportunities in renewable energy manufacturing.

Finally, the USITC should assess and report the likely costs to U.S. businesses, plus the likely environmental and health costs, of environmental abuses that likely would continue, and possibly increase, under the TPP. The TPP environment chapter, hampered by weak language and a failed enforcement mechanism, is unlikely to meaningfully reduce environmental violations occurring in TPP countries. The continuation of such abuses not only would threaten the environment, but also would put U.S. businesses such as fishing and timber companies at a competitive disadvantage.

SNA International

Introduction

My company, SNA International, focuses on forensic DNA management and consulting, as well as providing technological tools to help with forensic operations. The Trans-Pacific Partnership will help small businesses like mine overcome barriers such as tariffs and unfair cost disadvantages, and compete in the global economy.

Barriers to Trade

The lack of strong international trade policies makes it challenging for my company to compete with state-owned enterprises in the international market. These government-backed businesses often receive subsidies and preferential regulatory treatment to engage in commercial activity, making it harder for U.S. companies to gain a foothold in those countries. For example, in 2009, we were competing for a contract with the Oklahoma Bureau of Investigations, but lost the bid to a UK-based company that was backed by its government. In the end, the UK-based company did an insufficient job, and we won the next contract. But second chances do not come often and we are losing contracts because of an unfair cost disadvantage.

Benefits to Trade

The Trans-Pacific Partnership (TPP) includes provisions that will help ensure American businesses compete on a level playing field with state-owned enterprises. By prohibiting these enterprises or designated monopolies from discriminating against enterprises, goods, or services, from foreign countries, the TPP will prevent state-owned enterprises from distorting markets and putting U.S. companies at a competitive disadvantage.

Conclusion

The world economy is becoming increasingly global and we have no choice but to compete with companies in other countries. The TPP will make this process easier and fairer, which is increasingly crucial to many businesses' growth.

Society of Professional Engineering Employees in Aerospace

Congress and the public rely on official estimates to make informed policy decisions. Economic models have consistently overestimated the gains from trade. Trade models make simplifying assumptions, such as full employment, balanced trade, and economies operating at full capacity. Such assumptions serve ideological purposes, but they weaken the credibility of predicted outcomes.

Other countries are comfortable with trade-distorting policies, which are contrary to the assumptions used in economic models. These departures from economists' assumptions have real consequences for workers and communities in Guatemala, Mexico, Malaysia, Vietnam, and the United States.

For economic models to have value, they should acknowledge underlying assumptions and make clear how those assumptions affect the results.

Software & Information Industry Association

No written summary. Please see EDIS for full submission.

Spectronics Corporation

Introduction

My company, Spectronics Corporation, manufactures ultraviolet equipment and is one of the largest manufacturing firms on Long Island. Almost half of our sales are overseas, so our ability to export is critical to our business. The Trans-Pacific Partnership is extremely important to us, as it helps to ensure that our patents are respected when we enter new markets overseas.

Barriers to Trade

Protecting our intellectual property abroad is our biggest obstacle. Currently, it is very expensive to defend our patents in other countries. As a small business, the risk of having our intellectual property stolen is high. We have limited resources if our intellectual property is

stolen outside the United States, where there is not always an established system for defending patents.

Benefits of Trans-Pacific Partnership

The recently finalized Trans-Pacific Partnership (TPP) would establish a structure for enforcing our patents overseas, making it easier for small businesses like mine to protect our intellectual property. My company is particularly interested in entering Pacific Rim markets, so the TPP will help us find new exporting opportunities which will in turn allow us to create more jobs here on Long Island.

Conclusion

My business's success depends on strong trade agreements, as they are critical for small businesses and the workers we employ. The TPP will help us protect our intellectual property in other countries, expand our business overseas, and create more jobs in the U.S.

Sunrise Shoes and Pedorthic Service

Introduction

International trade is essential to Capital Region businesses like mine. When my company started in 1986, we were a small therapeutic footwear retail store. Twenty-five years later, we design DM standard care delivery systems and manufacture therapeutic footwear with applied soft tissue geometry and propulsive gait technology. Moving forward, we plan on exporting our added value therapeutic footwear and services to customers around the world, including in the Asia Pacific. The Trans-Pacific Partnership would help my business in our efforts to sell internationally.

Challenges to International Trade

As a small business, we face significant challenges with selling our products and services in other countries. Currently, it can be very complicated to navigate regulations and very expensive to manage high tariffs. Small businesses have fewer resources to handle these challenges and are often scared of even beginning on the path to trading internationally.

Benefits of Trans-Pacific Partnership

This international trade agreement would help small businesses like mine compete on an even playing field. There is significant potential for our world-class footwear and services to help customers in other countries. The trade agreement would streamline the process for entering into international markets and getting our products into the hands of more customers.

Conclusion

The opportunities for U.S. businesses to grow by selling overseas are huge and constantly growing. The vast majority of the world's consumers live outside America's borders. If businesses like mine don't look to diversify our consumers, we would be cutting ourselves short. International trade agreements like the Trans-Pacific Partnership will help us live up to our full potential. When small businesses grow, we create new jobs, making the U.S. economy stronger overall.

Sweetener Users Association

No written summary. Please see EDIS for full submission.

Team Askin Technologies

Introduction

My company, Team Askin Technologies, exports professional services in the aviation safety domain. We currently have been exporting for about four years and we do work with two civil aviation authorities, Saudi Arabia and Singapore. We help customers with their aviation safety regulations and supporting systems' with all work being performed in the United States.

Our goal is to export our Safety and Regulatory Subject Matter Expertise to other nations and the recently finalized Trans-Pacific Partnership can help us accomplish that.

Regulations and their compliance bring transparency and peace of mind.

Barriers to International Trade

Having different regulations, tariffs and fee structures make trade and exporting more difficult. With everyone on the same page and following the same guidelines we will communicate more effectively and streamline exporting.

Benefits of International Trade

International business has brought in more than \$15 million in sales for my small business. It's about 60 percent of our revenue. TPP would help companies like mine apply our services in other countries. Air travel is global by nature, and there's a lot of opportunity to increase our work overseas.

Conclusion

My business, and many others like it across the country, depends on international trade agreements to level the playing field for American businesses. TPP will simplify regulations in other countries to make it easier for us to do business there.

Teseda Corporation

Introduction

My company, Teseda Corporation, provides solutions to the semiconductor industry by isolating defects on complex semiconductors due to design, manufacturing, or use. Our users are worldwide, either headquartered outside of the U.S. or with divisions outside of the U.S. Because the semiconductor manufacturers we work with operate worldwide, my company is international by nature.

Currently, Teseda does business in China, Japan, Taiwan, Korea, Singapore, and the Philippines. While we are interested in expanding our business into more overseas markets, there are currently barriers to trade that make it difficult for us to do so, particularly relating to protecting our intellectual property. By strengthening IP protections, as well as reducing other barriers to trade in the Pacific Rim, the Trans-Pacific Partnership (TPP) will enable us to expand operations overseas, creating more jobs in the U.S. and contributing to our economic growth.

Barriers to Trade

My company is high-tech, but small: it is very difficult and costly for us to fight intellectual property battles. Teseda and other small businesses like it need to pay fees in every country to protect our IP, so we own a lot of patents: beyond the patent applications, we need to make annual payments to continue those patents' effectiveness, which is very expensive. If I cannot protect my IP, then someone can reproduce what my company is building and sell duplicates, so I would lose that market. IP protection is fundamental to securing business and, as a result, creating jobs.

There are other barriers to entering new markets, as well. The high cost of tariffs on our products gets shifted to our customers, making us less cost-competitive in those markets. And right now, we need to ensure our electrical equipment meets safety standards in every individual country we do business in, which is time-consuming and expensive.

Benefits of the Trans-Pacific Partnership

TPP will make it easier for businesses like mine to protect our intellectual property rights in new markets. The IP commitments in TPP are backed by strong enforcement systems, which is

particularly important for small businesses like mine who cannot afford the legal resources necessary to protect our IP. TPP will allow us to expand into new markets without fear of losing our valuable intellectual property.

Additionally, TPP will harmonize codes, including safety standards on electrical equipment. I believe that if my company gets safety qualifications at U.S. labs, that certification should apply across the board. TPP will help reduce the hoops we have to jump through to start selling our products in new markets.

Finally, TPP will eliminate all tariffs on U.S. manufactured goods, including electrical equipment. This will in turn reduce the price of our products in the Pacific Rim markets, allowing us to compete with domestic manufacturers in those companies.

Conclusion

As a small business, Teseda sees a tremendous value in the protection of intellectual property rights, the harmonization of trade standards, and the reduction or elimination of tariffs on U.S. goods. TPP will not only help us grow our business, but will also help companies like mine create jobs in the U.S. and grow our economy.

Third Way

No written summary. Please see EDIS for full submission.

Thirty Tigers

Introduction

The Trans-Pacific Partnership would have a positive effect on the U.S. economy, because when entrepreneurs are not able to readily access markets for their goods and services, businesses and workers suffer.

Thirty Tigers is an entertainment company I co-founded in 2001. In the last 15 years, we have gone from two employees working out of my guest bedroom to 30 employees mostly working out of our offices in Nashville, Tennessee. Our marketing, distribution and management services have fostered a number of independent artists, and last year, we sold \$17 million worth of their music worldwide. Our success (as well as our artists') is due, in part, to our ability to reach customers around the world.

Opportunities with International Trade

We have recently expanded our services to all of Europe and Australia, and the ease of which we can gain access many of to those markets, thanks to existing free trade agreements, helps not only my business but also the artists who we represent. When my business grows, I employ more American workers. When my artists are able to grow their careers and tour in those markets, they employ guitar techs and road managers who live and pay taxes in Nashville.

Cost of Inaction

International trade will happen whether or not there are international trade agreements in place. The Trans-Pacific Partnership would ensure that U.S. businesses can compete fairly with those in other countries. A recent report from the Peterson Institute estimates that delaying implementation of the agreement for just one year could cost the United States more than \$77 billion in lost national income.

This loss would be seen on the balance sheets of small businesses like mine across the country. Delaying access to international markets means delaying our revenue and delaying our new jobs.

There's no way to know if we would be able to make up for these losses over time, so it is important Congress acts quickly to approve the Trans-Pacific Partnership.

Conclusion

I urge Congress to support the Trans-Pacific Partnership to open the spigot of commerce and foster a vibrant economy that can create jobs as entrepreneurs send their goods and services to global customers without undue barriers.

Free trade is good for all businesses, good for my business, and good for my employees as well.

Tile Council of North America

No written summary. Please see EDIS for full submission.

Titanium Metals Corporation

No written summary. Please see EDIS for full submission.

Trade in Services International

Trade in Services International (TiSI) is dedicated to helping small and medium enterprises and service firms leverage the global services¹²³³ economy for export expansion, employment, and sustainable development of the TPP.

My testimony will focus on the development aspects TPP provisions on governance, e-commerce, and development advance trade policy in support of economic growth and development. The U.S. will benefit from the full implementation of TPP market oversight provisions that create robust competition authorities, transparent regulatory authorities, and institutionalize anti-corruption practices in TPP member economies. Small and medium enterprises (SMEs) will benefit from a legal framework governing electronic commerce. The US and TPP members will also gain from deepening women's engagement in the economy.

The TPP fosters good governance among the 12 member countries to achieve economic prosperity and sustainable development. The U.S. will benefit from a robust trade relationship with TPP member economies as they deepen market oversight reforms, create a positive policy climate for electronic commerce, and boost women's economic engagement. The TPP also sets the international standard for trade rules on competition policy, state owned enterprises (SOEs), transparency, and anti-corruption. At the same time, TPP members recognize the right to regulate, safeguard public welfare, and protect the environment. TPP provisions are also valuable for other countries interested in moving toward a sustainable, market-based economy.

U.S. Chamber of Commerce

The U.S. Chamber of Commerce appreciates the opportunity to present the following perspectives on the likely impact of the Trans-Pacific Partnership (TPP) on the U.S. economy. The Chamber is the world's largest business federation, representing the interests of more than three million businesses of all sizes, sectors, and regions.

The Chamber in January announced its support for the TPP and pledged to advocate for its approval by Congress. This decision followed careful review of the agreement's text and deliberation by our International Policy Committee and Board of Directors.

The TPP will eliminate tariffs and many non-tariff barriers on U.S. industrial and consumer goods exports. It will provide substantial new market access for U.S. agricultural exports through tariff elimination or reduction, creation of new tariff-rate quotas, and other measures.

¹²³³ Services include: business, communication, construction, distribution, educational, environmental, financial, health related, tourism and travel, recreational, cultural and sporting, and transport services, WTO, Services Sectoral Classification List, July 1991, MTN.GNS/W/120, <http://WTO.org>.

TPP rules will open markets to cross-border trade in services and investments in service sectors. It will unleash the digital economy, strengthen our innovative and creative industries, and end the favoritism afforded to state enterprises.

The substantial benefits of past FTAs are relevant to this investigation. While our current FTA partners represent just 6% of the world's population outside the United States, in recent years they have purchased nearly half of all U.S. exports. In our analysis, U.S. exports to new FTA partner countries have grown by an annual average of 18% in the five-year period following an agreement's entry-into-force. This boost to U.S. export growth is especially pronounced with more recent FTAs, which are front-loaded to eliminate tariffs rapidly, open services markets, and eliminate nontariff barriers more comprehensively than earlier FTAs.

The Chamber commissioned an economic analysis of the relationship between FTAs and job creation.¹²³⁴ It employed a computable general equilibrium economic model used by economists worldwide known as the Global Trade Analysis Project (GTAP), which is also used by the ITC. The results are impressive. The increased trade brought about by these FTAs boosted U.S. output by more than \$300 billion — enough to support 5.4 million U.S. jobs. This is a remarkable record.

No trade agreement is perfect, and the TPP is no exception. The Chamber is disappointed at the TPP's limited term of protection for IP relating to biologics and the fact that the TPP's rules regarding the "forced localization" of data do not extend to financial services. The TPP also includes a number of "carveouts" that deny specific products and sectors the benefit of the agreement's rules and tariff elimination.

We have strongly encouraged the Obama administration to work with Congress to address legitimate concerns expressed by industry and legislators to achieve the highest possible standards for American workers and businesses.

Addressing these ongoing concerns will be necessary, in our view, to secure the political support necessary for congressional passage. Working together we hope to ensure the agreement secures strong bipartisan approval. Thank you.

U.S. Dairy Export Federation

No written summary. Please see EDIS for full submission.

¹²³⁴ U.S. Chamber of Commerce, *Opening Markets, Creating Jobs: Estimated U.S. Employment Effects of Trade with FTA Partners*, May 14, 2010: <https://www.uschamber.com/report/opening-markets-creating-jobs-estimated-us-employment-effects-trade-fta-partners>, viewed on January 20, 2015.

U.S.-Japan Business Council

No written summary. Please see EDIS for full submission.

U.S. Meat Export Federation, National Cattleman's Beef Association, and North American Meat Institute

For the U.S. beef industry, Japan and Vietnam are the countries where significant export gains for beef will be possible through the elimination or reduction of existing tariffs and related import restrictions. Japan is the U.S. beef industry's largest export market, valued at \$1.3 billion in 2015. Currently, Japan maintains the highest tariffs on imports of beef from the U.S. of any of our major export markets. Under the terms of the TPP, Japan agreed to reduce its tariff on imports of chilled and frozen beef from 38.5 percent to 9 percent over 15 years. The reduction in the tariff is expected to result in increased per capita beef consumption and associated commercially significant opportunities for increased U.S. beef exports to Japan.

Japan signed an Economic Partnership Agreement with Australia, our principal competitor, before concluding the TPP negotiations. Currently, Japan's tariffs on frozen and chilled beef imports from Australia are 10 and 7 percentage points less than the tariff charged on imports of U.S. beef. This tariff advantage will continue to widen, putting U.S. beef exports at a significant commercial disadvantage, until the TPP is implemented and Japan implements a common tariff on beef imports from all TPP countries. Partly reflecting Australia's tariff advantage, Japan's imports of U.S. beef decreased by 11% in 2015 (to \$1.34 billion; 198,500 mt) while imports from Australia increased by 7% to \$1.76 billion (314,330 mt, +3%). Thus the loss to the U.S. beef industry of \$168 million during the first year of the JAEPA signifies the urgency in implementing TPP.

Although Vietnam is currently a much smaller market for U.S. beef, valued at \$32 million in 2015, through TPP tariffs would be eliminated in 3 years for beef and 5 years for variety meats (from 15% and 20% for boneless and bone-in beef and 10% for variety meats). Similar to the situation in Japan, U.S. beef is currently at a disadvantage in Vietnam, where Australia and New Zealand benefit from an FTA agreement where duties on most commercially meaningful products are now 5% and will be eliminated by 2018. Thus there is potential to grow U.S. beef exports to Japan and Vietnam with the reduction in import duties, but there is also an urgency for implementing TPP to overcome the current tariff disadvantages facing U.S. beef.

For Mexico and Canada, the U.S. will lose its preferential advantage as duties will be eliminated for beef imports from our primary competitors, Australia and New Zealand. But our analysis

indicates that the benefits of the TPP Agreement for the beef industry are likely to outweigh the costs. Besides significant gains in Japan and Vietnam, U.S. beef could also benefit from improved market access in countries that join TPP in the future. Such an interest has been expressed by major beef importers, including Taiwan, the Philippines, and Indonesia. Moreover, we also have good reason to believe that the broader value of the Agreement in setting a new, higher standard for future trade agreements will bring future benefits to our industry.

U.S. Dairy Export Council and the National Milk Producers Federation

Our industry determined early during the TransPacific Partnership (TPP) talks that substantial new dairy access gains would be vital to avoid an overall negative outcome for our sector. We were not willing to accept a result that opened our market to our major competitors (New Zealand and Australia) if at the same time other TPP dairy markets (mainly Japan and Canada) were permitted to largely block meaningful new access to our dairy products.

Based on our ongoing review of the terms of the agreement, it appears that our industry avoided the type of disproportionate one-way street outcome about which we were so deeply concerned. At the same time, we remain troubled by the lost opportunity to significantly pry open the long-sheltered dairy markets in Japan and Canada.

The two most important non-tariff achievements of this agreement are the sanitary and phytosanitary (SPS) chapter and the intellectual property chapter's provisions on geographical indications.

TPP is the first U.S. trade agreement to include rules and disciplines on SPS measures that go beyond those contained in the WTO SPS Agreement and are nearly all enforceable. Improvements were achieved in the areas of science and risk analysis, equivalence, import checks and transparency.

The TPP's GI provisions establish a more equitable and transparent international model for GI registrations than the EU's highly protectionist approach. Side letters with several TPP parties involved in trade negotiations with the EU should help avoid new inappropriate GI barriers to U.S. exports.

These achievements may be difficult to quantify in the ITC's modeling, but are relevant to TPP's expected economic impact. Our analysis of the agreement remains underway while we continue to pursue certain implementation issues with the Administration. We have, however, identified a number of factors that are relevant to any such assessment, which we urge the USITC to take into account in its analysis:

- The impact, both economic and precedential, of U.S. dairy tariff elimination granted to Japan despite a lack of reciprocal open access to Japan's dairy market;
- The impacts on U.S. sales in existing FTA partner markets, such as Mexico and Peru;
- The impact of U.S. tariff elimination on milk powders granted to New Zealand & Australia;
- The impact of U.S. tariff elimination on specific cheese TRQs granted to Canada, New Zealand & Australia;
- The level of dairy imports from Canada;
- The impact on U.S. exports in light of TPP-region competition from NZ and Australia;
- The degree of flexibility created by the agreement's rules of origin;
- The impact on TPP results given the likelihood of EU FTAs in the TPP region;
- The likelihood of intentionally obstructive regulatory barriers arising; and, finally,
- The use of new TPP dairy safeguard provisions by the U.S.

We stand ready to work with ITC analysts to discuss these recommendations and the best approach to economic modeling in the dairy sector.

Union for Affordable Cancer Treatment

No written summary. Please see EDIS for full submission.

United Parcel Service

No written summary. Please see EDIS for full submission.

United States Conference of Mayors

No written summary. Please see EDIS for full submission.

United States Council for International Business

The United States Council for International Business (USCIB) believes that the Trans-Pacific Partnership (TPP) agreement will contribute substantially to economic growth in the United States and the Asia-Pacific region, cement U.S. global leadership, and provide significant new opportunities for U.S. businesses, workers and farmers. However there are provisions in the agreement that limit or exclude protections for certain sectors and we strongly encourage the Administration to address these issues. These negative outcomes should not be used as a baseline for future agreements.

Market Access: The TPP expands market access in the region through elimination of tariff and non-tariff barriers, as well as breaking new ground in addressing growing regulatory impediments to trade. The TPP goods provisions, combined with the many other market opening provisions, will remove much of the cost, time and complexity currently hindering international trade.

Customs and Trade Facilitation: The TPP provides important commitments to facilitate, simplify, and speed the flow of goods across borders, however does not include a specific de minimis threshold for low-value shipments into the United States – USCIB supports the establishment of a USD \$800 threshold.

Investment: The investment chapter covers all of the core obligations found in our U.S. Model BIT, including investor-state dispute settlement (ISDS), as well as many safeguards. We are pleased that the chapter has a broad definition of covered investments; however it could be improved by not limiting investment and access to related remedies by excluding specific industries.

Services/Financial Services: The TPP provides more comprehensive opening of markets through negative lists that expand the scope of opportunities for many U.S. service providers, though there are limitations for some sectors. While there are some benefits for the financial services industry in terms of market access, the sector has been excluded from the data flow and data localization provisions and access to ISDS, and will be affected by Malaysia’s “national interest” exception.

E-Commerce and Data Flows: The newly binding commitments in the TPP regarding data flows and server location are extremely important to our membership, including for the financial services sector, which was excluded from this important provision.

State-Owned Enterprises: The TPP is the first trade agreement to make a serious effort to address these challenging issues of SOEs. While we would have welcomed more disciplines on subsidies and other areas of preferential treatment, we commend the chapter as a good first step in this emerging area.

Intellectual Property Rights: IP protection is vital in order for the innovative industry of the United States to thrive. While this chapter’s high-standard provisions in many areas provide great benefits for most industries, such as including provisions for data protection for agricultural chemical regulatory data for 10 years, in the biologic pharmaceuticals sector TPP fails to provide 12 years of protection, as is provided in the United States.

United States Fashion Industry Association

No written summary. Please see EDIS for full submission.

United Steelworkers

The Trans Pacific Partnership (TPP) will have a serious adverse impact on production, employment and wages here in the U.S., thereby undermining our economy and our national security.

The TPP fails to promote the economic interests of the United States in a number of fundamental ways:

1. The TPP fails to sufficiently advance labor rights and offers only false promises of progress. The TPP provisions limit the ability to guarantee that International Labor Organization (ILO) standards, as defined in the Conventions, will be the basis for workers' rights in the TPP countries.

In multiple instances, the Chapter on workers' rights includes terminology such as "may", "endeavor" and "as appropriate." The result is that countries can do little, if anything, to comply with their TPP commitments.

2. The TPP will have a serious adverse impact on domestic manufacturing. The agreement supports the global supply chains of multinational companies through continued outsourcing of production and offshoring of jobs.

The Rules of Origin in the auto and auto parts sector will have a significant long-term adverse impact on domestic production and employment. The TPP includes only a 45% requirement so that a majority of a vehicle's value could come from parts produced in China or other non-TPP countries and be considered to be "Made in America" for purposes of export to another TPP country.

The agreement also includes a new subset of parts – including bodies made of steel, aluminum or other materials, laminated auto glass and other products – that may be treated as produced within the TPP whether or not a majority of their content is actually produced in a TPP country. This provision could further reduce the already inadequate 45% threshold to a level potentially as low as 35 or 30%. This will lead to the substantial loss of jobs in the auto parts, components and materials sourcing sector.

The provisions seeking to provide new disciplines on state-owned enterprises (SOEs) will have little impact in reigning in their increasing competitive threat. Existing support for SOEs by our

TPP partners has been substantial but not actionable, and any support that is provided prior to implementation of the agreement will be protected.

The TPP also fails to include enforceable disciplines on currency manipulation, which has, and will continue to have serious consequences for U.S. manufacturing.

The steel sector will also face additional problems as the TPP also fails to address rising global over-capacity in the sector. This is the single greatest threat to commodity producers such as steel. Additionally, Vietnam is able to continue its existing tariffs on the import of steel into its market for 13 years while the U.S. market remains open to imports.

The TPP includes no integrated enforcement measures and existing U.S. enforcement infrastructure is insufficient. Even the best rules, if left unenforced or inadequately enforced, will lead to further decimation of domestic manufacturing with the subsequent loss of jobs and increased income inequality inevitably following as a result.

Universal Leaf Tobacco Company, Inc.

No written summary. Please see EDIS for full submission.

USA Rice Federation

No written summary. Please see EDIS for full submission.

Professor J. Robert Vastine

No written summary. Please see EDIS for full submission.

Veza Triumph Ltd.

Introduction

My company, Veza Triumph Ltd., works closely with Southern U.S. small businesses that are often part of the supply chains of larger U.S. corporations. Our job is to help them overcome the obstacles to international trade. The recently finalized Trans-Pacific Partnership will allow small U.S. manufacturers to enter global markets both via their continued relationships with multinationals and independently.

Barriers to Trade

While multinationals have the capacity to independently climb the barriers required to enter new markets, and they can withstand high international tariffs without marked price increases,

those obstacles are often cost-prohibitive for small businesses. It is difficult for small business to enter new markets and engage in international trade with these barriers.

Benefits to Trade

The Trans-Pacific Partnership will allow U.S. small businesses to have access to new markets, reduced tariffs, and improve international corporate governance standards to help businesses of all sizes. TPP will also be a win-win for American manufacturing, as the elimination of all tariffs on U.S. manufactured goods will increase small businesses' ability to sell their products abroad and produce jobs here at home.

Conclusion

It is through helping U.S. businesses that we can make our nation's economy stronger overall. TPP is critical for small businesses and the workers they employ. TPP will help small businesses expand overseas and create more jobs across the country.

W.S. Darley & Co.

Introduction

My company, W.S. Darley & Company, sells fire pumps, fire trucks, and emergency response equipment to over 100 countries each year. It is difficult to operate on a level playing field in certain countries where tariffs and other trade barriers make selling difficult. The Trans-Pacific Partnership will help small businesses like mine overcome these barriers to compete in the global economy.

Barrier to Trade

Currently, high tariffs and other trade barriers make selling our products overseas very difficult, as the cost of doing business in those countries is too high. As a result of this difficulty in entering new markets, it is virtually impossible to compete with the domestic suppliers in those countries.

Benefits to Trade

The recently finalized Trans-Pacific Partnership would allow us, and other businesses across the country, to more easily enter new markets by reducing or eliminating tariffs placed on our goods. This will enable us to create more jobs here in the U.S. and contribute to the development of a more prosperous economy.

Conclusion

The success of my business depends on strong trade agreements that provide companies across America with a level playing field in foreign trade. The lower barriers to trade that come with TPP are good for small businesses like mine and good for U.S. jobs.

Wal-Mart Stores

No written summary. Please see EDIS for full submission.

Wiley Rein LLP

No written summary. Please see EDIS for full submission.

Wine Institute

No written summary. Please see EDIS for full submission.

Appendix E

Nonconforming Measures

Nonconforming Measures

The following tables provide a breakdown of nonconforming measures (NCMs) from TPP's Annex I and Annex II, by country and sector. Table E.1 lists TPP parties that have scheduled NCMs in particular sectors. Tables E.2 through E.13 list these same NCMs by country and provide more detailed information on each specific restriction, the annex in which it is located, and the relevant obligations. NCMs in Annex I are measures which would violate certain provisions in the TPP Investment (TPP Chapter 9) or Cross-border Trade in Services (TPP Chapter 10) chapters, but that TPP parties wish to keep in force (for example, foreign equity caps in certain sectors that violate national treatment provisions). By listing an NCM in Annex I, the party commits to a "standstill" whereby the measure will not become more restrictive in the future. It also commits to a "ratchet," meaning that if a measure is altered to become less restrictive in the future, that new level of restrictiveness will become the benchmark for the standstill requirement.

Annex II contains a list of reservations which enable TPP parties to preserve discretion for maintaining current NCMs or adopting new restrictions in the future. In addition to Annexes I and II, there are separate annexes with NCMs for financial services (Annex III) and state-owned enterprises (Annex IV). Sector-specific annexes, and annexes that only apply to particular TPP chapters are discussed separately in their corresponding sections of this report. Air transportation services for all countries (with the exception of specialty air services) are exempt from the provisions in the TPP Cross-border Trade in Services and Investment chapters.

Appendix E: Nonconforming Measures

Table E.1: TPP members that have nonconforming measures in particular sectors

Sector	Countries with NCMs in Annex I or II
Accounting, auditing, and bookkeeping services	Australia, Brunei, Canada, Chile, Japan, Peru, United States, Vietnam
Advertising services	Peru
Aerospace and services incidental to aerospace	Japan
Agriculture and services incidental to agriculture	Australia, Brunei, Japan, Mexico, New Zealand, Vietnam
Air transport	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam
Architectural services	Brunei, Canada, Japan, Malaysia, Peru, United States
Arms and explosives	Chile, Japan, Malaysia, Mexico, Singapore
Audiovisual services - see also printing and publishing	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam
Coal	Brunei
Construction and engineering services	Brunei, Chile, Japan, Malaysia, Mexico, United States, Vietnam
Courier services	Brunei, Mexico
Distribution services	Australia, Brunei, Canada, Japan, Malaysia, Mexico, New Zealand, Singapore, Vietnam
Educational services	Australia, Brunei, Chile, Japan, Malaysia, Mexico, Peru, Singapore, United States, Vietnam
Energy (including nuclear energy) - see also oil and gas, pipeline transport, and services incidental to energy distribution	Chile, Japan, Malaysia, Mexico, New Zealand, United States
Engineering services (including integrated engineering services)	Brunei, Canada, Malaysia, Singapore, United States
Environmental services	Brunei, Chile, Malaysia, Mexico, Peru, Singapore
Financial services	Australia, Japan, Malaysia, Mexico, New Zealand, Singapore, Vietnam
Fishing, and services incidental to fishing - see also maritime transport services	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, United States, Vietnam
Forestry, hunting and services incidental to forestry	Brunei, Japan, Mexico, Vietnam
Health-related and social services	Australia, Brunei, Canada, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam
Investigation and security	Brunei, Canada, Chile, Japan, Mexico, Peru, Singapore, United States, Vietnam
Legal services	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam
Management consulting service	Canada
Manufacturing, and services incidental to manufacturing	Brunei, Japan, Malaysia, Peru, Singapore, Vietnam
Maritime transport services (including internal waterways transport) - see also fishing	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam
Mining, and services incidental to mining	Brunei, Canada, Chile, Japan, United States, Vietnam
Oil and gas - see also energy, services incidental to energy distribution, and pipeline transport	Brunei, Canada, Chile, Japan, Malaysia, Mexico, Peru, Vietnam
Other business services	Brunei, Canada, Japan, Mexico, New Zealand, Singapore, United States, Vietnam
Other professional services	Australia, Canada, Chile
Pipeline transport - see also oil and gas, energy and services incidental to energy distribution	Chile, Malaysia, Mexico, Singapore, Vietnam
Placement and supply services of personnel	Brunei, Canada, Japan, Singapore, United States, Vietnam
Postal services	Japan, Mexico, Singapore

Sector	Countries with NCMs in Annex I or II
Printing and publishing - see also audiovisual services	Australia, Brunei, Chile, Mexico, Singapore, Vietnam
Rail transport	Brunei, Japan, Mexico, Singapore, United States, Vietnam
Real estate services	Brunei, Canada, Japan, Malaysia, Mexico, New Zealand, Singapore, United States, Vietnam
Recreational, cultural and sporting services (except audiovisual services)	Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam
Related scientific and technical consulting services	Canada
Rental/leasing services without operators	Mexico, Peru, Singapore
Research and development services	Chile, New Zealand, Peru
Road transport	Brunei, Canada, Chile, Japan, Malaysia, Mexico, Peru, Singapore, United States, Vietnam
Services incidental to energy distribution - see also oil and gas, energy and pipeline transport	Brunei, Japan, Malaysia, Mexico, New Zealand, Singapore, Vietnam
Services auxiliary to all modes of transport	Japan, Malaysia, Mexico, Peru, Singapore, Vietnam
Space transport	Japan, United States, Vietnam
Taxation services	Vietnam
Technical testing and analysis services	Brunei, Japan, New Zealand, Singapore, Vietnam
Telecommunications services	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam
Tourism and travel services	Brunei, Canada, Malaysia, Mexico, Peru, Singapore, Vietnam
Urban planning and landscape architectural services	Brunei, Canada, Peru
Veterinary services	Vietnam

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Exempt Sectors Due to NCMs in Annex I and Annex II, by Country

Table E.2: Australia nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I	Local presence (Art. 10.6)	Residency requirements for auditors and liquidators.
Agriculture and services incidental to agriculture	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Australia reserves the right to adopt or maintain any measure to allow screening of investment proposals for agribusiness above a certain value.
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Total foreign ownership of individual Australian international airlines is restricted to a maximum of 49 percent; citizenship and local presence requirements for board members and head office; Australia reserves the right to adopt or maintain any measure regarding investment in airports, any measure regarding ground handling or airport operation services.

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
		Market access (Art. 10.5) Local presence (Art. 10.6)	
Audiovisual Services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Market access (Art. 10.5) Local presence (Art. 10.6)	Australia reserves the right to adopt or maintain any measure regarding transmission quotas for local content, spectrum management, subsidies, or preferential co-production arrangements.
Distribution services	Annex II	Market access (Art. 10.5)	Australia reserves the right to adopt or maintain any measure regarding wholesale and retail trade services of tobacco products, alcoholic beverages, or firearms.
Educational services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Australia reserves the right to adopt or maintain any measure regarding primary education.
Financial services	Annex I	National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11)	Notification and approval required for foreign investment resulting in practical control of a financial sector company.
Fishing and services incidental to fishing	Annex I	National treatment (Art. 9.4 and 10.3)	Approval required for fishing; authorized foreign vessels may be subject to a levy.
Health-related and social services	Annex I	National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11)	Citizenship requirements for directors of Commonwealth Serum Laboratories; the CSL main office must remain located in Australia.
Legal services	Annex I	Local presence (Art. 10.6)	Residency requirements for patent attorneys.
Maritime transport services (including internal waterways)	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Registered ships must be majority Australian-owned; residency requirements for certain occupations; Australia reserves the right to adopt or maintain any measure regarding cabotage and offshore transport.
Other professional services	Annex I	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4)	Citizenship and residency requirements for migration agents; notification required for foreign investments in human resources.
Recreational, cultural and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Australia reserves the right to adopt or maintain any measure regarding creative arts and cultural heritage; any measure regarding gambling.

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Sector	Annex	Obligations concerned	Measure
		Local presence (Art. 10.6)	
Telecommunications services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Market access (Art. 10.5) Local presence (Art. 10.6)	Approval required for foreign investment over a certain threshold; limits on foreign ownership of certain companies; additional requirements pertaining to citizenship of directors and local presence; notification required for manufacture or supply of encryption and security technologies and communication systems.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.3: Brunei nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I	National treatment (Art. 9.4 and 10.3) Senior Management and Board of Directors (Art. 9.11) Market access (Art. 10.5)	Financial auditing may not be provided by foreigners except through a partnership or joint venture; authorization required.
Agriculture and services incidental to agriculture	Annex I	Performance requirements (Art. 9.10)	Performance requirements, technology transfer, preference for local goods; limits on foreign ownership; requirements for foreign investors at certain agricultural sites.
Air transport	Annex I Annex II	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Senior Management and Board of Directors (Art. 9.11) Market access (Art. 10.5)	Joint venture requirements, limits on foreign ownership, technology transfer requirements, nationality requirement for senior managers, limits on the number of firms in specialty air services.
All sectors	Annex I	National treatment (Art. 9.4) Senior Management and Board of Directors (Art. 9.11)	Foreigners may not establish sole proprietorships; approval needed for partnerships; limits on foreign board members.
Architectural services	Annex I	National treatment (Art. 9.4 and 10.3) Senior Management and Board of Directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Residency or partnership requirements for providing architectural services.
Audiovisual services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior Management and Board of Directors (Art. 9.11)	Brunei reserves the right to maintain or adopt any measure regarding licensable broadcasting and video services.
Coal	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10)	Brunei reserves the right to adopt or maintain any measure regarding development or exploitation of coal reserves.

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
		Senior Management and Board of Directors (Art. 9.11)	
Construction and engineering services	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Local presence (Art. 10.6)	Local presence and technology transfer requirements; limits on foreign ownership apply to different levels of investment.
Courier services	Annex I	National treatment (Art. 9.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Joint venture requirements for courier services, including express delivery services.
Distribution services	Annex II	Market access (Art. 10.5)	Brunei reserves the right to maintain or adopt any measure regarding tobacco.
Educational services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Senior Management and Board of Directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Joint venture, technology transfer, and authorization required for educational services providers; the majority of senior managers must be Bruneian nationals; Brunei reserves the right to maintain or adopt any measure regarding private educational services.
Engineering services (including integrated engineering)	Annex I	National treatment (Art. 9.4 and 10.3) Senior Management and Board of Directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Residency or partnership requirements for providing engineering services (including integrated engineering).
Environmental services	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Local presence (Art. 10.6)	Local presence and technology transfer requirements for provision of environmental protection and related services (including waste management); limits on foreign ownership apply to different levels of investment.
Fishing and services incidental to fishing	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10)	Requirements for foreign investors in fishing at certain sites, preference for local goods, technology transfer; Brunei reserves the right to adopt or maintain any measure regarding fishing, including any differential treatment to foreign nationals.
Forestry and services incidental to forestry	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Market access (Art. 10.5)	Performance requirements, technology transfer, preference for local goods; limits on foreign ownership; requirements for foreign investors in fishing at certain sites; Brunei reserves the right to adopt or maintain any measure regarding logging.
Health-related and social services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Medical providers must work in Brunei for 6 years; Brunei reserves the right to maintain or adopt any measure regarding private medical practices.
Investigation and security services	Annex I	Local presence (Art. 10.6)	Foreign nationals cannot provide guard services unless they establish a local enterprise.
Legal services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Senior Management and Board of	Legal services may not be provided by foreigners except in international law and home country law; partnerships required; Brunei reserves the

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Sector	Annex	Obligations concerned	Measure
		Directors (Art. 9.11) Market access (Art. 10.5)	right to maintain or adopt any measure regarding representation of taxpayers.
Manufacturing and services incidental to manufacturing	Annex I	Performance requirements (Art. 9.10)	Performance requirements, technology transfer, preference for local goods; limits on foreign ownership; requirements for foreign investors in manufacturing at certain sites.
Maritime transport services (including internal waterways)	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Senior Management and Board of Directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Joint venture requirement, nationality requirement for senior managers, technology transfer requirements, limits on foreign ownership for maritime passenger and freight transportation; joint venture requirements, nationality requirements for senior managers, limits on foreign ownership, limits on the number of firms in maritime auxiliary services.
Mining and services incidental to mining	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Authorization required for sand and gravel mining (except silica sand), including services auxiliary to mining; any sand (apart from silica sand) or gravel mined in Brunei is not allowed to be exported; Brunei reserves the right to adopt or maintain any measure regarding silica sand deposits, including mining, quarrying, manufacture and export of such deposits.
Oil and gas	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior Management and Board of Directors (Art. 9.11) Local presence (Art. 10.6) Most-favored-nation treatment (Art. 9.5)	Requirements for obtaining exploration, exploitation, development, and production rights for petroleum; petroleum remains exclusively owned by the state; foreign operators in the oil and gas industry may be required to reserve a portion of natural gas or other petrochemical products for domestic use; citizenship and residency requirements for management positions; Brunei reserves the right to exercise discretion in petroleum investment, including affording differential treatment to investors.
Other business services	Annex I	National treatment (10.3)	Approval is required to provide trade fair organizing services.
Placement and supply services of personnel	Annex I	National treatment (Art. 9.4) Local presence (Art. 10.6)	Foreign nationals cannot provide placement services except through local agents.
Printing and publishing	Annex II	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Brunei reserves the right to adopt or maintain any measure regarding the printing or publishing of newspapers.
Printing and publishing services	Annex II	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Brunei reserves the right to maintain or adopt any measure regarding newspapers.
Rail transport	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Joint venture requirements; limits on foreign ownership; technology transfer requirements; nationality requirement for senior managers for rail transport services.

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
Real estate services	Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Brunei reserves the right to adopt or maintain any measure regarding valuers or appraisers.
Road transport	Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Brunei reserves the right to maintain or adopt any measure regarding road transport.
Services incidental to energy distribution	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11)	Brunei reserves the right to maintain or adopt any measure regarding power generation and transmission.
Technical testing and analysis services	Annex I	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6))	Residency or partnership requirements for providing technical testing and analysis services.
Telecommunications services	Annex I	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Performance requirements (Art. 9.10) Local presence (Art. 10.6)	Local presence, licensing, and partnership requirements for telecommunication services; prior approval for majority foreign ownership in telecommunication enterprises; other performance requirements.
Tourism and travel services	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11) Market access (Art. 10.5)	Joint venture requirement, nationality requirement for senior managers, local supplier preference for hotels and accommodation; foreign nationals cannot establish travel agencies; limits on foreign ownership for tour operator services.
Urban planning and landscape architectural services	Annex I	National treatment (Art. 9.4 and 10.3) Senior management and board of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Residency or partnership requirements for providing urban planning and landscape architecture services.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.4: Canada nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I	Local presence (Art. 10.6)	Residency requirements for certain provinces.
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Restrictions on foreign ownership and operation of Canadian-registered aircraft, domestic air services, and Air Canada; local presence and requirements for aircraft repair and maintenance services; authorization required for specialty air services; reciprocity requirements for recognition of repair and maintenance credentials; Canada reserves the right to adopt or maintain any measure regarding marketing, ground handling services, and airport operation services.
Architectural services	Annex I	Local presence (Art. 10.6)	Residency requirements for certain provinces.
Audiovisual services	Annex I Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Restrictions on ownership and control of audiovisual services for the protection of cultural industries; Canada reserves the right to adopt or maintain any measure that affects cultural industries including local content requirements.
Distribution services	Annex I	National treatment (Art. 9.4) Local presence (Art. 10.6)	Citizenship, economic needs tests, and local presence requirements for certain provinces, including local presence requirements for import and export permits.
Engineering services (including integrated engineering)	Annex I	Local presence (Art. 10.6)	Residency requirements for certain provinces; Canada reserves the right to adopt or maintain any market access measure for integrated engineering services.
Fishing and services incidental to fishing	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4)	Canada reserves the right to adopt or maintain any measure regarding licensing for fishing or fishing related activities.
Health-related and social services	Annex I	National treatment (Art. 9.4)	Limits on foreign ownership of Nordion.
Investigation and security services	Annex I	Local presence (Art. 10.6) Senior management and board of directors (Art. 9.11)	Residency requirements and restrictions on senior management and boards of directors for certain provinces.
Legal services	Annex I	Local presence (Art. 10.6)	Residency and registration requirements for patent agents and trademark application processors.
Management consulting services	Annex I	Local presence (Art. 10.6)	Residency requirements for certain provinces.
Maritime transport services (including internal waterways)	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10)	Residency and citizenship requirements for ship registry, crew registry, and to supply pilotage services; local presence requirements for shipping conference members; Canada reserves the right to adopt or maintain any measure regarding cabotage, agreements with other

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
		Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	countries involving maritime transport services (including internal waterways), reciprocity for benefits accorded to investors, and statutory inspections.
Mining, and services incidental to mining	Annex I	National treatment (Art. 9.4)	Limits on foreign ownership of uranium mines.
Oil and gas	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10) Local presence (Art. 10.6) Most-favored-nation treatment (Art. 9.5)	Oil and gas production licenses must be held by entities incorporated in Canada; limits on foreign ownership of Cameco; local incorporation requirements for production licenses and shareholding; “benefits plan” requirement; Canada may impose a requirement or enforce a commitment or undertaking for the transfer of technology.
Other business services	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Nationality requirements for customs brokers and duty-free shop operators; residency requirement for examiners of cultural property; other residency and local presence requirements for certain provinces.
Placement and supply services of personnel	Annex I	Local presence (Art. 10.6)	Local presence requirements for certain provinces.
Real estate services	Annex I	Local presence (Art. 10.6)	Residency requirements for certain provinces.
Recreation, cultural and sporting services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Restrictions on ownership and control of audiovisual services for the protection of cultural industries; Canada reserves the right to adopt or maintain any measure that affects cultural industries including local content requirements.
Related scientific and technical consulting services	Annex I	Local presence (Art. 10.6) Senior management and board of directors (Art. 9.11)	Residency and citizenship requirements, restrictions on senior management and boards of directors for certain provinces.
Road transport	Annex I	National treatment (Art. 10.3) Local presence (Art. 10.6)	Nationality and local presence requirements for cabotage in truck or bus services, local presence requirements and economic needs tests in certain provinces.
Telecommunications services	Annex I Annex II	National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11)	Limits on foreign investment in telecommunications services; restrictions on foreign ownership and control; nationality requirements for boards of directors; additional restrictions in certain provinces.
Tourism and travel services	Annex I	National treatment (Art. 9.4) Local presence (Art. 10.6)	Residency, citizenship, local presence, and special taxation requirements for certain provinces.
Urban planning and landscape architecture services	Annex I	Local presence (Art. 10.6)	Residency requirements for certain provinces.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.5: Chile nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I Annex II	National treatment (Art. 10.3) Local presence (Art. 10.6) Market access (Art. 10.5)	Registration requirements for external auditors of financial institutions.
Air transport	Annex I Annex II	National treatment (Art. 10.3 and 9.4) Most-favored-nation treatment (Art. 10.4 and 9.5) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Nationality requirements for aircraft registry, majority ownership must be Chilean; residency requirements for president and managers, nationality requirements for majority of directors and/or administrators; time limits and authorization requirements for foreign aircraft to remain in Chile; reciprocity requirements for the recognition of foreign aviation-related licenses and provision of air services by foreign companies; Chile reserves the right to adopt or maintain any market access measure related to the repair and maintenance of aircraft.
Arms and explosives	Annex I	Most-favored-nation treatment (Art. 9.5 and 10.4)	Registration and authorization required for importing or owning fireworks, firearms or other explosives.
Audiovisual services	Annex I Annex II	Most-favored-nation treatment (Art. 9.5 and 10.4)	Limits on ownership and nationality of board members of public radio broadcasters; local content requirements; Chile reserves the right to adopt or maintain any measure related to protection for cultural industries.
Construction and engineering services	Annex II	National treatment (Art. 10.3) Local presence (Art. 10.6)	Chile reserves the right to adopt or maintain any measure regarding construction and engineering services.
Educational services	Annex II	National treatment (Art. 10.3 and 9.4) Most-favored-nation treatment (Art. 10.4 and 9.5) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Chile reserves the right to adopt or maintain any measure regarding educational services.
Energy (including nuclear)	Annex I	National treatment (Art. 9.4)	Authorization and partnerships required for the production of nuclear energy.
Environmental services	Annex II	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4) Local presence (Art. 10.6)	Chile reserves the right to adopt or maintain any measure regarding sanitation.
Fishing and services incidental to fishing	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Nationality and residency requirements for authorization to carry out aquaculture activities and harvest aquatic species; nationality requirements for fishing in territorial waters and registering vessels; Chile reserves the right to control the activities of foreign fishing, use of land and sea-bed for issuance of maritime concessions.
Investigation and security services	Annex I	National treatment (Art. 10.3)	Nationality requirements for private security guards.
Legal services	Annex I	National treatment (Art. 10.3)	Nationality and residency requirements for

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
	Annex II	Local presence (Art. 10.6) Market access (Art. 10.5)	certain legal services; legal studies must be completed in Chile; authorization and residency restrictions for bankruptcy receivers.
Maritime transport services (including internal waterways)	Annex I	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4) Local presence (Art. 10.6)	Cabotage is limited to Chilean vessels; reciprocity requirements for international cargo transport; residency requirements for vessel registrants, managers, and owners; foreign vessels must use Chilean pilotage services; nationality requirements for captains, shipping agents, and dockworkers; certain nationality and joint venture requirements apply to Chilean flagged vessels.
Mining	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Requirements for administrative concessions or special operating contracts in the extraction of lithium deposits; right of first refusal by Chile and other performance requirements for other mining including extraction through seawater.
Oil and gas	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Requirements for administrative concessions or special operating contracts in the production of hydrocarbons.
Other professional services	Annex I	National treatment (Art. 10.3) Local presence (Art. 10.6)	Residency requirements for customs brokers.
Pipeline transport services	Annex II	Market access (Art. 10.5)	Nationality requirements for providers of pipeline transportation services; the supply of pipeline transportation services may be subject to a concession on a national treatment basis.
Printing and publishing	Annex I	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Nationality requirements for owners of media such as newspapers, magazines or other texts published in Chile; nationality or residency requirement for directors of media enterprises must also be Chilean nationals (depending on the language of publication).
Recreation, cultural and sporting services	Annex I Annex II	Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6)	Chile may establish regulations on certain forms of sporting organizations; and Chile reserves the right to adopt or maintain any measure regarding arts and cultural industries.
Research and development services	Annex I Annex II	National treatment (Art. 10.3) Market access (Art. 10.5)	Authorization required for certain research services.
Road transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6)	Registration requirements for foreign land transportation service providers; international transportation service providers cannot supply local transportation services (cabotage); residency and ownership requirements for international land transport services.
Telecommunication services	Annex I Annex II	National treatment (Art. 10.3 and 9.4) Most-favored-nation treatment (Art. 10.4 and 9.5) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Nationality and residency requirements for owners and administrators of communications media; Chile reserves the right to adopt or maintain any measure related to satellite broadcasting, any market access measure involving international telecommunications not inconsistent with the GATS; concession required for local telecommunications and any entity

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Sector	Annex	Obligations concerned	Measure
			routing international traffic in Chile.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.6: Japan nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Accounting and auditing service providers must be qualified under Japanese law, registered, and resident in Japan; limits on form for accounting services firms nationality requirements for notaries.
Aerospace, and services incidental to aerospace	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Prior notification and screening requirements for investments in the aircraft industry; numerical limits on licenses; local presence requirements for manufacture or repair aircraft; Japan reserves the right to adopt or maintain any measure regarding the investments in space industry including importing technology for development, production or use, production services, repair and maintenance services.
Agriculture, and services incidental to agriculture	Annex I	National treatment (Art. 9.4)	Prior notification and screening requirements for foreign investment in agriculture, forestry and related services; residency requirements for plant breeders.
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Senior management and boards of directors (Art. 9.11)	Prior notification and screening requirements for investments in air transport services; nationality requirements for aircraft and certain air transport workers; restrictions on cabotage for foreign registered aircraft; authorization required for foreign aircraft in international air transport; foreign aircraft may not be registered in Japan; nationality requirements for pilots; Japan reserves the right to maintain and adopt any measure related to airport operations and ground handling services.
Architectural services	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Architectural service providers must be qualified under Japanese law, and resident in Japan.
Arms and explosives	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Japan reserves the right to adopt or maintain any measure regarding the investment in arms industry and explosives manufacturing industry.
Audiovisual services	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Japan reserves the right to adopt or maintain any measure regarding broadcasting services.

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Sector	Annex	Obligations concerned	Measure
		Local presence (Art. 10.6)	
Construction and engineering services	Annex I Annex II	Market access (Art. 10.5) Local presence (Art. 10.6)	Approval and local presence requirements for motor vehicle repair.
Distribution services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Licensing and residency requirements for public wholesalers, alcohol distribution; livestock dealers; Japan reserves the right to adopt or maintain any measure regarding tobacco, firearms, explosives, and aerospace.
Educational services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Restrictions on licensing and qualifications for education, including higher education; Japan reserves the right to adopt or maintain any measure regarding primary and secondary education.
Energy (including nuclear)	Annex II	National treatment (Art. 9.4 and 10.3)	Japan reserves the right to adopt or maintain any measure regarding investments or the supply of services in nuclear energy.
Financial services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Japan reserves the right to adopt or maintain any measure regarding minting and coinage.
Fishing	Annex I	National treatment (Art. 9.4)	Prior notification and screening requirements for foreign investment in fisheries, and related services.
Forestry and services incidental to forestry	Annex I	National treatment (Art. 9.4)	Prior notification and screening requirements for foreign investment in forestry, and related services; residency requirements for plant breeders.
Investigation and security services	Annex I	National treatment (Art. 9.4)	Prior notification and screening requirements for investments in security guard services.
Legal services	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Legal service providers must be qualified under Japanese law, registered, and resident in Japan; limits on form for legal services firms; residency requirements for legal services providers in foreign law.
Manufacturing and services incidental to manufacturing	Annex I	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Authorization required for docks to manufacture or repair vessels; notification and screening requirements for investments in biological preparations manufacturing industry, in leather and leather products manufacturing industry Japan reserves the right to adopt or maintain any measure relating to investments in or manufacture of tobacco products.
Maritime transport services (including internal waterways)	Annex I	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4) Market access (Art. 10.5)	Economic needs tests for dock services; nationality requirements for Japanese flagged vessels; licensing requirements for maritime procedures agents; notification and screening requirements for investment in water transportation; reciprocity requirements for loading and unloading of cargo; authorization required for docks to manufacture or repair

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Sector	Annex	Obligations concerned	Measure
			vessels; certain ports are closed to non-Japanese ships.
Mining and services incidental to mining	Annex I	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Nationality requirements for mining rights or mining lease rights.
Oil and gas	Annex I	National treatment (Art. 9.4)	Prior notification and screening requirements for foreign investment in the oil industry.
Other business services	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	License and qualification requirements for collections agency services; licensing, qualifications, and residency requirements for surveyor services; local presence and licensing requirements for machine inspectors; residency requirements for vocational skills testers.
Placement and supply services of personnel	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Local presence and approval requirements for the placement and supply services of personnel.
Postal services	Annex II	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Japan reserves the right to adopt or maintain any measure regarding postal services.
Rail transport	Annex I	National treatment (Art. 10.3)	Screening and approval requirements for investments in rail transport.
Real estate services	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Real estate service providers must be qualified and licensed under Japanese law, resident in Japan, and are subject to approval.
Recreation, cultural and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Japan reserves the right to adopt or maintain any measure regarding betting and gambling.
Road transport	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Local presence and approval requirements for motor vehicle repair and maintenance investment in road passenger transport; economic needs tests for motorway services.
Services auxiliary to all modes of transport	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Nationality and reciprocity requirements for approval of foreigners in international freight forwarding; local presence and approval requirements for customs brokerage.
Services incidental to energy distribution	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Most-favored-nation treatment (Art. 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Japan reserves the right to adopt or maintain any measure regarding investments or the supply of services in the electric utility industry, and gas utility industry.

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
Space transport	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Japan reserves the right to adopt or maintain any measure relating to the investments in space industry.
Technical testing and analysis services	Annex I	Market access (Art. 10.5) Local presence (Art. 10.6)	Local presence is required for measuring services.
Telecommunications services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Foreign ownership restrictions; nationality requirements for certain management positions; notification and screening requirements for investments in telecommunications and internet-based services; Japan reserves the right to adopt or maintain any measure regarding telegraph services.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.7: Malaysia nonconforming measures

Sector	Annex	Obligations concerned	Measure
Air transport	Annex II	National treatment (Art. 10.3 and 9.4) Local presence (Art. 10.6) Market access (Art. 10.5) Senior Board of Management and Directors (Art. 9.11)	Malaysia reserves the right to maintain or adopt any measure for passenger and freight, airport operations, repair and maintenance, and ground handling.
Architectural services	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Licensing requirements for architectural services; residency requirements for engineers; limits on legal form and ownership of firms.
Arms and explosives	Annex II	National treatment (Art. 9.4) Prohibition of Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Malaysia reserves the right to maintain or adopt any measures affecting the arms and explosives sector.
Audiovisual services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Review and prior approval required for certain media; protection for cultural industries.
Construction and engineering services	Annex I	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Limits on form and ownership; personnel quotas.
Distribution services	Annex I Annex II	National treatment (Art. 9.4 and 10.3)	Limits on firm activity and ownership; foreigners are prohibited from operating some retail

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Sector	Annex	Obligations concerned	Measure
		Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	outlets; personnel quotas; foreigners cannot distribute fabric and motor vehicles; Malaysia reserves the right to maintain or adopt any measures for distribution of arms, explosives, rice, sugar, flour, automobiles, alcohol, and tobacco.
Educational activity	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Limits on activity for preschool, primary, secondary, and religious schools.
Energy (including nuclear)	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Malaysia reserves the right to adopt or maintain any measure related to nuclear energy including auxiliary services.
Engineering services (including integrated engineering)	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Residency requirements for engineers.
Environmental services	Annex II	National treatment (Art. 9.4)	Malaysia reserves the right to maintain or adopt any measures for sewage.
Financial services	Annex II	National treatment (Art. 9.4 and 10.3)	Malaysia reserves the right to maintain or adopt any measures to limit use of ringgits by non-residents.
Fishing and services incidental to fishing	Annex I Annex II	National treatment (Art. 10.3 and 9.4) Market access (Art. 10.5) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11)	Restrictions on foreign fishing vessels, loading and unloading, transshipment and fisheries research; licensing restrictions, authorization required; Malaysia reserves the right to adopt or maintain any measure related to fisheries.
Health-related and social services	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Limits on activity; local presence restrictions; authorization required.
Legal services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on the types of activity that can be performed by foreign law firms and the firms' legal form; patent and trademark agents must be residents; Malaysia reserves the right to adopt or maintain any measure related to Sharia law and mediation.
Manufacturing and services incidental to manufacturing	Annex I	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Limits on foreign ownership and investment in the manufacture of certain motor vehicles and batik fabric; export requirements for companies in free trade zones, petroleum refiners,

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
			manufacturers of optical discs; expansion of palm oil plantations, arms and explosives subject to approval and licensing restrictions; licensing restrictions on pineapple canning.
Maritime transport services (including internal waterways)	Annex I	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Limits on legal form of incorporation and ownership; restrictions on flagged vessels; limits on foreign senior management.
Oil and gas	Annex I Annex II	National treatment (Art. 10.3 and 9.4) Market access (Art. 10.5) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11)	Petronas maintains a monopoly on oil and gas exploration and is the exclusive owner of petroleum resources; local establishment and joint venture requirements for oil and gas activities; Malaysia reserves the right to adopt or maintain any measure related to power generation and hydrocarbons.
Pipeline transport services	Annex II	National treatment (Art. 10.3 and 9.4) Market access (Art. 10.5) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11)	Malaysia reserves the right to adopt or maintain any measure related to utilities.
Real estate services	Annex I	National treatment (Art. 10.3 and 9.4)	Residency requirements for valuers.
Recreational, cultural, and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Approval required for performing arts; protection for cultural industries; Malaysia reserves the right to maintain or adopt any measure regarding gambling.
Road transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Market access (Art. 10.5) Local presence (Art. 10.6)	Nationality restrictions on freight services providers; majority foreign ownership of freight providers prohibited; Malaysia reserves the right to maintain or adopt any measure regarding passenger and freight transport.
Services auxiliary to all modes of transport	Annex I	National treatment (Art. 10.3)	Foreigners cannot be customs agents.
Services incidental to energy distribution	Annex I	National treatment (Art. 10.3 and 9.4) Local presence (Art. 10.6) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Only supply authorities are authorized to operate any installation involving gas, water and electricity; residency and nationality requirements for supply of services in gas, water and electricity, and disposal of waste.
Telecommunications	Annex I	National treatment (Art. 9.4 and	Licensing requirements, with limits on firm

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Sector	Annex	Obligations concerned	Measure
services		10.3) Local presence (Art. 10.6)	activity and firms' legal form; firms must be locally-incorporated.
Tourism and travel services	Annex I	National treatment (Art. 10.3)	Foreigners cannot be tourist guides.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.8: Mexico nonconforming measures

Sector	Annex	Obligations concerned	Measure
Agriculture and services incidental to agriculture	Annex I	National treatment (Art. 9.4)	Nationality requirements for land ownership for agriculture or livestock purposes; foreign ownership restrictions in enterprises owning such land; nationality requirements for ownership of enterprise involved in pesticide spraying.
Air transport	Annex I Annex II	Local presence (Art. 10.6) National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Foreign governments are not allowed to invest; residency and permit requirements for aircraft repair; only Mexican enterprises can operate airports and heliports; authorization required for foreign ownership of airfield operators; ownership limits and nationality requirements for operators of Mexican-registered aircraft; Mexico reserves the right to maintain or adopt any measure regarding market access for airport and heliport services.
Arms and explosives	Annex I	National treatment (Art. 9.4)	Restrictions on majority foreign ownership of manufacturers of explosives, fireworks, firearms, cartridges and ammunition (excluding the preparation of explosive mixtures for industrial and extractive activities).
Audiovisual services	Annex I Annex II	Most-favored-nation treatment (Art. 9.5 and 10.4) National treatment (Art. 10.3) Market access (Art. 10.5)	Local content requirements; film screening requires permit; quotas for educational and cultural content; some channels are reserved for public television signals.
Construction and engineering services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Authorization required for majority foreign ownership in energy-related construction; Mexico reserves the right to maintain or adopt any measure regarding market access.
Courier services	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Mexico reserves the right to maintain or adopt any measure regarding market access for courier services.
Distribution services	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Foreign ownership limits for retailers selling firearms; only Mexican establishments may sell gasoline and diesel fuel.
Educational services	Annex I Annex II	National treatment (Art. 9.4)	Authorization required for majority foreign ownership of educational institutions.
Energy (including nuclear)	Annex I Annex II	National treatment (Art. 9.4) Most-favored-nation treatment	Authorization required for majority foreign ownership in energy-related construction;

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
		(Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	restrictions on investment in nuclear energy.
Environmental services	Annex II	Market access (Art. 10.5)	Mexico reserves the right to maintain or adopt any measure regarding market access for cross-border trade.
Financial services	Annex II	Market access (Art. 10.5)	Mexico reserves the right to maintain or adopt any measure regarding minting or coining.
Fishing and services incidental to fishing	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6) Market access (Art. 10.5) Senior Board of Management and Directors (Art. 9.11)	Restrictions on majority foreign ownership of fishing enterprises; permits are required for fishing activities; Mexico reserves the right to maintain or adopt any measure regarding fishing.
Forestry and services incidental to forestry	Annex I	National treatment (Art. 9.4)	Nationality requirements for land ownership for forestry purposes; foreign ownership restrictions in enterprises owning such land.
Health-related and social services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5)	Only nationals can provide in-house medical services as doctors; Mexico reserves the right to maintain or adopt any measure regarding market access for cross-border trade.
Investigation and security services	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Mexico reserves the right to maintain or adopt any measure regarding market access for control, inspection and surveillance of ports.
Legal services	Annex I	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4)	Authorization required for majority ownership; reciprocity required for activities; limits on firms' legal form; only nationals can be notaries.
Maritime transport services (including internal waterways)	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6)	Foreign governments are not allowed to invest in certain activities; ownership limits for port administrators and port pilots; no foreign ownership of port inspectors; ownership limits for Mexican shipping enterprises; authorization required for majority ownership of port services providers, high-seas navigation and port towing; cabotage restricted to Mexican ship-owners with Mexican vessels; scheduled transport can be reserved for Mexican companies; reciprocity for high-seas navigation and inland navigation; nationality requirements for operating marine and river works, for captains and crew of flagged vessels and harbor pilots, for stevedores and warehousing providers, for port and shipyard operators.
Oil and gas	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art.	Private investment allowed only through contracts for the exploration and production of oil and other hydrocarbons, transmission, and

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Sector	Annex	Obligations concerned	Measure
		9.10) Local presence (Art. 10.6) Market access (Art. 10.5) Most-favored-nation treatment (Art. 10.4)	distribution of electricity; the Mexican state remains the sole owner of hydrocarbon resources; Mexico reserves the right to adopt or maintain any measure regarding power generation or hydrocarbons.
Other business services	Annex II	Market access (Art. 10.5)	Mexico reserves the right to maintain or adopt any measure regarding market access for credit reporting.
Pipeline transport services	Annex I	National treatment (Art. 10.3) Local presence (Art. 10.6)	Nationality requirement for pipeline operators; Mexico reserves the right to maintain or adopt any measure regarding utilities.
Postal services	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Restrictions on foreign ownership of telegraph and postal services.
Printing and publishing	Annex I	National treatment (Art. 9.4)	Restrictions on majority foreign ownership in printing or publication of newspapers.
Rail transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Authorization required for majority ownership of railroad operators; railway crew members must be nationals; Mexico reserves the right to maintain or adopt any measure regarding market access for tramway and subway transport.
Real estate services	Annex II	Market access (Art. 10.5)	Mexico reserves the right to maintain or adopt any measure regarding market access.
Recreational, cultural and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Mexico reserves the right to maintain or adopt any measure regarding gambling.
Rental and leasing services without operators	Annex II	Market access (Art. 10.5)	Mexico reserves the right to maintain or adopt any measure regarding market access for private cars, maritime, aircraft and other leasing.
Road transport	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6) Most-favored-nation treatment (Art. 10.4)	Foreign governments are not allowed to invest; nationality requirements for building and operating roads; nationality requirements for bus and truck station operators, and auxiliary road service providers; no foreign ownership for transport of domestic cargo (except courier services); nationality requirements for bus, tourist, truck transport, taxis, parcel and courier; nationality requirement for operating roads and bridges.
Services auxiliary to all modes of transport	Annex I	National treatment (Art. 9.4 and 10.3)	Only nationals can be customs brokers.
Telecommunications	Annex I	National treatment (Art. 9.4 and	Concessions required; foreign governments

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Sector	Annex	Obligations concerned	Measure
services	Annex II	10.3) Local presence (Art. 10.6)	cannot invest in communications; incorporation required under Mexican law; ownership limits for broadcasters; authorization required; local physical presence required for internet traffic exchange points and control centers; part of spectrum is reserved, limits on spectrum resale.
Tourism and travel services	Annex II	Market access (Art. 10.5)	Permit required for tour operators.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.9: New Zealand nonconforming measures

Sector	Annex	Obligations concerned	Measure
Agriculture, including services incidental to agriculture	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Establishment of marketing authorities with monopoly marketing and acquisition powers for certain products; New Zealand reserves the right to adopt or maintain any measures regarding shares in certain dairy cooperatives; any measures regarding WTO rights for tariff quotas, country-specific preferences or other measures including wholesale distribution rights for agricultural products.
Air transport	Annex I	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11)	Nationality and residency requirements for New Zealand international airlines; limits on foreign ownership and nationality requirements for directors of Air New Zealand.
Audiovisual services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6) Performance requirements (Art. 9.10)	Approval required for acquisition of spectrum; preferential co-production arrangements for films; local content requirements.
Distribution services	Annex II	Market access (Art. 10.5) National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10)	New Zealand reserves the right to maintain or adopt any measures regarding tobacco and alcohol, and a government-endorsed allocation scheme for some agriculture exports.
Energy (including nuclear)	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	New Zealand reserves the right to adopt or maintain any measure regarding nuclear energy.
Financial services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of	New Zealand reserves the right to maintain or adopt any measures regarding compulsory social insurance and residential disaster insurance.

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Sector	Annex	Obligations concerned	Measure
		directors (Art. 9.11) Local presence (Art. 10.6)	
Fishing and services incidental to fishing	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	New Zealand reserves the right to control any activities related to fishing and access to New Zealand ports.
Health-related and social services	Annex II	Most-favored-nation treatment (Art. 9.5 and 10.4)	New Zealand reserves the right to maintain or adopt any measures regarding adoption services.
Legal services	Annex I	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4)	Limits on registration of patent attorneys.
Maritime transport services (including internal waterways)	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	New Zealand reserves the right to maintain or adopt any measures regarding maritime concessions, cabotage, flagged vessels, and ship registration.
Other business services	Annex II	National treatment (Art. 9.4 and 10.3)	New Zealand reserves the right to maintain or adopt any measures related to firefighting.
Real estate services	Annex II	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	New Zealand reserves the right to maintain or adopt any measures related to residential real estate.
Recreational, cultural and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	New Zealand reserves the right to maintain or adopt any measures regarding gambling or cultural heritage.
Research and development services	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10)	New Zealand reserves the right to maintain or adopt any measures.
Technical testing and analysis services	Annex II	National treatment (Art. 9.4 and 10.3)	New Zealand reserves the right to maintain or adopt any measures.
Telecommunications	Annex I	National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11)	Approval required for majority foreign ownership; citizenship requirement for directors.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Appendix E: Nonconforming Measures

Table E.10: Peru nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Licensing and residency requirements for public accountants.
Advertising services	Annex I Annex II	National treatment (Art. 10.3)	Local content requirements; limits on payroll for foreigners.
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Senior management and boards of directors (Art. 9.11) Most-favored-nation treatment (Art. 10.4) Local presence (Art. 10.6)	Residency requirement for national commercial aviation companies, directors, and operators; limits on foreign ownership; Peru reserves the right to maintain or adopt any measure regarding ground-handling services or airport operation.
Architectural services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5)	Registration fees are higher for foreign architects; non-residents must have contract with residents to obtain registration.
Audiovisual services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Most-favored-nation treatment (Art. 9.5 and 10.4)	Nationality and residency requirements for broadcasters; foreign shareholders in radio broadcasting cannot be authorized to broadcast in neighboring countries; local content requirements; limits on payroll for foreigners; reciprocity for certain services; protection for cultural industries; Peru may adopt or maintain any measure giving preferential treatment in the audiovisual and music sectors.
Educational services	Annex II	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4) Local presence (Art. 10.6)	Peru reserves the right to maintain or adopt any measure.
Environmental services	Annex II	Local presence (Art. 10.6)	Peru reserves the right to maintain or adopt any measure regarding the public water supply.
Fishing and services incidental to fishing	Annex I	National treatment (Art. 10.3)	Letters of guarantee required for foreign flagged fishing vessels; scientific observer requirements for foreign flagged vessels, 30 percent of crew must be Peruvian; Peru reserves the right to adopt or maintain any measure relating to artisanal fishing.
Health-related and social services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Peru reserves the right to maintain or adopt any measure regarding law enforcement, social security, social welfare, public health, childcare.
Investigation and security services	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Nationality requirements for the provision of security services.
Legal services	Annex I Annex II	Market access (Art. 10.5) National treatment (Art. 9.4 and 10.3)	Nationality requirement for notaries; limits on notary positions.
Manufacturing and services incidental to manufacturing	Annex II	Most-favored-nation treatment (Art. 9.4 and 10.4) Cross-Border Trade in Services and Investment (Art. 9.10)	Peru reserves the right to adopt or maintain any measure regarding Peruvian handicrafts and jewelry.

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Sector	Annex	Obligations concerned	Measure
Maritime transport services (including internal waterways)	Annex I	National treatment (Art. 9.4 and 10.3) Local presence (Art. 10.6)	Residency requirement for national ship companies, directors, operators, bay and port service providers; nationality requirements for crew of flagged vessels and harbor pilots; limits on foreign ownership; cabotage reserved for Peruvian flagged vessels; reservations for Peruvian Navy in transport of hydrocarbons.
Oil and gas	Annex I	National treatment (Art. 10.3) Local presence (Art. 10.6)	Residency and registration requirements for hydrocarbon exploration, including local branch establishment; executive agents must be Peruvian nationals; foreign enterprises must establish branch in Peru, must have Peruvian attorney and executive agent.
Recreational, cultural and sporting services	Annex I Annex II	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 9.4 and 10.4) Cross-Border Trade in Services and Investment (Art. 9.9)	Local content requirements; limits on payroll for foreigners; limits on stay of foreign circuses; nationality requirement for bullfighters; government support for jewelry, theater, visual arts, music, and publishing; protection for cultural industries; Peru reserves the right to adopt any measure related to handicrafts, jewelry, art, music and publishing.
Rental and leasing services without operators	Annex II	National treatment (Art. 10.3)	Nationality and residency requirements for national ship-owners; cabotage prohibited.
Research and development services	Annex I Annex II	National treatment (Art. 10.3)	Archaeology programs must have Peruvian director; authorization required.
Road transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6)	Requirement to have adequate infrastructure; cabotage prohibited; Peru reserves the right to maintain or adopt any measure regarding international land transport.
Services auxiliary to all modes of transport	Annex I	Local presence (Art. 10.6)	Residency requirement for customs warehousing.
Telecommunications services	Annex I Annex II	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4) Local presence (Art. 10.6)	Call-backs are prohibited; Peru reserves the right to maintain or adopt any measure regarding concessions for public telecoms; authorization required; international traffic must be routed through concession-holders; interconnection among private services is prohibited.
Tourism and travel services	Annex I	National treatment (Art. 10.3) Local presence (Art. 10.6)	Residency requirement for tourist water transport.
Urban planning and landscape architectural services	Annex II	Market access (Art. 10.5)	Non-residents must have contract with residents to obtain registration.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Appendix E: Nonconforming Measures

Table E.11: Singapore nonconforming measures

Sector	Annex	Obligations concerned	Measure
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore-designated airlines must be effectively controlled by Singaporean citizens or government; Singapore reserves the right to maintain or adopt any measure regarding cross-border supply of repair and maintenance, marketing, computer reservation, airport operation, or ground handling services, and any measure regarding investment or specialty air services.
Arms and explosives	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11)	Singapore reserves the right to maintain or adopt any measure affecting the arms and explosives sector.
Audiovisual services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and board of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to adopt or maintain any measure regarding broadcasting, including transmission quotas, requirements for spectrum management, local content requirements, and subsidies.
Distribution services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Local presence required for issuance of import and export permits, distribution of hazardous substances, medical and health products; Singapore reserves the right to maintain or adopt any measure regarding import and export licensing, and any measure regarding alcohol or tobacco.
Educational services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Authorization required for medical training; Singapore reserves the right to maintain or adopt any measure regarding primary or secondary education for citizens.
Energy (including nuclear)	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5)	Singapore reserves the right to maintain or adopt any measure regarding nuclear energy.

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Sector	Annex	Obligations concerned	Measure
Engineering services (including integrated engineering)	Annex I Annex II	Local presence (Art. 10.6) National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11)	Singapore must maintain a controlling interest in national engineering company, including control over boards of directors.
Environmental services	Annex I Annex II		Local incorporation required for sewage; Singapore reserves the right to maintain or adopt any measure affecting wastewater.
Financial services	Annex I	National treatment (Art. 9.4 and 10.3)	Limits on borrowing and lending by non-resident financial institutions.
Health-related and social services	Annex I Annex II	National treatment (Art. 10.3) Market access (Art. 10.5) Local presence (Art. 10.6)	Residency required for pharmacy, nursing and therapeutic services; limits on suppliers of medical, pharmacy and nursing services; Singapore reserves the right to maintain or adopt any measure regarding regulation.
Investigation and security services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Registration required; non-Malaysian foreigners cannot be guards; Singapore reserves the right to maintain or adopt any measure for armed guards.
Legal services	Annex I Annex II	National treatment (Art. 10.3)	Registration required for patent agents; Singapore reserves the right to maintain any measure regarding the practice of Singaporean law.
Manufacturing and services incidental to manufacturing	Annex I	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10)	Certain restrictions for the manufacture and services incidental to the manufacture of beer, cigars, drawn steel products, chewing gum, bubble gum, cigarettes; and matches.
Maritime transport services (including internal waterways)	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore maintains a monopoly on cargo handling, pilotage, and the supply of desalinated water; ownership limits for cruise and ferry terminal operators; Singapore reserves the right to maintain or adopt any measure regarding towing, provisioning, garbage collection, port captain services, or emergency repair; foreign ownership of PSA corporation is limited to 49 percent.
Other business services	Annex I	National treatment (Art. 9.4 and 10.3)	Limits on the number of credit bureau services suppliers.
Pipeline transport services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Only licensees can own pipelines and transport gas; local presence required.
Placement and supply services of personnel	Annex I	Local presence (Art. 10.6)	Local presence requirements for employment agencies.
Postal services	Annex I	National treatment (Art. 9.4 and	Local incorporation required for basic letter

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Sector	Annex	Obligations concerned	Measure
	Annex II	10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	services; Singapore reserves the right to maintain or adopt any measure regarding public postal licensees.
Printing and publishing	Annex II	National treatment (Art. 9.4 and 10.3) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to maintain or adopt any measure regarding printing and publishing of newspapers including shareholding limits and management control.
Rail transport	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to maintain or adopt any measure regarding passenger or freight transportation.
Real estate services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to maintain any measure.
Recreational, cultural and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to maintain or adopt any measure regarding gambling.
Rental and leasing without operators	Annex I	National treatment (Art. 10.3) Market access (Art. 10.5)	No cross-border rental of vehicles by non-residents is allowed.
Road transport	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to maintain or adopt any measure regarding passenger or freight transportation.
Services auxiliary to all modes of transport	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10)	Singapore reserves the right to maintain or adopt any measure regarding warehousing or freight forwarding.

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Sector	Annex	Obligations concerned	Measure
		Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	
Services incidental to energy distribution	Annex I	Market access (Art. 10.5)	Power producers must sell through electricity wholesale operators; Singapore reserves some monopoly rights; limits on foreign ownership of Singaporean power companies.
Technical testing and analysis services	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Market access (Art. 10.5) Local presence (Art. 10.6)	Singapore reserves the right to adopt or maintain any measure affecting the supply of prospecting, surveying and map making services.
Telecommunications services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Market access (Art. 10.5) Local presence (Art. 10.6)	Local incorporation requirements for operators, domain name holders; limits on licenses, reciprocity requirements; Singapore reserves the right to adopt or maintain any measure regarding ownership of providers of public mobile and wireless communications.
Tourism and travel related services	Annex I	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5)	Nationality or residency requirements for stalls in government markets; local incorporation required for food and beverage services.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.12: United States nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing and bookkeeping services	Annex I	Local presence (Art. 10.6)	Residency, citizenship or local presence requirements in certain states.
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Cabotage for passenger and air freight service is restricted to U.S. citizens; authorization required for air freight forwarding and passenger charters; reciprocity or authorization required for provision of specialty air service; the United States reserves the right to adopt or maintain any measure regarding cross border supply of auxiliary air services including computer reservation, marketing, ground handling services or any measure that accords differential treatment to treaty partners in aviation.
Architectural services, urban planning and landscape	Annex I	Senior management and boards of directors (Art. 9.11)	Restrictions on senior managers or boards of directors in Michigan.

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Sector	Annex	Obligations concerned	Measure
architecture services			
Construction and related engineering services	Annex I	Local presence (Art. 10.6)	Local presence requirements in Michigan.
Educational services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.4 and 10.5) Local presence (Art. 10.6) Performance requirements (Art. 9.9) Senior management and boards of directors (Art. 9.10)	Limits on the number of licenses available for cosmetology schools in Kentucky; the United States reserves the right to adopt or maintain any measure regarding public education and child care.
Energy (including nuclear)	Annex I	National treatment (Art. 9.4)	License required for any activities related to nuclear power.
Engineering services (including integrated engineering)	Annex I	Local presence (Art. 10.6)	Residency requirements in certain states.
Fishing, and services incidental to fishing	Annex II	Most-favored-nation treatment (Articles 9.4 and 10.3)	The United States reserves the right to adopt or maintain any measure that accords differential treatment to treaty partners in fisheries.
Health-related and social services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.4 and 10.5) Local presence (Art. 10.6) Performance requirements (Art. 9.9) Senior management and boards of directors (Art. 9.10)	Restrictions on firms' legal form in Michigan and New York; the United States reserves the right to adopt or maintain any measure regarding law enforcement and correctional services, social security, public education and child care.
Investigation and security services	Annex I	Local presence (Art. 10.6)	Residency requirements in certain states.
Legal services	Annex I	National treatment (Art. 10.3) Most-favored-nation treatment (Art. 10.4) Local presence (Art. 10.6)	Patent attorneys and agents must be U.S. citizens; local presence requirements in certain states.
Maritime transport services (including internal waterways)	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6) Performance requirements (Art. 9.9) Senior management and boards of directors (Art. 9.10)	The United States reserves the right to adopt or maintain any measure regarding maritime transport including investment, ownership and operation of vessels, certification and licensing of crews, and cabotage (excluding vessel construction and port services conditional on comparable market access), and any measure that accords differential treatment to treaty partners in maritime matters including salvage.
Mining and services incidental to mining	Annex I	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5)	Foreigners are restricted from obtaining access to leases or right-of-way on certain federal land.
Other business services	Annex I	National treatment (Art. 10.3) Local presence (Art. 10.6)	Certain exports and re-exports of commodities, software, and technology require a license; customs brokers must be U.S. citizens.
Placement and	Annex I	Local presence (Art. 10.6)	Citizenship requirements in Arkansas.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Sector	Annex	Obligations concerned	Measure
supply services of personnel			
Rail transport	Annex I	National treatment (Art. 10.3)	Incorporation requirements in Vermont.
Real estate services	Annex I	Local presence (Art. 10.6)	Residency or citizenship requirements in certain states.
Recreational, cultural and sporting services	Annex II	National treatment (Art. 9.4 and 10.3) Market access (Art. 10.5) Local presence (Art. 10.6) Performance requirements (Art. II.9) Senior management and boards of directors (Art. 9.10)	The United States reserves the right to adopt or maintain any measure relating to betting and gambling services.
Road transport	Annex I	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Local presence (Art. 10.6)	Cabotage for truck and bus service is restricted to U.S. citizens; authorization required for cross-border land transport, Mexican providers are subject to certain requirements including reciprocity.
Space transport	Annex II	Most-favored-nation treatment (Articles 9.4 and 10.3)	The United States reserves the right to adopt or maintain any measure that accords differential treatment to treaty partners in satellite or other commercial space launches.
Telecommunications	Annex I Annex II	National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.10)	Radio or other broadcast licenses cannot be held by foreign governments; the United States reserves the right to adopt or maintain any measure regarding sharing of radio spectrum, satellite broadcasting and cable television.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Table E.13: Vietnam nonconforming measures

Sector	Annex	Obligations concerned	Measure
Accounting, auditing, and bookkeeping services	Annex I Annex II	Local presence (Art. 10.6)	Local presence requirements for auditors; Vietnam reserves the right to maintain or adopt any measure not consistent with local presence obligations in accounting, bookkeeping and taxation services.
Agriculture	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Limits on firms' legal form and ownership restrictions; Vietnam reserves the right to adopt or maintain any measure regarding investment in cultivating rare plants and breeding rare wild animals.
Air transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on investment in Vietnamese airlines; quotas for board members; Vietnam reserves the right to adopt or maintain any measure for specialty air services, ground handling, or airport operations.

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
Audiovisual services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on firms' legal form; foreign ownership limits; foreigners are excluded from certain activities; local content requirements; restrictions on sound recording; protection for cultural industries; Vietnam reserves the right to adopt or maintain any measure for broadcasting or news agencies, video distribution, subsidies and co-production preferences.
Construction and engineering services	Annex I	National treatment (Art. 9.4)	Limits on certain types of real estate activity.
Distribution services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Economic needs tests; foreign investment prohibited for importers of tobacco, oil, media, aircraft; Vietnam reserves the right to adopt or maintain any measure for tobacco, media, precious metals, pharmaceuticals, oil, as well as any measure for traditional markets.
Educational services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Some education services excluded from foreign investment; Vietnam reserves the right to adopt or maintain any measure for investment in primary or secondary education.
Energy (including nuclear)	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Vietnam reserves the right to adopt or maintain any measure for hydroelectricity or nuclear.
Financial services	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Vietnam reserves the right to adopt or maintain any measure regarding the management or establishment of commodity exchanges.
Fishing, and services incidental to fishing	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Senior management and boards of directors (Art. 9.11)	Vietnam reserves the right to adopt or maintain any measure in relation to fishery activities.
Forestry and services incidental to forestry	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Senior management and boards of directors (Art. 9.11)	Limits on firms' legal form and ownership restrictions; Vietnam reserves the right to adopt or maintain any measure regarding investment in forestry and hunting activities.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Sector	Annex	Obligations concerned	Measure
Health-related and social services	Annex II	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Vietnam reserves the right to adopt or maintain any measure regarding non-hospital facilities or other human health services.
Investigation and security services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Vietnam reserves the right to adopt or maintain any measure.
Legal services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on firms' legal form; Vietnam reserves the right to maintain or adopt any measure for legal services involving arbitration and conciliation, legal documentation, judicial administration, civic enforcement, judicial expertise, bailiffs, property auction, notary, and bankruptcy.
Manufacturing and services incidental to manufacturing	Annex I Annex II	National treatment (Art. 9.4) Performance requirements (Art. 9.10)	Limits on foreign investment and majority ownership in the manufacture of transportation equipment; joint venture requirements; limits on foreign investment and majority ownership in manufacturing of tobacco products; Vietnam reserves the right to adopt or maintain measures regarding paper production and the manufacturing and assembling of large buses.
Maritime transport services (including internal waterways)	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on foreign ownership and firms' legal form in passenger and freight transport and container handling; citizenship requirements for crew; Vietnam reserves the right to adopt or maintain any measure for port construction, operation, management, cabotage, rental, or towing.
Mining	Annex I	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Screening requirement for foreign investment in mining.
Oil and gas	Annex I	National treatment (Art. 9.4) Most-favored-nation treatment (Art. 9.5)	Contracts with PetroVietnam required for oil and gas activities; priority for sub-contracts given to Vietnamese; Vietnam remains the sole owner of

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
		Performance requirements (Art. 9.10)	hydrocarbon resources.
Other business services	Annex I	National treatment (Art. 9.4)	Vietnam reserves the right to adopt or maintain any measure for geodesic or cartographic activities; limits on legal form for foreign asset appraisal.
Pipeline transport services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Vietnam reserves the right to adopt or maintain any measure regarding pipeline transport.
Placement and supply services of personnel	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Vietnam reserves the right to adopt or maintain any measure.
Printing and publishing	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Vietnam reserves the right to adopt or maintain any measure.
Rail transport	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on foreign ownership and firms' legal form; certain activities excluded; Vietnam reserves the right to adopt or maintain any measure related to cabotage or infrastructure.
Real estate services	Annex I	National treatment (Art. 9.4)	Limits on activity involving construction, lease, purchase, lease-purchase and transfer of real estate properties.
Recreational, cultural and sporting services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Limits on foreign ownership and firms' legal form; restrictions on electronic games; approval needed for theme parks; preferences given for local artists; Vietnam reserves the right to adopt or maintain any measure regarding gambling, martial arts, performing and fine arts, and cultural industries.

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Sector	Annex	Obligations concerned	Measure
Road transport	Annex I Annex II	Local presence (Art. 10.6) National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on firms' legal form and restrictions on foreign investment; all drivers in joint ventures must be Vietnamese; Vietnam reserves the right to adopt or maintain any measure regarding cabotage.
Services auxiliary to all modes of transport	Annex I	National treatment (Art. 9.4) Senior management and boards of directors (Art. 9.11)	Restrictions on majority foreign ownership in passenger and freight transportation; limits on firms' legal form and joint venture requirements for investment.
Services incidental to energy distribution	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Foreign services suppliers prohibited in this sector; Vietnam reserves the right to adopt or maintain any measure for hydroelectricity or nuclear.
Space transport	Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Vietnam reserves the right to adopt or maintain any measure.
Taxation services	Annex II	Local presence (Art. 10.6)	Vietnam reserves the right to maintain or adopt any measure not consistent with local presence obligations.
Technical testing and analysis services	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Vietnam reserves the right to adopt or maintain any measure.
Telecommunications	Annex I Annex II	National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11)	Local presence requirements; limits on foreign ownership and firms' legal form; Vietnam reserves the right to adopt or maintain any measure regarding non-basic or value-added services, any measure regarding telecoms networks in rural and ethnic minority areas, and any measure regarding broadcast services.

Appendix E: Nonconforming Measures

Sector	Annex	Obligations concerned	Measure
Tourism and travel services	Annex I Annex II	Local presence (Art. 10.6) National treatment (Art. 9.4 and 10.3) Most-favored-nation treatment (Art. 9.5 and 10.4) Performance requirements (Art. 9.10) Senior management and boards of directors (Art. 9.11) Local presence (Art. 10.6)	Limits on firms' legal form; certain activities excluded; Vietnam reserves the right to adopt or maintain any measure regarding tourist guides.
Veterinary services	Annex I	National treatment (Art. 9.4)	Nationality requirements for veterinary service providers.

Source: TPP Annex I – Cross-Border Trade in Services and Investment Non-conforming Measures, TPP Annex II - Cross-Border Trade in Services and Investment Non-conforming Measures.

Appendix F

Country Profiles



Economy Overview

In 2014, Australia had the world’s 12th-largest economy with a nominal GDP of \$1,454.7 billion.¹²³⁵ It was also one of the world’s wealthiest countries, with GDP per capita estimated at \$61,925.5. Its real GDP grew by 2.5 percent in 2014 (table F.1).¹²³⁶

Table F.1: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	1,142.3	1,537.5	1,454.7
GDP growth (real, annual %)	2.0	3.6	2.5
GDP per capita (current \$)	51,845.7	67,646.1	61,925.5
Population (million)	22.0	22.7	23.5
Internet users (per 100 people)	76.0	79.0	84.6

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2014, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 2.4 percent, 6.9 percent, 70.5 percent, and 20.2 percent of Australia’s GDP, respectively.¹²³⁷ Food and beverages, machinery and equipment, and fabricated metal products were the top three manufacturing sectors in Australia in terms of value added.¹²³⁸ The mining sector was important to the Australian economy, as coal, oil, natural gas, and minerals accounted for more than half of Australian exports in 2014.¹²³⁹

Australia has 10 bilateral and regional trade agreements signed or in force, covering 16 partner countries; eight of them are TPP countries (Brunei, Chile, Japan, Malaysia, New Zealand, Singapore, the United States, and Vietnam).¹²⁴⁰ The U.S.-Australia bilateral FTA was signed in 2004 and entered into force in 2005.¹²⁴¹

¹²³⁵ World Bank, “Gross Domestic Product 2014,” <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹²³⁶ World Bank, World Development Indicators database (accessed December 28, 2015).

¹²³⁷ Ibid.

¹²³⁸ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹²³⁹ UN, Comtrade database (accessed January 22, 2016).

¹²⁴⁰ Government of Australia, Department of Foreign Affairs and Trade, “FTAs in Force,” and “FTAs Signed,” <http://www.austrade.gov.au/Export/Free-Trade-Agreements> (accessed July 13, 2015).

¹²⁴¹ USTR, “Free Trade Agreement Australia,” <https://ustr.gov/trade-agreements/free-trade-agreements/australian-fta>.

Merchandise Trade

Trade with the world: In 2014, Australia's two-way merchandise trade with the world totaled \$468.0 billion. China was Australia's largest trading partner, followed by the EU, Japan, the United States, and South Korea. TPP countries (including the United States) accounted for 29.2 percent of Australia's merchandise trade with the world.¹²⁴²

Trade with the United States: In 2014, two-way merchandise trade between the United States and Australia totaled \$37.3 billion, accounting for 0.9 percent of total U.S. merchandise trade. In 2014, the United States had a merchandise trade surplus of \$15.9 billion with Australia.¹²⁴³

See table F.2 for leading Australian exports to the world and the United States, and table F.3 for leading Australian imports from the world and the United States.

Table F.2: Leading Australia exports to the world and the United States, by HS 4-digit subheading, 2014

Australia exports	Value	Share
	Billion \$	%
<i>To the world:</i>	240.4	100.0
Iron ores and concentrates (HS2601)	60.2	25.0
Coal and coal products (HS2701)	34.4	14.3
Petroleum gases and other gaseous hydrocarbons (HS2711)	17.2	7.1
Gold (HS7108)	12.0	5.0
Crude petroleum oils (HS2709)	9.6	4.0
<i>To the United States:</i>	10.7	100.0
Meat of bovine animals, frozen (HS0202)	1.5	14.2
Meat of sheep or goats, fresh, chilled or frozen (HS0204)	0.6	5.4
Meat of bovine animals, fresh or chilled (HS0201)	0.5	4.7
Parts of balloons, dirigibles, gliders, airplanes, other aircraft, spacecraft and spacecraft launch vehicles (HS8803)	0.5	4.7
Wine (HS2204)	0.4	4.2

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Australia's exports to the world are based on Australia's reported export data; for Australia's exports to the United States, on U.S. reported import data.

Table F.3: Leading Australia imports from the world and the United States, by HS 4-digit subheading, 2014

Australia imports	Value	Share
	Billion \$	%
<i>From the world:</i>	227.5	100.0
Crude petroleum oils (HS2709)	18.3	8.0
Non-crude petroleum products (HS2710)	16.9	7.4
Motor vehicles for the transport of persons (HS8703)	15.8	7.0
Wireless telephone sets and other apparatus (HS8517)	7.1	3.1
Medicaments (HS3004)	6.7	2.9
<i>From the United States:</i>	26.6	100.0
Motor vehicles for the transport of persons (HS8703)	2.0	7.5

¹²⁴² UN, Comtrade database (accessed December 31, 2015).

¹²⁴³ USITC DataWeb/USDOC (accessed January 8, 2016).

Australia imports	Value	Share
Civilian aircraft, engines, equipment, and parts (HS8800)	1.8	6.7
Medical, surgical, dental or veterinary instruments and appliances (HS9018)	0.8	3.2
Wireless telephone sets and other apparatus (HS8517)	0.7	2.5
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	0.6	2.4

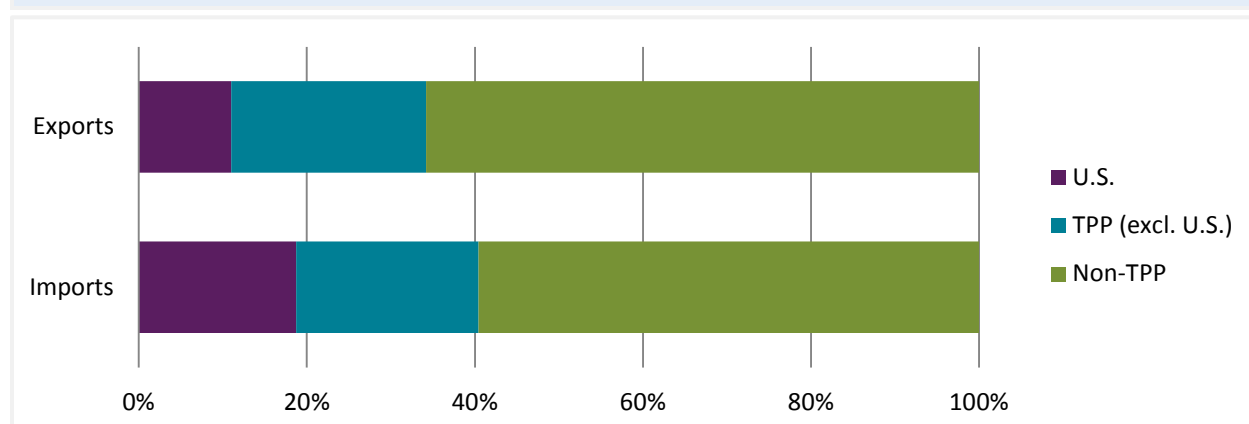
Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Australia's imports from the world are based on Australia's reported import data; for Australia's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2014, Australia's two-way services trade with the world totaled \$117.7 billion. The United States was Australia's largest services trading partner, followed by the United Kingdom, China, Singapore, and New Zealand. TPP countries (including the United States) accounted for 37.6 percent of Australia's services trade (figure F.1).¹²⁴⁴

Figure F.1: Australia's services trade, 2014



Source: OECD Stat database (accessed on January 22, 2016). Corresponds to [appendix table J.25](#).

Trade with the United States: In 2014, two-way services trade between the United States and Australia totaled \$26.1 billion, accounting for 2.2 percent of total U.S. services trade. In 2014, the United States had a services trade surplus of \$12.6 billion with Australia.

The leading services Australia imported from the United States were travel (27.7 percent), other business services (15.1 percent), and charges for intellectual property (IP) use¹²⁴⁵ (14.9 percent). The leading services Australia exported to the United States were other business services (31.0 percent), travel (26.8 percent), and transport (14.2 percent). Technical and trade-

¹²⁴⁴ OECD, Stat database, "EBOPS 2010: Trade in Services by Partner Country" (accessed January 22, 2016).

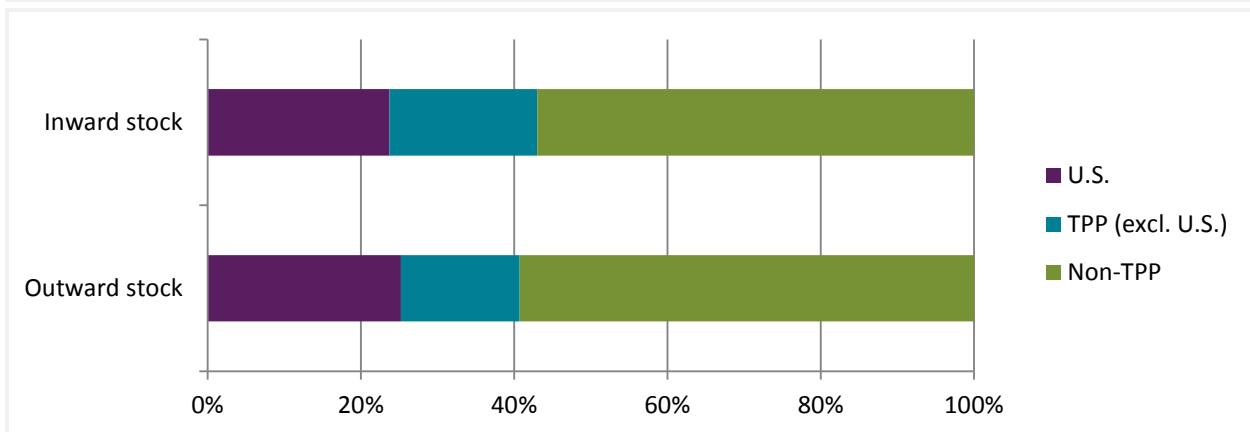
¹²⁴⁵ Charges for intellectual property (IP) use include royalties and license fees.

related business services, and professional and management consulting services, were the top two types of business services Australia traded with the United States.¹²⁴⁶

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Australia’s total inward FDI stock¹²⁴⁷ was \$564.6 billion and total outward FDI stock¹²⁴⁸ was \$443.5 billion.¹²⁴⁹ TPP countries (including the United States) accounted for 43.0 percent of Australia’s inward FDI stock and for 40.7 percent of Australia’s outward FDI stock (figure F.2).¹²⁵⁰

Figure F.2: Australia’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to appendix table J.26.
 Note: Because FDI data are not available for some TPP countries, the share of Australia’s inward FDI stock shown for TPP (excluding the United States) does not include Brunei, Mexico, and Peru; and the share of Australia’s outward FDI stock shown for TPP (excluding the United States) does not include Brunei, Canada, Mexico, and Peru.

FDI with the United States: In 2014, Australia’s FDI stock in the United States was valued at \$47.3 billion, equal to 1.6 percent of U.S. total inward FDI stock. Manufacturing (19.7 percent),

¹²⁴⁶ USDOC, BEA, International Transactions Account database, “Table 2.2 U.S. Trade in Services, by Type of Services and by Country or Affiliation,” October 15, 2015.

¹²⁴⁷ Inward FDI stock is the value of foreign investors' equity in and net loans to enterprises resident in the reporting economy. Source: OECD, “Definition of FDI Stocks,” <https://data.oecd.org/fdi/fdi-stocks.htm>.

¹²⁴⁸ Outward FDI stock is the value of the resident investors' equity in and net loans to enterprises in foreign economies. Source: OECD, “Definition of FDI Stocks,” <https://data.oecd.org/fdi/fdi-stocks.htm>.

¹²⁴⁹ UNCTAD, FDI/TNC database, “Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014” and “Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014” (accessed December 18, 2015).

¹²⁵⁰ Because the FDI data are not available for some TPP countries, the share of Australia’s inward FDI stock shown for TPP countries does not include Brunei, Mexico, and Peru, and the share of Australia’s outward FDI stock for TPP countries does not include Brunei, Canada, Mexico, and Peru. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

finance and insurance (10.3 percent), and wholesale trade (7.5 percent) were the leading sectors receiving Australian investment.¹²⁵¹

In 2014, U.S. FDI stock in Australia was valued at \$180.3 billion, equal to 3.7 percent of U.S. total outward FDI stock. Non-bank holding companies (38.8 percent), finance and insurance (19.8 percent), and mining (15.4 percent) were the leading sectors receiving U.S. investment.¹²⁵²

¹²⁵¹ USDOC, BEA, International Transactions Account database, "Foreign Direct Investment Position in the United States on a Historical-cost Basis" (accessed December 28, 2015).

¹²⁵² USDOC, BEA, International Transactions Account database, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).



Brunei Darussalam

Economy Overview

With a nominal GDP of \$17.1 billion in 2014, the economy of Brunei Darussalam (Brunei) was ranked 112th globally in terms of size.¹²⁵³ Brunei's economy is principally driven by crude oil and natural gas production.¹²⁵⁴ Mineral fuels accounted for more than 90 percent of its merchandise exports.¹²⁵⁵ Recent declines in oil production contributed to a 2.3 percent contraction of GDP in 2014 (table F.4).¹²⁵⁶ As a result of its rich natural resources and relatively small population, Brunei had one of the highest levels of GDP per capita (\$40,980) in Southeast Asia in 2014.¹²⁵⁷

Table F.4: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion US\$)	12.4	17.0	17.1
GDP growth (real, annual %)	2.6	0.9	-2.3
GDP per capita (current US\$)	31,453.2	41,807.7	40,979.6
Population (thousands)	393.3	405.5	417.4
Internet users (per 100 people)	53.0	60.3	68.8

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2013, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed to 0.7 percent, 12.3 percent, 31.0 percent, and 55.9 percent of Brunei's GDP, respectively.¹²⁵⁸

As of January 2016, Brunei had eight bilateral and regional trade agreements in force; six of them were signed collectively under the Association of Southeast Asian Nations (ASEAN), of which Brunei is a member. Brunei is also one of the original four signee countries of the Trans-Pacific Strategic Economic Partnership Agreement (TPSEP/P4), the trade agreement that TPP was built upon. These eight agreements cover 16 partner countries, 7 of which are TPP countries (Australia, Chile, Japan, Malaysia, New Zealand, Singapore, and Vietnam).¹²⁵⁹

¹²⁵³ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹²⁵⁴ CIA, *World Factbook* (accessed January 14, 2016).

¹²⁵⁵ UN, Comtrade database (accessed December 31, 2015).

¹²⁵⁶ USEIA, "Brunei" (accessed March 20, 2015); World Bank, World Development Indicators database (accessed January 4, 2016).

¹²⁵⁷ World Bank, World Development Indicators (accessed January 4, 2016).

¹²⁵⁸ World Bank, World Development Indicators database (accessed January 14, 2016).

¹²⁵⁹ Government of Brunei, Ministry of Foreign Affairs and Trade, "Brunei Darussalam's Free Trade Agreements," <http://www.mofat.gov.bn/Pages/Free-Trade-Agreements.aspx> (accessed January 14, 2016).

Merchandise Trade

Trade with the world: In 2014, Brunei's two-way merchandise trade with the world totaled \$14.1 billion. Japan was Brunei's largest trading partner, followed by South Korea, Malaysia, Singapore, and India. TPP countries (including the United States) accounted for 58.1 percent of Brunei's merchandise trade.¹²⁶⁰

Trade with the United States: In 2014, two-way merchandise trade between the United States and Brunei totaled \$581.0 million, accounting for 0.01 percent of total U.S. merchandise trade. The United States had a merchandise trade surplus of \$517.4 million with Brunei.¹²⁶¹

See table F.5 for leading Brunei exports to the world and the United States, and table F.6 for leading Brunei imports from the world and the United States.

Table F.5: Leading Brunei exports to the world and the United States, by HS 4-digit subheading, 2014

Brunei exports	Value	Share
	Million \$	%
<i>To the world:</i>	10,508.8	100.0
Petroleum gases and other gaseous hydrocarbons (HS2711)	5,345.8	50.9
Crude petroleum oils (HS2709)	4,378.6	41.7
Provitamins or vitamins, natural or synthetic (HS2936)	243.1	2.3
Acyclic alcohols and their derivatives (HS2905)	201.4	1.9
Parts for aircrafts under heading 88.01 or 88.02 (HS8803)	23.1	0.2
<i>To the United States:</i>	31.8	100.0
Acyclic alcohols and their derivatives (HS2905)	16.1	50.7
Exports of articles imported for repair (HS9801)	9.0	28.2
Apparel such as sweaters, etc., knitted or crocheted (HS6110)	2.4	7.5
Crustaceans, live, fresh, chilled, or frozen (HS0306)	1.7	5.3
Apparel such as women's or girl's briefs, panties, pajamas etc., knitted or crocheted (HS6108)	0.6	1.8

Source: UN, Comtrade database (accessed on December 31, 2015); USITC DataWeb/USDOC (accessed on January 8, 2016).

Note: Figures for Brunei's exports to the world are based on Brunei's reported export data; for Brunei's exports to the United States, on U.S. reported import data.

Table F.6: Leading Brunei imports from the world and the United States, by HS 4-digit subheading, 2014

Brunei imports	Value	Share
	Million \$	%
<i>From the world:</i>	3,598.7	100.0
Non-crude petroleum products (HS2710)	362.2	10.1
Motor vehicles for the transport of people (HS8703)	301.7	8.4
Water vessels for transport or shipping (HS8901)	209.7	5.8
Telephone sets, including cellular (HS8517)	79.9	2.2
Binders made for foundry molds or cores (HS3824)	75.4	2.1
<i>From the United States:</i>	549.2	100.0
Civilian aircraft, engines, equipment, and parts (HS8800)	286.9	52.2
Aircraft, spacecraft, and spacecraft launch vehicles (HS8802)	133.0	24.2

¹²⁶⁰ UN, Comtrade database (accessed December 31, 2015).

¹²⁶¹ USITC DataWeb/USDOC (accessed January 8, 2016).

Brunei imports	Value	Share
Telephone sets, including cellular (HS8517)	17.5	3.2
Turbojets, turbo propellers, other gas turbines, and parts (HS8411)	6.9	1.3
Special purpose motor vehicles (HS8705)	6.3	1.1

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Brunei's imports from the world are based on Brunei's reported import data; for Brunei's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2014, Brunei's two-way services trade with the world totaled \$2.8 billion. Transportation (38.3 percent), travel (32.8 percent), and other business services (17.1 percent) were the leading services Brunei traded with the world.¹²⁶²

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Brunei's total inward FDI stock was \$6.2 billion, and outward FDI stock totaled \$133.8 million.¹²⁶³ Singapore and the United States were the top sources of Brunei's inward FDI in 2012, while Singapore and Bangladesh were the top destinations for Brunei's outward FDI.¹²⁶⁴

¹²⁶² No country-specific data are available for Brunei's trade in services, and U.S. statistical agencies do not publish cross-border services trade data specific to Brunei. Source: ASEAN, WGSITS, ASEANstats database (accessed October 31, 2015).

¹²⁶³ UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014" (accessed December 18, 2015).

¹²⁶⁴ The latest bilateral FDI data available for Brunei are for the year 2012. However, the data are not detailed enough to cover most TPP countries. Source: UNCTAD Bilateral FDI Statistics (accessed February 1, 2016).



Economy Overview

In 2014, Canada had the world's 11th-largest economy with a nominal GDP of \$1,785.4 billion.¹²⁶⁵ It is considered to be a high-income country, with GDP per capita at \$50,235. Canada's real GDP grew by 2.4 percent in 2014 (table F.7).¹²⁶⁶

Table F.7: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	1,614.0	1,832.7	1,785.4
GDP growth (real, annual %)	3.4	1.9	2.4
GDP per capita (current \$)	47,463.6	52,733.5	50,235.4
Population (million)	34.0	34.8	35.5
Internet users (per 100 people)	80.3	83.0	87.1

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2014, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 1.5 percent, 10.6 percent, 69.5 percent, and 18.3 percent of Canada's GDP, respectively.¹²⁶⁷ Food and beverages, fabricated metal products, and machinery and equipment are Canada's top manufacturing sectors in terms of value added (2014).¹²⁶⁸ Canada is rich in natural resources, making it one of the world's leading exporters of mineral and energy products.

As of January 2016, other than TPP, Canada had 12 bilateral and regional trade agreements in force, covering 15 partner countries; four of them are TPP countries (Chile, Mexico, Peru and the United States). The North American Free Trade Agreement (NAFTA) with the United States and Mexico entered into force on January 1, 1994.¹²⁶⁹

¹²⁶⁵ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹²⁶⁶ World Bank, World Development Indicators database (accessed December 28, 2015).

¹²⁶⁷ Government of Canada, Statistics Canada, "Gross Domestic Product at Basic Prices, by Industry" (accessed February 1, 2016).

¹²⁶⁸ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹²⁶⁹ Government of Canada, Ministry of Foreign Affairs, "Canada's Free Trade Agreements," <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/fta-ale.aspx?lang=eng> (accessed January 21, 2016).

Merchandise Trade

Trade with the world: In 2014, Canada's two-way merchandise trade with the world totaled \$936.6 billion. The United States was Canada's largest trading partner, followed by the EU, China, Mexico, and Japan.¹²⁷⁰ TPP countries (including the United States) accounted for 73.2 percent of Canada's merchandise trade with the world.¹²⁷¹

Trade with the United States: In 2014, two-way merchandise trade between the United States and Canada totaled \$660.2 billion, accounting for 16.6 percent of total U.S. merchandise trade, making Canada the United States' largest single country trading partner. In 2014, the United States had a merchandise trade deficit of \$35.4 billion with Canada.¹²⁷²

See table F.8 for leading Canada exports to the world and the United States, and table F.9 for leading Canada imports from the world and the United States.

Table F.8: Leading Canada exports to the world and the United States, by HS 4-digit subheading, 2014

Canada exports	Value	Share
	Billion \$	%
<i>To the world:</i>	473.6	100.0
Crude petroleum oils (HS2709)	88.1	18.6
Motor vehicles for the transport of persons (HS8703)	44.9	9.5
Petroleum gases and other gaseous hydrocarbons (HS2711)	17.0	3.6
Non-crude petroleum products (HS2710)	15.2	3.2
Gold (HS7108)	15.0	3.2
<i>To the United States:</i>	347.8	100.0
Crude petroleum oils (HS2709)	83.2	23.9
Motor vehicles for the transport of persons (HS8703)	43.2	12.4
Petroleum gases and other gaseous hydrocarbons (HS2711)	15.1	4.3
Non-crude petroleum products (HS2710)	14.2	4.1
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	9.6	2.8

Source: UN, Comtrade database (accessed December 31, 2015); USITC Dataweb/USDOC (accessed January 8, 2016).

Note: Figures for Canada's exports to the world are based on Canada's reported export data; for Canada's exports to the United States, on U.S. reported import data.

¹²⁷⁰ UN, Comtrade database (accessed December 31, 2015).

¹²⁷¹ Ibid.

¹²⁷² USITC DataWeb/USDOC (accessed January 8, 2016).

Table F.9: Leading Canada imports from the world and the United States, by HS 4-digit subheading, 2014

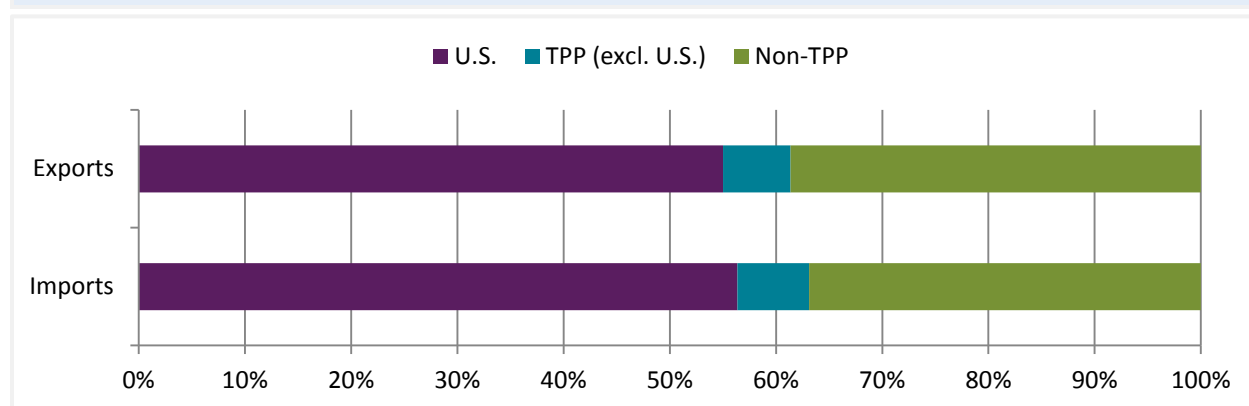
Canada imports	Value	Share
	Billion \$	%
<i>From the world:</i>	463.0	100.0
Motor vehicles for the transport of persons (HS8703)	27.0	5.8
Crude petroleum oils (HS2709)	21.7	4.7
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	20.5	4.4
Non-crude petroleum products (HS2710)	18.1	3.9
Motor vehicles for the transport of goods (HS8704)	12.8	2.8
<i>From the United States:</i>	312.4	100.0
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	17.5	5.6
Motor vehicles for the transport of persons (HS8703)	15.3	4.9
Non-crude petroleum products (HS2710)	13.6	4.4
Crude petroleum oils (HS2709)	11.7	3.7
Motor vehicles for the transport of goods (HS8704)	10.4	3.3

Source: UN, Comtrade database (accessed December 31, 2015); USITC Dataweb/USDOC (accessed January 8, 2016).

Note: Figures for Canada's imports from the world are based on Canada's reported import data; for Canada's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2014, Canada's two-way services trade with the world totaled \$194.3 billion. The United States was Canada's largest services trading partner, followed by the United Kingdom, Hong Kong (China), France, and China. TPP countries (including the United States) accounted for more than 62.3 percent of Canada's services trade (figure F.3).¹²⁷³

Figure F.3: Canada's services trade, 2014


Source: OECD Stat database (accessed January 21, 2016). Note: Because Canada's services trade data are not available for all TPP countries, the shares shown for TPP (excluding the United States) do not include Brunei and Peru. Corresponds to [appendix table J.27](#).

¹²⁷³ Because Canada's services trade data are not available for some TPP countries, the share for TPP countries does not include Brunei and Peru. Source: OECD, Stat database, "EBOPS 2002: Trade in Services by Partner Country" (accessed January 21, 2016).

Trade with the United States: In 2014, two-way services trade between the United States and Canada totaled \$91.4 billion, accounting for 7.7 percent of total U.S. services trade. In 2014, the United States had a services trade surplus of \$31.3 billion with Canada.

The leading services Canada imported from the United States were travel (33.7 percent), other business services (15.3 percent), and charges for IP use (14.2 percent). The leading services Canada exported to the United States were travel (24.1 percent), other business services (22.7 percent), transport (19.7 percent) and telecommunications, computer, and information services (16.9 percent).¹²⁷⁴

IPR for computer software (4.4 percent), audio-visual and related products (3.1 percent), and industrial process (2.9 percent) were the top types of IP use Canada imported from the United States. Professional and management consulting services (9.5 percent), technical and trade-related business services (7.2 percent), and research and development services (6.1 percent) were the top business services Canada exported to the United States.¹²⁷⁵

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Canada's total inward FDI stock was \$631.3 billion, and outward FDI stock was \$714.6 billion.¹²⁷⁶ TPP countries (including the United States) accounted for 52.7 percent of Canada's inward FDI stock and for 51.7 percent of Canada outward FDI stock (figure F.4).¹²⁷⁷

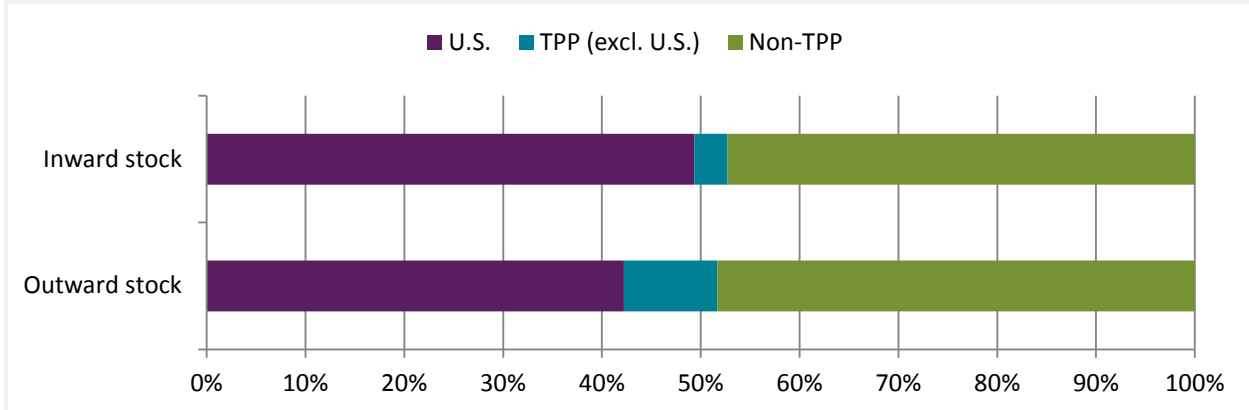
¹²⁷⁴ USDOC, BEA, International Transactions Account database, "Table 2.2: U.S. Trade in Services, by Type of Services and by country or affiliation," October 15, 2015.

¹²⁷⁵ Ibid.

¹²⁷⁶ UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990-2014" (access December 18, 2015).

¹²⁷⁷ Because Canada's FDI data are not available for some TPP countries, the share of Canada's inward FDI stock shown for TPP countries does not include Brunei, Chile, Malaysia, New Zealand, Peru, and Vietnam, and the share of Canada's outward FDI stock shown for TPP countries does not include Brunei and Vietnam. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

Figure F.4: Canada’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.28](#).

Note: Because Canada’s FDI data are not available for some TPP countries, the share of Canada’s inward FDI stock shown for TPP (excluding the United States) does not include Brunei, Chile, Malaysia, New Zealand, Peru, and Vietnam, and the share of Canada’s outward FDI stock shown for TPP (excluding the United States) does not include Brunei and Vietnam.

FDI with the United States: In 2014, Canada’s FDI stock in the United States was valued at \$261.2 billion, equal to 9.0 percent of U.S. total inward FDI stock. Manufacturing (21.9 percent), finance and insurance (20.4 percent), and depository institutions (16.4 percent) were the leading destinations for Canadian investment. About 33.2 percent of Canadian FDI in U.S. manufacturing went to chemicals and 21.3 percent went to transportation equipment.¹²⁷⁸

In 2014, U.S. FDI stock in Canada was valued at \$386.1 billion, equal to 7.8 percent of U.S. total outward FDI stock. Leading destination sectors were non-bank holding companies (29.2 percent), manufacturing (28.3 percent), finance and insurance (12.9 percent), and mining (7.0 percent).¹²⁷⁹

¹²⁷⁸ USDOC, BEA, International Transactions Account database, “Foreign Direct Investment Position in the United States on a Historical-cost Basis” (accessed December 28, 2015).

¹²⁷⁹ USDOC, BEA, International Transactions Account database, “U.S. Direct Investment Position Abroad on a Historical-cost Basis” (accessed December 28, 2015).



Economy Overview

In 2014, Chile's nominal GDP was \$258.1 billion, making it the world's 42nd-largest economy.¹²⁸⁰ The World Bank considers Chile an upper-middle-income country, with a GDP per capita of \$14,528.3 (2014). Its real GDP grew by 1.9 percent in 2014 (table F.10).¹²⁸¹

Table F.10: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	217.5	265.2	258.1
GDP growth (real, annual %)	5.8	5.5	1.9
GDP per capita (current \$)	12,785.1	15,253.3	14,528.3
Population (million)	17.0	17.4	17.8
Internet users (per 100 people)	45.0	61.4	72.4

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2014, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed to 3.3 percent, 12.4 percent, 61.5 percent, and 22.8 percent of Chile's GDP, respectively.¹²⁸² Chile is among the world's largest producers of copper. Copper ores and refined copper products accounted for nearly one-half of Chilean merchandise exports in 2014.¹²⁸³

As of July 2015, Chile had 26 bilateral and regional trade agreements signed or in force. It had free trade agreements with all 11 other TPP countries (Australia, Brunei, Canada, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam).¹²⁸⁴ The U.S.-Chile FTA entered into force on January 1, 2004.¹²⁸⁵

Merchandise Trade

Trade with the world: In 2014, Chile's two-way merchandise trade with the world totaled \$149.0 billion. China was Chile's largest trading partner, followed by the United States, the EU,

¹²⁸⁰ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹²⁸¹ World Bank, World Development Indicators database (accessed December 28, 2015).

¹²⁸² World Bank, World Development Indicators database (accessed December 28, 2015).

¹²⁸³ UN, Comtrade database (accessed December 31, 2015).

¹²⁸⁴ Organization of American States, Foreign Trade Information System, "Information on Chile: Trade Agreements," http://www.sice.oas.org/ctyindex/CHL/CHLAgreements_e.asp (accessed February 10, 2016).

¹²⁸⁵ USTR, "Chile Free Trade Agreement," <https://ustr.gov/trade-agreements/free-trade-agreements/chile-fta>.

Japan, and Brazil. TPP countries (including the United States) accounted for 30.9 percent of Chile's merchandise trade with the world.¹²⁸⁶

Trade with the United States: In 2014, two-way merchandise trade between the United States and Chile totaled \$26.0 billion, accounting for 0.7 percent of total U.S. merchandise trade. In 2014, the United States had a merchandise trade surplus of \$7.0 billion with Chile.¹²⁸⁷

See table F.11 for leading Chile exports to the world and the United States, and table F.12 for leading Chile imports from the world and the United States.

Table F.11: Leading Chile exports to the world and the United States, by HS 4-digit subheading, 2014

Chile exports	Value	Share
	Billion \$	%
<i>To the world:</i>	76.6	100.0
Refined copper and copper alloys, unwrought (HS7403)	18.1	23.6
Copper ores and concentrates (HS2603)	16.8	21.9
Unrefined copper; copper anodes for electrolytic refining (HS7402)	3.0	3.9
Chemical wood pulp, soda or sulphate, other than dissolving grades (HS4703)	2.9	3.8
Fish fillets and other fish meat (HS0304)	2.3	3.0
<i>To the United States:</i>	9.5	100.0
Refined copper and copper alloys, unwrought (HS7403)	2.2	23.0
Fish fillets and other fish meat (HS0304)	1.5	15.4
Grapes, fresh or dried (HS0806)	0.7	7.8
New pneumatic tires, of rubber (HS4011)	0.4	4.2
Fresh fruit, nesoi (HS0810)	0.3	3.3

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Chile's exports to the world are based on Chile's reported export data; for Chile's exports to the United States, on U.S. reported import data. "nesoi" = "not elsewhere specified or included."

Table F.12: Leading Chile imports from the world and the United States, by HS 4-digit subheading, 2014

Chile imports	Value	Share
	Billion \$	%
<i>From the world:</i>	72.3	100.0
Non-crude petroleum products (HS2710)	6.3	8.7
Crude petroleum oils (HS2709)	6.0	8.3
Motor vehicles for the transport of persons (HS8703)	3.7	5.2
Wireless telephone sets and other apparatus (HS8517)	2.0	2.8
Petroleum gases and other gaseous hydrocarbons (HS2711)	2.0	2.7
<i>From the United States:</i>	16.5	100.0
Non-crude petroleum products (HS2710)	5.0	30.0
Civilian aircraft, engines, equipment, and parts (HS8800)	1.6	9.6
Petroleum gases and other gaseous hydrocarbons (HS2711)	0.4	2.7
Motor vehicles for the transport of persons (HS8703)	0.4	2.4
Motor vehicles for the transport of goods (HS8704)	0.4	2.3

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Chile's imports from the world are based on Chile's reported import data; for Chile's imports from the United States, on U.S. reported export data.

¹²⁸⁶ UN, Comtrade database (accessed December 31, 2015).

¹²⁸⁷ USITC DataWeb/USDOC (accessed January 8, 2016).

Cross-border Services Trade

Trade with the world: In 2014, Chile's two-way services trade with the world totaled \$28.3 billion. The United States, Argentina, Brazil, Germany, and China were its top services trading partners (2013).¹²⁸⁸

Trade with the United States: In 2014, two-way services trade between the United States and Chile totaled \$5.0 billion, accounting for 0.4 percent of total U.S. services trade. In 2014, the United States had a services trade surplus of \$2.6 billion with Chile.¹²⁸⁹

The leading services Chile imported from the United States were travel (26.3 percent), transport (21.7 percent), and charges for IP use (13.9 percent). Computer software (7.6 percent) was the top type of IP use Chile imported from the United States.¹²⁹⁰

The leading services Chile exported to the United States were transport (40.4 percent), travel (29.6 percent), and other business services (14.7 percent). Research and development services (5.1 percent) and business and management consulting and public relations services (4.8 percent) were the top types of business services Chile exported to the United States.¹²⁹¹

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Chile's total inward FDI stock was \$207.8 billion and its total outward FDI stock was \$89.7 billion.¹²⁹² TPP countries (including the United States) accounted for about 24.0 percent of Chile's inward FDI stock and for 13.1 percent of Chile's outward FDI stock (figure F.5).¹²⁹³

¹²⁸⁸ Chile's services trade data by trading partners are not available for 2014. Source: UN Service Trade Statistics Database (accessed on December 14, 2015).

¹²⁸⁹ USDOC, BEA, International Transactions Account database, "Table 2.2. U.S. Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015.

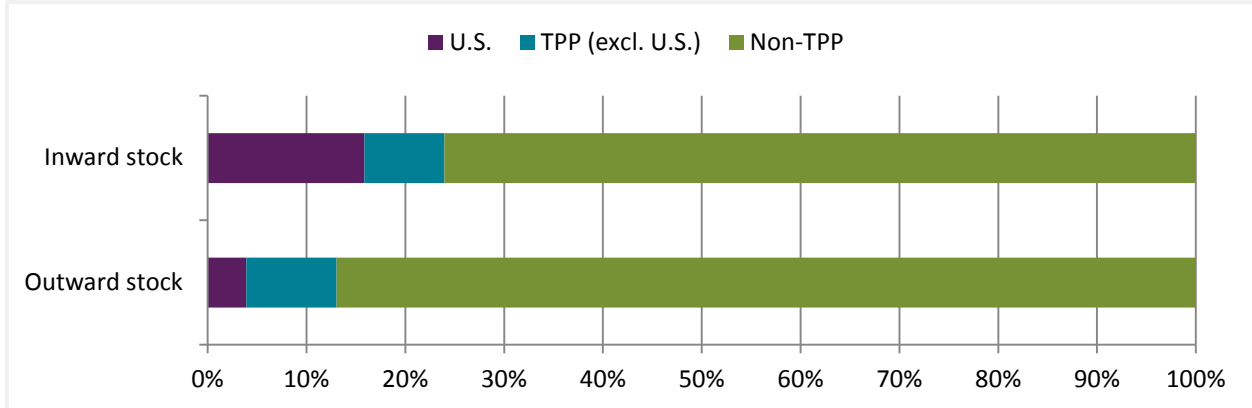
¹²⁹⁰ Ibid.

¹²⁹¹ Ibid.

¹²⁹² UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014" (accessed December 18, 2015).

¹²⁹³ Because Chile's FDI data are not available for some TPP countries, the share of Chile's inward FDI stock shown for TPP countries does not include Brunei, Malaysia, and Vietnam, and the share of Chile's outward FDI stock shown for TPP countries does not include Brunei. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

Figure F.5: Chile’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.29](#).

Note: Because Chile’s FDI data are not available for some TPP countries, the share of Chile’s inward FDI stock shown for TPP (excluding the United States) does not include Brunei, Malaysia, and Vietnam, and the share of Chile’s outward FDI stock shown for TPP (excluding the United States) does not include Brunei.

FDI with the United States: In 2014, Chile’s FDI stock in the United States was valued at \$730 million, equal to 0.03 percent of U.S. total inward FDI stock; U.S. FDI stock in Chile was valued at \$27.6 billion, or equal to 0.6 percent of U.S. total outward FDI stock. Mining (45.4 percent), finance and insurance (20.4 percent), and manufacturing (17.7 percent) were the leading destination sectors for U.S. FDI in Chile.¹²⁹⁴

¹²⁹⁴ USDOC, BEA, International Transactions Account database, “U.S. Direct Investment Position Abroad on a Historical-cost Basis,” and “Foreign Direct Investment Position in the United States on a Historical-cost Basis” (accessed December 28, 2015).



Economy Overview

In 2014, Japan had the world's third-largest economy with a nominal GDP of \$4,601.5 billion.¹²⁹⁵ The World Bank considers Japan a high-income country, with GDP per capita of \$36,194.4 billion (2014). However, Japan's economic growth slowed down between 2010 and 2014, and its GDP contracted by 0.1 percent in 2014 (table F.13).¹²⁹⁶

Table F.13: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	5,495.4	5,954.5	4,601.5
GDP growth (real, annual %)	4.7	1.8	-0.1
GDP per capita (current \$)	42,909.2	46,679.3	36,194.4
Population (million)	128.1	127.6	127.1
Internet users (per 100 people)	78.2	79.5	90.6

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2013, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 1.2 percent, 18.5 percent, 72.6 percent, and 7.7 percent of Japan's GDP, respectively.¹²⁹⁷ Motor vehicles, food and beverage, and machinery and equipment were the top three manufacturing sectors in Japan in terms of value added (2014).¹²⁹⁸ Japan was the world's third-largest motor vehicle producer after China and the United States,¹²⁹⁹ and was also among the world's largest and most technologically advanced manufacturers of electronic equipment, machine tools, steel and nonferrous metals, ships, and textiles.¹³⁰⁰

As of January 2016, Japan had 15 bilateral and regional trade agreements signed or in force. These agreements covered 17 countries, 8 of which are TPP countries (Singapore, Mexico, Malaysia, Chile, Brunei, Vietnam, Peru, and Australia).¹³⁰¹

¹²⁹⁵ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹²⁹⁶ World Bank, World Development Indicators (accessed December 28, 2015).

¹²⁹⁷ Ibid.

¹²⁹⁸ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹²⁹⁹ OICA, 2014 Production Statistics database (accessed December 28, 2015).

¹³⁰⁰ CIA, *World Factbook* (accessed December 28, 2015).

¹³⁰¹ Government of Japan, Ministry of Foreign Affairs, <http://www.mofa.go.jp/policy/economy/fta/> (accessed February 9, 2016).

Merchandise Trade

Trade with the world: In 2014, Japan's two-way merchandise trade with the world totaled \$1,502.4 billion. China was Japan's largest trading partner, followed by the United States, the EU, South Korea, and Taiwan. TPP countries (including the United States) accounted for 28.0 percent of Japan's merchandise trade with the world.¹³⁰²

Trade with the United States: In 2014, two-way merchandise trade between the United States and Japan totaled \$200.8 billion, accounting for 5.1 percent of total U.S. merchandise trade and making Japan the United States' fifth-largest trading partner. In 2014, the United States had a merchandise trade deficit of \$67.2 billion with Japan.¹³⁰³

See table F.14 for leading Japanese exports to the world and the United States, and table F.15 for leading Japanese imports from the world and the United States.

Table F.14: Leading Japan exports to the world and the United States, by HS 4-digit subheading, 2014

Japan exports	Value	Share
	Billion \$	%
<i>To the world:</i>	690.2	100.0
Motor vehicles for the transport of persons (HS8703)	88.5	12.8
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	32.5	4.7
Electronic integrated circuits and parts (HS8542)	25.5	3.7
Non-crude petroleum products (HS2710)	13.4	1.9
Machines and apparatus (HS8486)	13.0	1.9
<i>To the United States:</i>	134.0	100.0
Motor vehicles for the transport of persons (HS8703)	33.9	25.3
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	8.3	6.2
Parts of aircraft and spacecraft (HS8803)	4.9	3.6
Printing machinery (HS8443)	3.6	2.7
Self-propelled bulldozers, angle-dozers, graders, etc. (HS8429)	2.8	2.1

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Japan's exports to the world are based on Japan's reported export data; for Japan's exports to the United States, on U.S. reported import data.

Table F.15: Leading Japan imports from the world and the United States, by HS 4-digit subheading, 2014

Japan imports	Value	Share
	Billion \$	%
<i>From the world:</i>	812.2	100.0
Crude petroleum oils (HS2709)	130.7	16.1
Petroleum gases and other gaseous hydrocarbons (HS2711)	84.5	10.4
Wireless telephone sets and other apparatus (HS8517)	25.5	3.1
Non-crude petroleum products (HS2710)	25.0	3.1
Coal (HS2701)	19.7	2.4
<i>From the United States:</i>	66.8	100.0

¹³⁰² UN, Comtrade database (accessed December 31, 2015)

¹³⁰³ USITC DataWeb/USDOC (accessed January 8, 2016).

Japan imports	Value	Share
Civilian aircraft, engines, equipment, and parts (HS8800)	6.5	9.7
Corn (HS1005)	2.7	4.0
Medical/surgical,/dental/veterinary instruments and appliances (HS9018)	2.7	4.0
Medicaments (HS3004)	2.5	3.8
Pork meat, fresh, chilled or frozen (HS0203)	1.7	2.6

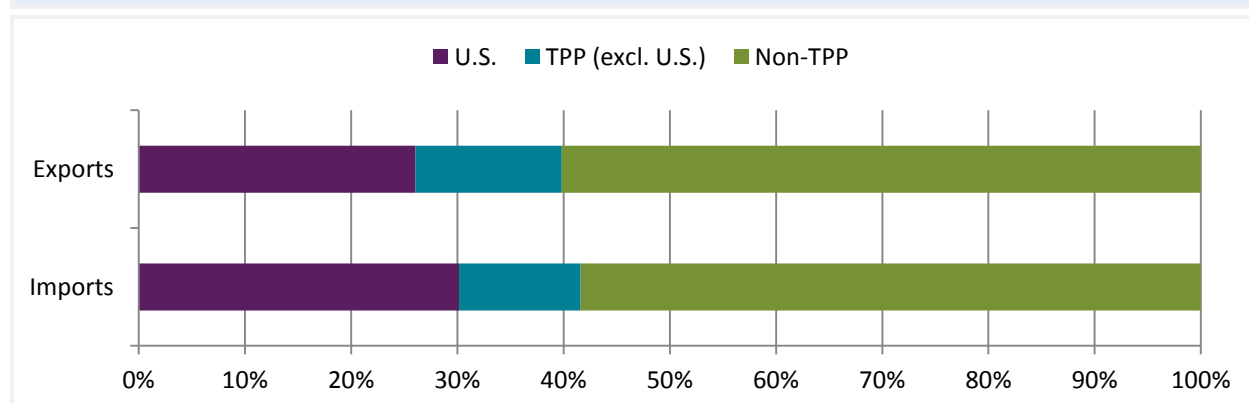
Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Japan's imports from the world are based on Japan's reported import data; for Japan's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2014, Japan's two-way services trade with the world totaled \$355.2 billion. The United States was Japan's largest services trading partner, followed by China, Singapore, the United Kingdom, and South Korea. TPP countries accounted for more than 40.8 percent of Japan's services trade (figure F.6).¹³⁰⁴

Figure F.6: Japan's services trade, 2014



Source: OECD, Stat database (accessed April 4, 2016). Corresponds to [appendix table J.30](#).

Note: Because Japan's services trade data are not available for some TPP countries, the shares shown for TPP (excluding the United States) do not include Brunei, Chile, and Peru.

Trade with the United States: In 2014, two-way services trade between the United States and Japan totaled \$77.9 billion, accounting for 6.6 percent of total U.S. services trade. The United States had a services trade surplus of \$15.5 billion with Japan.¹³⁰⁵

The leading services Japan imported from the United States were travel (25.9 percent), transport (20.3 percent), and charges for IP use (18.6 percent). Computer software

¹³⁰⁴ Because Japan's services trade data are not available for all TPP countries, the share shown for TPP countries does not include Brunei, Chile, and Peru. Source: OECD, Stat database, "EBOPS 2010: Trade in Services by Partner Country" (accessed April 4, 2016).

¹³⁰⁵ USDOC, BEA, International Transactions Account database, "Table 2.2. U.S. Trade in Services, by Type of Services and by Country or Affiliation" (accessed October 15, 2015).

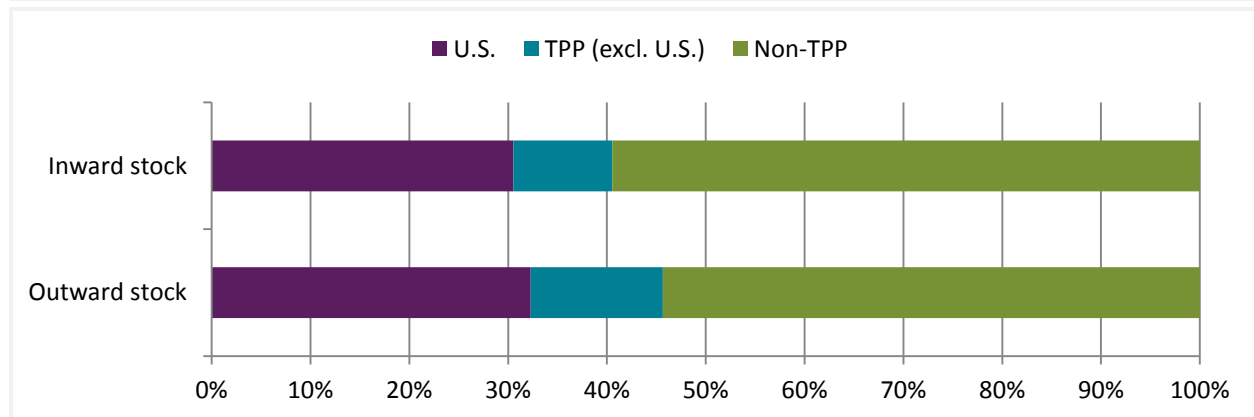
(7.5 percent), industrial processes (4.4 percent), and trademarks (4.1 percent) were the major types of IP use Japan imported from the United States.¹³⁰⁶

Charges for IP use (39.7 percent), transport (25.4 percent), and other business services (10.0 percent) were the leading services Japan exported to the United States. Industrial processes (37.8 percent) were the top types of IP use Japan exported to the United States.¹³⁰⁷

Foreign Direct Investment (FDI)

FDI in the world: In 2014, total Japanese inward FDI stock equaled \$170.6 billion, and total outward FDI stock was \$1,118.0 billion.¹³⁰⁸ TPP countries accounted for 40.6 percent of Japanese inward FDI stock and for 45.6 percent of Japanese outward FDI stock (figure F.7).¹³⁰⁹

Figure F.7: Japan’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.31](#).

Note: Because Japan’s FDI data are not available for some TPP countries, the shares of Japan’s inward and outward FDI stock shown for TPP (excluding the United States) do not include Brunei, Chile, and Peru.

FDI in the United States: In 2014, inward FDI stock from Japan in the United States was valued at \$372.8 billion, or 12.9 percent of U.S. total inward FDI stock. Wholesale trade (31.7 percent), manufacturing (31.0 percent), and finance and insurance (12.4 percent) were the leading

¹³⁰⁶ Ibid.

¹³⁰⁷ Ibid.

¹³⁰⁸ UNCTAD, FDI/TNC database, “Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014” and “Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014” (accessed December 18, 2015).

¹³⁰⁹ Because the FDI data are not available for some TPP countries, the shares of Japan's inward and outward FDI stocks shown for TPP countries do not include Brunei, Chile, and Peru. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

destination sectors for Japanese FDI. Transportation equipment (10.9 percent) was the top U.S. manufacturing sector receiving Japanese investment.¹³¹⁰

In 2014, U.S. investors held \$108.1 billion of FDI stock in Japan, equal to 2.2 percent of U.S. total outward FDI stock. Finance and insurance (50.0 percent), manufacturing (20.7 percent), and wholesale trade (9.9 percent) were the leading sectors in Japan receiving U.S. investment.¹³¹¹

¹³¹⁰ USDOC, BEA, International Transactions Account database, "Foreign Direct Investment Position in the United States on a Historical-cost Basis" (accessed December 28, 2015).

¹³¹¹ USDOC, BEA, International Transactions Account database, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).



Economy Overview

In 2014, Malaysia's nominal GDP was \$338.1 billion, making it the 35th-largest economy in the world.¹³¹² It is a middle- to upper-middle-income country, with GDP per capita of \$11,307.1. Its real GDP grew by 6.0 percent in 2014 (table F.16).¹³¹³

Table F.16: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	255.0	314.4	338.1
GDP growth (real, annual %)	7.4	5.5	6.0
GDP per capita (current \$)	9,069.0	10,834.7	11,307.1
Population (million)	28.1	29.0	29.9
Internet users (per 100 people)	56.3	65.8	67.5

Source: World Bank Development Indicators database (accessed December 22, 2015).

In 2014, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 8.9 percent, 22.9 percent, 51.2 percent, and 17.0 percent of Malaysia's GDP, respectively.¹³¹⁴ The leading manufacturing sectors in terms of value added were office, accounting, and computing machinery; coke, refined petroleum products, and nuclear fuel; and food and beverages (2014).¹³¹⁵

As of November 2015, Malaysia had 14 bilateral and regional trade agreements signed or in force, covering four TPP countries (Australia, Chile, Japan, and New Zealand).¹³¹⁶

Merchandise Trade

Trade with the world: In 2014, Malaysia's two-way merchandise trade with the world totaled \$443.0 billion. China was Malaysia's largest trading partner, followed by Singapore, the EU, Japan, and the United States. TPP countries (including the United States) accounted for 38.5 percent of Malaysia's merchandise trade with the world.¹³¹⁷

¹³¹² World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹³¹³ CIA, *World Factbook* (accessed January 19, 2016); World Bank, World Development Indicators database (accessed December 22, 2015).

¹³¹⁴ World Bank, World Development Indicators database (accessed December 22, 2015).

¹³¹⁵ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹³¹⁶ Government of Malaysia, Ministry of International Trade and Industry, <http://fta.miti.gov.my/index.php/pages/view/4> (accessed January 19, 2016).

¹³¹⁷ UN, Comtrade database (accessed December 31, 2015).

Appendix F: Country Profiles

Trade with the United States: In 2014, two-way merchandise trade between the United States and Malaysia totaled \$43.5 billion, accounting for 1.1 percent of U.S. total merchandise trade. In 2014, the United States had a merchandise trade deficit of \$17.4 billion with Malaysia.¹³¹⁸

See table F.17 for leading Malaysian exports to the world and the United States, and table F.18 for leading Malaysian imports from the world and the United States.

Table F.17: Leading Malaysia exports to the world and the United States, by HS 4-digit subheading, 2014

Malaysia exports	Value	Share
	Billion \$	%
Electronic integrated circuits and parts (HS8542)	31.0	13.3
Petroleum gases and other gaseous hydrocarbons (HS2711)	20.9	8.9
Non-crude petroleum products (HS2710)	18.5	7.9
Palm oil and its fractions (HS1511)	12.0	5.1
Crude petroleum oils (HS2709)	10.5	4.5
<i>To the United States:</i>	30.4	100.0
Electronic integrated circuits and parts (HS8542)	7.6	25.0
Wireless telephone sets and other apparatus (HS8517)	5.1	16.8
Printing machinery (HS8443)	1.5	5.1
Diodes, transistors and similar semiconductor devices (HS8541)	1.5	4.8
Apparel accessories of unhardened vulcanized rubber (HS4015)	1.1	3.6

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Malaysia's exports to the world are based on Malaysia's reported export data; for Malaysia's exports to the United States, on U.S. reported import data.

Table F.18: Leading Malaysia imports from the world and the United States, by HS 4-digit subheading, 2014

Malaysia imports	Value	Share
	Billion \$	%
Electronic integrated circuits and parts (HS8542)	29.3	14.0
Non-crude petroleum products (HS2710)	22.8	10.9
Crude petroleum oils (HS2709)	7.7	3.7
Diodes, transistors and similar semiconductor devices (HS8541)	4.2	2.0
Wireless telephone sets and other apparatus (HS8517)	3.8	1.8
<i>From the United States:</i>	13.1	100.0
Electronic integrated circuits and parts (HS8542)	4.4	33.5
Civilian aircraft, engines, equipment, and parts (HS8800)	1.1	8.6
Wireless telephone sets and other apparatus (HS8517)	0.5	3.7
Diodes, transistors and similar semiconductor devices (HS8541)	0.4	2.9
Oscilloscopes, spectrum analyzers, etc. (HS9030)	0.3	2.3

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Malaysia's imports from the world are based on Malaysia's reported import data; for Malaysia's imports from the United States, on U.S. reported export data.

¹³¹⁸ USITC DataWeb/USDOC (accessed January 8, 2016).

Cross-border Services Trade

Trade with the world: In 2014, Malaysia's two-way services trade with the world totaled \$87.1 billion. Travel (40.1 percent) and transportation (20.1 percent) were the leading services Malaysia traded with the world.¹³¹⁹

Trade with the United States: In 2014, two-way services trade between the United States and Malaysia totaled \$4.6 billion, accounting for 0.4 percent of total U.S. services trade. In 2014, the United States had a services trade surplus of \$1.1 billion with Malaysia.

The leading services Malaysia imported from the United States were travel (24.4 percent), charges for IP use (22.0 percent), and other business services (19.6 percent). Industrial processes (8.9 percent) and computer software (5.9 percent) were the major types of IP use Malaysia imported from the United States.

The leading services Malaysia exported to the United States were other business services (more than 32.5 percent);¹³²⁰ telecommunications, computer, and information services (15.5 percent); and transport (14.7 percent). Research and development (19.6 percent) and professional and management consulting (10.2 percent) were the top types of business services Malaysia exported to the United States.¹³²¹

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Malaysia's total inward FDI stock was \$133.8 billion and its outward FDI stock was \$135.7 billion.¹³²² TPP countries (including the United States) accounted for over 43.2 percent of Malaysian inward FDI stock, and over 23.0 percent of Malaysian outward FDI stock (figure F.8).¹³²³

¹³¹⁹ No country-specific data are available for Malaysia's trade in services, and U.S. statistical agencies do not publish cross-border services trade data specific to Malaysia. Source: ASEAN, WGSITS, ASEANstats database (accessed October 31, 2015).

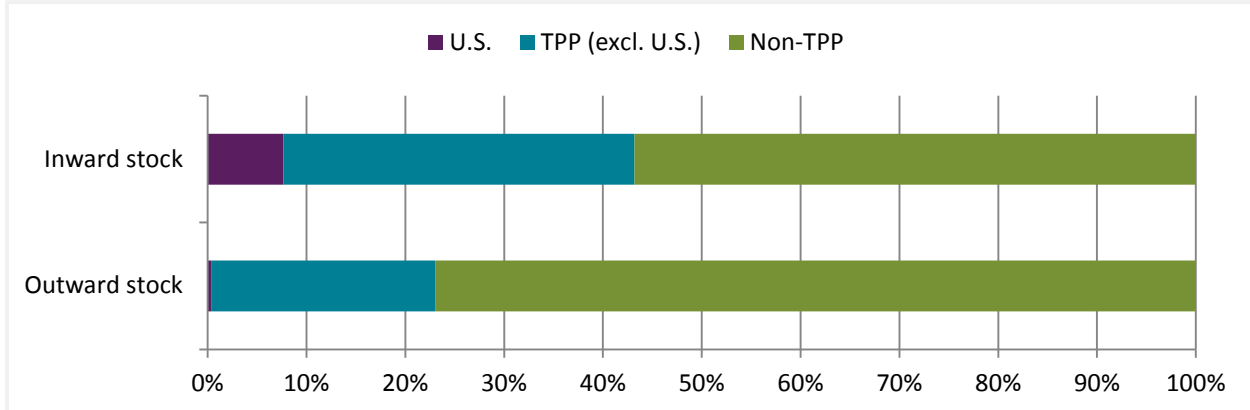
¹³²⁰ Due to confidentiality issues, the exact percentage is suppressed to avoid disclosing information about individual companies.

¹³²¹ USDOC, BEA, International Transactions Account database, "Table 2.2 U.S. Trade in Services, by Type of Services and by Country or Affiliation" (accessed October 15, 2015).

¹³²² UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014" (accessed December 18, 2015).

¹³²³ Because Malaysia's FDI data are not available for some TPP member countries, the share of Malaysia's inward FDI stock shown for TPP countries does not include Brunei, Canada, Chile, Mexico, New Zealand, Peru, and Vietnam, and the share of Malaysia's outward FDI stock shown for TPP countries does not include Brunei, Canada, Chile, Japan, Mexico, New Zealand, and Peru. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

Figure F.8: Malaysia’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.32](#).

Note: Because Malaysia’s FDI data are not available for some TPP countries, the share of Malaysia’s inward FDI stock shown for TPP (excluding the United States) does not include Brunei, Canada, Chile, Mexico, New Zealand, Peru, and Vietnam, and the share of Malaysia’s outward FDI stock shown for TPP (excluding the United States) does not include Brunei, Canada, Chile, Japan, Mexico, New Zealand, and Peru.

FDI with the United States: In 2014, Malaysia’s FDI stock in the United States was \$0.8 billion, equal to 0.03 percent of U.S. total inward FDI stock. Other industries (48.2 percent), manufacturing (26.3 percent), and wholesale trade (7.8 percent) were the leading destination sectors for the inward FDI from Malaysia in the United States.¹³²⁴

In 2014, U.S. FDI stock in Malaysia was valued at \$14.4 billion, equal to 0.3 percent of U.S. total outward FDI stock. Mining (33.5 percent), manufacturing (29.3 percent), and finance and insurance (12.5 percent) were the leading sectors for U.S. investment in Malaysia. Of the U.S. FDI invested in the Malaysian manufacturing sector, 37.7 percent was for computers and electronic products.¹³²⁵

¹³²⁴ USDOC, BEA, International Transactions Account database, “Foreign Direct Investment Position in the United States on a Historical-cost Basis” (accessed December 28, 2015).

¹³²⁵ USDOC, BEA, International Transactions Account database, “U.S. Direct Investment Position Abroad on a Historical-cost Basis” (accessed December 28, 2015).



Economy Overview

In 2014, Mexico had the 15th-largest economy in the world and the second-largest economy in Latin America, with a nominal GDP of \$1,294.7 billion.¹³²⁶ The World Bank considers Mexico an upper-middle-income country, with GDP per capita of \$10,325.6. Its real GDP grew by 2.2 percent in 2014 (table F.19).¹³²⁷

Table F.19: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	1,049.9	1,184.5	1,294.7
GDP growth (real, annual %)	5.2	4.0	2.2
GDP per capita (current \$)	8,851.4	9,703.4	10,325.6
Population (million)	118.6	122.0	125.4
Internet users (per 100 people)	31.1	39.8	44.4

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2014, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed to 3.3 percent, 17.7 percent, 62.3 percent, and 16.7 percent of Mexico's GDP, respectively.¹³²⁸ Food and beverages, motor vehicles, and petroleum products were the top three manufacturing sectors in Mexico in terms of value added in 2014.¹³²⁹

As of May 2015, Mexico had 11 free trade agreements with 46 countries, 32 agreements on the promotion and reciprocal protection of investments with 33 countries, and 9 agreements of limited scope within the framework of the Latin American Integration Association (ALADI). These agreements cover seven TPP countries (Australia, Canada, Chile, Japan, Peru, Singapore, and the United States).¹³³⁰ The North American Free Trade Agreement (NAFTA) with the United States and Canada entered into force on January 1, 1994.¹³³¹

¹³²⁶ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹³²⁷ World Bank, World Development Indicators database (accessed December 19, 2015).

¹³²⁸ Ibid.

¹³²⁹ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹³³⁰ Government of Mexico, Ministry of Economy, "Comercio Exterior/Países con Tratados y Acuerdos Firmados con México" [Foreign trade/Countries with treaties and agreements signed with Mexico] May 10, 2015, <http://www.gob.mx/se/acciones-y-programas/comercio-exterior-paises-con-tratados-y-acuerdos-firmados-con-mexico> (accessed February 10, 2016).

¹³³¹ NAFTA Secretariat, <https://www.nafta-sec-alena.org/Home/Resources/Frequently-Asked-Questions> (accessed February 1, 2016).

Merchandise Trade

Trade with the world: In 2014, Mexico's two-way merchandise trade with the world totaled \$797.1 billion. The United States was by far Mexico's largest trading partner, followed by China, the EU, Canada, and Japan. TPP countries (including the United States) accounted for 72.1 percent of Mexico's merchandise trade with the world.¹³³²

Trade with the United States: In 2014, two-way merchandise trade between the United States and Mexico totaled \$534.3 billion, accounting for 13.5 percent of total U.S. merchandise trade and making Mexico the United States' third-largest single-country trading partner. In 2014, the United States had a merchandise trade deficit of \$53.8 billion with Mexico.¹³³³

See table F.20 for leading Mexico exports to the world and the United States, and table F.21 for leading Mexico imports from the world and the United States.

Table F.20: Leading Mexico exports to the world and the United States, by HS 4-digit subheading, 2014

Mexico exports	Value	Share
	Billion \$	%
Crude petroleum oils (HS2709)	35.9	9.0
Motor vehicles for the transport of persons (HS8703)	32.4	8.2
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	22.8	5.7
Motor vehicles for the transport of goods (HS8704)	21.5	5.4
Automatic data processing machines and units (HS8471)	20.7	5.2
<i>To the United States:</i>	294.1	100.0
Crude petroleum oils (HS2709)	27.7	9.4
Motor vehicles for the transport of persons (HS8703)	21.5	7.3
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	19.0	6.5
Motor vehicles for the transport of goods (HS8704)	19.0	6.5
Automatic data processing machines and units (HS8471)	13.5	4.6

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Mexico's exports to the world are based on Mexico's reported export data; for Mexico's exports to the United States, on U.S. reported import data.

¹³³² UN, Comtrade database (accessed December 31, 2015).

¹³³³ USITC DataWeb/USDOC (accessed January 8, 2016).

Table F.21: Leading Mexico imports from the world and the United States, by HS 4-digit subheading, 2014

Mexico imports	Value	Share
	Billion \$	%
Non-crude petroleum products (HS2710)	24.4	6.1
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	22.9	5.7
Electronic integrated circuits and parts (HS8542)	13.9	3.5
Wireless telephone sets and other apparatus (HS8517)	13.4	3.4
Parts for telecommunication equipment (HS8529)	9.5	2.4
<i>From the United States:</i>	240.2	100.0
Non-crude petroleum products (HS2710)	18.5	7.7
Parts and accessories for tractors, public-transport passenger vehicles, and other special purpose motor vehicles (HS8708)	15.5	6.4
Parts and accessories for data recording and processing machines (HS8473)	10.5	4.4
Electronic integrated circuits and parts (HS8542)	5.1	2.1
Wireless telephone sets and other apparatus (HS8517)	4.6	1.9

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Mexico's imports from the world are based on Mexico's reported import data; for Mexico's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2013, Mexico's two-way services trade with the world totaled \$52.1 billion. Travel (44.3 percent) and transportation (25.9 percent) were the leading services Mexico traded with the world.¹³³⁴

Trade with the United States: In 2014, two-way services trade between the United States and Mexico totaled \$49.5 billion, accounting for 4.2 percent of total U.S. services trade. The United States had a services trade surplus of \$10.5 billion with Mexico.¹³³⁵

Travel accounted for 52.0 percent of Mexico's total services imports from the United States, followed by transport (13.8 percent), charges for IP use (10.6 percent), and other business services (10.3 percent). Travel accounted for 62.9 percent of Mexico's total services exports to the United States, followed by other business services (13.8 percent), and transport (10.8 percent). Technical, trade-related, and other business services were the top business services traded between these two countries.¹³³⁶

¹³³⁴ Neither data for 2014 nor country-specific data are available for Mexico's trade in services. Source: UN, Service Trade Statistics Database (accessed December 14, 2015).

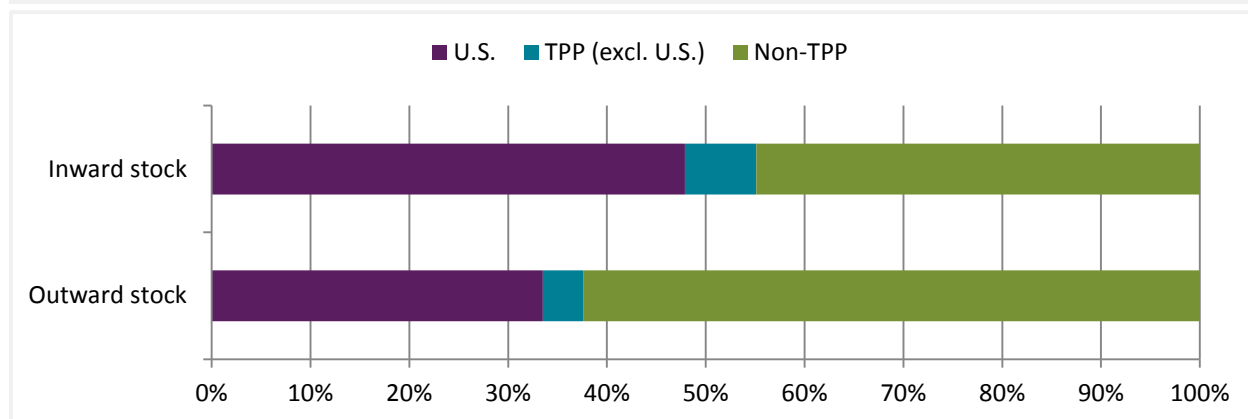
¹³³⁵ USDOC, BEA, International Transactions Account database, "Table 2.2 U.S. Trade in Services, by Type of Services and by Country or Affiliation" (accessed October 15, 2015).

¹³³⁶ Ibid.

Foreign Direct Investment

FDI with the world: In 2014, Mexico's total inward FDI stock was \$338.0 billion, and total outward FDI stock was \$131.2 billion.¹³³⁷ TPP countries (including the United States) accounted for over 55.1 percent of Mexico's inward FDI stock, and over 37.6 percent of Mexico's outward FDI stock (figure F.9).¹³³⁸

Figure F.9: Mexico's inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.33](#).

Note: Because Mexico's FDI data are not available for some TPP countries, the share of Mexico's outward FDI stock shown for TPP (excluding the United States) does not include Australia, Brunei, Japan, Malaysia, New Zealand, Singapore, and Vietnam.

FDI with the United States: In 2014, Mexico's FDI stock in the United States was valued at \$17.7 billion, equal to 0.6 percent of U.S. total inward FDI stock. The manufacturing sector (27.4 percent) was the leading destination for Mexican investment, with over one-half going to food manufacturing.¹³³⁹

In 2014, U.S. FDI stock in Mexico was valued at \$107.8 billion, equal to 2.2 percent of U.S. total outward FDI stock. Non-bank holding companies (36.5 percent), manufacturing (28.3 percent), finance and insurance (9.8 percent), and mining (8.7 percent) were the leading sectors receiving U.S. investment in Mexico.¹³⁴⁰

¹³³⁷ UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014" (accessed December 18, 2015).

¹³³⁸ Because Mexico's FDI data are not available for some TPP countries, the share of Mexico's outward FDI stock shown for TPP countries does not include Australia, Brunei, Japan, Malaysia, New Zealand, Singapore, and Vietnam. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

¹³³⁹ USDOC, BEA, International Transactions Account database, "Foreign Direct Investment Position in the United States on a Historical-cost Basis" (accessed December 28, 2015).

¹³⁴⁰ USDOC, BEA, International Transactions Account database, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).



Economy Overview

The World Bank considers New Zealand a high-income country.¹³⁴¹ In 2014, New Zealand had a nominal GDP of \$169.9 billion and GDP per capita of \$38,113.¹³⁴² In 2014, its real GDP grew at 3.2 percent (table F.22).¹³⁴³

Table F.22: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	145.3	174.1	200.0
GDP growth (real, annual %)	1.4	2.2	3.0
GDP per capita (current \$)	33,394.1	39,505.0	44,342.2
Population (million)	4.4	4.4	4.5
Internet users (per 100 people)	81.0	82.0	85.5

Source: World Bank, World Development Indicators database (accessed April 4, 2016); OECD, Stat database (accessed February 2, 2016).

In 2011, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 6.9 percent, 12.1 percent, 69.7 percent, and 11.2 percent of New Zealand’s GDP, respectively.¹³⁴⁴ Food and beverages; coke and refined petroleum products; and fabricated metal products are the top three manufacturing sectors in New Zealand in terms of value added (2014).¹³⁴⁵

As of February 2016, New Zealand had nine bilateral and regional trade agreements in force with 15 partner economies; six of them are TPP countries (Australia, Brunei, Chile, Malaysia, Singapore, and Vietnam).¹³⁴⁶

Merchandise Trade

Trade with the world: In 2014, New Zealand’s two-way merchandise trade with the world totaled \$84.1 billion. China was New Zealand’s largest trading partner, followed by Australia,

¹³⁴¹ World Bank, “Country: New Zealand” http://data.worldbank.org/country/new-zealand#cp_gdp (accessed February 10, 2016).

¹³⁴² OECD, Stat database (accessed February 2, 2016).

¹³⁴³ Government of New Zealand, the Reserve Bank of New Zealand, “Real GDP” (accessed February 2, 2016).

¹³⁴⁴ Data after 2011 are not available. Source: World Bank, World Development Indicators database (accessed December 19, 2015).

¹³⁴⁵ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹³⁴⁶ Government of New Zealand, Ministry of Foreign Affairs and Trade, “Free Trade Agreements in Force,” <http://mfat.govt.nz/Trade-and-Economic-Relations/2-Trade-Relationships-and-Agreements/index.php> (accessed February 10, 2016).

the EU, the United States, and Japan. TPP countries (including the United States) accounted for 41.5 percent of New Zealand's merchandise trade with the world.¹³⁴⁷

Trade with the United States: In 2014, two-way merchandise trade between the United States and New Zealand totaled \$8.2 billion. The United States had a merchandise trade surplus of \$0.3 billion with New Zealand. New Zealand accounted for 0.2 percent of U.S. total merchandise trade.¹³⁴⁸

See table F.23 for leading New Zealand exports to the world and the United States, and table F.24 for leading New Zealand imports from the world and the United States.

Table F.23: Leading New Zealand exports to the world and the United States, by HS 4-digit subheading, 2014

New Zealand exports	Value	Share
	Billion \$	%
<i>To the world:</i>	41.6	100.0
Concentrated milk and cream (HS0402)	7.6	18.4
Meat of sheep or goats, fresh, chilled or frozen (HS0204)	2.5	6.0
Butter and other milk fat or oil (HS0405)	2.1	5.2
Wood in the rough (HS4403)	1.9	4.5
Meat of bovine animals, frozen (HS0202)	1.8	4.4
<i>To the United States:</i>	4.0	100.0
Meat of bovine animals, frozen (HS0202)	0.9	23.8
Grape wine and must (HS2204)	0.3	8.3
Whey and other milk products (HS0404)	0.3	7.2
Casein products (HS3501)	0.3	7.0
Meat of sheep or goats, fresh, chilled or frozen (HS0204)	0.2	4.8

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for New Zealand's exports to the world are based on New Zealand's reported export data; for New Zealand's exports to the United States, on U.S. reported import data.

¹³⁴⁷ UN, Comtrade database (accessed December 31, 2015).

¹³⁴⁸ USITC DataWeb/USDOC (accessed January 8, 2016).

Table F.24: Leading New Zealand imports from the world and the United States, by HS 4-digit subheading, 2014

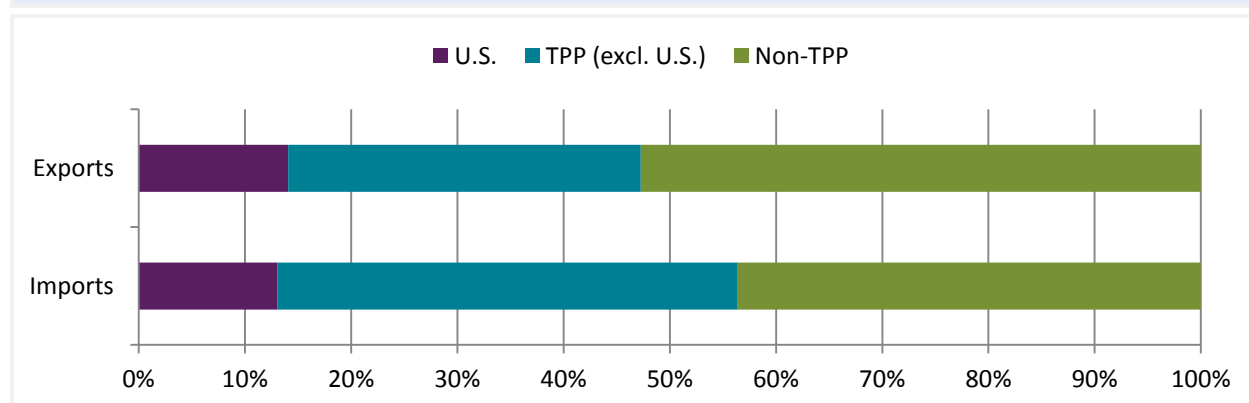
New Zealand imports	Value	Share
	Billion \$	%
<i>From the world:</i>	42.5	100.0
Crude petroleum oils (HS2709)	4.0	9.3
Motor vehicles for the transport of persons (HS8703)	3.4	8.0
Non-crude petroleum products (HS2710)	2.3	5.4
Powered aircraft and spacecraft launch vehicles (HS8802)	1.3	3.1
Motor vehicles for the transport of goods (HS8704)	1.2	2.8
<i>From the United States:</i>	4.3	100.0
Civilian aircraft, engines, equipment, and parts (HS8800)	1.3	29.7
Motor vehicles for the transport of persons (HS8703)	0.2	5.5
Sugar (HS1702)	0.1	1.9
Aircraft, powered; spacecraft; and spacecraft launch vehicles (HS8802)	0.1	1.8
Mechanical appliances for dispersing liquid or powder; fire extinguishers, spray guns, etc.(HS8424)	0.1	1.4

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for New Zealand's imports from the world are based on New Zealand reported import data; for New Zealand's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2014, New Zealand's two-way services trade with the world totaled \$27.6 billion. Australia was New Zealand's largest services trading partner, followed by the United States, China, the United Kingdom, and Singapore. TPP countries (including the United States) accounted for at least 51.6 percent of New Zealand's service trade (figure F.10).¹³⁴⁹

Figure F.10: New Zealand's services trade, 2014


Source: OECD, Stat database (accessed April 4, 2016). Corresponds to [appendix table J.34](#).

Note: Because New Zealand's services trade data are not available for some TPP countries, the share shown for TPP (excluding the United States) does not include Chile and Peru.

¹³⁴⁹ Because New Zealand's services trade data are not available for some TPP countries, the share shown for TPP countries does not include Chile and Peru. Source: OECD, Stat database, "EBOPS 2010: Trade in Services by Partner Country" (accessed April 4, 2016).

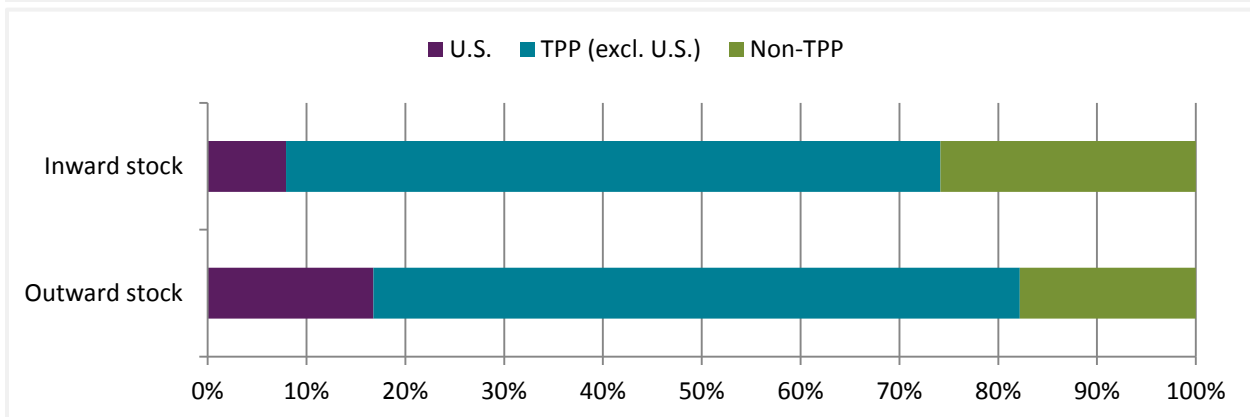
Trade with the United States: In 2014, two-way services trade between the United States and New Zealand totaled \$3.7 billion, accounting for 0.3 percent of total U.S. services trade. The United States had a services trade surplus of \$0.8 billion with New Zealand.

The leading services New Zealand imported from the United States were travel (46.8 percent), royalties and license fees for IP use (14.6 percent), and financial services (12.8 percent). The leading services New Zealand exported to the United States were travel (39.9 percent), transport (34.5 percent), and other business services (16.1 percent).¹³⁵⁰

Foreign Direct Investment (FDI)

FDI with the world: In 2014, New Zealand’s total inward FDI stock was \$76.8 billion and outward FDI stock was \$18.7 billion. TPP countries (including the United States) accounted for 74.2 percent of New Zealand’s inward FDI stock, and 82.2 percent of New Zealand’s outward FDI stock (figure F.11). Australia is by far the largest source and destination of New Zealand’s inward and outward FDI.¹³⁵¹

Figure F.11: New Zealand’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.35](#).

Note: Because New Zealand’s FDI data are not available for some TPP countries, the share of New Zealand’s inward FDI stock shown for TPP (excluding the United States) does not include Brunei, Chile, Malaysia, Mexico, Peru, and Vietnam, and the share of New Zealand’s outward FDI stock shown for TPP (excluding the United States) does not include Brunei, Chile, Mexico, Peru, and Vietnam.

FDI with the United States: In 2014, New Zealand’s FDI stock in the United States was valued at \$1.0 billion, equal to 0.03 percent of U.S. total inward FDI stock. Wholesale trade (59.5 percent)

¹³⁵⁰ USDOC, BEA, International Transactions Account database, “Table 2.2 U.S. Trade in Services, by Type of Services and by Country or Affiliation” (accessed October 15, 2015).

¹³⁵¹ Because New Zealand's FDI data are not available for some TPP countries, the share of New Zealand's inward FDI stock shown for TPP countries does not include Brunei, Chile, Malaysia, Mexico, Peru, and Vietnam, and the share of New Zealand's outward FDI stock shown for TPP countries does not include Brunei, Chile, Mexico, Peru, and Vietnam. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

was the leading destination sector for New Zealand's investment in the United States, followed by manufacturing (27.2 percent).¹³⁵²

Also in 2014, U.S. FDI stock in New Zealand was valued at \$7.8 billion, equal to 0.2 percent of U.S. total outward FDI stock. Manufacturing (26.3 percent), finance and insurance (23.6 percent), and non-bank holding companies (18.0 percent) were the leading sectors for U.S. investment in New Zealand.¹³⁵³

¹³⁵² USDOC, BEA, International Transactions Account database, "Foreign Direct Investment Position in the United States on a Historical-cost Basis" (accessed December 28, 2015).

¹³⁵³ USDOC, BEA, International Transactions Account database, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).



Economy Overview

In 2014, Peru's nominal GDP was \$202.6 billion, making it the world's 52nd-largest economy.¹³⁵⁴ The World Bank classified Peru as an upper-middle-income country, with GDP per capita of \$6,541.0. In 2014, Peru's real GDP grew by 2.4 percent (table F.25).¹³⁵⁵

Table F.25: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	148.5	192.7	202.6
GDP growth (real, annual %)	8.5	6.0	2.4
GDP per capita (current \$)	5,056.3	6,388.8	6,541.0
Population (million)	29.3	30.2	31.0
Internet users (per 100 people)	34.8	38.2	40.2

Source: World Bank, World Development Indicators database (accessed December 28, 2015).

In 2012, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 7.4 percent, 14.9 percent, 55.8 percent, and 21.9 percent of Peru's GDP, respectively.¹³⁵⁶ In 2014, food and beverage, non-metallic mineral products, and chemicals and chemical products were the top three manufacturing sectors in Peru in terms of value added.¹³⁵⁷ Mining is an important sector in Peru's economy; primary commodities, including gold, copper, lead, and zinc, are Peru's leading exports.¹³⁵⁸

As of July 2015, Peru had 18 bilateral and regional trade agreements signed or in force. Six of them were with other TPP countries (Canada, Chile, Japan, Mexico, Singapore, and the United States).¹³⁵⁹ The U.S.-Peru Free Trade Agreement (PTPA) was signed on April 12, 2006¹³⁶⁰ and entered into force on February 1, 2009.¹³⁶¹

¹³⁵⁴ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹³⁵⁵ World Bank, World Development Indicators database (accessed December 28, 2015).

¹³⁵⁶ Ibid.

¹³⁵⁷ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹³⁵⁸ UN, Comtrade database (accessed December 31, 2015).

¹³⁵⁹ Organization of American States, Foreign Trade Information System, http://www.sice.oas.org/ctyindex/PER/PERAgreements_e.asp (accessed February 10, 2016).

¹³⁶⁰ Organization of American States, Foreign Trade Information System, http://www.sice.oas.org/ctyindex/PER/PERAgreements_e.asp (accessed February 10, 2016).

¹³⁶¹ USTR, "Peru Trade Promotion Agreement" <https://ustr.gov/trade-agreements/free-trade-agreements/peru-tpa> (accessed February 1, 2016).

Merchandise Trade

Trade with the world: In 2014, Peru's two-way merchandise trade with the world totaled \$80.7 billion. China was Peru's largest trading partner, followed by the United States, the EU, Brazil, and Canada. TPP countries (including the United States) accounted for 34.3 percent of Peru's merchandise trade with the world.¹³⁶²

Trade with the United States: In 2014, two-way merchandise trade between the United States and Peru totaled \$16.1 billion, accounting for 0.4 percent of total U.S. merchandise trade. In 2014, the United States had a merchandise trade surplus of \$4.0 billion with Peru.¹³⁶³

See table F.26 for leading Peru exports to the world and the United States, and table F.27 for leading Peru imports from the world and the United States.

Table F.26: Leading Peru exports to the world and the United States, by HS 4-digit subheading, 2014

Peru exports	Value	Share
	Billion \$	%
<i>To the world:</i>	38.5	100.0
Copper ores and concentrates (HS2603)	6.9	18.0
Gold (HS7108)	5.6	14.6
Non-crude petroleum products (HS2710)	3.3	8.6
Refined copper products (HS7403)	1.9	4.8
Flours, meals and pellets (HS2301)	1.4	3.5
<i>To the United States:</i>	6.1	100.0
Non-crude petroleum products (HS2710)	0.9	15.0
Gold (HS7108)	0.7	12.2
Crude petroleum oils (HS2709)	0.4	5.9
Silver (HS7106)	0.3	4.4
Vegetables, fresh or chilled (HS0709)	0.3	3.1

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Peru's exports to the world are based on Peru's reported export data; for Peru's exports to the United States, on U.S. reported import data.

¹³⁶² UN, Comtrade database (accessed December 31, 2015).

¹³⁶³ USITC DataWeb/USDOC (accessed January 8, 2016).

Table F.27: Leading Peru imports from the world and the United States, by HS 4-digit subheading, 2014

Peru imports	Value	Share
	Billion \$	%
<i>From the world:</i>	42.2	100.0
Crude petroleum oils (HS2709)	3.0	7.2
Non-crude petroleum products (HS2710)	2.9	6.8
Motor vehicles for the transport of persons (HS8703)	1.8	4.2
Wireless telephone sets and other apparatus (HS8517)	1.7	3.9
Motor vehicles for the transport of goods (HS8704)	0.9	2.0
<i>From the United States:</i>	10.1	100.0
Non-crude petroleum products (HS2710)	2.7	26.6
Corn (HS1005)	0.5	4.7
Wireless telephone sets and other apparatus (HS8517)	0.4	3.6
	Billion \$	%
Automated data processing machines and units (HS8471)	0.3	3.0
Self-propelled bulldozers, angle-dozers, graders etc. (HS8429)	0.2	1.8

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Peru's imports from the world are based on Peru's reported import data; for Peru's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2013, Peru's two-way services trade with the world totaled \$13.4 billion. Travel (34.3 percent), transportation (32.9 percent), and other business services (13.6 percent) were the leading services Peru traded with the world.¹³⁶⁴

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Peru's total inward FDI stock was \$79.4 billion, and its total outward FDI stock was \$4.2 billion.¹³⁶⁵ TPP countries such as Canada, Chile, the United States, and Mexico were among the top sources of Peru's inward FDI.¹³⁶⁶

FDI with the United States: In 2014, U.S. FDI stock in Peru was valued at \$6.5 billion, or equal to 0.1 percent of U.S. total outward FDI stock. The mining sector accounted for 62.8 percent of total U.S. investment in the country.¹³⁶⁷

¹³⁶⁴ No country-specific data are available for Peru's trade in services. The latest available data are for 2013, and U.S. statistical agencies do not publish cross-border services trade data specific to Peru. Source: UN, Service Trade Statistics Database (accessed December 15, 2015).

¹³⁶⁵ UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014" (accessed December 18, 2015).

¹³⁶⁶ IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

¹³⁶⁷ BEA, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).



Economy Overview

In 2014, Singapore had the world's 36th-largest economy with a nominal GDP of \$308 billion.¹³⁶⁸ Singapore is also one of the most developed countries in the world, with GDP per capita of \$56,284.6. In 2014, its real GDP grew by 2.9 percent (table F.28).¹³⁶⁹

Table F.28: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	236.4	289.9	307.9
GDP growth (real, annual %)	15.2	3.4	2.9
GDP per capita (current \$)	46,570.0	54,577.1	56,284.6
Population (million)	5.1	5.3	5.5
Internet users (per 100 people)	71.0	72.0	82.0

Source: World Bank, World Development Indicators database (accessed on December 28, 2015).

Agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 0.03 percent, 18.4 percent, 75.0 percent, and 6.5 percent of Singapore's GDP, respectively, in 2014.¹³⁷⁰ Office, accounting and computing machinery; chemicals and chemical products; and machinery and equipment were the top three manufacturing sectors in Singapore in terms of value added.¹³⁷¹

As of January 2016, Singapore had 20 bilateral and regional trade agreements in force, covering nine TPP countries (Australia, Brunei, Chile, Japan, Malaysia, New Zealand, Peru, the United States, and Vietnam).¹³⁷² The U.S.-Singapore bilateral FTA was signed in 2003 and entered into force in 2004.

Merchandise Trade

Trade with the world: In 2014, Singapore's two-way merchandise trade with the world totaled \$776.0 billion. China was Singapore's largest trading partner, followed by Malaysia, the EU, the

¹³⁶⁸ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹³⁶⁹ World Bank, World Development Indicators (accessed December 28, 2015).

¹³⁷⁰ World Bank, World Development Indicators database (accessed on December 28, 2015).

¹³⁷¹ UNIDO, Statistical Country Briefs database (accessed on February 2, 2016).

¹³⁷² Government of Singapore, http://www.fta.gov.sg/sg_fta.asp (accessed on January 16, 2016).

United States, and Indonesia. TPP countries accounted for 30.3 percent of Singapore's merchandise trade with the world.¹³⁷³

Trade with the United States: In 2014, two-way merchandise trade between the United States and Singapore totaled \$46.7 billion, accounting for 1.2 percent of total U.S. merchandise trade. In 2014, the United States had a merchandise trade surplus of \$13.8 billion with Singapore.¹³⁷⁴

See table F.29 for leading Singapore exports to the world and the United States, and table F.30 for the leading Singapore imports from the world and the United States.

Table F.29: Leading Singapore exports to the world and the United States, by HS 4-digit subheading, 2014

Singapore exports to the world	Value	Share
	Billion \$	%
Total:	409.8	100.0
Electronic integrated circuits and parts (HS 8542)	83.7	20.4
Non-crude petroleum products (HS 2710)	66.1	16.1
Automated data processing machines and units (HS 8471)	9.3	2.3
Telephones and cellular telephones (HS 8517)	8.5	2.1
Semiconductors and components (HS 8541)	8.0	1.9
<i>Singapore exports to the United States:</i>		
Total:	16.4	100.0
Heterocyclic compounds (HS 2933)	1.5	8.9
Sulfonamides (HS 2935)	1.1	6.9
Electronic integrated circuits and parts (HS 8542)	1.1	6.6
Pharmaceuticals (HS 3004)	0.8	4.9
Automated data processing machines and units (HS 8471)	0.8	4.7

Source: UN, Comtrade (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Singapore's exports to the world are based on Singapore's reported export data; for Singapore's exports to the United States, on U.S. reported import data.

Table F.30: Leading Singapore imports from the world and the United States, by HS 4-digit subheading, 2014

Singapore imports from the world	Value	Share
	Billion \$	%
Total	366.2	100.0
Non-crude petroleum products (HS2710)	72.3	19.7
Electronic integrated circuits and parts (HS8542)	58.3	15.9
Crude petroleum oils (HS2709)	34.3	9.4
Wireless telephone sets and other apparatus (HS8517)	8.5	2.3
Turbo-jets, turbo-propellers and other gas turbines (HS8411)	7.5	2.1
<i>Singapore imports from the United States:</i>		
Total	30.2	100.0
Civilian aircraft, engines, equipment, and parts (HS8800)	4.0	13.3
Non-crude petroleum products (HS2710)	3.8	12.6
Electronic integrated circuits and parts (HS8542)	1.6	5.4
Medical/surgical,/dental/veterinary instrument & appliances (HS9018)	0.9	2.8

¹³⁷³ UN, Comtrade database (accessed December 31, 2015).

¹³⁷⁴ USITC DataWeb/USDOC (accessed January 8, 2016).

Singapore imports from the world	Value	Share
Automated data processing machines and units (HS 8471)	0.7	2.3

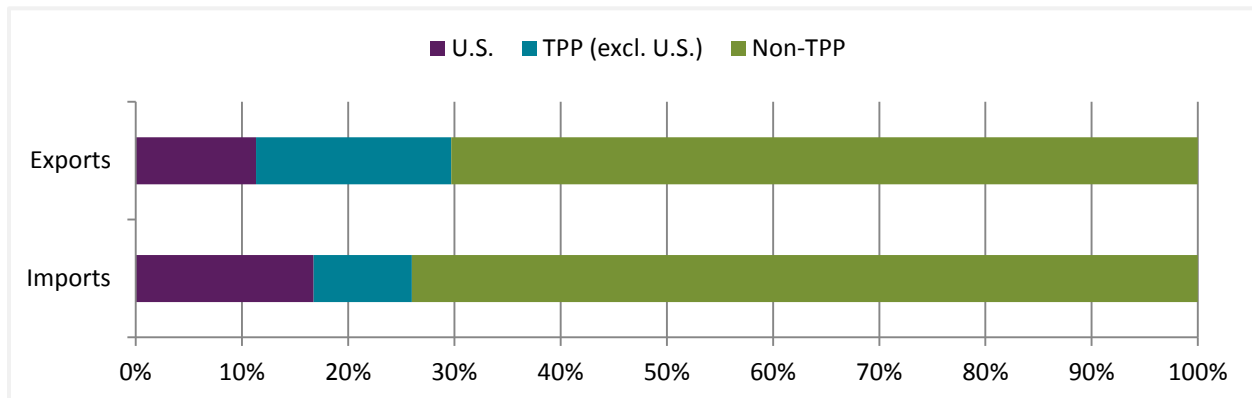
Source: UN, Comtrade (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Singapore’s exports to the world are based on Singapore’s reported export data; for Singapore’s exports to the United States, on U.S. reported import data.

Cross-border Services Trade

Trade with the world: In 2014, Singapore’s two-way services trade with the world totaled \$293.6 billion.¹³⁷⁵ The United States was Singapore’s largest services trading partner, followed by China, Australia, Japan, and the United Kingdom. TPP countries accounted for more than 27.8 percent of Singapore’s service trade (figure F.12).¹³⁷⁶ In 2014, Singapore’s services trade amounted to 100.0 percent of its GDP—among the highest globally.¹³⁷⁷

Figure F.12: Singapore’s services trade, 2014



Source: Government of Singapore, Department of Statistics, “Singapore International Trade in Services 2014” (accessed April 4, 2016). Corresponds to [appendix table J.36](#).

Note: Because Singapore’s services trade data are not available for some TPP countries, the shares shown for TPP (excluding the United States) do not include Brunei, Chile, Mexico, and Peru.

Trade with the United States: In 2014, two-way services trade between the United States and Singapore totaled \$17.9 billion, accounting for 1.5 percent of total U.S. services trade. In 2014, the United States had a services trade surplus of \$6.0 billion with Singapore.

¹³⁷⁵ In 2014, Singapore’s overall trade in services totaled at 389.2 billion in Singapore dollar, or approximately 293.6 billion in US dollar with the exchange rate of 1 Singapore dollar=0.75448 US dollar on December 31, 2014. Source: Government of Singapore, Department of Statistics, “Singapore’s International Trade in Services 2014” (accessed April 4, 2016); and www.xe.com, “Ex Currency Chart (SGD/USD),” <http://www.xe.com/currencycharts/?from=SGD&to=USD&view=5Y> (accessed April 5, 2016).

¹³⁷⁶ Because services trade data are not available for all TPP countries, the shares shown for TPP do not include Brunei, Chile, Mexico, and Peru. Government of Singapore, Department of Statistics, “Singapore International Trade in Services 2014” (accessed April 4, 2016).

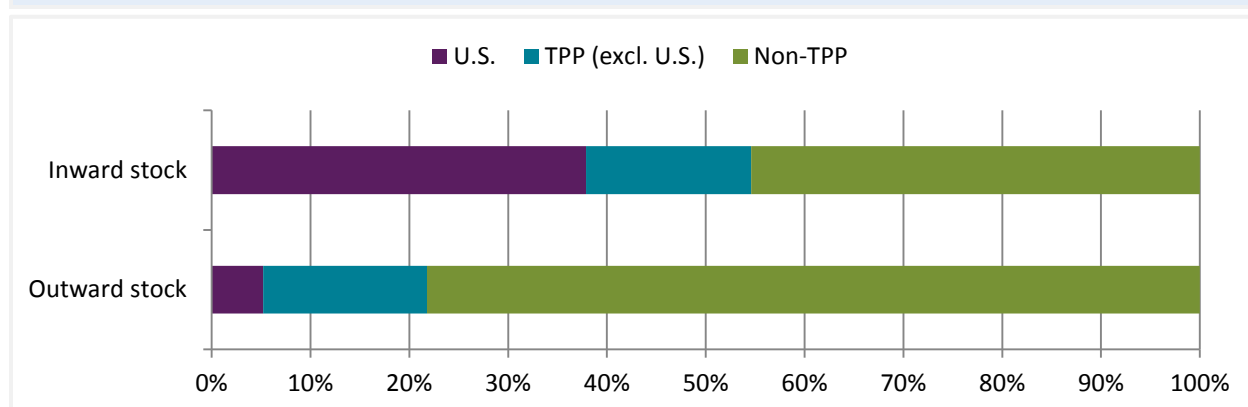
¹³⁷⁷ Government of Singapore, Department of Statistics, “Singapore’s International Trade in Services 2014” (accessed April 4, 2016).

The leading services Singapore imported from the United States were other business services (31.1 percent), particularly business and management consulting and public relations services; charges for IP use (27.9 percent), particularly for industrial processes; and maintenance and repair services (9.1 percent). The leading services Singapore exported to the United States were other business services (40.3 percent), transportation (19.3 percent), and travel (11.6 percent).¹³⁷⁸

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Singapore’s total inward FDI stock was \$912.4 billion, and total outward FDI stock was \$576.4 billion.¹³⁷⁹ TPP countries (including the United States) accounted for 54.6 percent of Singapore’s inward FDI stock, and 21.8 percent of Singapore’s outward FDI stock (figure F.13).¹³⁸⁰

Figure F.13: Singapore’s inward and outward FDI stocks, 2014



Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Corresponds to [appendix table J.37](#).

Notes: Because the FDI data are not available for some TPP countries, the share of Singapore’s inward FDI stock shown for TPP (excluding the United States) does not include Brunei, Mexico, Peru, and Vietnam, and the share of Singapore’s outward FDI stock shown for TPP (excluding the United States) does not include Brunei, Peru, and Vietnam.

¹³⁷⁸ USDOC, BEA, “Table 2.2. U.S. Trade in Services, by Type of Services and by Country or Affiliation,” October 15, 2015.

¹³⁷⁹ UNCTAD, FDI/TNC database, “Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014” and “Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014” (accessed December 18, 2015).

¹³⁸⁰ Because Singapore's FDI data are not available for some TPP countries, the share of Singapore's inward FDI stock shown for TPP countries does not include Brunei, Mexico, Peru, and Vietnam, and the share of Singapore's outward FDI stock shown for TPP countries does not include Brunei, Peru, and Vietnam. Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015).

FDI with the United States: In 2014, Singapore's FDI stock in the United States was valued at \$20.6 billion, equal to 0.7 percent of U.S. total inward FDI stock. Wholesale trade (22.2 percent) was one of the leading destinations for Singaporean investment.¹³⁸¹

In 2014, U.S. FDI stock in Singapore was valued at \$179.8 billion, equal to 3.7 percent of U.S. total outward FDI stock. Non-bank holding companies (57.8 percent), manufacturing (17.8 percent, 70 percent of which was in the manufacturing of computer and electronic products), and finance and insurance (10.4 percent) were the leading sectors to receive U.S. investment in Singapore.¹³⁸²

¹³⁸¹ USDOC, BEA, International Transactions Account database, "Foreign Direct Investment Position in the United States on a Historical-cost Basis" (accessed December 28, 2015).

¹³⁸² USDOC, BEA, International Transactions Account database, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).



Economy Overview

In 2014, Vietnam's nominal GDP was \$186.2 billion and its GDP per capita was \$2,052.3, making it the world's 54th-largest economy.¹³⁸³ The World Bank considers Vietnam a lower-middle-income country.¹³⁸⁴ In 2014, Vietnam's GDP grew by 6.0 percent (table F.31).¹³⁸⁵

Table F.31: Major economic indicators, 2010–14

Economic indicators	2010	2012	2014
GDP (current billion \$)	115.9	155.8	186.2
GDP growth (real, annual %)	6.4	5.2	6.0
GDP per capita (current \$)	1,333.6	1,755.3	2,052.3
Population (million)	86.9	88.8	90.7
Internet users (per 100 people)	30.7	39.5	48.3

Source: World Bank, World Bank Development Indicators database (accessed December 22, 2015).

In 2014, agriculture, manufacturing, services, and other industries (including mining, construction, and utilities) contributed 18.1 percent, 17.5 percent, 43.4 percent, and 21.0 percent of Vietnam's GDP, respectively.¹³⁸⁶ Food and beverages; office, accounting and computing machinery; and non-metallic mineral products were the top three manufacturing sectors in Vietnam in terms of value added.¹³⁸⁷

As of January 2016, Vietnam had 10 bilateral and regional trade agreements signed or in force. Six of them were signed collectively under ASEAN, of which Vietnam is a member. These agreements cover 19 partner countries, 7 of which are other TPP countries (Australia, Brunei, Chile, Japan, Malaysia, New Zealand, and Singapore).¹³⁸⁸

Merchandise Trade

Trade with the world: In 2014, Vietnam's two-way merchandise trade with the world totaled \$298.1 billion. China was Vietnam's largest trading partner, followed by the EU, the United

¹³⁸³ World Bank, "Gross Domestic Product 2014," <http://data.worldbank.org/data-catalog/GDP-ranking-table> (accessed December 28, 2015).

¹³⁸⁴ World Bank, "Country: Vietnam" <http://data.worldbank.org/country/vietnam> (accessed February 10, 2016).

¹³⁸⁵ World Bank, World Development Indicators database (accessed December 22, 2015).

¹³⁸⁶ Ibid.

¹³⁸⁷ UNIDO, Statistical Country Briefs database (accessed February 2, 2016).

¹³⁸⁸ Asian Development Bank, Asia Regional Integration Center, "Free Trade Agreements," <http://aric.adb.org/fta-country> (accessed February 10, 2016).

States, South Korea, and Japan. TPP countries accounted for 31.0 percent of Vietnam’s merchandise trade with the world.¹³⁸⁹

Trade with the United States: In 2014, two-way merchandise trade between the United States and Vietnam totaled \$36.3 billion, accounting for 0.9 percent of total U.S. merchandise trade. In 2014, the United States had a merchandise trade deficit of \$24.9 billion with Vietnam.¹³⁹⁰

See table F.32 for Vietnam’s leading exports to the world and the United States, and table F.33 for Vietnam’s leading imports from the world and the United States.

Table F.32: Leading Vietnam exports to the world and the United States, by HS 4-digit subheading, 2014

Vietnam exports	Value	Share
	Billion \$	%
<i>To the world:</i>	150.2	100.0
Wireless telephone sets and other apparatus (HS8517)	24.4	16.2
Crude petroleum oils (HS2709)	7.2	4.8
Footwear, with outer soles and uppers of leather (HS6403)	4.3	2.9
Automated data processing machines and units (HS8471)	3.8	2.5
Footwear, with outer soles and uppers of textile materials (HS6404)	3.7	2.4
<i>To the United States:</i>	30.6	100.0
Furniture and parts (HS9403)	2.4	7.9
Apparels such as sweaters, etc., knitted or crocheted (HS6110)	1.8	6.0
Wireless telephone sets and other apparatus (HS8517)	1.8	6.0
Automated data processing machines and units (HS8471)	1.8	5.7
Footwear, with outer soles and uppers of leather (HS6403)	1.7	5.5

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Vietnam’s exports to the world are based on Vietnam’s reported export data; for Vietnam’s exports to the United States, on U.S. reported import data.

¹³⁸⁹ UN, Comtrade database (accessed December 31, 2015).

¹³⁹⁰ USITC DataWeb/USDOC (accessed January 8, 2016).

Table F.33: Leading Vietnam imports from the world and the United States, by HS 4-digit subheading, 2014

Vietnam imports	Value	Share
	Billion \$	%
<i>From the world:</i>	147.8	100.0
Electronic integrated circuits and parts (HS8542)	10.3	7.0
Wireless telephone sets and other apparatus (HS8517)	9.4	6.3
Non-crude petroleum products (HS2710)	8.0	5.4
Flat-rolled iron or non-alloy steel products, 600 mm (23.6 in.) or more wide, hot-rolled, non clad, plated or coated (HS7208)	2.2	1.5
Polymers of ethylene, in primary forms (HS3901)	1.9	1.3
<i>From the United States:</i>	5.7	100.0
Electronic integrated circuits and parts (HS8542)	0.4	6.9
Cotton, not carded or combined (HS5201)	0.4	6.8
Soybeans (HS1201)	0.3	6.0
Fresh or dried nuts (HS0802)	0.3	4.9
Concentrated or sweetened milk and cream (HS0402)	0.2	3.5

Source: UN, Comtrade database (accessed December 31, 2015); USITC DataWeb/USDOC (accessed January 8, 2016).

Note: Figures for Vietnam's imports from the world are based on Vietnam's reported import data; for Vietnam's imports from the United States, on U.S. reported export data.

Cross-border Services Trade

Trade with the world: In 2014, Vietnam's two-way services trade with the world totaled \$25.4 billion. Transportation (40.1 percent) and travel (37.4 percent) were the leading services Vietnam traded with the world.¹³⁹¹

Foreign Direct Investment (FDI)

FDI with the world: In 2014, Vietnam's total inward FDI stock was \$91.0 billion, and outward FDI stock was \$7.5 billion.¹³⁹² In 2012, Japan was the largest source of Vietnam's inward FDI, followed by Malaysia and Singapore, and Cambodia was the largest destination of Vietnam's outward FDI.¹³⁹³

FDI with the United States: In 2014, U.S. investors held \$1.5 billion of FDI stock in Vietnam, equal to 0.03 percent of U.S. total outward FDI stock.¹³⁹⁴

¹³⁹¹ No country-specific data are available for Vietnam's trade in services, and U.S. statistical agencies do not publish cross-border services trade data specific to Vietnam. Source: ASEAN, WGSITS, ASEANstats database (accessed October 31, 2015).

¹³⁹² UNCTAD, FDI/TNC database, "Web Table 3. FDI Inward Stock, by Region and Economy, 1990–2014" and "Web Table 4. FDI Outward Stock, by Region and Economy, 1990–2014" (accessed December 18, 2015).

¹³⁹³ The latest country-specific FDI data for Vietnam are for 2012. Source: UNCTAD, FDI/TNC database.

¹³⁹⁴ USDOC, BEA, International Transactions Account database, "U.S. Direct Investment Position Abroad on a Historical-cost Basis" (accessed December 28, 2015).

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Appendix G

Quantitative Analysis of the Effect of Liberalization on Cross-border Trade and Investment

For an accessible version of [Appendix G](#), click here.

Introduction

The discussion that follows focuses on the quantitative analysis in this report—the computable general equilibrium (CGE) analysis presented in chapter 2 and the industry estimates presented in chapters 3, 4, and 5. This appendix details the procedures used to adapt the standard Global Trade Analysis Project (GTAP) model to enable the Commission to assess the likely effects of TPP. The basic features of the GTAP model are introduced, along with a discussion on adjustments made to the standard database, the development of the baseline, and the various analyses incorporating the different TPP provisions quantified in the model, including the liberalizations in tariffs, certain nontariff measures, and investment restrictions.

The GTAP Model

The GTAP project has two main components. One is a documented global database on international trade, economy-wide inter-industry relationships, and national income accounts (the GTAP database). The other is a standard modeling framework to organize and analyze the data (the GTAP model). The modeling framework allows comparisons of the global economy in two environments: one in which the base values of policy instruments such as tariffs, tariff-rate quotas (TRQs), or export restrictions are unchanged, and one in which these measures are changed, or “shocked,” to reflect the policies that are being studied. A change in policy makes itself felt throughout the economies depicted in the model. We begin with the latest release of the GTAP database, version 9, and start with the GTAP model and assumptions as discussed in the USITC’s analysis of the U.S.–Korea free trade agreement.¹³⁹⁵

Results from the GTAP model are based on established global trade patterns. This means that the model is unable to estimate changes in trade in commodities that historically have not been traded. That is to say, if a particular commodity is not traded between two economies, no model simulation will bring about such a trade flow under any circumstance. Furthermore, patterns of trade may exist for such reasons as the distance between countries, the presence or absence of transport infrastructure, or cultural preferences, which are all imperfectly captured by the model. The GTAP model does not directly account for historical or cultural factors as determinants of trade patterns. The model assumes that these factors are unaffected by the trade policy change.

In the GTAP model, domestic products and imports are consumed by firms, governments, and households. Product markets are assumed to be perfectly competitive (implying zero economic

¹³⁹⁵ See USITC, *U.S.-Korea Free Trade Agreement*, 2007, Appendix F.

profit for the firm).¹³⁹⁶ In the model, imports are imperfect substitutes for domestic products (i.e., consumers are aware of the source of the products and may distinguish between them based on the foreign or domestic origin), and sectoral production is determined by global demand and supply.

The Dynamic GTAP Model

The CGE simulation model used in this report can also be seen as consisting of two parts. The first part is the standard static CGE model, as discussed in the previous section. The model simulates changes, assuming that the economy-wide supply of labor responds to changes in the real wage rate while the supplies of all other primary factors are fixed. The static model by design does not produce information about the speed with which changes occur or about what happens to various dimensions of the economies in the meantime. Rather, the simulation finds the new equilibrium of prices and quantities within the model that result in response to the change in policy.

The second part of the CGE model provides for dynamic linkages and simulates changes over time. To simulate changes in the structure of the U.S. economy over time, the simulation framework incorporates physical capital accumulation for the economy as a whole. Capital accumulates each period as new investment, less depreciation on existing assets, adds to the capital stock.

The level of new capital goods or investment is determined by the static model. The Commission uses a “baseline” which describes the expected evolution of the world economy in the absence of the TPP Agreement. The baseline runs from 2017 to 2047 in five-year steps and incorporates projections for labor availability, growth rates for population and gross domestic product (GDP), and trade policy changes that would take place in the absence of TPP—for example, the tariff changes provided in the recently signed Japan-Australia Economic Partnership Agreement. Population and labor availability are exogenous variables in the CGE model. Thus these variables are shocked in every period, according to the projections. GDP, however, is normally an endogenous variable in the CGE model. To target GDP, the closure of the model is changed, with GDP growth made exogenous, and an economy-wide technology parameter allowed to adjust as needed. The baseline incorporates projections from the International Monetary Fund (IMF) and Organisation for Economic Co-operation and Development (OECD) for labor, population, and GDP growth rates. Table G.1 shows forecast

¹³⁹⁶ Under perfect competition entering a market is costless which drives the product price down to average cost and reduces profits to zero in the sense that every productive factor receives a wage or a return that is commensurate to its productivity.

growth in real GDP, labor force, and population adopted in the baseline; table G.2 shows selected results from incorporating these forecasts.

Table G.1: Inputs to projected U.S. baseline: Five-year cumulative growth rates for U.S. real GDP, labor force, and population, percent

Time period	Real GDP	Labor force	Population
2017–22	13.64	2.37	3.55
2022–27	12.60	2.44	3.29
2027–32	11.91	2.65	2.88
2032–37	10.64	2.96	2.48
2037–42	9.45	3.01	2.17
2042–47	8.56	2.78	1.96

Source: USITC estimates.

Table G.2: Selected indicators from projected U.S. baseline: Five-year cumulative growth rates for U.S. capital stock, real private consumption, real exports, and real imports, percent

Time period	End of period capital stock	Real private consumption	Real exports of goods and services	Real imports of goods and services
2017-22	8.37	9.39	10.35	12.56
2022-27	13.82	11.48	9.12	11.05
2027-32	15.04	10.89	9.21	10.78
2032-37	15.41	10.00	8.54	10.03
2037-42	15.02	8.60	7.94	9.95
2042-47	14.80	7.19	7.45	10.27

Source: USITC estimates.

The simulation of the TPP Agreement then generates a “policy” line. The policy simulations include the TPP-related policy changes and several variables used in the baseline simulations, including population and labor growth and the economy-wide technology parameter. For a particular variable, e.g., total U.S. exports, the distance between the “policy” line and the “baseline” is the effect of the TPP Agreement. The TPP shocks that we simulate in this report start in the year 2017. That is, we assume 2017 as the year of entry into force and the first year that the policy line deviates from the baseline.

Updating and Modifying the GTAP Database

As noted earlier, for the purpose of the TPP analysis, the Commission has updated and modified the standard GTAP database to reflect current U.S. and global economic conditions, and to project future U.S. and global economic conditions both under TPP and in the absence of TPP.

The current standard version of the GTAP database (version 9) contains 140 regions and 57 sectors. The standard GTAP data are based on the year 2011—that is, figures for trade flows, trade barriers, and other data refer to the world in that year.

In addition to the data on bilateral trade found in each of the sectors in the model, data are incorporated on the domestic production and use of output in each sector (including its use in the production of other commodities and services); the supply and use of land, labor, and capital; population; and GDP. The database also contains information on tariffs, some nontariff barriers, and other taxes. An additional component of the data is a set of parameters which, in the context of the model's equations, determine economic behavior. These are principally a set of elasticity values that determine, among other things, the extent to which imports and domestically produced goods are substitutes for one another.

TPP Model Regions and Sectors

The Commission's analysis focuses on U.S. trade with TPP members and other important trading partners to the United States. Table G.3 shows the countries and regions specified in the model. They include the 12 TPP parties, China, the European Union (EU), Hong Kong, Indonesia, South Korea, Thailand, and the rest of the world as a region.

Table G.3: Model regions

TPP parties		Other countries/regions
United States	Australia	China
Canada	New Zealand	EU
Mexico	Malaysia	Hong Kong
Chile	Singapore	Indonesia
Peru	Vietnam	South Korea
Japan	Brunei	Thailand
		Rest of the world

Source: Compiled by USITC staff.

Also, the GTAP database's 57 sector aggregation was modified, making it possible to focus on particular industries of interest. In total, 56 industry sectors are specified in the model, including both goods and services. Table G.4 lists all the model sectors.

Table G.4: Model goods and services sectors

Model sectors		
Rice	Poultry meat products	Auto parts and trailers
Wheat	Soybean oil	Other transportation equipment
Other grains	Soybean meal	Electronic equipment
Corn grain	Dairy products	Instruments and medical devices
Fresh fruit, vegetables, and nuts	Sugar, sweeteners, and SCPs	Toys, sporting goods, and other manufacturers
Soybeans	Processed foods	Electricity
Other oil seeds	Chemicals	Gas manufacture, distribution
All other agriculture	Beverages and tobacco products	Water
Cattle, sheep, goats, and horses	Textiles	Construction
Hides and skins	Wearing apparel	Wholesale and retail trade
Forestry	Leather products	Transportation, logistics, travel and tourism
Seafood	Footwear	Communications

Model sectors		
Coal	Wood products	Financial services n.e.c.
Oil	Paper products, publishing	Insurance
Gas	Petroleum, coal products	Business services n.e.c.
Minerals and minerals products n.e.c.	Machinery and equipment	Recreational and other services
Beef meat	Metal products n.e.c.	Public administration, defense, education, health
Other meats	Titanium downstream products	Dwellings
Pork meat products	Passenger vehicles	

Source: Compiled by USITC staff.

Note: N.e.c. = not elsewhere classified; SCPs = sugar-containing products.

Updating the Database

For the purpose of the present study, a number of updates have been made to benchmark data on trade flows and GDP growth. The model is then projected to 2017 using estimates of regional and global GDP growth. Data are drawn from the U.S. Department of Commerce (U.S. imports and exports), the IMF's *World Economic Outlook* (GDP projections). Observed GDP growth rates for all the regions of the model are targeted using these data, as are population growth rates. Trade flows within the model are adjusted to reflect key observable trade in the real world. The strategy employed is to match disaggregated trade flows that are critical to the results of the policy simulation. Once the database is updated to align with key observed 2014 data, the 2014 database is then projected forward to 2017. This is accomplished by incorporating real GDP and population growth projections from the sources listed above.

Key Assumptions

The Commission's simulation results depend not only on the GTAP model and parameters, but also on a number of assumptions made to align the baseline and policy simulations with the Commission's interpretation of the Agreement and with economic forecasts necessary to establish the baseline. The Commission's simulations do not currently incorporate any adjustment costs. This assumption means that the sectoral allocation of labor may change without any additional costs to workers or firms.

To align the model with anticipated demographic changes in the United States and elsewhere in the world, population growth, labor force, and labor force participation are based on annual data and forecasts through 2050 published by the International Labour Organization (ILO). Forecast growth in real GDP were obtained from the IMF's *World Economic Outlook* databases and the OECD's long-term baseline projections.

In addition to labor force projections, participation rates were modeled to respond to changes in real wages. As real wages (wages adjusted for the price index for private consumption) rise,

the labor supply expands accordingly. The real labor supply elasticities for both skilled and unskilled labor are 0.4 for the United States (published by the CBO) and other developed economies, while 0.44 is used for other economies (based on a review of the literature).

The ratio of the U.S trade deficit (that is, exports less imports) relative to GDP was kept fixed within the model by allowing changes in the U.S. savings rate to fluctuate.¹³⁹⁷

In addition to the specification and modeling of provisions regarding foreign direct investment and NTMs affecting traded services, discussed later in this appendix, the following assumptions were also made. Trade responses for U.S. exports of dairy products to Canada and Japan follow expansions in the corresponding quota levels, implying that the United States will take full advantage of future quota expansions. U.S. imports of cheese from New Zealand were modeled not to expand after U.S. tariff changes because the Commission has determined that U.S. and New Zealand cheese are not comparable products. In sugar, U.S. exports and imports follow expansions in the corresponding quota levels.

U.S. beef meat exports to Japan were modeled to reflect the preference of Japanese consumers for Japanese beef meat. U.S. exports of meat products to Malaysia were modeled not to expand because of limited available expansion capacity for Malaysian-approved Halal meat plants in the United States. U.S. poultry product exports to and imports from Canada were modeled not to respond significantly to Canadian tariff changes because U.S. exports to Canada are essentially duty free (due to duty drawbacks) and these products are reexported to the United States after being processed in Canada.

U.S. trade responses to tariff changes in textiles, apparel, leather products, and footwear were modeled to reflect existing supply chain relationships and capacity constraints.

The existing regime of duty drawback in Vietnam generally reduces the effect of duty reductions and removals. Vietnamese trade was modeled to reflect the influence of TPP rules of origin. For Vietnam to take advantage of reduced tariffs on its products, Vietnam was modeled to prefer trading more with TPP economies and less with non-TPP economies.

For the sectors including instruments and medical devices; other transportation equipment; and other machinery and equipment, U.S. exports to non-TPP countries were modeled to reflect modest changes due to the competitive advantages of U.S. exporters of those products.¹³⁹⁸

¹³⁹⁷ While the U.S. trade balance has fluctuated significantly since 1980, its correlation with U.S. GDP is about 0.9, during the same period, which suggests a stable relationship between the trade balance and GDP.

¹³⁹⁸ Non-TPP importers of these U.S. products were assumed to consider effective prices which not only reflect changes in market prices but also reflect the quality and technical characteristics of products.

Alternative Model Assumptions

Certain assumptions and policy changes to the model discussed above were introduced based on industry expertise. These inputs include the degree of substitution between domestic and foreign varieties of certain goods and the expected restrictiveness of select TRQs, among other factors. Economy-wide effects excluding this information are shown in table G.5 below.

Table G.5: Aggregate effects of TPP liberalization under alternative model assumptions

Measure	2032		2047	
	Billion \$	Percent	Billion \$	Percent
Real income	60.5	0.25	88.3	0.30
Real GDP	44.1	0.16	68.8	0.18
Employment, FTE thousand	128.8	0.07	176.0	0.09
Total exports	27.8	1.0		
Agriculture and food	11.0	4.1		
Manufacturing, natural resources, and energy	12.0	0.7		
Services	4.9	0.6		
Total imports	51.8	1.2		
Agriculture and food	5.3	3.6		
Manufacturing, natural resources, and energy	39.5	1.1		
Services	6.9	1.2		

Source: USITC estimates.

Incorporating Market Access Provisions

In order to understand the incremental effects of the market access provisions under TPP (Chapter 2 of the TPP text), two databases of tariffs from 2017 through 2046 were constructed to show the evolution of tariffs absent and including TPP.

Tariffs and TRQs in the Absence of TPP

To calculate TPP's potential effects on trade, the model was updated with most-favored-nation (MFN) tariff rates¹³⁹⁹ from TPP member countries' 2014 tariff schedules, and with current and future preferential rates given to other TPP members under pre-TPP free trade agreements (FTAs), such as the North American Free Trade Agreement, or NAFTA. These data were gathered from national authorities (e.g., the Commission, Japan Customs, Canada Border Services Agency, etc.) at the national tariff line level, and were processed by Market Analysis and Research, International Trade Centre UNCTAD/WTO. The MFN rates were assumed to remain unchanged throughout the simulation horizon. Rates for existing FTAs were

¹³⁹⁹ Also referred to as normal trade relations (NTR) rates.

extrapolated after their respective full implementation.¹⁴⁰⁰ Where rates were expressed as specific or compound rates, ad valorem equivalents were calculated using the WTO-World Tariff Profiles methodology.¹⁴⁰¹ For lines subject to TRQs, information about the fill rate¹⁴⁰² was used to determine whether the rate to be charged against imports for that product would take the in-quota rate or the out-of-quota rate.

Data were aggregated in two steps. First, to fully account for existing preferences, if multiple import programs applied to the same tariff line, rates were selected for each tariff line by choosing the lowest rate given to imports under all existing import programs (comparing MFN with existing FTA rates, if any). National tariff lines were then aggregated by simple averages to the Harmonized System (HS) 6-digit level, the level at which international tariff rates are published. Finally, tariff rates were aggregated to the sector levels found in the model using three-year averages of bilateral trade as weights. The trade data came from three different sources: Trade Map, IDB, and Comtrade.¹⁴⁰³

Tariffs and TRQs under TPP

TPP tariff schedules were processed according to the text of the agreement. National tariff schedules in the agreement's text were first processed to show tariff levels throughout the implementation of the agreement. This information was aggregated by simple averages to the HS 6-digit level; information about TRQs and specific tariffs were provided by Market Analysis and Research, International Trade Centre UNCTAD/WTO.¹⁴⁰⁴ Tariff data under the TPP were replaced with tariff data without the TPP in situations where tariffs under the TPP would be higher than other existing FTA rates.¹⁴⁰⁵ Finally, the data were aggregated in the same manner as the database without TPP tariff rates.

Rules of Origin

The Commission simulations include modeling of provisions regarding rules of origin for Vietnamese exports of textiles and apparel. In particular, the simulations are run under the

¹⁴⁰⁰ For example, the Japan-Australia Free Trade Agreement will be fully implemented in 2031. 2031 Japan-Australia tariff rates are then used after 2031 in the model.

¹⁴⁰¹ World Trade Organization (WTO), International Trade Centre (ITC), and United Nations Conference on Trade and Development (UNCTAD), "Methodology for the Estimation of Non-Ad Valorem Tariffs," 2006, 179.

¹⁴⁰² A fill rate is the rate at which a country's importers use up the quota allocated to them under a TRQ.

¹⁴⁰³ International Trade Center, Trade Map; WTO, Integrated Data Base (IDB); UN Statistical Division, Comtrade database.

¹⁴⁰⁴ The conventions described above were used in the conversion of specific and compound tariffs to ad-valorem equivalents and the treatment of lines subject to TRQs

¹⁴⁰⁵ For example, in year 5 of the agreement, the rate on a certain product would be 2 percent under the TPP text. But under a pre-existing free-trade agreement, the rate for that same product would be duty-free. In this case, the rate under the TPP text would be replaced with 0.

constraint that Vietnamese exporters may expand their exports under reduced tariffs only if they increase their use of originating intermediate inputs and reduce their use of non-originating intermediate inputs.

Incorporating Services Liberalization

The TPP Agreement contains market access provisions that liberalize cross-border trade in services with TPP partners, and national treatment provisions that enable firms to establish commercial presence in TPP partner markets more easily.

Market-access provisions for services are found in TPP's Chapter 10, Cross-Border Trade in Services; Chapter 11, Financial Services; and to a limited extent in Chapter 13, Telecommunication Services. National treatment provisions related to services firms established abroad are included in TPP's Chapter 9, Investment, and in both the Financial Services and the Telecommunications chapters. In addition, provisions on MFN treatment, restrictions on local-presence requirements, and obligations regarding transfers would prevent discrimination against foreign services suppliers. Where TPP partners wish to retain certain nontariff measures in a particular sector, rather than committing to full liberalization in the sector, these are noted as nonconforming measures (NCMs) and are listed in Annexes I–III of the agreement.

This section describes the analysis conducted to assess the impact of the TPP Agreement on cross-border services trade. The effects of TPP on services trade that is provided via commercial presence (mode 3) is considered in our analysis on the effects of the agreement on foreign affiliate sales, described later in this appendix.

Estimated Trade Costs for Cross-border Services Trade

To analyze the effects of a possible liberalization in cross-border services trade under TPP, it is necessary to understand the level of existing barriers by country and services sector. One way to summarize these barriers in a country is to estimate their effects in raising the costs to import such services. These costs can be expressed in AVEs (i.e., as a rate equal to a percentage of a traded service's value) and are often referred to as "tariff equivalents." The tariff

equivalents used in this analysis are taken from the empirical literature on services barriers.¹⁴⁰⁶ These are derived from a gravity approach for each services sector in the GTAP database.

For each services sector, the estimating equation in this analysis takes the form

$$x_{ij} = c + \delta y_j + \alpha_{ij} \text{dist}_{ij} + \beta_{ij} D_{ij} + \gamma_i + \gamma_j + \varepsilon_{ij}$$

where x_{ij} represents the log of exports from country i to partner j . Trade costs other than regulations between i and j are proxied by dist_{ij} , the log of their bilateral distance. The vector D_{ij} contains bilateral trade determinants common in the gravity literature, including common language, engagement in a FTA, etc., controlled by indicator variables.

Exporter and importer fixed effects (γ_i and γ_j respectively) are included in the model to account for the usual multilateral resistance terms. Without longitudinal data, measures of output and expenditure collapse in the country fixed effects. To disentangle the importer expenditure from the degree of restrictiveness of trade, exports are normalized by the potential size of the market, and the coefficient for y_j is fixed.¹⁴⁰⁷ The last term in the equation, ε_{ij} , represents an error term.

The estimation of the gravity equation above is done using the latest GTAP database released in 2015, which provides data for bilateral trade in services by broad services sectors for the year 2011.¹⁴⁰⁸ This estimation is conducted for the following sectors: construction (cns); communication (cmn); trade (trd); finance (ofi); other services (osg), comprising education, health, defense, and public administration; business (obs); water transport (wtp); air transport (atp); other transport (otp); and insurance (isr).

Derivation of Tariff Equivalents

Tariff equivalents t_j are obtained from the estimated gravity model. The relationship used to derive these is:

$$\ln(1 + t_j)^{1-\sigma} = \gamma_j - \gamma_{j^*}$$

¹⁴⁰⁶ In particular, these estimates—often referred to as the CEPII tariff equivalents—are based on Fontagné, Guillin, and Mitaritonna, “Estimation of Tariff Equivalents,” 2011, as updated in Fontagné, Mitaritonna, and Signoret, “Estimated Tariff Equivalents,” 2016.

¹⁴⁰⁷ Theory suggests an elasticity of 1, although it is often found to vary from that value. Based on past experience, the Commission constrains this parameter to 0.8, but this choice does not affect the results. This treatment essentially divides the left-hand side (log exports) by the GDP of the importer.

¹⁴⁰⁸ Details of the estimations are in Fontagné, Mitaritonna, and Signoret, “Estimated Tariff Equivalents,” 2016.

which relies on the estimated fixed effect γ_j for importer country j , relative to γ_{j^*} , the fixed effect for a “benchmark” importing country or the country with the largest fixed effect (e.g., Luxembourg in the estimation for communication services).¹⁴⁰⁹ The specific values of the tariff equivalents would also depend on the elasticity of substitution σ , which is not estimated in the model, but needs to be assumed. The empirical literature on gravity suggests that this elasticity could range in values from 5 to 10.¹⁴¹⁰ An intermediate value of 8 is assumed. A higher σ provides lower AVEs, and vice versa. The relative ranking among the different countries, however, is not sensitive to the assumed value of the elasticity of substitution.

Table G.6: Estimated ad valorem equivalent of trade costs by party and services sector, percent, 2011

	cmn	cns	isr	obs	ofi	osg	trd	otp	atp	wtp
Canada	37.0	49.4	36.6	29.0	43.9	41.3	36.5	20.9	20.9	39.4
Mexico	68.4	85.9	16.7	85.2	79.1	47.7	45.2	32.7	32.7	88.2
Chile	45.2	69.3	42.4	45.9	50.4	45.5	36.1	18.2	18.2	17.7
Peru	48.2	38.8	47.2	46.0	76.4	50.6	59.5	36.8	36.8	64.1
Japan	60.2	23.8	51.4	35.5	61.4	54.1	35.1	24.1	24.1	30.1
Australia	44.8	71.2	53.8	39.2	63.1	45.0	42.2	21.5	21.5	45.7
New Zealand	32.3	32.1	42.4	28.8	49.4	37.6	30.9	14.5	14.5	27.4
Malaysia	20.1	8.3	34.5	18.7	46.7	34.7	33.5	14.4	14.4	27.0
Singapore	12.1	31.3	15.1	7.6	24.2	27.1	8.7	0.0	0.0	7.3
Vietnam	29.0	21.5	37.4	32.5	43.6	36.1	35.9	25.5	25.5	37.8
Brunei	49.2	16.1	56.7	31.0	60.3	21.9	31.4	20.6	20.6	32.8

Source: USITC calculation based on Fontagné, Mitaritonna, and Signoret, “Estimated Tariff Equivalents,” 2016.

TPP Liberalization

Services trade is liberalized in TPP through a number of different avenues. The three primary routes are (1) commitments to reduce or remove specific nontariff measures which had been reserved exceptions (NCMs) in previous trade agreements; (2) adoption of a negative list approach (discussed below) to commitments; and (3) the adoption of broad disciplines on ensuring the ability to transmit data across borders and on prohibiting the introduction of data-localization measures (requirements that data be stored and/or processed only in-country). Other parts of TPP also introduce helpful disciplines for services trade—intellectual property protections, rules about state-owned enterprises, government procurement rules, and commitments to improve regulatory coherence, for example—but the impact of these taken

¹⁴⁰⁹ See Fontagné, Guillin, and Mitaritonna, “Estimation of Tariff Equivalents,” 2011, for details on the derivation.

¹⁴¹⁰ See Anderson and van Wincoop, “Trade Costs,” 2004.

together is judged to be less important than that of the three primary factors listed above.¹⁴¹¹ The methodology adopted to incorporate the TPP effects of these three factors is outlined below.

A TPP party may commit to a more liberal services trade regime than it did under the General Agreement on Trade in Services or in prior FTAs. For instance, the party may remove an item from its list of NCMs, or propose an NCM which is not as wide ranging as it was previously. To represent these changes quantitatively, the World Bank's Services Trade Restrictiveness Index (STRI) for the country-sector-mode combination was rescored to reflect the new policy setting committed to in TPP.¹⁴¹² The change in the estimated STRI from pre-TPP to TPP policy settings is an input to the model.

TPP also obliges countries to accept cross-border services trade obligations on a "negative list" basis, meaning that the signatories promise to provide full access to their services markets unless they specifically list an exception, or NCM reservation. This implies that each TPP partner is making commitments to open trade for the full range of services, except those specifically listed in the NCM annexes. Any new services introduced in the future are also included under TPP's disciplines. As a result, the negative list approach is likely to be more important to trade in sectors where there are ongoing high levels of innovation. The GTAP services sectors were ranked according to their digital intensity and digital usage in business processes, in order to capture differences in the degree of innovation and likely introduction of new digital services. In the model, it was assumed that the adoption of a negative list approach would reduce barriers to services trade to a greater extent in services sectors which are more digitally intense, as these are likely to be more innovative.¹⁴¹³

One particular horizontal issue addressed in TPP has gained substantial public attention: the treatment of e-commerce, and specifically cross-border data flows.¹⁴¹⁴ The ability to manage information efficiently is a critical requirement to keeping down costs of supply in many service sectors. In the model, it was assumed that barriers to services trade were reduced as a result of the helpful disciplines in the TPP E-Commerce chapter. Given that financial institutions and other suppliers of cross-border financial services are excluded from these disciplines, however,

¹⁴¹¹ Several hearing witnesses, industry representatives, and industry groups such as the Coalition of Services Industries have indicated that the three factors listed—reduced nonconforming measures (NCMs), negative list treatment, and e-commerce disciplines—explain the bulk of the likely impact of TPP. NCMs are explained later in this section.

¹⁴¹² Baseline STRI levels are those published by the World Bank, adjusted by USITC staff for commitments in existing U.S. FTAs. The policy simulation considers changes in baseline STRIs due to commitments in TPP. See Borchert, Gootiiz, and Mattoo, "Guide to the Services Trade Restrictiveness Database," 2012.

¹⁴¹³ Manyika et al., *Digital America: The Tale of the Haves*, December 2015, 89.

¹⁴¹⁴ USITC, hearing transcript, January 14, 2016, 4–6 (testimony of Peter Allgeier, Coalition of Services Industries).

it is assumed in the model that the two GTAP financial sectors (ofi and isr) do not benefit from lower barriers to trade from this factor.

Taking into account the liberalization observed in TPP as a result of these three factors, we estimated a combined percentage reduction in observed barriers to U.S. services exports to the other 11 TPP partners. These were expressed as percentage reductions to AVEs reported above.¹⁴¹⁵ We assumed equal weights for the contribution of each of the three factors to the overall reduction in each AVE, and capped their possible combined contribution at 90 percent. This method expresses changes in barriers to services trade from TPP in terms of relative price changes, which can then be fed into the CGE model, along with assumptions for liberalization in tariffs, quotas, and foreign direct investment (FDI) barriers, to estimate overall income and trade effects.

Table G.7: Percent change in AVEs due to the combined effects of STRI rescoring for TPP, the negative list approach, and TPP e-commerce provisions

	cns	trd	otp+atp	wtp	cmn	ofi	isr	obs	osg
Canada	0.0	-9.8	-0.2	-3.0	-18.8	0.0	0.0	-16.5	-7.5
Mexico	0.0	-9.8	-0.2	-3.0	-18.8	0.0	0.0	-26.0	-7.5
Chile	0.0	-9.8	-0.2	-3.0	-18.8	0.0	0.0	-16.5	-7.5
Peru	0.0	-9.8	-0.2	-3.0	-18.8	0.0	0.0	-16.5	-7.5
Japan	0.0	-24.8	-0.5	-9.0	-45.8	-24.0	-24.0	-40.5	-19.5
Australia	0.0	-9.8	-0.2	-3.0	-18.8	0.0	0.0	-16.5	-7.5
New Zealand	0.0	-24.8	-0.5	-9.0	-45.8	-24.0	-43.5	-40.5	-19.5
Malaysia	0.0	-24.8	-0.5	-9.0	-45.8	-24.0	-24.0	-50.0	-19.5
Singapore	0.0	-9.8	-0.2	-3.0	-18.8	0.0	0.0	-26.0	-7.5
Vietnam	0.0	-24.8	-0.5	-9.0	-45.8	-24.0	-24.0	-40.5	-19.5
Brunei	0.0	-24.8	-0.5	-9.0	-45.8	-24.0	-24.0	-40.5	-19.5

Source: USITC calculations.

Incorporating Investment Provisions

The TPP Agreement would impact the U.S. economy not only by lowering barriers to cross-border trade, but also by reducing barriers to foreign investment. This section describes Commission analysis integrating these foreign investment effects into the dynamic CGE model used to estimate TPP's effects.

While economists have long recognized the importance of investment to international trade,¹⁴¹⁶ modeling the investment impact of trade agreements has been difficult. This analysis builds on a model of international investment used in a recent Commission report on trade and

¹⁴¹⁵ Fontagné, Mitaritonna, and Signoret, "Estimated Tariff Equivalents," 2016.

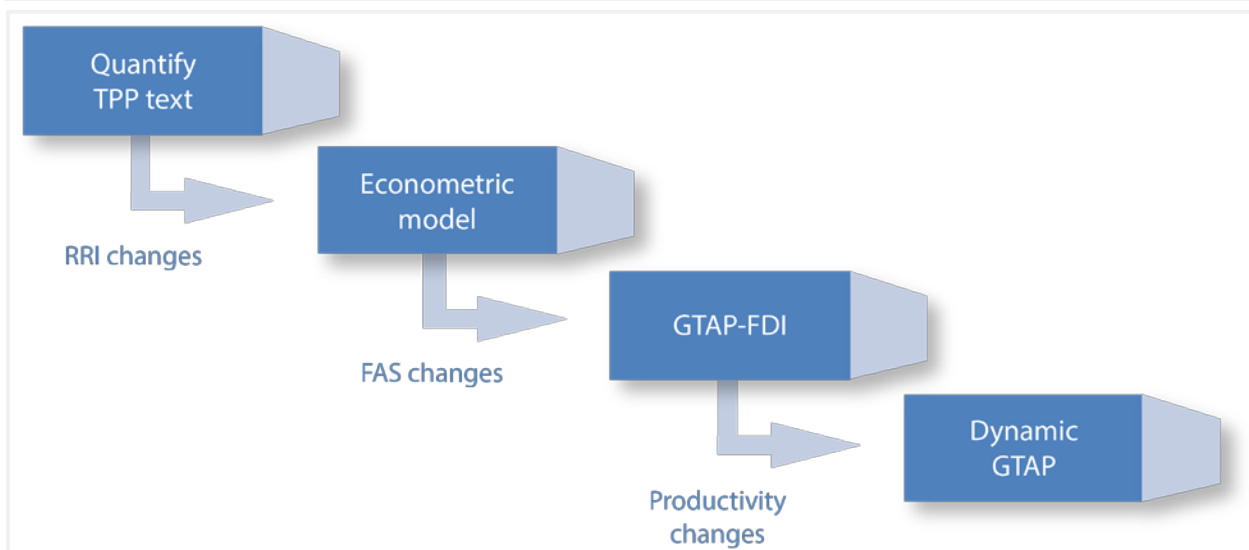
¹⁴¹⁶ For example, see Cecchini, Catinat, and Jacquemin, *The European Challenge*, 1988.

investment barriers in India.¹⁴¹⁷ The current analysis of TPP uses a similar methodology and data, although the changes in investment barriers (or “shocks”) were constructed from a careful consideration of the specific provisions and exclusions in the TPP Agreement.¹⁴¹⁸ This investment model is not a dynamic model, and key elements of the static model are transferred to the dynamic CGE model used to assess the agreement.

Methodology

The overall goal of this analysis is to calculate the impact of TPP’s investment provisions on economic variables (welfare, employment, etc.) in the United States. However, the Commission does not have a single model capable of doing this, so this analysis goes from the starting point of the TPP text to changes in welfare and productivity in several steps, using an output from one model as an input into the next. The first step is to calculate how much TPP would change investment restrictions, as measured by the OECD’s FDI regulatory restrictiveness index (RRI). Next, the analysis calculates how changes in RRI would affect foreign affiliate sales (FAS) for TPP host countries and foreign affiliate owner countries. Then the analysis calculates how that change in FAS would affect productivity in each sector of each TPP country. Finally, the analysis calculates how those productivity shocks would affect macroeconomic variables in the United States. While the investment model is static, this final step uses the dynamic CGE model.

Figure G.1: Steps in the Commission’s methodology for modeling investment provisions



Source: Compiled by USITC.

¹⁴¹⁷ USITC, *Trade, Investment, and Industrial Policies in India*, 2014. Previous Commission studies on prospective FTAs have not included a quantitative assessment of provisions that reduced barriers to FDI.

¹⁴¹⁸ USITC, *Trade, Investment, and Industrial Policies in India*, 2014, considers the effects of a hypothetical full removal of FDI restrictions on foreign affiliates in India.

Quantifying Changes in Investment Restrictions

The first step is to calculate how much TPP will affect investment restrictions in each TPP member country. This analysis' measure of investment restrictiveness is the OECD's FDI Regulatory Restrictiveness Index (RRI).¹⁴¹⁹ The RRI is a measure of the statutory restrictions on FDI in a particular sector in a particular host country. It is calculated by comparing the host country's laws concerning FDI in a particular sector to a scoresheet developed by the OECD, with a given restriction on FDI worth a given number of points.¹⁴²⁰ The RRI database covers 42 sectors and subsectors in 31 countries in 2014. Table G.8 lists the average RRI for TPP countries. Baseline (pre-TPP) investment restrictions for each sector of TPP countries are measured using the 2014 RRI database.

Table G.8: Investment restrictions (average RRI) in TPP countries

Country	RRI in 2014	RRI after TPP	Change
Australia	0.127	0.112	-0.015
Brunei	0.150	0.130	-0.021
Canada	0.173	0.156	-0.017
Chile	0.057	0.057	0.000
Japan	0.052	0.051	-0.001
Malaysia	0.211	0.139	-0.072
Mexico	0.193	0.170	-0.023
New Zealand	0.240	0.161	-0.079
Peru	0.077	0.070	-0.007
Singapore	0.068	0.053	-0.015
U.S.	0.089	0.074	-0.015
Vietnam	0.150	0.141	-0.010

Source: OECD's FDI Regulatory Restrictiveness Index (RRI) and USITC calculations.

Notes: RRI values are imputed for Brunei, Singapore, and Vietnam.

While RRI data are available for most TPP countries, they are not available for Singapore, Brunei, or Vietnam. Their RRI values are imputed using the values of similar countries for which RRI data are available. RRI values for sectors in Brunei and Vietnam are imputed using the average RRI value of that sector for all non-OECD member countries in the database. For Singapore, this process is repeated, except that the average of all OECD member countries is used instead.

¹⁴¹⁹ Available at <http://www.oecd.org/investment/fdiindex.htm>. For a description of their methodology, see Kalinova, Palerm, and Thomsen, "OECD's FDI Restrictiveness Index," 2010.

¹⁴²⁰ Note that the RRI is a measure of the regulatory restrictions on FDI, not of the regulatory restrictions that apply to all firms. For example, health and safety regulation that apply to all firms do not affect RRI.

An additional drawback worth mentioning is that the RRI is a partial measure of the investment climate, not a comprehensive one. It does not include all laws that restrict investment. For example, cultural requirements for TV broadcasting do not factor into RRI.

RRI Changes under TPP

The next step is to calculate how much TPP would change a host country's RRI in a particular sector. In TPP's investment chapter, TPP member countries agree not to restrict investment by investors of other TPP countries in certain ways. However, Annexes I, II, and III contain NCMs which specify that TPP's investment chapter does not apply to certain sectors in certain TPP host countries.

As a result, the Commission splits the calculation of how much TPP will change RRIs into two parts. First, it identified the host country-sectors which have an NCM that partially or fully exempts the country sector from the TPP Investment chapter. Then, for sectors that are not fully exempt, it calculated how much their RRI would fall due to TPP (see Table G.8). Countries, may, of course, reduce their RRI restrictions by more than is required under TPP. But when the Commission's analysis calculated the level of reform induced by TPP, it assumed that countries would liberalize only the minimum amount required.

The effect of NCMs is to exempt certain sectors from certain provisions of the TPP Investment chapter. In order to calculate the effect of NCMs on RRI, this analysis divided NCMs into two groups: "high" NCMs and "low" NCMs. High NCMs are NCMs that exempt all or almost all of a sector from all or almost all of the TPP Investment chapter. For host country sectors with high NCMs, this analysis assumes that TPP would not change their RRI. Low NCMs are those that exempt only a small part of the sector or exempt a sector only from a small amount of the TPP Investment chapter. For country sectors with low NCMs, the Commission assumes that the RRI would change as much as if there were no NCMs for that country sector at all.¹⁴²¹ Although there are many NCMs that are clearly high, for others the assignment was more subjective.

Next, for sectors not exempted from the TPP Investment chapter by NCMs, the effect of the chapter on RRI was calculated. The TPP Investment chapter's provisions forbid certain types of investment restrictions, but allow other types. The RRI is scored based on which investment restrictions a country has, out of a specific list of restrictions. TPP forbids all restrictions that compose the RRI except one: restrictions on key foreign personnel. Such restrictions are worth a maximum of 0.1 points of RRI.¹⁴²² As a result, for country sectors with a pre-TPP RRI of above 0.1, TPP is assumed to reduce their RRI to 0.1. Country sectors with a pre-TPP RRI of 0.1 or below do not change their RRI.

¹⁴²¹ This assumption means that the true change in RRI is smaller than what is used in the model.

¹⁴²² Kalinova, Palerm, and Thomsen, "OECD's FDI Restrictiveness Index," 2010, 11.

Table G.9 provides a full list of the projected declines in RRI by host country and sector. For ease of presentation in the table, the change in the index has been multiplied by 100, so that a reported reduction of 6.0 in the table is a change of -0.06 in the RRI. For instance, -0.06 is the RRI value for the mining and quarrying sector in Canada, where no high NCMs were identified and the initial RRI would fall from 0.16 to 0.10 due to TPP.

Appendix G: Quantitative Analysis of the Effect of Liberalization on Trade and Investment

Table G.9: Decrease in RRI from TPP (times 100), by country and sector

Sector	AUS	BRN	CAN	CHL	JPN	MYS	MEX	NZL	PER	SGP	USA	VNM
Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forestry	0.0	0.0	0.0	0.0	0.0	73.0	0.0	10.0	0.0	0.0	0.0	0.0
Fisheries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	0.0	0.0
Mining & quarrying (incl. oil extr.)	0.0	0.0	6.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Manufacturing	0.0	0.0	1.0	0.0	0.0	0.0	0.3	10.0	0.0	0.0	0.0	0.0
Food and other	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Oil refining & chemicals	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Metals, machinery, & other minerals	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Electric, electronics, & instruments	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Transport equipment	0.0	0.0	1.0	0.0	0.0	0.0	1.3	10.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	2.1	14.7	0.0
Electricity generation	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	2.6	29.3	0.0
Electricity distribution	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	1.5	0.0	0.0
Construction	0.0	4.2	1.0	0.0	0.0	15.0	0.0	10.0	0.0	0.0	0.0	2.1
Services	0.3	2.2	2.4	0.1	0.2	5.0	4.4	7.3	1.5	0.8	1.8	0.9
Distribution	0.0	4.9	1.0	0.0	0.0	8.5	7.5	10.0	0.0	0.0	0.0	2.5
Wholesale	0.0	2.3	1.0	0.0	0.0	17.0	0.0	10.0	0.0	0.0	0.0	1.2
Retail	0.0	7.5	1.0	0.0	0.0	0.0	15.0	10.0	0.0	0.0	0.0	3.8
Transport	0.0	5.9	0.0	0.0	1.7	6.7	11.1	3.3	0.0	5.4	0.0	0.0
Surface	0.0	0.0	0.0	0.0	0.0	0.0	33.3	10.0	0.0	0.0	0.0	0.0
Maritime	0.0	17.8	0.0	0.0	5.0	20.0	0.0	0.0	0.0	16.2	0.0	0.0
Air	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hotels & restaurants	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Media	2.5	0.0	20.0	1.0	0.0	22.5	17.5	0.0	15.0	2.5	12.5	0.0
Radio & TV broadcasting	5.0	0.0	20.0	2.0	0.0	25.0	25.0	0.0	30.0	5.0	25.0	0.0
Other media	0.0	0.0	20.0	0.0	0.0	20.0	10.0	0.0	0.0	0.0	0.0	0.0
Communications	0.0	2.3	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	5.0	1.2
Fixed telecoms	0.0	3.4	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	1.7
Mobile telecoms	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	10.0	0.6
Banking	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other finance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Business services	0.0	4.0	1.0	0.0	0.0	3.8	0.0	10.0	0.0	0.0	0.0	3.4
Legal	0.0	0.0	1.0	0.0	0.0	15.0	0.0	10.0	0.0	0.0	0.0	5.4
Accounting & auditing	0.0	8.6	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	4.3
Architectural	0.0	5.2	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	2.6
Engineering	0.0	2.3	1.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	1.2
Real estate investment	30.0	19.3	0.0	0.0	0.0	20.0	6.7	10.0	0.0	6.4	0.0	9.6
Total FDI index	1.5	2.1	1.7	0.0	0.1	7.2	2.3	7.9	0.7	1.5	1.5	1.0

Source: USITC calculations.

Additionally, special treatment is given to certain host countries and sectors. Vietnam’s Annex I NCMs contain an extremely large number of substantial partial exemptions for sectors that are not fully exempt from the investment chapter. In order to deal with this, the Commission’s analysis halves the RRI change for Vietnam. The “TV and radio broadcasting” and “other media” sectors also had many low NCMs. In order to ensure that the RRI changes for these sectors were accurate, their post-TPP RRI includes the effect of both low and high NCM exemptions. Finally, there was no change to RRI in any agricultural sector, because of limited foreign investment in that sector and expected negligible effects based on industry information.

Variation in RRI Changes by Owner Country¹⁴²³

The prior section’s calculations show how TPP would change RRI in each host country sector. However, even in a particular host country sector, the change in RRI differs across owner countries. In particular, the United States already has FTAs with a number of TPP countries, and these FTAs already have investment provisions similar to those of TPP. As a result, while TPP would not change the ease of U.S. investment in these TPP countries, it would increase the ease of investment for other TPP members in the aforementioned host countries. However, the OECD provides a single RRI for each host country and sector, for all owner countries.

Table G.10: Change in RRI due to TPP, by owner and host country

Host	Investor			
	United States	Other TPP parties with U.S. FTA	Other TPP parties without U.S. FTA	Rest of the world
United States	–	No	Yes	No
Other TPP parties with U.S. FTA	No	Yes	Yes	No
Other TPP parties without U.S. FTA	Yes	Yes	Yes	No
Rest of the world	No	No	No	No

Source: Compiled by USITC staff.

Table G.10 shows how the Commission analysis deals with these issues.¹⁴²⁴ All countries can be divided into one of four groups: the United States, countries in TPP with which the United States already has an FTA, countries in TPP with which the United States does not already have an FTA, and countries not in TPP. For country pairs marked with a “No,” TPP would lead to no change in RRI, either because it does not apply (for non-TPP countries) or because similar investment provisions are already in place due to preexisting FTAs. For pairs marked with a “Yes,” TPP would lead to changes in RRI; the magnitude of the change in RRI for a particular host country sector would be as calculated in the preceding section.

¹⁴²³ The Owner Country is the home country of the owners of the investment.

¹⁴²⁴ This analysis only includes the effect of U.S. FTAs. Although other TPP countries have bilateral FTAs with each other, their investment provisions may not be the same as those of TPP.

Continuing the Canadian mining example, the United States already has an FTA with Canada, but Japan does not. As a result, TPP would cause RRI in Canadian mining and quarrying to fall from 0.16 to 0.10 for Japanese investors, but RRI would remain at 0.16 for U.S. investors.

Changes in Foreign Affiliate Sales

Next, the Commission examines how this change in RRI would affect foreign affiliate sales (FAS), which refer to sales by firms located in a domestic market but owned by foreign investors. This analysis uses a database compiled by Commission staff that describes the FAS of each sector, host country, and owner country triplet for 26 host and owner countries and 59 sectors.¹⁴²⁵ This analysis also uses econometric analysis from a previous Commission study to describe the relationship between RRI and FAS.¹⁴²⁶ The model in that study would predict an increase of 1.8 percent in FAS for each 0.01 decrease in the RRI, holding all else constant.¹⁴²⁷ This association is used to estimate FAS changes for each sector, host country, and owner country due to changes in the RRI. For example, as already discussed, the RRI change for mining and quarrying in Canada was -0.06 , which means that FAS in this sector in Canada would increase by 11 percent for all non-US TPP owner countries. However, as explained above, FAS in that sector is not shocked for U.S. or non-TPP owners.

The Commission's econometric model relies on a number of assumptions. It assumes that the relationship between the restriction index and FAS is similar across sectors. It also assumes that the relationship holds for all host and owner countries. Unfortunately, more detailed data are not available to estimate econometric coefficients that would vary by country. Nonetheless, FAS effects will vary by host country, owner country, and sector, as the RRI varies by host country, owner country, and sector. Additionally, the econometric model for the effect of RRI on FAS does not control for tariff rates.¹⁴²⁸ To the extent that FAS are affected by tariffs and tariffs are excluded from the regression and correlated with the RRI, it is possible that the coefficient for the RRI variable may be biased down, and thus the effect of the RRI is overstated.¹⁴²⁹ Finally, the econometric model uses the variation in host country RRI that applied to all owner countries. However, a host country reform that only applied to TPP owner countries (and not to non-TPP owners) would increase the consumer price of FAS not owned by TPP countries relative to FAS that are owned by TPP countries. To the extent that the TPP-

¹⁴²⁵ The original database has 140 host and owner countries and 57 sectors. In this simulation, countries are aggregated to 26 regions and sectors disaggregated to 59 sectors.

¹⁴²⁶ USITC, *Trade, Investment, and Industrial Policies in India*, 2014.

¹⁴²⁷ See the econometric estimates in appendix G, in USITC, *Trade, Investment, and Industrial Policies in India*, 2014.

¹⁴²⁸ Although tariffs are discussed here, an analogous caveat must also be made for nontariff barriers to importation, which have the same issues.

¹⁴²⁹ This would be case, for instance, of "tariff jumping" FDI. At least for the case of tariffs, many of the largest barriers are in the food and agriculture sector, where foreign investment is very low in any case.

owned and non-TPP-owned FAS are substitutes, the increase in FAS to owners from countries with a falling RRI may be understated.

Changes in Sectoral Productivity

This section describes how the Commission uses a comparative static CGE model called GTAP-FDI to analyze increases in productivity as a result of changes in FAS due to TPP investment provisions. The GTAP-FDI model is based on the standard GTAP model, extended to include data on FDI and FAS. This model has also been extended to treat the labor force as an endogenous variable (assuming a flexible labor supply). Note that the FDI model uses the same labor supply elasticities as those used in the dynamic GTAP model, which were drawn from the empirical literature.¹⁴³⁰

Under the flexible labor supply assumption, the labor supply elasticity is greater than zero, which implies that the labor supply will expand in response to a rise in real wages, and contract if wages fall. This assumption allows entry into TPP to cause adjustments to aggregate employment in each country.

The simulations use GTAP version 9, with a 2011 baseline. The Commission aggregated 140 regions of the original GTAP model into 26 regions.¹⁴³¹ The 57 GTAP sectors were disaggregated into 59 sectors: retail and wholesale were split into two different sectors, as were telecommunications and other communications.

When a country reduces its restrictions on FDI, costs decrease for the foreign affiliates that it hosts. This leads to increased FAS but also increases the productivity of the host country. This increase in productivity can be calculated from the increase in FAS using the GTAP-FDI model.

This analysis runs 12 simulations using the GTAP-FDI model, one for each TPP member country, in which only that country liberalizes investments that it hosts.¹⁴³² In each simulation, that host country's FAS for all the other 11 owner countries and sectoral productivity parameters are swapped and the host country's FAS for all owner countries are shocked by the amounts given in the previous step.¹⁴³³ The GTAP-FDI model then calculates the productivity change in each

¹⁴³⁰ Specifically, for the United States and other developed countries in the model, this elasticity is 0.4; for all developing countries, the elasticity used is 0.44.

¹⁴³¹ The 26 regions are the 12 TPP member countries, mainland China, Hong Kong, Indonesia, South Korea, the Philippines, Russia, Taiwan, Thailand, Cambodia, Laos, India, EU, Brazil, and the rest of the world.

¹⁴³² This is done because the econometric estimate implicitly assumes a unilateral liberalization. However, the individual unilateral liberalizations are eventually combined into a multilateral liberalization (as in TPP) in the final step with the dynamic GTAP model.

¹⁴³³ This productivity parameter is country-sector specific.

sector of that country. Table G.11 shows the average productivity gains of TPP member countries from the GTAP-FDI model.

Table G.11: Host country productivity gain from TPP's reduction in host country RRI, percentage

Country	Productivity gain
Australia	0.075
Brunei	2.202
Canada	0.018
Chile	0.000
Japan	0.001
Malaysia	0.687
Mexico	0.605
New Zealand	0.693
Peru	0.001
Singapore	0.070
United States	0.001
Vietnam	0.021

Source: USITC estimates.

Notes: Economy-wide productivity gains are calculated as share-weighted means of sector/parent gains using sales shares.

As can be seen from table G.11 above, Brunei, New Zealand, and Malaysia would be expected to receive the highest productivity gains as a result of reducing their investment barriers according to TPP investment provisions. This would be due to the fact that these TPP member countries have relatively high initial FDI barriers pre-TPP, and would therefore reduce their FDI barriers more to enjoy higher overall productivity gains. By contrast, countries like Chile, the United States, Japan, and Peru already have fairly low FDI barriers prior to TPP, and therefore have little room to further reduce their FDI barriers based on TPP investment provisions. Hence, the resulting productivity gains for these countries would be relatively low.

Effects on the Economy of Cross-border Trade and FAS

As the final step in its modeling process, the Commission runs a combined simulation incorporating productivity gains as a result of TPP investment provisions, coupled with reductions in tariff and nontariff measures for cross-border trade in goods and services. This last simulation, conducted in the dynamic GTAP model, gives the macroeconomic impacts of the TPP Agreement.

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Appendix H

Additional Modeling Results

Table H.1: Estimated effects of TPP on U.S. output, employment, and trade: Changes relative to baseline in 2032

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Rice	-12.5	-0.3	15.3	1.6	-17.7	-0.1	0.0
Wheat	-1.5	0.0	18.2	1.5	-7.9	0.0	-0.7
Other grains	-5.5	-0.2	16.5	1.0	217.0	0.5	0.6
Corn grain	-31.3	-0.1	2.5	1.3	206.7	0.3	0.4
Fresh fruit, vegetables, and nuts	574.9	2.0	119.2	0.5	172.1	0.2	0.3
Soybeans	-419.4	-1.0	26.6	1.7	-406.9	-0.9	-0.9
Other oil seeds	-1.6	-0.1	40.8	2.7	52.8	0.3	0.4
All other ag	637.9	2.4	503.8	2.0	1,764.5	0.7	0.6
Cattle, sheep, goats, and horses	-3.0	-0.3	60.8	1.7	214.3	0.3	0.4
Hides and skins	115.1	0.8	35.3	2.6	141.9	0.3	0.4
Forestry	-305.3	-3.4	-1.6	-0.3	-286.6	-0.8	-1.3
Seafood	74.1	2.2	231.9	0.9	-51.5	-0.2	-0.2
Coal	-126.9	-0.5	13.5	1.0	-76.5	-0.1	-0.3
Oil	1,338.1	7.8	884.1	0.3	-486.1	-0.1	-0.3
Gas	1,384.0	5.3	1,415.4	6.1	-89.4	0.0	-0.1
Minerals and minerals products n.e.c.	441.7	1.1	509.3	1.0	18.0	0.0	0.0
Beef meat	876.1	8.4	419.0	5.7	614.6	0.5	0.4
Other meats	690.5	24.8	41.2	2.5	657.7	3.9	3.0
Pork meat products	219.3	1.9	94.4	4.4	180.3	0.3	0.3
Poultry meat prods	173.9	1.3	-16.6	-3.6	265.8	0.6	0.6
Soybean oil	27.7	1.3	2.8	3.3	54.1	0.7	0.6
Soybean meal	113.4	1.1	8.1	3.9	169.9	0.7	0.6
Dairy products	1,845.5	18.0	348.6	10.3	1,839.3	1.3	1.1
Sugar, sweeteners, and SCP	129.6	4.3	132.1	2.4	517.7	0.4	0.4
Processed foods	1,540.0	3.8	427.2	1.1	2,396.5	0.8	0.7
Chemicals	1,944.1	0.7	5,283.4	1.3	-2,854.8	-0.3	-0.3
Beverages and tobacco products	683.9	3.7	206.2	0.7	1,033.9	0.4	0.3
Textiles	256.6	1.3	869.4	1.6	-328.5	-0.4	-0.4
Wearing apparel	10.3	0.3	1,891.3	1.4	424.7	1.0	0.9
Leather products	59.5	6.0	439.2	2.0	-118.7	-1.5	-1.5
Footwear	137.7	12.2	1,103.6	2.7	29.8	0.5	0.8
Wood products	135.4	0.8	2,204.9	2.1	-1,539.7	-0.5	-0.6
Paper products, publishing	39.7	0.1	722.2	2.0	-32.3	0.0	0.0
Petroleum, coal products	1,023.8	0.7	518.8	0.4	2,931.5	0.2	0.2
Machinery and equipment	1,510.7	0.6	3,914.4	0.8	-1,683.6	-0.2	-0.2

Appendix H: Additional Modeling Results

	Exports		Imports		Output		Employment
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Percent
Metals and metal products n.e.c.	1,159.1	0.7	3,191.6	1.4	-3,664.8	-0.4	-0.3
Titanium downstream products	-33.9	-1.1	115.4	14.2	-202.4	-1.2	-1.3
Passenger vehicles	1,953.9	1.9	2,371.7	0.8	1,628.3	0.3	0.3
Auto parts and trailers	1,219.8	1.2	3,039.2	1.6	-1,365.9	-0.3	-0.3
Other transportation equipment	2,074.1	1.3	3,016.8	2.1	80.1	0.0	0.0
Electronic equipment	622.4	0.8	5,323.0	0.9	-3,729.5	-0.8	-0.8
Instruments and medical devices	169.7	0.2	1,044.6	0.7	-641.1	-0.2	-0.3
Toys, sporting goods, and other manufacturers	149.3	0.7	1,282.1	0.8	-136.1	-0.3	-0.3
Electricity	26.1	3.1	83.9	2.0	1,088.7	0.2	0.0
Gas manufacture, distribution	0.0	3.4	0.0	1.6	175.1	0.1	0.0
Water	-2.5	-2.1	9.4	1.4	17.0	0.1	0.0
Construction	-186.4	-2.0	161.4	1.5	7,234.8	0.2	0.2
Wholesale and retail trade	848.7	2.5	542.4	1.2	7,447.5	0.1	0.1
Transportation, logistics, travel, and tourism	-1,258.4	-1.1	1,770.5	1.5	-719.9	0.0	-0.1
Communications	877.7	2.8	306.4	1.2	2,845.6	0.2	0.1
Financial services n.e.c.	-12.1	0.0	787.8	1.1	1,520.0	0.1	0.1
Insurance	34.4	0.1	703.5	1.1	707.9	0.1	0.0
Business services n.e.c.	4,575.5	1.6	2,031.5	1.2	11,576.0	0.2	0.1
Recreational and other services	-687.8	-1.5	199.3	0.9	1,749.8	0.1	0.1
Public Administration, Defense, Education, Health	605.8	0.4	459.6	0.8	9,981.0	0.1	0.1

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

Table H.2: Estimated effects of TPP on U.S. exports: Changes relative to baseline in 2032.

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Rice	81.5	6.9	-8.5	-1.1	3.7	2.8	86.3	27.6	-94.0	-3.0	-12.5	-0.3
Wheat	-46.5	-1.3	43.9	3.1	32.9	4.9	-123.3	-7.9	45.1	0.5	-1.5	0.0
Other grains	19.4	2.9	2.7	0.5	0.2	0.7	16.4	14.6	-24.8	-1.0	-5.5	-0.2
Corn grain	133.2	1.4	57.5	1.3	-6.1	-0.4	81.8	2.4	-164.5	-1.3	-31.3	-0.1
Fresh fruit, vegetables, and nuts	990.3	8.3	-1.3	0.0	-3.2	-0.3	994.8	30.8	-415.4	-2.4	574.9	2.0
Soybeans	127.2	2.8	20.0	0.8	0.4	1.2	106.7	5.6	-546.6	-1.5	-419.4	-1.0
Other oil seeds	40.5	4.8	-2.6	-0.4	0.1	1.0	43.1	26.9	-42.2	-3.7	-1.6	-0.1
All other ag	1,221.7	14.0	269.1	5.6	9.7	1.2	942.9	30.3	-583.8	-3.3	637.9	2.4
Cattle, sheep, goats, and horses	14.0	2.9	8.5	2.4	0.4	1.0	5.1	6.5	-17.0	-2.8	-3.0	-0.3
Hides and skins	469.2	21.1	51.9	3.7	1.7	1.8	415.7	57.0	-354.2	-3.0	115.1	0.8
Forestry	27.7	2.3	15.9	3.7	-0.7	-4.2	12.4	1.7	-333.0	-4.3	-305.3	-3.4
Seafood	115.7	8.7	0.3	0.0	0.5	1.4	114.9	26.5	-41.6	-2.0	74.1	2.2
Coal	49.4	1.2	27.9	1.2	8.2	1.8	13.3	1.0	-176.2	-0.9	-126.9	-0.5
Oil	1,339.0	7.8	1,339.0	7.8	0.0	12.5	0.0	12.5	-0.9	-0.7	1,338.1	7.8
Gas	1,637.8	6.8	972.4	6.2	5.4	19.0	660.0	8.0	-253.8	-12.5	1,384.0	5.3
Minerals and minerals products n.e.c.	756.8	4.2	277.3	1.9	19.7	2.1	459.8	20.9	-315.1	-1.5	441.7	1.1
Beef meat	995.4	18.4	12.8	0.4	10.1	3.3	972.6	61.2	-119.3	-2.4	876.1	8.4
Other meats	756.0	54.9	529.3	52.7	2.2	3.0	224.5	75.7	-65.6	-4.7	690.5	24.8
Pork meat products	386.8	5.0	116.4	2.8	16.0	2.0	254.4	9.2	-167.5	-4.2	219.3	1.9
Poultry meat prods	588.4	15.7	150.6	5.7	105.6	17.5	332.2	70.2	-414.5	-4.2	173.9	1.3
Soybean oil	26.8	4.6	2.9	0.8	8.8	4.2	15.1	57.1	0.9	0.1	27.7	1.3
Soybean meal	385.5	12.9	-0.2	0.0	0.4	1.4	385.3	36.1	-272.0	-3.6	113.4	1.1
Dairy products	1,973.7	37.0	1,200.3	40.4	18.3	2.3	755.1	48.4	-128.1	-2.6	1,845.5	18.0
Sugar, sweeteners, and SCP	129.6	5.9	46.0	2.5	0.0	0.0	83.5	39.0	0.0	0.0	129.6	4.3
Processed foods	1,915.9	9.1	96.8	0.7	36.2	1.1	1,782.9	39.3	-375.9	-1.9	1,540.0	3.8

Appendix H: Additional Modeling Results

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Chemicals	5,457.2	3.6	2,089.4	1.8	493.6	2.7	2,874.2	21.2	-3,513.1	-2.4	1,944.1	0.7
Beverages and tobacco products	791.0	9.2	324.6	5.7	5.6	0.6	460.8	22.7	-107.1	-1.1	683.9	3.7
Textiles	551.7	5.2	232.2	2.5	28.4	3.6	291.1	48.9	-295.0	-3.1	256.6	1.3
Wearing apparel	27.9	1.1	-69.7	-3.3	9.4	5.8	88.2	44.0	-17.6	-1.2	10.3	0.3
Leather products	71.1	12.2	14.2	3.6	2.2	4.9	54.7	39.9	-11.6	-2.8	59.5	6.0
Footwear	135.0	23.6	-4.1	-1.6	-5.9	-9.7	145.0	55.4	2.6	0.5	137.7	12.2
Wood products	474.7	4.7	143.4	1.7	-4.3	-0.9	335.6	24.9	-339.3	-4.5	135.4	0.8
Paper products, publishing	629.6	3.1	302.9	1.9	33.2	2.0	293.5	13.3	-590.0	-2.8	39.7	0.1
Petroleum, coal products	1,192.8	2.2	492.4	1.8	464.6	2.1	235.8	5.9	-169.0	-0.2	1,023.8	0.7
Machinery and equipment	3,050.3	2.6	1,372.8	1.6	264.9	1.3	1,412.6	13.9	-1,539.5	-1.3	1,510.7	0.6
Metals and metal products n.e.c.	3,397.5	4.7	1,852.4	3.0	204.7	3.8	1,340.4	27.4	-2,238.4	-2.3	1,159.1	0.7
Titanium downstream products	47.3	7.1	11.1	3.5	1.7	2.6	34.5	12.0	-81.2	-3.4	-33.9	-1.1
Passenger vehicles	3,054.0	6.0	106.3	0.3	8.7	0.1	2,939.0	151.8	-1,100.1	-2.1	1,953.9	1.9
Auto parts and trailers	1,702.1	2.1	1,378.5	1.9	71.3	1.7	252.3	16.3	-482.3	-2.5	1,219.8	1.2
Other transportation equipment	2,344.5	4.1	658.4	2.4	419.4	2.9	1,266.8	8.7	-270.5	-0.3	2,074.1	1.3
Electronic equipment	2,252.7	6.8	801.4	4.7	207.0	4.0	1,244.3	11.7	-1,630.3	-3.3	622.4	0.8
Instruments and medical devices	571.2	1.7	196.2	1.2	72.8	1.0	302.1	2.8	-401.5	-0.6	169.7	0.2
Toys, sporting goods, and other manufacturers	688.8	9.6	170.3	4.0	52.7	3.6	465.8	32.7	-539.4	-3.6	149.3	0.7
Electricity	26.1	3.1	26.1	3.1	0.0	0.0	0.0	7.1	0.0	-4.3	26.1	3.1
Gas manufacture, distribution	0.0	3.6	0.0	0.0	0.0	18.2	0.0	3.5	0.0	-4.2	0.0	3.4
Water	-0.3	-0.8	-0.3	-1.3	-0.1	-1.8	0.1	0.7	-2.1	-2.8	-2.5	-2.1
Construction	-22.0	-0.9	-0.2	-1.3	-0.4	-0.6	-21.5	-0.9	-164.4	-2.4	-186.4	-2.0
Wholesale and retail trade	1,402.5	15.6	508.5	11.8	184.4	9.5	709.6	25.8	-553.8	-2.2	848.7	2.5
Transportation, logistics, travel, and tourism	-51.4	-0.2	-76.8	-0.9	-29.7	-0.5	55.1	0.7	-1,206.9	-1.3	-1,258.4	-1.1
Communications	1,391.5	25.2	416.9	20.8	237.3	12.4	737.4	46.4	-513.8	-2.0	877.7	2.8

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Financial services n.e.c.	1,008.9	8.3	-19.2	-0.4	-25.0	-1.0	1,053.1	24.6	-1,020.9	-2.0	-12.1	0.0
Insurance	564.3	4.6	-23.8	-0.3	-16.4	-1.1	604.4	15.9	-529.9	-1.9	34.4	0.1
Business services n.e.c.	9,520.1	20.7	1,346.7	15.3	857.0	9.5	7,316.4	26.0	-4,944.6	-2.0	4,575.5	1.6
Recreational and other services	-96.7	-0.7	-53.5	-0.8	-37.5	-1.5	-5.7	-0.1	-591.2	-1.8	-687.8	-1.5
Public Administration, Defense, Education, Health	2,849.8	9.8	857.7	6.3	497.4	7.2	1,494.7	17.0	-2,244.0	-1.9	605.8	0.4

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

Appendix H: Additional Modeling Results

Table H.3: Estimated effects of TPP on U.S. imports: Changes relative to baseline in 2032

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Rice	10.5	14.9	0.7	4.4	0.4	1.7	9.4	28.7	4.9	0.6	15.3	1.6
Wheat	19.1	1.6	19.1	1.6	0.0	4.4	0.0	11.1	-0.9	-3.3	18.2	1.5
Other grains	15.1	1.1	14.8	1.6	0.3	0.1	0.0	-0.2	1.4	0.5	16.5	1.0
Corn grain	2.1	1.5	2.0	1.5	0.1	1.6	0.0	7.5	0.4	0.7	2.5	1.3
Fresh fruit, vegetables, and nuts	132.7	0.7	52.9	0.4	16.1	0.4	63.6	6.4	-13.5	-0.3	119.2	0.5
Soybeans	23.1	3.5	23.1	3.5	0.0	2.3	0.0	4.2	3.5	0.4	26.6	1.7
Other oil seeds	40.4	3.2	37.7	3.4	2.8	2.2	0.0	0.1	0.4	0.1	40.8	2.7
All other ag	386.1	3.6	215.5	3.2	25.1	2.9	145.5	5.0	117.7	0.8	503.8	2.0
Cattle, sheep, goats, and horses	57.6	1.8	57.3	1.8	0.0	1.0	0.3	13.2	3.2	0.7	60.8	1.7
Hides and skins	25.3	4.4	23.7	4.2	0.4	4.0	1.2	24.9	10.0	1.3	35.3	2.6
Forestry	-2.9	-1.0	-3.7	-1.3	0.1	1.8	0.7	20.1	1.3	0.6	-1.6	-0.3
Seafood	332.2	2.9	70.5	1.4	10.9	0.3	250.8	9.0	-100.3	-0.7	231.9	0.9
Coal	14.1	4.4	13.8	4.4	0.2	3.6	0.0	6.9	-0.6	-0.1	13.5	1.0
Oil	1,819.5	0.8	1,771.9	0.7	39.1	5.1	8.6	3.5	-935.4	-1.7	884.1	0.3
Gas	1,401.5	6.1	1,401.5	6.1	0.0	41.9	0.0	100.0	13.9	6.1	1,415.4	6.1
Minerals and minerals products n.e.c.	348.9	2.5	140.1	1.3	13.5	0.6	195.3	17.3	160.4	0.4	509.3	1.0
Beef meat	437.9	6.4	-11.2	-0.3	6.8	0.4	442.3	27.7	-18.9	-4.4	419.0	5.7
Other meats	46.8	3.1	30.4	36.0	15.3	1.9	1.1	0.2	-5.6	-4.1	41.2	2.5
Pork meat products	93.8	6.2	93.6	6.2	0.1	1.0	0.0	10.3	0.6	0.1	94.4	4.4
Poultry meat prods	-18.9	-4.2	33.2	10.8	-52.2	-36.9	0.0	39.1	2.3	28.1	-16.6	-3.6
Soybean oil	2.8	3.3	2.8	3.3	0.0	2.9	0.0	8.7	0.0	-3.3	2.8	3.3
Soybean meal	7.3	6.2	7.3	6.2	0.0	11.1	0.0	20.0	0.8	0.9	8.1	3.9
Dairy products	369.1	31.2	114.6	46.2	0.1	0.2	254.3	29.8	-20.4	-0.9	348.6	10.3
Sugar, sweeteners, and SCP	132.1	3.6	74.8	2.2	57.3	30.6	0.0	0.0	0.0	0.0	132.1	2.4
Processed foods	-202.7	-1.0	-587.8	-3.5	111.3	5.7	273.7	23.2	629.9	3.3	427.2	1.1
Chemicals	6,202.8	6.8	2,712.7	4.1	339.6	2.7	3,150.5	22.7	-919.4	-0.3	5,283.4	1.3

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Beverages and tobacco products	111.5	1.1	48.9	0.6	12.6	1.1	50.0	7.5	94.8	0.5	206.2	0.7
Textiles	786.0	14.7	183.8	4.6	4.8	5.3	597.4	46.4	83.4	0.2	869.4	1.6
Wearing apparel	7,355.1	25.0	11.7	0.2	2.2	0.2	7,341.3	35.2	-5,463.8	-5.1	1,891.3	1.4
Leather products	1,158.5	55.3	4.3	1.3	0.0	1.0	1,154.1	65.5	-719.3	-3.6	439.2	2.0
Footwear	1,551.9	23.4	93.6	13.4	0.3	4.6	1,458.0	24.6	-448.3	-1.3	1,103.6	2.7
Wood products	1,850.0	5.8	510.7	2.2	26.9	2.1	1,312.4	17.8	354.9	0.5	2,204.9	2.1
Paper products, publishing	530.7	4.1	494.6	4.1	12.0	3.6	24.1	3.9	191.4	0.8	722.2	2.0
Petroleum, coal products	812.9	2.2	726.1	2.1	28.2	2.9	58.6	3.9	-294.1	-0.3	518.8	0.4
Machinery and equipment	4,553.3	3.1	2,493.2	2.3	92.9	2.1	1,967.2	6.1	-639.0	-0.2	3,914.4	0.8
Metals and metal products n.e.c.	3,139.3	4.0	2,211.1	3.4	219.3	2.7	708.9	10.6	52.2	0.0	3,191.6	1.4
Titanium downstream products	202.1	109.7	-4.2	-10.2	-1.7	-10.7	208.1	164.1	-86.8	-13.8	115.4	14.2
Passenger vehicles	933.8	0.5	806.4	0.6	2.7	1.8	124.8	0.3	1,437.9	1.4	2,371.7	0.8
Auto parts and trailers	3,830.3	3.9	2,887.4	3.3	8.1	2.7	934.7	8.7	-791.1	-0.8	3,039.2	1.6
Other transportation equipment	2,561.1	4.5	1,907.7	3.9	46.8	4.9	606.6	8.7	455.7	0.5	3,016.8	2.1
Electronic equipment	2,973.9	4.0	1,634.4	4.1	138.3	4.8	1,201.2	3.8	2,349.1	0.5	5,323.0	0.9
Instruments and medical devices	932.2	2.1	376.8	1.4	64.4	1.4	491.1	3.9	112.3	0.1	1,044.6	0.7
Toys, sporting goods, and other manufacturers	410.3	6.2	208.2	4.5	24.7	5.7	177.4	12.0	871.8	0.6	1,282.1	0.8
Electricity	83.9	2.0	83.9	2.0	0.0	16.7	0.0	0.0	0.0	0.0	83.9	2.0
Gas manufacture, distribution	0.0	3.4	0.0	33.3	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.6
Water	0.4	0.5	0.0	0.0	0.1	0.4	0.3	0.6	8.9	1.6	9.4	1.4
Construction	51.6	3.5	-0.3	-0.8	-0.6	-1.3	52.4	3.7	109.8	1.2	161.4	1.5
Wholesale and retail trade	7.6	0.1	-21.8	-0.7	1.8	0.2	27.6	2.1	534.8	1.3	542.4	1.2
Transportation, logistics, travel, and tourism	2,137.8	11.6	2,255.6	23.2	-74.0	-1.6	-43.8	-1.0	-367.3	-0.4	1,770.5	1.5
Communications	50.0	1.4	-10.3	-0.6	-0.8	-0.1	61.2	7.3	256.4	1.1	306.4	1.2
Financial services n.e.c.	-70.1	-0.8	-40.4	-1.0	-49.3	-1.7	19.6	0.9	857.9	1.4	787.8	1.1

Appendix H: Additional Modeling Results

Sector	All TPP		NAFTA partners		Existing FTA partners		New FTA partners		Rest of the world		All countries	
	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent	Million \$	Percent
Insurance	-45.2	-0.5	-30.0	-0.5	-9.3	-0.7	-5.9	-0.3	748.7	1.3	703.5	1.1
Business services n.e.c.	27.9	0.1	-16.6	-0.2	-21.1	-0.3	65.6	1.4	2,003.6	1.3	2,031.5	1.2
Recreational and other services	-24.4	-0.5	-28.1	-0.8	10.7	1.4	-7.0	-0.9	223.7	1.4	199.3	0.9
Public Administration, Defense, Education, Health	-64.6	-0.9	-49.5	-1.5	-8.3	-0.5	-6.9	-0.3	524.2	1.0	459.6	0.8

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

Table H.4: Estimated effects of TPP on factor payments: Percent changes relative to baseline in 2032

Sector	Land	Labor	Capital	Natural resources	Total
Rice	-0.5	0.2	0.1	0.0	0.0
Wheat	-0.2	-0.2	-0.3	0.0	-0.2
Other grains	1.8	1.0	1.0	0.0	1.3
Corn grain	1.5	0.9	0.8	0.0	1.1
Fresh fruit, vegetables, and nuts	1.3	0.7	0.7	0.0	1.0
Soybeans	-0.6	-0.5	-0.5	0.0	-0.5
Other oil seeds	1.4	0.8	0.7	0.0	1.1
All other ag	1.8	1.0	1.0	0.0	1.3
Cattle, sheep, goats, and horses	1.4	0.8	0.7	0.0	1.1
Hides and skins	1.1	0.8	0.8	0.0	0.9
Forestry	0.0	-0.8	-0.9	-5.7	-2.6
Seafood	0.0	0.3	0.3	1.6	0.6
Coal	0.0	0.2	0.1	-0.9	-0.7
Oil	0.0	0.1	0.0	-1.1	-0.5
Gas	0.0	0.3	0.3	-0.1	0.1
Minerals and minerals products n.e.c.	0.0	0.4	0.4	-0.3	0.3
Beef meat	0.0	0.9	0.9	0.0	0.9
Other meats	0.0	3.4	3.1	0.0	3.4
Pork meat products	0.0	0.7	0.7	0.0	0.7
Poultry meat prods	0.0	1.0	1.0	0.0	1.0
Soybean oil	0.0	1.1	1.1	0.0	1.1
Soybean meal	0.0	1.1	1.1	0.0	1.1
Dairy products	0.0	1.6	1.6	0.0	1.6
Sugar, sweeteners, and SCP	0.0	0.8	0.8	0.0	0.8
Processed foods	0.0	1.1	1.2	0.0	1.2
Chemicals	0.0	0.1	0.1	0.0	0.1
Beverages and tobacco products	0.0	0.7	0.7	0.0	0.7
Textiles	0.0	0.1	0.1	0.0	0.1
Wearing apparel	0.0	1.4	1.4	0.0	1.4
Leather products	0.0	-1.1	-1.0	0.0	-1.1
Footwear	0.0	1.2	1.2	0.0	1.2
Wood products	0.0	-0.1	-0.1	0.0	-0.1
Paper products, publishing	0.0	0.4	0.4	0.0	0.4
Petroleum, coal products	0.0	0.6	0.6	0.0	0.6
Machinery and equipment	0.0	0.2	0.2	0.0	0.2
Metals and Metals and metal products n.e.c.	0.0	0.1	0.1	0.0	0.1
Titanium downstream products	0.0	-0.9	-0.8	0.0	-0.8
Passenger vehicles	0.0	0.7	0.8	0.0	0.7
Auto parts and trailers	0.0	0.1	0.2	0.0	0.1
Other transportation equipment	0.0	0.4	0.4	0.0	0.4
Electronic equipment	0.0	-0.4	-0.4	0.0	-0.4
Instruments and medical devices	0.0	0.2	0.2	0.0	0.2
Toys, sporting goods, and other manufacturers	0.0	0.1	0.2	0.0	0.1
Electricity	0.0	0.4	0.4	0.0	0.4
Gas manufacture, distribution	0.0	0.4	0.5	0.0	0.5
Water	0.0	0.4	0.5	0.0	0.5
Construction	0.0	0.7	0.7	0.0	0.7

Appendix H: Additional Modeling Results

Sector	Land	Labor	Capital	Natural resources	Total
Wholesale and retail trade	0.0	0.5	0.6	0.0	0.5
Transportation, logistics, travel, and tourism	0.0	0.3	0.4	0.0	0.4
Communications	0.0	0.5	0.6	0.0	0.6
Financial services n.e.c.	0.0	0.5	0.5	0.0	0.5
Insurance	0.0	0.5	0.5	0.0	0.5
Business services n.e.c.	0.0	0.6	0.6	0.0	0.6
Recreational and other services	0.0	0.5	0.5	0.0	0.5
Public Administration, Defense, Education, Health	0.0	0.5	0.6	0.0	0.5

Source: USITC estimates.

Notes: Dollar values are in 2017 prices. N.e.c. = not elsewhere classified.

Appendix I

Quantitative Analysis of IPR Protections

For an accessible version of Appendix I, [click here](#).

This appendix describes the econometric model and sensitivity tests the Commission used in preparing the estimate in chapter 6 of the effects of increased patent protection on U.S. receipts for the use of intellectual property abroad (IP receipts).

Model Specification

The Commission's regression strategy is a panel approach that shows how changes in a country's characteristics correlate with changes in U.S. IP receipts.¹⁴³⁴

The econometric specification is:

$$\ln \text{IPReceipts}_{ct} = \alpha \ln \text{GDP}_{ct} + \beta \text{Park}_{ct} + \gamma_c + \delta_t + \varepsilon_{ct} \quad (1)$$

The variable $\ln \text{IPReceipts}_{ct}$ is the natural log of IP receipts from country c in year t , and $\ln \text{GDP}_{ct}$ is the log of the country's GDP. Park_{ct} is the value of the Ginarte-Park (Park) index of statutory patent protections for country c in year t .¹⁴³⁵ The country fixed effects γ_c deal with time-invariant factors that affect the level of patent protection, such as the distance of the country from the United States, common language, and historical institutions.¹⁴³⁶ The year fixed effects δ_t deal with changes in the U.S. technology (or intellectual property) stock and effectively deflates the other variables.

This analysis estimates the model for 30 economies using the three years (2000, 2005, and 2010) when there are both services trade data on U.S. IP receipts from the U.S. Department of Commerce's Bureau of Economic Analysis (BEA)¹⁴³⁷ and Park data.¹⁴³⁸ GDP data for 2000–10 are from the International Monetary Fund.¹⁴³⁹

¹⁴³⁴ The approach is similar to that used in Ivus, "Do Stronger Patent Rights," 2010, and Lippoldt and Schultz, "Uncovering Trade Secrets," 2014.

¹⁴³⁵ Park, "Patent Index 1960–2010," n.d. (accessed February 22, 2016).

¹⁴³⁶ This is a conventional way to deal with endogeneity, following Baier and Bergstrand, "Do Free Trade Agreements," 2007.

¹⁴³⁷ The 30 individual economies are Argentina, Australia, Brazil, Canada, Chile, China, France, Germany, Hong Kong, India, Indonesia, Israel, Italy, Japan, South Korea, Malaysia, Mexico, Netherlands, New Zealand, Norway, Philippines, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, and the United Kingdom. Eight of these are TPP parties: Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. BEA data are not available for Brunei, Peru, or Vietnam. BEA, table 2.1, October 15, 2015.

¹⁴³⁸ Although Venezuela is in both the BEA and Park data sets, it is dropped from the analysis due to unusual circumstances in that country: it is the one country in the dataset for which patent protections decreased during the time period. The analysis also drops Ireland, as only one year of IP receipt data is available for it.

¹⁴³⁹ IMF, World Economic Outlook databases (accessed February 22, 2016).

Regression Results

Column (1) in table I.1 presents the results of the preferred specification. The coefficient of the Park index, the impact of patent protections on IP receipts, is positive and statistically significant. To examine the robustness of our results to changes in our model specification, several alternative specifications were also considered.

Table I.1: Econometric estimates using different model specifications

Variable	Regression Specification				
	(1), preferred	(2)	(3)	(4)	(5)
Park	0.347** (0.168)		0.451 (0.517)	0.526*** (0.152)	0.453*** (0.157)
Park × Fraser		0.032** (0.013)	-0.021 (0.084)		
Fraser			0.171 (0.339)		
TSP				-0.194 (0.184)	
TSP × Fraser					0.012 (0.017)
Ln GDP	0.655*** (0.187)	0.668*** (0.185)	0.633*** (0.185)	0.623*** (0.193)	0.606*** (0.184)
Country and year fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	90	88	88	78	78
Adjusted R^2	0.966	0.966	0.965	0.972	0.972

Notes: Robust standard errors in parenthesis. ** (or ***) indicates significant at 5% (or 1%) level.

Specification (2) focuses on the rule of law. Although the Park index measures patent protection, it is limited to **statutory** protection levels. Statutory rights, however, may have different impacts depending on the country's level of rule of law. Therefore, the analysis estimates a second specification in which the value of the Park index is interacted with that portion of the Fraser Institute's Economic Freedom Index that addresses legal systems and property rights. The components include judicial independence; impartial courts; protection of property rights; military interference; integrity of the legal system; legal enforcement of contracts; regulatory costs; reliability of police; and business costs of crime. It does not focus specifically on the enforcements of patents or IPRs, but on the rule of law more generally.¹⁴⁴⁰

Specification (2) follows the literature in not including Park and Fraser as separate variables (only their interaction).¹⁴⁴¹ IP receipts are modeled as:

$$\ln \text{IPReceipts}_{ct} = \alpha \ln \text{GDP}_{ct} + \beta \text{Park}_{ct} \times \text{Fraser}_{ct} + \gamma_c + \delta_t + \varepsilon_{ct} \quad (2)$$

¹⁴⁴⁰ Fraser Institute, "Economic Freedom," 2015, 4.

¹⁴⁴¹ See Hu and Png, "Patent Rights," 2013, and Maskus and Yang, "The Impacts of Post-TRIPS," 2013.

As in the main regression, the coefficient of interest, $\text{Park} \times \text{Fraser}$, is positive and statistically significant. If the coefficients of specification (2) are used for the scenarios, instead of those in the preferred regression (1), the effect of increasing patent protection is smaller. A comparison of the scenario effects using specifications (1) and (2) is given in table I.2.

Table I.2: Scenario estimates using different regression specifications

		(1), preferred	(2)
Historical effect	Absolute (billion \$)	2.9	1.8
	Percent	11	7
Counterfactual effect	Absolute (billion \$)	5.0	3.2
	Percent	17	11

Source: Compiled by USITC staff.

However, since adding the Fraser Index does not improve the regression's adjusted R^2 , and the index does not focus specifically on IPR protection or enforcement, specification (1) is preferred as it uses the most direct and simple measure of patent protection.

Specification (3) is another specification that looks at rule of law, but also includes the Park and Fraser variables by themselves:

$$\ln \text{IPReceipts}_{ct} = \alpha \ln \text{GDP}_{ct} + \beta \text{Park}_{ct} \times \text{Fraser}_{ct} + \theta_1 \text{Park}_{ct} + \theta_2 \text{Fraser}_{ct} + \gamma_c + \delta_t + \varepsilon_{ct} \quad (3)$$

However, in specification (3), none of the coefficients for the three variables of interest is statistically significant. Taken together, the results for specifications (2) and (3) indicate that using the Park variable alone, as in specification (1), is the most appropriate specification.

Specifications (4) and (5) of table I.1 look at trade secret protection (TSP). The measures of country-level TSP for 1995 to 2010 are taken from Lippoldt and Schultz.¹⁴⁴² In specification (4), TSP is included as an additional explanatory variable:

$$\ln \text{IPReceipts}_{ct} = \alpha \ln \text{GDP}_{ct} + \beta_{\text{park}} \text{Park}_{ct} + \beta_{\text{TSP}} \text{TSP}_{ct} + \gamma_c + \delta_t + \varepsilon_{ct} \quad (4)$$

In specification (5), the TSP and Park variables are interacted with the Fraser Index:

$$\ln \text{IPReceipts}_{ct} = \alpha \ln \text{GDP}_{ct} + \beta_{\text{park}} \text{Park}_{ct} + \beta_{\text{TSP}} \text{TSP}_{ct} \times \text{Fraser}_{ct} + \gamma_c + \delta_t + \varepsilon_{ct} \quad (5)$$

However, the TSP coefficients in both of these equations are not statistically significant, meaning that any changes in measured trade secret protection during the period 1995–2010 did not have a statistically significant relationship to changes in IP receipts.

¹⁴⁴² Lippoldt and Schultz, "Uncovering Trade Secrets," 2014.

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Appendix J

Data Tables for Figures

Appendix J: Data Tables for Figures

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Table J.1: Shares of world GDP for TPP signatory countries, 2014

Country	Share of world GDP
Non-TPP	64
United States	22.4
Japan	5.9
Canada	2.3
Australia	1.9
Mexico	1.6
Brunei	0.02
Chile	0.3
Malaysia	0.4
Peru	0.3
New Zealand	0.2
Singapore	0.4
Vietnam	0.2

Source: World Bank, World Development Indicators (accessed January 20, 2016). Table corresponds to [fig. 1.3](#).

Table J.2: Sectoral shares of TPP countries' GDP, by sector, 2013^a

Country	Agriculture	Manufacturing	Services	Other
Australia	2.5	7.1	70.7	19.7
Brunei	0.7	12.3	31.0	56.0
Canada	1.5	10.7	70.8	17.0
Chile	3.2	11.8	61.7	23.3
Japan	1.2	18.5	72.6	7.7
Malaysia	9.3	23.9	50.2	16.6
Mexico	3.5	17.5	62.1	16.9
New Zealand	6.9	12.1	69.8	11.2
Peru	7.2	15.7	54.3	22.8
Singapore	0.0	18.8	74.9	6.3
United States	1.4	12.4	78.1	8.1
Vietnam	18.4	17.5	43.3	20.8

Source: World Bank, World Development Indicators (accessed July 7, 2015). Table corresponds to [fig. 1.4](#).

^a "Other" industries are defined as construction, mining (including petroleum products), electricity, gas, and water. Data for Canada and Peru are based on 2010 data and data for New Zealand are based on 2011 data.

Table J.3: Share of total trade of goods and services exports and imports, by partner, 2014^a

Country	Services Exports	Goods exports	Goods imports	Services imports
Australia	9.3	41.1	38.9	10.8
Brunei	6.7	62.1	21.3	10
Canada	7.7	41.9	40.9	9.5
Chile	7	43.2	40.8	8.9
Japan	8.1	38.1	44.8	9
Malaysia	7.9	44.2	39.4	8.5
Mexico	2.4	46.8	47.1	3.8
New Zealand	12.2	37.8	38.6	11.4
Peru	6.2	40.9	44.8	8.1
Singapore	13.3	38.7	34.6	13.4
United States	13.8	31.4	45.5	9.3
Vietnam	3.4	46.4	45.7	4.5

Source: UN, Comtrade (accessed January 8, 2016); USITC DataWeb/USDOC (accessed December 31, 2015); ASEAN, ASEANstats database (accessed December 14, 2015); UN, Service Trade Statistics Database (accessed December 14, 2015); OECD, OECD.Stat (accessed January 27, 2016); USDOC, BEA, table 2.2, "U.S. Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015. Note: The distance between the black bars and the 50 percent line indicate the country's total trade surplus or deficit. For example, Australian imports and exports were nearly balanced, whereas Brunei ran a trade surplus of approximately 18 percent. Table corresponds to [fig. 1.5](#).

^a Services data for Japan and New Zealand are based on 2013 data.

Table J.4: U.S. merchandise exports to and imports from TPP partners, 2014, billion dollars

Country	Exports	Imports
Brunei	0.55	0.03
New Zealand	4.26	3.98
Vietnam	5.73	30.59
Malaysia	13.07	30.42
Japan	66.83	134.00
Peru	10.05	6.08
Chile	16.51	9.48
Australia	26.58	10.67
Singapore	30.24	16.43
Mexico	240.25	294.07
Canada	312.42	347.80

Source: USITC DataWeb/USDOC (accessed January 25, 2016). Table corresponds to [fig. 1.6](#).

Table J.5: U.S. total export destinations and import sources from TPP partners and the rest of the world, 2014

Country	U.S. total exports	U.S. general imports
World (trillion \$)	1.62	2.35
Shares by country (percent):		
Non-TPP	55.2	62.4
Canada	19.3	14.8
Mexico	14.8	12.5
Japan	4.1	5.7
Singapore	1.9	1.3
Australia	1.6	1.3
Chile	1.0	0.7
Malaysia	0.8	0.5
Peru	0.6	0.4

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Country	U.S. total exports	U.S. general imports
Vietnam	0.4	0.3
New Zealand	0.3	0.2
Brunei	0.0	0.0

Source: USITC DataWeb/USDOC (accessed January 25, 2016). Table corresponds to [fig. 1.7](#).

Table J.6: Shares of outward-bound and inward-bound FDI stocks, by TPP country, 2014

Country	U.S. outward FDI stocks	U.S. inward FDI stocks
World (trillion \$)	4.9	2.9
Shares by country (percent):		
Australia	3.7	1.6
Canada	7.8	9.0
Japan	2.2	12.9
Mexico	2.2	0.6
Singapore	3.7	0.7
Other TPP	1.1	0.1
Non-TPP	79.3	75.1

Source: USDOC, BEA, "Direct Investment Positions for 2014: Country and Industry Detail," 2015 (accessed December 28, 2015). Table corresponds to [fig. 1.8](#).

Table J.7: Sectors with the 10 largest U.S. tariff reductions under TPP for partners with which the United States has no existing FTAs, trade-weighted ad valorem rates

	AVE before TPP	AVE in 2032
Footwear	14.1	0.0
Sugars, sweeteners, and SCP	14.0	0.1
Titanium downstream products	13.2	0.0
Wearing apparel	13.0	0.0
Leather products	8.6	0.0
Textiles	5.8	0.0
Beef meat	3.8	0.0
Rice	3.5	0.0
Pork meat products	2.9	0.0
Processed foods	2.9	0.0

Source: USITC calculations; ITC, "Tariff Rates for 2016–2046 between TPP Member Countries," 2016. Table corresponds to [fig. 2.1](#).

Note: Does not include tariff lines subject to TRQs. TPP countries with which the United States has no existing FTAs are Brunei, Japan, Malaysia, New Zealand, and Vietnam. SCP = sugar-containing products.

Table J.8: Sectors with the 10 largest tariff reductions on U.S. exports under TPP to partners with which the United States has no existing FTAs, trade-weighted ad valorem rates

	AVE before TPP	AVE in 2032	AVE in 2046
Beef meat	32.0	7.6	6.2
Footwear	17.2	0.3	0.0
Corn grain	16.0	0.0	0.0
Rice	14.9	0.0	0.0
Poultry meat prods	14.1	0.0	0.0
Other meats	9.0	0.0	0.0
Wearing apparel	8.7	0.0	0.0
Sugars, sweeteners, and SCP	8.3	0.0	0.0
Processed foods	8.4	0.2	0.2
All other agriculture	8.1	0.5	0.0

Source: USITC calculations; ITC, "Tariff Rates for 2016–2046 between TPP Member Countries," 2016. Table corresponds to [fig. 2.2](#).

Note: Does not include tariff lines subject to TRQs. TPP countries with which the United States has no existing FTAs are Brunei, Japan, Malaysia, New Zealand, and Vietnam. SCP = sugar-containing products.

Table J.9: Effectively applied tariffs for U.S. imports and tariffs applied by TPP partners against U.S. exports, percent

			AVE before TPP	AVE in 2032
Against new FTA partners	USA	Agriculture and food	1.2	0.0
		Manufacturing	1.8	0.0
		Natural resources and energy	0.1	0.0
Against U.S. exports	Australia	Agriculture and food	0.0	0.0
		Manufacturing	0.0	0.0
		Natural resources and energy	0.0	0.0
	Brunei	Agriculture and food	8.2	0.0
		Manufacturing	2.4	0.0
		Natural resources and energy	0.0	0.0
	Canada	Agriculture and food	0.0	0.0
		Manufacturing	0.0	0.0
		Natural resources and energy	0.0	0.0
	Chile	Agriculture and food	0.0	0.0
		Manufacturing	0.0	0.0
		Natural resources and energy	0.0	0.0
	Japan	Agriculture and food	15.6	9.9
		Manufacturing	0.6	0.0
		Natural resources and energy	0.0	0.0
	Mexico	Agriculture and food	0.0	0.0
		Manufacturing	0.0	0.0
		Natural resources and energy	0.0	0.0
	Malaysia	Agriculture and food	14.6	0.8
		Manufacturing	2.2	0.0
		Natural resources and energy	2.2	0.0
	New Zealand	Agriculture and food	2.2	0.0
		Manufacturing	1.7	0.0
		Natural resources and energy	0.0	0.0
	Peru	Agriculture and food	0.2	0.0
		Manufacturing	0.0	0.0
		Natural resources and energy	0.0	0.0

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		AVE before TPP	AVE in 2032
Singapore	Agriculture and food	0.0	0.0
	Manufacturing	0.0	0.0
	Natural resources and energy	0.0	0.0
Vietnam	Agriculture and food	7.6	0.0
	Manufacturing	2.6	0.0
	Natural resources and energy	0.1	0.0

Source: USITC calculations; ITC, “Tariff Rates for 2016–2046 between TPP Member Countries,” 2016. Table corresponds to [fig. 2.3](#).

Note: Does not include tariff lines subject to TRQs. Based on trade-weighted averages using 2012–14 trade statistics.

Table J.10: Estimated ad valorem equivalents of services trade barriers, by broad service sector, percent

	Before TPP	AVE in 2032
Communications	45.1	26.5
Business services n.e.c.	34.3	21.7
Public services	44.9	36.8
Wholesale and retail trade	34.3	26.8
Financial services n.e.c.	53.0	46.7
Insurance services	39.8	34.5
Water transport	36.3	33.3
Road, rail, and air transport	20.8	20.6
Construction	40.1	40.1

Source: USITC estimates. Table corresponds to [fig. 2.4](#).

Note: N.e.c. = “not elsewhere classified.”

Table J.11: Decomposition of U.S. real income, GDP, trade, and employment gains, by modeled TPP provisions, percent

	Real income	GDP	Exports	Imports	Employment
Traded goods provisions	55.4	68.2	80.9	57.6	59.9
Traded services provisions	34.2	21.4	10.4	27.2	27.7
Investment provisions	10.4	10.4	8.7	15.2	12.4

Source: USITC estimates. Table corresponds to [fig. 2.5](#).

Table J.12: United States merchandise trade balance, 1996–2015, by partner type, billion \$

	US FTA partners	Rest of the world
1996	-40.5	-127.9
1997	-33.8	-148.9
1998	-38.0	-195.4
1999	-59.2	-272.7
2000	-82.2	-354.3
2001	-87.5	-323.4
2002	-92.4	-377.9
2003	-101.4	-434.3
2004	-116.0	-537.2
2005	-121.9	-644.7
2006	-132.4	-685.6
2007	-125.7	-665.3
2008	-113.1	-686.9
2009	-51.6	-449.4

Appendix J: Data Tables for Figures

	US FTA partners	Rest of the world
2010	-71.4	-564.0
2011	-65.8	-659.6
2012	-70.8	-659.6
2013	-67.6	-622.3
2014	-63.9	-663.2
2015	-60.4	-676.7

Source: USITC DataWeb/USDOC (accessed on March 15, 2016). Table corresponds to [fig. 2.7](#).

Table J.13: U.S. domestic exports to TPP parties, 2011–15, billion \$

	U.S. exports, 2015	Change in U.S. exports, 2011–15
Canada	202.3	-5.3
Mexico	160.9	25.6
Japan	43.6	-0.9
Singapore	22.5	-3.7
Australia	20.0	-2.8
Chile	12.9	-0.5
Malaysia	9.2	-1.9
Peru	6.3	-0.04
Vietnam	4.2	1.8
New Zealand	2.7	-0.1
Brunei	0.1	-0.05

Source: USITC DataWeb/USDOC (accessed February 7, 2016). Table corresponds to [fig. 4.1](#).

Table J.14: U.S imports for consumption from TPP partners, 2011–15, billion \$

Country	U.S. imports, 2015	Change in U.S. imports, 2011–15
Mexico	261.6	23.2
Canada	253.9	-28.5
Japan	125.7	1.5
Vietnam	34.2	19.1
Malaysia	31.7	9.5
Singapore	15.4	-1.3
Australia	5.9	-1.2
Chile	4.4	-1.3
Peru	3.0	-1.8
New Zealand	1.0	0.2
Brunei	0.0	0.0

Source: USITC DataWeb/USDOC (accessed February 17, 2016). Table corresponds to [fig. 4.2](#).

Table J.15: Percent of tariff lines for U.S. exports to current non-FTA partners that are or will become duty free upon TPP entry into force, MNRE products

	MFN	EIF
Brunei	71	91
Japan	49	96
Malaysia	59	83
New Zealand	56	94
Vietnam	35	69

Source: TPP, chap. 2, Annex 2-D. Table corresponds to [fig. 4.3](#).

Notes: MFN: most favored nation. EIF: entry into force of TPP. MFN rates are those listed in each country's tariff elimination schedule. Tariff lines that are duty free at the entry into force of the agreement only include MFN duty-free rates and those for which duties would be eliminated under TPP. EIF rates are specific to U.S. exports—rates of duty elimination may vary by country. For New Zealand, the analysis does not include the tariff lines for which duty rates apply for the good of which it is a part.

Table J.16: U.S. international services supplied, 2005–14, billion \$

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Cross-border private exports—TPP countries	111.1	118.9	127.7	135.1	129.5	151.6	164.9	175.6	176.7	176.3
Cross-border private exports—All other countries	246.3	278.6	339.8	378.6	362.7	391.9	440.7	458.0	488.3	513.8
Services supplied by U.S. firms' foreign affiliates—TPP countries	211.2	242.8	265.6	288.4	292.7	327.0	363.8	376.1	380.9	
Services supplied by U.S. firms' foreign affiliates—All other countries	584.4	647.0	753.6	828.6	779.0	828.2	883.2	909.9	940.0	

Source: USDOC, BEA, Interactive tables, International Data, January 20, 2016. Table corresponds to [fig. 5.1](#).

Notes: Data for affiliates are available from 2005 through 2013. Affiliate data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, and Singapore. Affiliate data for Brunei and Vietnam are not available. Cross-border data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. Cross-border data for Brunei, Peru, and Vietnam are not available.

Table J.17: U.S. international services received, 2005–14, billion \$

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Cross-border private imports—TPP countries	65.0	71.2	74.6	76.9	68.7	75.8	81.9	87.0	91.3	94.2
Cross-border private imports—All other countries	212.0	242.6	269.7	303.3	286.7	301.6	322.5	337.1	347.1	359.0
Services supplied by U.S. affiliates of foreign firms—TPP countries	152.8	164.9	174.3	181.6	177.2	188.5	216.0	227.4	270.7	
Services supplied by U.S. affiliates of foreign firms—All other countries	418.3	483.4	509.5	520.0	492.1	512.6	565.5	585.8	607.8	

Source: USDOC, BEA, Interactive tables, International Data, January 20, 2016. Table corresponds to [fig. 5.2](#).

Notes: Data for affiliates are available from 2005 through 2013. Affiliate data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, and Singapore. Affiliate data for Brunei and Vietnam are not available. Cross-border data for TPP countries include data for Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. Cross-border data for Brunei, Peru, and Vietnam are not available.

Table J.18: U.S. private cross-border exports of services, 2014, billion \$

Country	Canada	Japan	Mexico	Australia	Singapore	Other TPP		Total
						countries	All other	
U.S. private cross-border exports	61.1	46.1	29.6	19.0	11.7	8.8	513.8	690.1
Percent of total	8.8	6.7	4.3	2.8	1.7	1.3	74.5	100.0

Source: USDOC, BEA, Interactive Tables, International Data, International Services, "Table 2.3: U.S. Trade in Services, by Country or Affiliation and by Type of Service" (accessed January 20, 2016). Table corresponds to [fig. 5.3](#).

Note: Other TPP countries include Chile (\$3.8 billion), Malaysia (\$2.8 billion), and New Zealand (\$2.2 billion).

Table J.19: U.S. private cross-border imports of services, 2014, billion \$

Country	Canada	Japan	Mexico	Australia	Singapore	Other TPP		Total
						countries	All other	
U.S. private cross-border imports	29.8	28.3	19.4	6.6	5.8	4.4	359.0	453.3
Percent of total	6.6	6.2	4.3	1.5	1.3	1.0	79.2	100.0

Source: USDOC, BEA, Interactive Tables, International Data, International Services, "Table 2.3: U.S. Trade in Services, by Country or Affiliation and by Type of Service" (accessed January 20, 2016). Table corresponds to [fig. 5.4](#).

Notes: Totals may not add to 100 percent due to rounding. Other TPP countries include Malaysia (\$1.8 billion), New Zealand (\$1.5 billion), and Chile (\$1.2 billion).

Table J.20: Affiliate transactions: Services supplied to foreign persons by U.S. multinational enterprises through their majority-owned foreign affiliates, 2013, billion \$

Country	Canada	Japan	Singapore	Australia	Mexico	Other TPP		Total
						countries	All other	
Affiliate transactions: Services supplied to foreign persons by U.S. MNEs through their MOFAs, 2013	127.6	71.6	59.5	52.6	43.4	26.2	940.0	1,320.9
Percent of total	9.7	5.4	4.5	4.0	3.3	2.0	71.2	100.0

Source: USDOC, BEA, Interactive Tables, International Data, International Services, "Table 3.2: Services Supplied to Foreign Persons by U.S. MNEs through Their MOFAs, by Country of Affiliate and by Destination" (accessed January 20, 2016). Table corresponds to [fig. 5.5](#).

Note: Other TPP countries include Chile (\$11.5 billion), Malaysia (\$7.9 billion), New Zealand (\$4.2 billion), and Peru (\$2.6 billion).

Table J.21: Affiliate transactions: Services supplied to U.S. persons by foreign multinational enterprises through their majority-owned U.S. affiliates, 2013, billion \$

Country	Japan	Canada	Australia	Singapore	Other TPP		Total
					countries	All other	
Affiliate transactions: Services supplied to U.S. persons by foreign multinational enterprises	146.5	84.4	22.9	8.3	8.6	607.8	878.5
Percent of total	16.7	9.6	2.6	0.9	1.0	69.2	100.0

Source: USDOC, BEA, Interactive Tables, International Data, International Services, "Table 4.2: Services Supplied to U.S. Persons by Foreign MNEs through Their MOUSAs, by Country of UBO" (accessed January 20, 2016). Table corresponds to [fig. 5.6](#).

Notes: Totals may not add to 100 percent due to rounding. Other TPP countries include Mexico (\$7,503 million), Malaysia (\$467 million), New Zealand (\$458 million), Chile (\$178 million), and Peru (\$6 million).

TPP Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors

Table J.22: How TPP reduces the trade costs faced by U.S. services exporters, by service industry, percent

	Before TPP	After TPP
Wholesale and retail trade	34	27
Road, rail, and air transport	21	21
Water transport	36	33
Communications	45	26
Banking + other financial services	53	47
Insurance services	40	34
Other business services	34	22

Source: USITC estimates. Table corresponds to [fig. 5.7](#).

Note: This refers to trade costs faced by U.S. services exporters in the sectors listed to TPP partner markets.

Table J.23: How TPP reduces the trade costs faced by U.S. services exporters, by TPP partners, percent

	Before TPP	After TPP
Canada	33	29
Mexico	64	50
Chile	42	36
Peru	49	42
Japan	42	28
Australia	42	36
New Zealand	32	21
Malaysia	25	17
Singapore	13	11
Vietnam	33	23
Brunei	32	21

Source: USITC estimates. Table corresponds to [fig.5.8](#).

Table J.24: Insurance penetration and GDP per capita, 2013

Country Name	Insurance penetration, percent	GDP per capita, PPP (constant 2011 international \$)
Australia	5.2	42,830
Canada	4.9	42,213
Chile	4.2	21,801
Japan	6.7	35,614
Malaysia	5.0	23,419
Mexico	2.1	16,141
New Zealand	2.8	33,360
Peru	1.7	11,324
Singapore	7.3	77,721
United States	10.7	51,282

Source: OECD Stat, "Insurance Indicators" (accessed January 16, 2016); World Bank, "World Development Indicators" (accessed January 16, 2015). Table corresponds to [fig. 5.9](#).

Table J.25: Australia's services trade, 2014, percent

Trade	United States	TPP countries excluding the United States	Non-TPP countries
Exports	11.0	23.2	65.8
Imports	18.7	21.7	59.6

Source: OECD Stat database (accessed on January 22, 2016). Table corresponds to [fig. F.1](#).

Table J.26: Australia's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	23.7	19.3	57.0
Outward FDI stock	25.2	15.5	59.3

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.2](#).

Note: Because FDI data are not available for some TPP countries, the share of Australia's inward FDI stock shown for TPP countries excluding the United States does not include Brunei, Mexico, and Peru; and the share of Australia's outward FDI stock shown for TPP countries excluding the United States does not include Brunei, Canada, Mexico, and Peru.

Table J.27: Canada's services trade, 2014, percent

Trade	United States	TPP countries excluding the United States	Non-TPP countries
Exports	55.0	6.4	38.6
Imports	56.4	6.7	36.9

Source: OECD Stat database (accessed on January 22, 2016). Table corresponds to [fig. F.3](#).

Note: Because Canada's services trade data are not available for all TPP countries, the shares shown for TPP countries excluding the United States do not include Brunei and Peru.

Table J.28: Canada's inward and outward FDI stock, 2014, percent

FDI Stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	49.4	3.4	47.3
Outward FDI stock	42.2	9.5	48.3

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.4](#).

Note: Because Canada's FDI data are not available for some TPP countries, the share of Canada's inward FDI stock shown for TPP countries excluding the United States does not include Brunei, Chile, Malaysia, New Zealand, Peru, and Vietnam; and the share of Canada's outward FDI stock shown for TPP countries excluding the United States does not include Brunei and Vietnam.

Table J.29: Chile's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	15.9	8.1	76.0
Outward FDI stock	3.9	9.1	86.9

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.5](#).

Note: Because Chile's FDI data are not available for some TPP countries, the share of Chile's inward FDI stock shown for TPP countries excluding the United States does not include Brunei, Malaysia, and Vietnam; and the share of Chile's outward FDI stock shown for TPP countries excluding the United States does not include Brunei.

Table J.30: Japan's services trade, 2014, percent

Trade	United States	TPP countries excluding the United States	Non-TPP countries
Exports	26.0	13.8	60.2
Imports	30.1	11.5	58.4

Source: OECD Stat database (accessed on January 22, 2016). Table corresponds to [fig. F.6](#).

Note: Because Japan's services trade data are not available for some TPP countries, the shares shown for TPP countries excluding the United States do not include Brunei, Chile, and Peru.

Table J.31: Japan's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	30.5	10.0	59.4
Outward FDI stock	32.3	13.4	54.4

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.7](#).

Note: Because Japan's FDI data are not available for some TPP countries, the shares of Japan's inward and outward FDI stock shown for TPP countries excluding the United States do not include Brunei, Chile, and Peru.

Table J.32: Malaysia's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	7.7	35.5	56.8
Outward FDI stock	0.3	22.7	77.0

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.8](#).

Note: Because Malaysia's FDI data are not available for some TPP countries, the share of Malaysia's inward FDI stock shown for TPP countries excluding the United States does not include Brunei, Canada, Chile, Mexico, New Zealand, Peru, and Vietnam; and the share of Malaysia's outward FDI stock shown for TPP countries excluding the United States does not include Brunei, Canada, Chile, Japan, Mexico, New Zealand, and Peru.

Table J.33: Mexico's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	47.9	7.2	44.9
Outward FDI stock	33.5	4.1	62.4

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.9](#).

Note: Because Mexico's FDI data are not available for some TPP countries, the share of Mexico's outward FDI stock shown for TPP countries excluding the United States does not include Australia, Brunei, Japan, Malaysia, New Zealand, Singapore, and Vietnam.

Table J.34: New Zealand's services trade, 2014, percent

Trade	United States	TPP countries excluding the United States	Non-TPP countries
Exports	14.1	33.2	52.7
Imports	13.1	43.3	43.6

Source: OECD Stat database (accessed on January 22, 2016), table corresponds to [fig. F.10](#).

Note: Because New Zealand's services trade data are not available for some TPP countries, the shares shown for TPP countries excluding the United States do not include Chile and Peru.

Table J.35: New Zealand's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	7.9	66.2	25.8
Outward FDI stock	16.8	65.4	17.8

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015), table corresponds to [fig. F.11](#).

Note: Because New Zealand's FDI data are not available for some TPP countries, the share of New Zealand's inward FDI stock shown for TPP countries excluding the United States does not include Brunei, Chile, Malaysia, Mexico, Peru, and Vietnam; and the share of New Zealand's outward FDI stock shown for TPP countries excluding the United States does not include Brunei, Chile, Mexico, Peru, and Vietnam.

Table J.36: Singapore's services trade, 2014, percent

Trade	United States	TPP countries excluding the United States	Non-TPP countries
Exports	11.3	18.4	70.3
Imports	16.8	9.2	74.0

Source: Government of Singapore, Department of Statistics, "Singapore International Trade in Services 2014" (accessed April 4, 2016). Table corresponds to [fig. F.12](#).

Note: Because Singapore's services trade data are not available for some TPP countries, the shares shown for TPP countries excluding the United States do not include Brunei, Chile, Mexico, and Peru.

Table J.37: Singapore's inward and outward FDI stock, 2014, percent

FDI stock	United States	TPP countries excluding the United States	Non-TPP countries
Inward FDI stock	37.9	16.7	45.4
Outward FDI stock	5.2	16.6	78.2

Source: IMF, Coordinated Direct Investment Survey (accessed December 28, 2015). Table corresponds to [fig. F.13](#).

Note: Because the FDI data are not available for some TPP countries, the share of Singapore's inward FDI stock shown for TPP countries excluding the United States does not include Brunei, Mexico, Peru, and Vietnam; and the share of Singapore's outward FDI stock shown for TPP countries excluding the United States does not include Brunei, Peru, and Vietnam.