

Chapter 13

Industry and Economic Analysis



Photo: A Commission hearing.

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Introduction

The United States International Trade Commission (Commission) has a long history of providing industry and economic analysis and trade policy advice to Congress and President. In this chapter we provide a brief discussion of the historical legislative requirements for analytical advice the Commission provides Congress and the President on the potential effects of trade policy changes. From the Commission's inception as the United States Tariff Commission through today, Congress has required the Commission to provide information and analysis on the effect of tariffs and other trade barriers (i.e., standards and customs procedures) on specific sectors, and in more recent years on the overall U.S. economy, to both Congress and to the President.

While most of this chapter will deal with more recent statutory requirements for Commission industry and economic analyses, it is important to keep in mind that from its inception the Commission was expected to provide in-depth industry and economic analysis on important trade policy issues of the day. Of the numerous statutes requiring the Commission to provide industry and economic advice, this chapter will focus on three. Section 131 of the Trade Act of 1974¹⁰⁵⁹ requires the Commission to provide confidential pre-negotiation advice on potential sensitive sectors to the President. Section 2104 of the Trade Act of 2002, as updated by Section 105 of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015,¹⁰⁶⁰ requires the Commission to provide an in-depth assessment of the potential impacts on the U.S. economy of an agreement that has been negotiated but before Congressional ratification.

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¹⁰⁵⁹ 19 U.S.C. § 2151.

¹⁰⁶⁰ 19 U.S.C. § 2151 (amended Pub. L. No. 114-26, 129 Stat. 320 (2015)).

In addition, section 332 of the Trade Act of 1930¹⁰⁶¹ provides broad authority for the President and Congress to request from the Commission in-depth studies on almost any trade-related issue, and also permits the Commission to self-initiate such studies. This paper consists of 5 parts. In part 1, we provide an overview of why the Commission, an independent agency, was selected to provide such analysis. Clearly the strong political forces surrounding debates on trade had a strong role in the creation of such an independent agency. The next three sections provide overviews of the regular study areas and the role of Commission reports in informing negotiations or public debates and discussions surrounding trade policy developments. Part 2 describes the general trade-related studies, usually produced under section 332 of the Trade Act of 1930. Part 3 provides an overview of the pre-negotiation advice required in Section 131 of the Trade Act of 1974 (and section 221 under earlier acts). Part 4 then reviews the post-negotiation analysis required in Section 2104 of the Trade Act of 2002 and similar sections in subsequent Trade Acts. Conclusions are provided in Part 5.

Why an Independent Agency to Conduct Industry and Economic Analysis?

The Tariff Commission was formed when Congress was embroiled in debates over the effects of tariffs on producers, consumers, and workers, besides being a source of government revenue.¹⁰⁶² Much of the early Tariff Commission analysis was focused on trying to determine the “incidence”—that is, who actually paid the cost of the applied tariff, and studies appeared to rely on changes in consumer prices before and after tariff changes.¹⁰⁶³ One idea which was widespread at the time was that tariffs were paid by foreigners only, and thus placed no burden on the U.S. economy.¹⁰⁶⁴ These early analyses focused very much on tariff policy related to specific products and industries. The Commission's first Chairman, Frank Taussig, was a Harvard Economics professor and a leading expert of the time on analyzing the effects of tariffs and he was expected to bring a more “scientific” approach to tariff analysis. In the first issue of *The*

¹⁰⁶¹ The Tariff Act of 1930 (Hawley-Smoot Tariff Act or Smoot-Hawley Act), Pub. L. No. 71-361, § 332, 46 Stat. 590, 698 (codified in portions of 19 U.S.C. § 1332) is best known for the Smoot-Hawley Tariff, which imposed a substantial increase in import duties during the early stages of the Great Depression. It is perhaps noteworthy that the lesser-known Section 332 authority of “Smoot-Hawley” has been used in numerous studies of the potential effects of trade liberalization in the subsequent decades. This may warrant a modest revision of the reputation of the Trade Act of 1930 among those who primarily focus on its likely effects in deepening the Depression.

¹⁰⁶² Karen E. Schnietz, “The 1916 Tariff Commission: Democrats’ Use of Expert Information to Constrain Republican Tariff Protection,” 23 *Bus. & Econ. Hist.* 176 (1994); Revenue Act, Pub. L. No. 64-271, § 700, 39 Stat. 756, 795 (1916).

¹⁰⁶³ *Ibid.*

¹⁰⁶⁴ The idea that the burden of the tariff is borne by the person who legally remits the tariff is an example of what is known as the “flypaper theory of incidence” in the public finance literature. It has been superseded by the understanding that the burden of the tariff, or indeed any tax, is distributed between the buyer and the seller depending on the particular conditions of supply and demand.

American Economic Review in 1911, Taussig published “How Not To Make Tariffs,” a muckraking account associating unusual features in the tariff schedule with the influence of particular members of Congress.¹⁰⁶⁵ In establishing the Tariff Commission in 1916 the Congressional objective was to insulate tariff policy from the kind of direct political pressures that members of Congress faced from their constituent interests. The Commission was to “apply scientific principles to the study of tariffs and to assist in recommending appropriate levels.”¹⁰⁶⁶ Under Taussig, the Commission developed quantitative methods to evaluate the potential effects of tariff policy changes on U.S. economic activity. Economic analysis of the effects of tariffs was still nascent in 1916, but increasingly economic tools were being refined and developed that would allow for just such a “scientific” assessment of tariff effects.

These expanded the analysis requested by Congress, reflecting the evolution of Congressional objectives, priorities, and concerns in the trade policy sphere, but continued to focus on objective and complete analysis. The Congressional requests to the Commission have also emphasized timely analysis on these priority issues, as legislation often specifies explicit timelines for delivery, the set of issues to be covered, and, to some extent, the process used to gather information that often includes public submissions, questionnaires, and hearings.

Major shifts in tariff and trade policies that affected the Commission came with the passage of the Tariff Act of 1930 and particularly the Reciprocal Trade Agreement Act of 1934. Section 332 of the Trade Act of 1930 provided statutory authority to the Commission to conduct general fact-finding investigations.¹⁰⁶⁷ This section has remained an integral part of Congressional trade legislation renewals and the Commission continues to produce important analysis for the President and Congress under this statute. In the Reciprocal Trade Agreement Act of 1934 Congress first authorized the President to engage in bilateral tariff negotiations with other countries, as well as the authority to adjust tariffs.¹⁰⁶⁸ While this Act was renewed several times, in the 1948 renewal a provision was introduced that required the Tariff Commission to analyze the tariff level below which U.S. industries would be imperilled.¹⁰⁶⁹ This analysis was known as “peril point” analysis (see Hiscox, 1994, and Baldwin, 1984, for interesting discussions of the role of “peril point” and other provisions) and required the Commission to provide the President with in-depth industry and economic analysis of the potential effects of tariff

¹⁰⁶⁵ Frank Taussig, “How Tariffs Should Not Be Made,” *Am. Econ. Rev.*, vol. 1 no. 1, March 1911, 20-32. Taussig also published “The Tariff History of the United States” (1914), and “Some Aspects of the Tariff Question” (Cambridge: Harvard Univ. Press, 1915).

¹⁰⁶⁶ 1916 U.S. Tariff Commission Established, https://www.usitc.gov/flash/dynamic_timeline.htm (accessed August 2, 2016).

¹⁰⁶⁷ 19 U.S.C. § 1332.

¹⁰⁶⁸ Reciprocal Trade Agreements Act of 1934, Pub. L. No. 73-316, 48 Stat. 943 (codified as amended at 19 U.S.C. § 1351).

¹⁰⁶⁹ Trade Agreements Extension Act of 1948, Pub. L. No. 80-792, 62 Stat. 1053.

reductions possibly subject to negotiations.¹⁰⁷⁰ It is notable that this statute was introduced in legislation after the signing of the General Agreement on Tariffs and Trade, and signalled the start of a continuing role for the Commission in the context of the multilateral trading system. The “peril point” provisions were often subject to legislative changes (see Hiscox, 1994) and eventually evolved into 1961’s Section 131 probable economic effect analysis.¹⁰⁷¹ While section 131 has evolved over time it remains an important element in the Commission’s role to provide advice to the President.

Subsequent legislation not only changed the name of the Commission, from the Tariff Commission to the International Trade Commission in 1974, but also the responsibilities and the mission of the Commission.¹⁰⁷² These expanded the analysis requested by Congress, reflecting the evolution of Congressional objectives, priorities, and concerns in the trade policy sphere, though continued to focus on objective and complete analysis.¹⁰⁷³

Over the 100 year history of the Commission, Congress, through legislative action, increased the breadth and depth of the advice it requested. Early requests focused on sector or even product specific effects of potential tariff changes on the US economy. Later legislation, exemplified by section 2104 of the Trade Act of 2002¹⁰⁷⁴ and section 105 of the Trade Act of 2015,¹⁰⁷⁵ asked the Commission to provide integrated, comprehensive, economy wide assessments of trade agreements. These assessments now range from analysis of tariffs to non-tariff barriers, to effects on international investment, and to policies affecting trade in services. In addition, the Commission was requested to provide discussions of each chapter in a free trade agreement (FTA) and of each listed Congressional priority in the 2002 Act.

In addition to direct requests from Congress for Commission analysis and reports, Congress has also legislated specific requirements for the President, usually through the United States Trade Representative (USTR) (and its predecessor the Special Trade Representative), to seek formal advice from the Commission on specific trade topics or negotiations. As a result of these various historical legislative requirements the Commission, an objective and independent U.S.

¹⁰⁷⁰ See Michael J. Hiscox, “The Magic Bullet? The RTAA, Institutional Reform, and Trade Liberalization,” 53 *Int’l Org.* 669 (1999); see also Robert Baldwin, “Rent-Seeking and Trade Policy: An Industry Approach,” 120(4) *Rev. of World Econ.* (Weltwirtschaftliches Archiv) 662 (1984) (providing interesting discussions of the role of the “peril point” and other provisions).

¹⁰⁷¹ *Ibid.*

¹⁰⁷² 19 U.S.C. § 2231; 19 U.S.C. §§ 1330–41; 19 U.S.C. § 1337.

¹⁰⁷³ See 19 U.S.C. §§ 1332(d), (g).

¹⁰⁷⁴ Pub. L. No. 107-210, § 2104, 116 Stat. 933, 1008 (2002) (codified as amended at 19 U.S.C. § 3804).

¹⁰⁷⁵ 19 U.S.C. § 2151 (amended Pub. L. No. 114-46, 129 Stat. 357 (2015)).

government agency that does not engage in trade policy development nor in negotiations,¹⁰⁷⁶ finds itself playing an important role in providing advice and analysis to the main trade policy negotiators and legislators in the US government.

The entire history of legislative requirements for industry and economic analysis from the Commission is beyond the scope of this paper.¹⁰⁷⁷ Instead, we focus on more recent requirements for studies that play a role in informing either trade negotiations or the public discourse on trade more broadly. Where relevant we will try to illustrate, very briefly, how these statutory requirements have been tied to the economic and political interests of the time, and that there is a clear evolution of the requirements for the Commission analysis that reflect Congressional priorities, economic developments, and the public debate on the effects of trade on the United States economy. This evolution illustrates quite clearly how, through both legislative action and internal Commission decision-making, the Commission has worked to keep up with the most pressing trade-related economic issues of the day. Early legislation required the Commission to assess the impact of changing tariffs on specific industries, while later legislation evolved, along with economic techniques to assess the potential impact of broad trade agreements on the overall U.S. economy. These reports and analysis have been used by policy-makers to help make informed decisions related to the impact of changing trade policies on U.S. industries and the broader economy. As trade legislation evolved, Congress asked the Commission to consider factors well beyond tariffs, including the potential effects of non-tariff measures.

The arc of various legislative efforts has essentially defined very specific roles for the Commission to provide analysis and the current set of legislative requirements provides for various Commission studies to be delivered to the President prior to the initiation of formal trade negotiations, through section 131 of the Trade Act of 1974, and for studies to be delivered to Congress and the public, after the successful conclusion of negotiations but prior to Congressional consideration.¹⁰⁷⁸ In addition there are several statutes that either allow for or require studies that are unrelated to any specific trade negotiation. As mentioned earlier section 332 of the Trade Act of 1974 allows for studies on almost any topic of interest, while several statutes require regular reporting on very specific topics.¹⁰⁷⁹ For example, section

¹⁰⁷⁶ The Commission is a non-voting observer in such interagency policy-making bodies as the Trade Policy Staff Committee and various subcommittees that are formed for special purposes. While not having a decision-making role, this observer status facilitates the ability of the executive branch to request analytical work from the Commission during the policy-making process.

¹⁰⁷⁷ A good summary of the various requirements over time can be found in John M. Dobson, *Two Centuries of Tariffs: The Background and Emergence of the U.S. International Trade Commission* (Washington, DC: USITC, 1976); Wendy L. Hansen & Thomas J. Prusa, "The Economics and Politics of Trade Policy: An Empirical Analysis of ITC Decision Making," 5 *Rev. of Int'l Econ.* 230 (1997).

¹⁰⁷⁸ Trade Act of 1974, Pub. L. No. 93-618, § 131, 88 Stat. 1978, 1994 (codified as amended at 19 U.S.C. § 2151).

¹⁰⁷⁹ Pub. L. No. 93-618, 88 Stat. 1978 (codified as amended at 19 U.S.C. § 1332).

163(c) of the Trade Act of 1974 (as did its predecessor legislation) requires that “the International Trade Commission shall submit to the Congress at least once a year, a factual report on the operation of the trade agreements program.”¹⁰⁸⁰ These reports provide Congress with factual information on trade policy and its administration for each calendar year. The reports are to cover “all activities consisting of, or related to, the administration of international agreements which primarily concern trade and which are concluded pursuant to the authority vested in the President by the Constitution” and Congressional legislation.¹⁰⁸¹

Why would Congress ask an independent agency for such analysis when many administration departments have economic analytical capabilities, with staffs of expert economists working to provide their departmental leadership with economic assessments that can inform policy development? It seems likely that these requests derived from the fact that Congress has limited internal resources to conduct such analysis, that it wanted to ensure a source of unbiased analysis, and that such analysis could be targeted to its priorities. As a result, Congress has often relied on summaries of academic research or those parts of administration-based research that the administration chooses to make public.¹⁰⁸² For instance, in the Trade Act of 2002 Congress called on the Commission to provide a detailed quantitative assessment each time the President enters into a new trade agreement, as well as to review assessments performed outside the Commission.¹⁰⁸³ Many academics, industry associations, and labor representatives provide their own analyses of these agreements. Those analyses are often conducted prior to the conclusion of negotiations and thus make hypothetical assumptions about what might be included in the final agreement. In addition, there are many assessments conducted by Administration economists that are used for internal documents and briefings, in the form of analytical advice for higher level, political departmental leadership. Some of this analysis is made public, but much of it is closely held due to the potentially highly charged political environment surrounding trade, and the policy debates between departments,

¹⁰⁸⁰ Pub. L. No. 93-618, § 163(b) 88 Stat. 1978, 2009 (codified as amended at 19 U.S.C. § 2213(c)).

¹⁰⁸¹ Pub. L. No. 93-618, § 163, 88 Stat. 1978, 2009 (codified as amended at 19 U.S.C. § 2213)

¹⁰⁸² In March and July of 1979 the Congressional Budget Office (CBO) wrote two background papers on the potential effects of the Tokyo Round on the U.S. economy. The CBO provides excellent analysis to Congress, but has limited technical resources and generally works to synthesize deeper analysis conducted by other research groups.

¹⁰⁸³ Specifically, Section 2104(f) of the Trade Act of 2002 calls for an assessment examining “the likely impact of the agreement on the United States economy as a whole and on specific industry sectors, including the impact the agreement will have on the 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.” It also calls for a review of “available economic assessments regarding the agreement, including literature regarding any substantially equivalent proposed agreement, and shall provide in its assessment a description of the analyses used and conclusions drawn in such literature, and a discussion of areas of consensus and divergence between the various analyses and conclusions, including those of the Commission regarding the agreement.” Pub. L. No. 107-210, § 2104(f), 116 Stat. 933, 1012–13 (2002) (codified as amended at 19 U.S.C. § 3804(f)).

between the Administration and Congress, and even within Congress. And any Administration analysis is likely to be viewed by Congress as biased in favor of supporting the Administration's negotiated outcome. Commission analysis is based on the provisions actually negotiated in the agreement and is viewed as unbiased, authoritative, detailed, and timely.

Over time, Congressional legislation has provided increasingly detailed negotiating objectives to the President. These principal negotiating objectives often have reflected the major economic issues facing Congress at that time, as new sectors emerge, or new issues arise in international negotiations. For example, neither services nor intellectual property rights received specific reference as negotiating objectives in Congressional trade legislation in the 1960s, but by the late 1980s were explicitly identified as areas for the President to focus on. In the Trade Act of 1974, Congress specified negotiating objectives for the President to pursue in trade agreements negotiated under the Act, as well as consultation requirements with Congress to ensure that members of Congress and their staff were kept abreast of negotiating progress and the general content of the agreements under negotiation.¹⁰⁸⁴ In the 1974 Act, the negotiating objectives were described in less than 4 pages of the bill and the consultation requirements took one half a page. Emphasis in this guidance was still very much on tariffs and traditional trade barriers and in the manufacturing and agricultural sectors. (Section 104, 1984).¹⁰⁸⁵ These trade negotiating objectives and consultation requirements were updated in the 2002 Act which also enhanced Congressional consultations by establishing a Congressional oversight group, through which selected House Ways and Means and Senate Finance Committee members received additional briefings on the state of ongoing negotiations.¹⁰⁸⁶ In contrast, the 2002 Act Congressional negotiating objectives had expanded to 38 pages (see section 2, Negotiating Objectives of the Act).¹⁰⁸⁷ In addition to manufacturing and agriculture, the objectives now included services, non-traditional barriers including behind the border barriers, such as technical barriers to trade and lack of transparency, very detailed guidance for WTO negotiations (17 pages) and further objectives for the Free Trade Agreement of the Americas (another 17 pages).¹⁰⁸⁸ The increase in Congressional "instruction" to the President was very substantial and suggests that Congress wished to ensure that Presidential negotiations were consistent with Congressional priorities. These negotiating objectives were once again updated in the 2015 Trade Act (at 14 pages). A summary of Congressional guidance to the President in the 2015 Trade Act contrasts sharply with the limited focus of the 1937 RTAA renewal which contained little if any Congressional objectives:

¹⁰⁸⁴ See Pub. L. No. 93-618, §§ 103–04, 88 Stat. 1978, 1984 (codified as amended at 19 U.S.C. §§ 2113–14).

¹⁰⁸⁵ Pub. L. No. 93-618, § 104, 88 Stat. 1978, 1984 (codified as amended at 19 U.S.C. § 2114).

¹⁰⁸⁶ Trade Act of 2002, Pub. L. No. 107-210, §§ 2101, 2107, 116 Stat. 933, 994–1004, 1016–18 (codified as amended at 19 U.S.C. §§ 3802, 3807).

¹⁰⁸⁷ Trade Act of 2002, Pub. L. No. 107-210, § 2101, 116 Stat. 933, 994–1004.

¹⁰⁸⁸ Trade Act of 2002, Pub. L. No. 107-210, §§ 2103–2108, 116 Stat. 933, 1004–18.

Since the original fast track authorization in the Trade Act of 1974, Congress has revised and expanded the negotiating objectives in succeeding TPA/fast track authorization statutes to reflect changing priorities and the evolving international trade environment. Since the last grant of TPA in 2002, new issues associated with state-owned enterprises, digital trade in goods and services, and localization policies have come to the forefront of U.S. trade policy and are included in the proposed TPA-2015 as principal negotiating objectives. Under the TPA-2002, the most recent previous authorization, Congress established trade negotiating objectives in three categories: (1) overall objectives; (2) principal objectives; and (3) other priorities. These begin with broad goals that encapsulate the “overall” direction trade negotiations are expected to take, such as fostering U.S. and global economic growth and obtaining more favorable market access for U.S. products and services. Principal objectives are more specific and are considered the most politically critical set of objectives. The proposed TPA-2015 uses a similar structure.¹⁰⁸⁹

Between 2002 and 2015 Congressional interest in intellectual property rights increased significantly. Congress added specific references to digital trade in goods and services and cross border data flows, localization barriers, state owned enterprises, and the relationship between the WTO and regional and/or plurilateral agreements.¹⁰⁹⁰ The evolution of Congressional interest, reflecting the evolution of broader economic developments, not only directed Presidential negotiating efforts but also signaled areas where Congress would require in-depth industry and economic analysis. Many of these new areas, such as digital trade and cross border data flows, often lacked specific, agreed upon definitions and even lacked basic data on how much and to whom such flows were going. The rapidly evolving market circumstances in new sectors where the basic tools of industry analysts and economists such as supply, use, and trade data are not available proves to be very challenging. In Commission industry and economic analysis, particularly post agreement, as well as in the fact-finding studies that can be requested under section 332, these new and emerging sectors are often of priority interest for Congress, the Administration, and the private sector. The capabilities and techniques needed to analyze and assess the impact of these emerging areas on the U.S. economy and the potential impact of trade policy changes on them require the Commission to continuously invest in new skills, new tools, and new capabilities, which the Commission has done in a very efficient manner and has responded to the Congressional requests related to estimating the impact on US exports due to intellectual property infringement and estimating the role of digital trade on the U.S. economy.

¹⁰⁸⁹ Bipartisan Congressional Trade Priorities and Accountability Act of 2015. Pub. L. No. 114-26, § 102, 129 Stat. 320, 320–33 (codified as amended at 19 U.S.C. § 4201).

¹⁰⁹⁰ Trade Act of 2002, Pub. L. No. 107-210, § 2102, 116 Stat. 933, 994–97.

An interesting aspect of the broader trade debate in the United States is the way the effects of trade policy changes are perceived by pro and anti-trade constituencies. In both factions changes in trade flows are often attributed to policies negotiated in a specific agreement, and these trade flows are thought to have large impacts on the various sectors of the U.S. economy. Those supporting trade liberalization typically will emphasize increases in exports, gains to consumers through lower prices and greater variety, increased competitive effects, improved productivity, and increased jobs and higher wages in exporting sectors. Those opposed to trade liberalization will typically emphasize increased imports, declining employment in import competing sectors, and lower wages for workers. Most professional economists that study trade policy and trade flows recognize that all of these kinds of effects can happen simultaneously, and, critically, that other macroeconomic factors besides trade agreements affect trade flows, employment, wages, and prices. In fact some of these other factors are likely to have more important effects on these economic outcomes than changes in trade policies, or changes in trade flows.

For example, economic growth, often measured as Gross Domestic Product (GDP), is a major determinant of trade growth, with trade typically rising or falling faster than GDP growth. Until recently changes in interest rates, through monetary policy changes aimed at controlling inflation, were thought to be major factors in driving economic growth and therefore trade. Technology also has major impacts on both trade flows and also employment and wages. Recent work on the U.S. labor market suggests that increased imports likely accounted for only 20 percent of manufacturing unemployment between 2000 and 2011, a period of unusually rapidly rising trade for the United States (Autor, *et al.*).¹⁰⁹¹ Long term comparisons of the U.S. unemployment rate show it is negatively correlated with the U.S. trade deficit, that is, unemployment declines when the trade deficit rises. In addition domestic and foreign investment and savings are important drivers of trade. Most economists argue convincingly that overall trade balances are largely driven by the balance between domestic saving and investment, and in economies with low (high) domestic savings compared to investment the result is a trade deficit (surplus).

Economists generally agree that the major impacts of trade and trade policy changes are compositional, that is, they affect the overall composition of economic activity between industries and sectors, and that reducing trade distorting barriers and the resulting reallocation of resources across sectors has small positive effects on economic activity in the short term. The larger the initial barriers removed, the larger the net positive economic effects will be, but the cross sector effects will also be larger. As will be shown later in this paper, the United States has relatively small trade barriers. At the Commission the major economic tools used are

¹⁰⁹¹ David H. Autor *et al.*, "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," 103 *Am. Econ. Rev.* 2121 (2013).

econometric models and partial and general equilibrium models. These models attempt to isolate the effect of the variable(s) of interest on other economic indicators. In trade economics the variable of interest is usually some change in trade or trade related policy, such as a change in openness (a tariff increase or decrease) or a change in a non-tariff measure, and to estimate the effect of that change on trade flows, GDP growth, and industrial output, for example. In econometric models one typically will use data that span a number of years (called time-series), across a large number of observational units, for example measuring a large number of individual firms in one time period (called cross-section), or a mix of the two (a large number of firms across a number of years, called pooled data) in order to use statistical analysis and properties to estimate the effects on the variable of interest—for instance how much exports change when foreign tariffs are reduced. The statistical methods allow one to try and control for the effects of other factors that may also affect that variable—in the case of increased exports to another country not only might the tariff change, but the country's economic growth (GDP) may also have changed. The statistical techniques used in econometric models allow one to obtain an estimate of the degree of confidence in the economic relationship (changes in exports due to tariff reductions), but they typically exclude many other potential explanatory variables that might be relevant (for instance were previously unavailable competing products suddenly available in that market, or did consumer preferences change?). Thus, econometric models provide statistical evidence of the size of relationships, but often do so in very general ways and one often has to be aware that some important economic factors could have been left out of the research, which can lead to inaccurate estimates of the policy change.

The other major modeling technique used at the Commission to estimate the impact of a change in trade policy on the US economy, exports and imports, is simulation modelling. In simulation modelling one builds an economic model to simulate the way one thinks a particular market (say the wheat market), group of markets (say wheat, corn, oilseeds and beef), or an entire economy (the U.S. or global economy) works. These models may rely on some econometric estimates of relationships, but largely rely on well accepted economic theory (generally a mathematical equation) of how markets work and then exactly match the theory to observed data, such as the US national income accounts. These models allow for more detailed representations of economic relationships, but they do not allow one to statistically test if the relationship is valid.

The models are fit, or calibrated, to the data collected and then a change is made to the policy variable of interest (for instance, a reduction in U.S. import tariffs on a large number of products) and an estimate of the effects is calculated (on imports, consumption and production), and precisely isolated, of the effect of that policy (tariff reduction) change. These models allow the actual tariffs to be used, and/or allow for simulating the effects of the policy change through a variety of other variables of interest (what might the effect be on

employment or overall national income, how do other sectors (for instance the automobile sector respond to steel tariff reductions). Whether econometric or simulation models are used many other things are usually happening simultaneously in an economy, and either approach will have its strengths and weaknesses in how these other things are treated. However it is important to keep in mind that both approaches attempt to isolate the policy change effect, while real world observed data are affected by many other things simultaneously. Thus in no case are the economic models attempts to predict the future, but rather to provide insights in the potential marginal effect of the policy changes. In the absence of such formal models one would be left to speculation or trend analysis, which can suffer from undisclosed bias in the analyst or lack transparency. While economic models can be complicated they typically clearly state their assumptions, data, and approaches, allowing other specialists to consider those details, or even change the assumptions and re-estimate the potential results. That reproducibility is important and often lacking in informal analysis.

Finally, there are longer term gains from openness, as low trade and investment barriers typically result in faster productivity gains beyond the reallocation effects that can occur in the short term. These dynamic effects of trade liberalization are often difficult to separate out from other positive factors such as well functioning institutions, good infrastructure, and investments in social capital such as education. Recent research has tended to show that countries more open to trade are likely to experience faster longer-run growth, other things being equal. As the Commission begins its second century, and with its state-of-the-art tool kit, it will likely continue to serve as a source of timely, independent, and objective industry and economic analysis on trade related issues to help the President and Congress understand the effects of new industries and economic forces affecting the United States and the dynamic global economy.

General Trade-Related Fact-Finding Investigations

General trade-related fact-finding reports were first authorized in section 332(g) of the Trade Act of 1930. The language was very general, indicating that “The commission shall put at the disposal of the President of the United States, the Committee on Ways and Means of the House of Representatives, and the Committee on Finance of the Senate, whenever requested, all information at its command, and shall make such investigations and reports as may be requested by the President or by either of said committees or by either branch of the Congress.”¹⁰⁹² The Commission has received a large number of requests under this statutory

¹⁰⁹² The Tariff Act of 1930 (Hawley-Smoot Tariff Act or Smoot-Hawley Act), Pub. L. No. 71-361, § 332(g), 46 Stat. 590, 698 (codified in portions of 19 U.S.C. § 1332(g)).

provision and the specific study requests typically have reflected the most important trade related issues of the day. Some of the earliest 332 requests related to important topics of the day, such as in 1932 on “Depreciated currency, effect upon imports of wood pulp and pulpwoods” (332-10) and “Depreciated currency” (332-11), evolving to more technical tariff related topics such as reports on American selling price conversion rates¹⁰⁹³ and customs valuations issues¹⁰⁹⁴, to studies on the competitiveness of U.S. industries.¹⁰⁹⁵ In more recent years the Commission has received requests to study digital trade,¹⁰⁹⁶ trade relations with Cuba¹⁰⁹⁷ and India¹⁰⁹⁸, small and medium sized enterprises,¹⁰⁹⁹ and intellectual property rights in China.¹¹⁰⁰ However, traditional commodities remain important, with a report on the competitiveness of U.S. rice in global markets¹¹⁰¹ and olive oil.¹¹⁰² Thus the Commission must not only be prepared to analyze some of the most cutting edge trade related issues in digital trade and intellectual property rights, but also traditional markets for agricultural commodities. To maintain this breadth requires flexibility in capabilities, particularly human capital, but also well thought out and generalizable frameworks for structured analysis. The Commission appears to have been able to address these challenges remarkably well.

The generalized framework that industry analysts and economists follow for Commission fact-finding investigations usually includes elements such as public hearings where interested parties and government officials, including members of Congress, can testify; surveys, including

¹⁰⁹³ *Products Subject to Duty on the American Selling Price Basis of Valuation; Conversion of Rates of Duty on Such Products to Rates Based on Values Determined by Conventional Valuation Methods*, TC Publication 181, Investigation No. 332-47 (August 1966).

¹⁰⁹⁴ USITC, *Customs Valuations*, TC Publication 180, Investigation No. 332-48 (February 1966).

¹⁰⁹⁵ USITC, *Competitiveness of U.S. Industries*, TC Publication 473, Investigation No. 332-65 (April 1972).

¹⁰⁹⁶ USITC, *Digital Trade in U.S. and Global Economies, Part 1*, USITC Publication 4415, Investigation No. 332-531 (July 2013); *Digital Trade in the U.S. and Global Economies, Part 2*, USITC Publication 4485, Investigation No. 332-540 (August 2014).

¹⁰⁹⁷ *Overview of Cuban Imports of Goods and Services and Effects of U.S. Restrictions*, USITC Publication 4597, Investigation No. 332-552 (March 2016).

¹⁰⁹⁸ USITC, *Trade and Investment Policies in India, 2014–2015*, USITC Publication 4566, Investigation No. 332-550 (September 2015).

¹⁰⁹⁹ USITC, *Small and Medium-Sized Enterprises: Overview of Participation in U.S. Exports*, USITC Publication 4125, Investigation No. 332-508 (January 2010); *Small and Medium-Sized Enterprises: Characteristics and Performance*, USITC Publication 4189, Investigation No. 332-510 (November 2010); *U.S.-Korea Free Trade Agreement: Effects on U.S. Small and Medium Sized Enterprises*, USITC Publication 4393, Investigation No. 332-536 (May 2013); *Trade Barriers that U.S. Small and Medium-Sized Enterprises Perceive as Affecting Exports to the European Union*, USITC Publication 4455, Investigation No. 332-541 (March 2014).

¹¹⁰⁰ USITC, *China: Intellectual Property Infringement, Indigenous Innovation Policies, and Frameworks for Measuring the Effects on the U.S. Economy*, USITC Publication 4199, Investigation No. 332-514 (November 2010); *China: Effects of Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy Investigation*, USITC Publication 4226, Investigation No. 332-519 (May 2011).

¹¹⁰¹ USITC, *Rice: Global Competitiveness of the U.S. Industry*, USITC Publication 4530, Investigation No. 332-549 (April 2015).

¹¹⁰² USITC, *Olive Oil: Conditions of Competition between U.S. and Major Foreign Supplier Industries*, USITC Publication 4419, Investigation No. 332-537 (August 2013).

extensive, detailed questionnaires or sometimes phone surveys, of U.S. producers, importers, and consumers; domestic and foreign field visits that often include face-to-face interviews with industry, government, and academic experts; extensive reviews of the academic and business literatures; data collection, compilation and analysis; and the development and application of quantitative techniques. Commission analysis usually incorporates numerous analytical approaches, ranging from statistical, including formal econometric analysis to sophisticated simulation modeling, such as partial and general equilibrium economic models. In order to support its general equilibrium modeling capabilities, the Commission uses both a global database, the Global Trade Analysis Project (GTAP) database, and a more detailed (500 sector) data-base of the U.S. economy in a model called the United States Applied General Equilibrium (USAGE) model. Commission staff have historically developed sophisticated partial equilibrium models capable of examining specific products and tariff changes that are regularly used by outside experts and have a global reputation. The Commission staff also work closely with academics to develop new and innovative approaches to economic modeling, such as the USAGE model, and to data collection, particularly in the areas of tariff and non-tariff barriers.

Many of the staff efforts developed in the context of staff-generated, rather than customer requested, products provide a venue for professional review and comment before the techniques are incorporated into formal Commission reports. These staff products also keep the Commission and trade policy-makers in Congress and the executive branch informed of the latest issues in global trade and economic developments. The array of staff products include staff research papers, short briefing papers known as Executive Briefings on Trade, and academic conference and journal publications. An important data gathering and staff training product is the Industry and Trade Summary series. These reports on select products allow the analyst to gather, and develop where necessary, information on product uses, the role of U.S. and foreign producers in the U.S. and global markets, tariff data and classification of the products being studied; and they also analyze the competitiveness of the U.S. industry. Staff also author articles for an internal, web-based journal *The Journal of International Commerce & Economics*. All of these efforts are aimed at ensuring the Commission staff have the quantitative tools, data, industry knowledge, and economic expertise required to rapidly provide independent and objective answers to the wide range of questions the President and Congress may have, and also inform the public and broader trade policy community.

Some of the section 332 requests the Commission receives are for “one off” studies and some are recurring, where the requestor either asks for series of reports or regularly requests an update of a previous study. A good example of a study for which the Commission has received regular update requests is the *Import Restraints* study. This series assesses the potential impact on the U.S. economy from the removal of all remaining “significant” import restraints, typically relatively high tariffs, and was initiated by Congress in 1993, and then USTR requested

numerous follow up studies. These studies have effectively tracked the on-going liberalization of the U.S. economy since 1993, and they identify those sectors for which significant protection remains. The reports illustrate the relative openness of the U.S. economy, and the USTR often uses the Commission reports as part of its submission to the World Trade Organization's Trade Policy Review Mechanism of the United States. The report includes detailed industry discussions of those sectors currently receiving relatively high tariff protection and then uses a large-scale general equilibrium economic simulation model to assess the direct and indirect effects of the protection provided. Thus one can estimate the "positive" effects on the protected sector, but also the negative effect of the protection on other sectors, consumers, and overall economic welfare. In the Sixth update of *Import Restraints*,¹¹⁰³ the Commission provided a special chapter on U.S. trade policy since 1934 (the year the Reciprocal Trade Agreements Act was passed). In Figure 3.2 on 64, U.S. trade weighted tariffs on dutiable imports and historical periods, 1930–2008, the Commission traced the arc of tariff changes in this period of U.S. global engagement on trade. Tariffs dropped from a peak of nearly 60 percent in 1932 to approximately 5 percent in 2008.¹¹⁰⁴ In the Sixth update the Commission also summarized the results of its previous studies in Box 2.1 on page 10. The Commission analysis shows a steady decline in potential welfare gains from the removal of these restraints, from 0.424 percent of GDP in 1991 to 0.019 percent of GDP in 2013, with a very significant decrease in welfare losses coming with the removal of U.S. protection on textiles and apparel with the ending of the Agreement on Textiles and Clothing under the Uruguay Round.¹¹⁰⁵ This series of studies demonstrates the remarkable decline in significant tariff related protection in the U.S. economy and helps illustrate to trading partners the extent of its openness. In addition in the 2002 edition (332-325, 2002) of the report the Commission provided an extensive discussion on labor transitions (chapter 7) that might arise from the liberalization scenarios. As described in the chapter,

The USITC model results in Chapter 2 showed that if all significant U.S. import restraints had been unilaterally removed in 1999, approximately 175,000 FTE workers would be displaced from their current industries and would need to seek employment in industries other than those being liberalized. Approximately 155,000 of these FTE workers would be in the textile and apparel sectors. Potential transition costs of concern

¹¹⁰³ USITC, *The Economic Effects of Significant U.S. Import Restraints: Sixth Update 2009*, USITC Publication 4094, Investigation No. 332-325 (September 2009).

¹¹⁰⁴ The Commission notes, following Irwin (1998), that the high tariffs in the 1930s were very much affected by the combination of price deflation and the widespread use of specific tariffs, which had the effect of increasing the *ad valorem* rate. Further, the Commission calculated the rates based on dutiable imports, so did not include goods and trade flows for which tariffs are zero. If duty free trade flows were included the average U.S. tariff drops even further.

¹¹⁰⁵ Note that years reported for welfare gains are not the years of the studies, but rather the years for which the economic models were based on for the analysis.

to policy-makers include lost income during spells of unemployment, unemployment insurance and other transitional assistance, and potential loss of the value of training and experience for workers who switch industries. On average, workers displaced as a result of unilateral U.S. liberalization of all significant import restraints likely would experience longer spells of unemployment than other displaced workers. Approximately 10 percent of workers displaced due to unilateral liberalization of all U.S. import restraints likely would experience severe wage decreases, defined as wage cuts of more than 20 percent in their new jobs . . . The workers who would be displaced in the event of unilateral trade liberalization likely would be concentrated in the Southeast, particularly in the Carolinas, due largely to the high share of apparel and textile workers among such workers. They would be more likely to leave the labor force after displacement, in part because of the higher proportion of female workers in textiles and apparel and the lower degree of attachment of female workers to the labor force. (See pages 167 and 168).

This analysis, while not a complete estimate of the economic costs of these labor market effects, demonstrates the extent to which the Commission analysis could provide comprehensive analysis of labor market effects. This kind of analysis came out well before the recent important work of Autor, Dorn, and Hanson, on the labor market effects of rapid increases in imports. The Commission updated the analysis in the 2007 edition of the report (332-325, 2007).

Other Import Restraints updates also included special chapters on global supply chains (7th update, 2011)¹¹⁰⁶ and the role of services in manufacturing (Eighth update, 2013).¹¹⁰⁷ Both special chapters provided in-depth discussions and analysis of two very important trends in the global economy and provided policy makers with important insights on these issues. A significant finding from the Seventh update on global supply chains demonstrated that despite the significant bilateral trade deficit with China, imports from China made up a very small share (approximately 2 percent) of total U.S. consumption, and further that there was significant U.S. value added in its imports from both China and Mexico, and that returned U.S. value added from its exports was among the largest in the world.¹¹⁰⁸ The Eighth update illustrated the growing importance of services as a source of comparative advantage for U.S. manufacturing exports, and that therefore, significantly more services are actually exported, and dependent on foreign markets, than traditional trade data would suggest, as their value is embedded in

¹¹⁰⁶ *The Economic Effects of Significant U.S. Import Restraints: Seventh Update 2011*, USITC Publication 4253, Investigation No. 332-325 (August 2011).

¹¹⁰⁷ *Economic Effects of Significant U.S. Import Restraints: Eighth Update*, USITC Publication 4440, Investigation No. 332-325 (December 2013).

¹¹⁰⁸ USITC Publication 4253, Investigation No. 332-325 (August 2011).

manufacturing goods exports.¹¹⁰⁹ The report also demonstrated that increasingly manufacturing is becoming more difficult to separate out from services. All of these section 332 studies used the integrated industry and economic analysis approach that has become the hallmark of Commission research. These studies combine in-depth knowledge of specific industries and sectors, as well as leading edge economic analysis, where the industry experts and economic experts work in an integrated fashion to provide relevant and realistic analysis, a unique feature of the Commission's analytical process. Often such analysis done by academics or industry experts alone may either miss significant real world aspects of the agreement, such as specific tariff cuts actually agreed to, phase-in periods, or entire chapters of the agreement. The latter also often lack the use of leading edge economic tools and data.

Another recent, and important section 332 study, the *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures, 2016 Report*,¹¹¹⁰ is an excellent example of the integrated approach, industry and economic expertise, qualitative and quantitative analysis that exemplifies the Commission approach. The report was requested in the Bipartisan Congressional Trade Priorities and Accountability Act of 2015, section 105 (f)(2) requiring the Commission to submit two reports to Congress, one in 2016 and a second not later than mid-2020, on the economic impact of trade agreements implemented under trade authorities procedures since 1984.¹¹¹¹ The study covered the multilateral Uruguay Round, as well as 15 bilateral and regional trade agreements.¹¹¹² In the study the Commission summarized the provisions in the various agreements, applied various economic modeling approaches from economy-wide to industry specific, a series of industry case studies, and a review of the literature on the effects.¹¹¹³ This complex study provided econometric estimates of the effects of agreements on international investment, intellectual property and merchandise trade balances with partner countries. The study included 10 case studies discussing the effects of agreements on products such as pork, motor vehicles, textiles, steel, express delivery, and telecommunications.

Pre-Negotiation Advice

Since the 1962 Trade Expansion Act,¹¹¹⁴ Congress has required that the Administration receive advice from the Commission, in the form of probable economic effect studies (in the 1962 legislation this was section 221 but since the 1974 Trade Act this requirement has come under section 131) prior to entering into negotiations. These studies are not made public as they

¹¹⁰⁹ USITC Publication 4440, Investigation No. 332-325 (December 2013).

¹¹¹⁰ USITC Publication 4614, Investigation No. 332-555 (June 2016).

¹¹¹¹ Pub. L. No. 114-26, § 105(f)(2), 129 Stat. 320, 349 (codified as amended at 19 U.S.C. § 4204).

¹¹¹² USITC Publication 4614, Investigation No. 332-555 (June 2016).

¹¹¹³ *Ibid.*

¹¹¹⁴ Trade Expansion Act of 1962, Pub. L. No. 87-794, 76 Stat. 872.

contain confidential advice to negotiators. The 1974 Act had the following language (the 1962 Act, and subsequent acts had very similar language) requesting that the Commission provide advice on a list of articles provided by the President that might be subject to negotiation, and that analysis should:

- investigate conditions, causes, and effects relating to competition between the foreign industries producing the articles in question and the domestic industries producing the like or directly competitive articles;
- analyze the production, trade, and consumption of each like or directly competitive article, taking into consideration employment, profit levels, and use of productive facilities with respect to the domestic industries concerned, and such other economic factors in such industries as it considers relevant, including prices, wages, sales, inventories, patterns of demand, capital investment, obsolescence of equipment, and diversification of production;
- describe the probable nature and extent of any significant change in employment, profit levels, and use of productive facilities, and such other conditions as it deems relevant in the domestic industries concerned which it believes such modifications would cause; and
- make special studies (including studies of real wages paid in foreign supplying countries), whenever deemed to be warranted, of particular proposed modifications affecting United States manufacturing, agriculture, mining, fishing, labor, and consumers, utilizing to the fullest extent practicable United States Government facilities abroad and appropriate personnel of the United States.¹¹¹⁵

In addition, subsection (e) of the statute directed the Commission to hold public hearings.¹¹¹⁶ Thus Congress clearly laid out very specific analytical factors to be considered in determining the probable economic effects on the industries that produced the articles potentially subject to negotiations. Unlike earlier “peril point” analysis the Commission was not to identify specific tariff rates, below which domestic industries might be injured, but instead to analyze the broader economic effects on these industries and describe any significant changes in employment, profits, and capacity utilization. To conduct this analysis, the Commission employs various quantitative and qualitative tools, ranging from formal economic models to in-depth industry knowledge and public hearings. In fact, public hearings, allowing industry representatives and other interested parties to present their views either in person or in written submissions, and allowing the Commissioners to ask questions and delve more deeply into the potential issues has been a hallmark of much of the Commission’s industry and economic analysis. Under the 1962 Act’s section 221 the Commission had 6 months to

¹¹¹⁵ 19 U.S.C. § 2151(d).

¹¹¹⁶ 19 U.S.C. § 2151(e).

complete its analysis;¹¹¹⁷ by the 1974 Act's section 131 the Commission had only 90 days to conduct the analysis in certain circumstances.¹¹¹⁸

The evolution of Congressional language from the 1962 Act to the 1974 Act demonstrated increasing interest in barriers other than traditional tariff and import restrictions, and also added consumer effects where the earlier language did not reference consumers. By 1998 Congress had added other subsections to section 131 that allowed, but did not require, the President to request that the Commission, under subsection (c) include in its investigations the effects of modifications of barriers on domestic workers and industry sectors. Another modification in 1988, adding section (d), inserted language that allowed the President, if so desired, to request Commission analysis over a broad array of potential areas, including, for example, examining foreign production, consumption and trade impacts, employment, capacity utilization, prices, wages, and investment.¹¹¹⁹ Section (d) further provides for the possibility of the President requesting special studies covering manufacturing, agriculture, mining, fishing, labor, consumers, services, intellectual property and investment.¹¹²⁰ However, these particular sections (c) and (d), are discretionary provisions of the statute not required provisions, and thus the President has the option of using them. These provisions have rarely, if ever, been used by the President to request pre-negotiation studies by the Commission. This may be partly due to the complicated analysis that would be required to investigate these issues, and the challenge the President might face in providing specific guidance to the Commission on how to approach the questions without revealing too much about the negotiating strategy, combined with the generally tight timelines the administration faces when starting negotiations. However, these added sections typically align with Congressional statements on principal negotiating areas and thus the Commission has developed substantive expertise and analytical capabilities in these areas and uses those capabilities in the post-negotiation (section 2104)¹¹²¹ and discretionary requests (section 332)¹¹²² studies it conducts. In fact, below we will describe a recent example where the USTR requested a section 332 investigation on the Information Technology Act Expansion, a WTO plurilateral agreement that members recently concluded. This request to the Commission appears to include elements of the discretionary provisions.

Presidential request language typically provides very specific instructions. In a 2013 request from USTR to the Commission it asked for a report on the probable economic effect of providing "duty-free treatment for imports of products from all of the EU member states on (i) industries in the United States producing like or directly competitive products, and (ii)

¹¹¹⁷ Trade Expansion Act of 1962, Pub. L. No. 87-794, § 221(b), 76 Stat. 872, 875.

¹¹¹⁸ See 19 U.S.C. § 2151(b).

¹¹¹⁹ 19 U.S.C. § 2151(d)(2).

¹¹²⁰ 19 U.S.C. § 2151(d)(4).

¹¹²¹ Pub. L. No. 107-210, § 2104, 116 Stat. 933, 1008 (2002) (codified as amended at 19 U.S.C. § 3804).

¹¹²² Pub. L. No. 71-361, § 332, 46 Stat. 590, 698 (codified in sections of 19 U.S.C. § 1332).

consumers.” The request specified that the Commission “consider each article in chapters 1 through 97 of the Harmonized Tariff Schedule of the United States (HTS) for which tariffs will remain, taking into account implementation of U.S. commitments in the World Trade Organization.” The request further specified that the Harmonized Tariff System (HTS) in effect during 2013 and trade data for 2012 be used in the analysis. It is necessary to specify which version of the HTS to use, as product classifications can change with HTS updates, and to specify which year of trade data should be used, as trade flows can vary substantially from year to year. While seemingly minor details, these criteria are important to ensure that the Commission is conducting its analysis on precisely the parameters the USTR believes will be needed during the negotiations. Further, as conditions in particular industries and product markets can vary from year to year these details are important for the Commission’s industry analysts and economists in preparing their analysis.

The pre-negotiation advice is intended to provide the President’s trade negotiators comprehensive and independent analysis of the potential effects of the negotiations on the U.S. economy and specific industries, and can supplement analysis provided by the potentially affected industries themselves or other U.S. government agencies. The Commission analysis is typically confidential and not made public to allow U.S. negotiators to develop negotiating strategies.

A public example of the kind of advice USTR can request prior to negotiations, though in this case in those discretionary elements in section 131(d), can be found in its request on the Information Technology Agreement Advice and Information on the Proposed Expansion Parts 1 and 2.¹¹²³ USTR asked the Commission to provide advice and information on the draft list of products for ITA expansion in two reports. The Commission’s first report described the uses of “each of the products on the list for both information and communications technology (ICT) and non-ICT purposes.”¹¹²⁴ USTR also identified the products that U.S. industry and other interested parties view as import-sensitive. In its second report, the Commission provided information about the potential competitive conditions in foreign markets.¹¹²⁵ The Commission discussed tariffs in major markets, identified major producing countries and leading U.S. export markets, as well as the leading sources of U.S. imports.¹¹²⁶ The Commission also reported on

¹¹²³ USITC, *The Information Technology Agreement: Advice and Information on the Proposed Expansion, Part 1*, USITC Publication 4355, Investigation No. 332-532 (October 2012); *The Information Technology Agreement: Advice and Information on the Proposed Expansion, Part 2*, USITC Publication 4392, Investigation No. 332-536 (February 2013).

¹¹²⁴ USITC, *The Information Technology Agreement: Advice and Information on the Proposed Expansion, Part 1*, USITC Publication 4355, Investigation No. 332-532 (October 2012).

¹¹²⁵ USITC, *The Information Technology Agreement: Advice and Information on the Proposed Expansion, Part 2*, USITC Publication 4392, Investigation No. 332-536 (February 2013).

¹¹²⁶ *Ibid.*

potential benefits of the ITA expansion to selected subsectors of the U.S. industry.¹¹²⁷ The Commission approach was to examine each tariff line identified by USTR. To give some idea of the challenges involved for the analysts we reproduce two paragraphs from the report's scope and approach section, 1-2:

To gather information for the second report, the Commission held a public hearing on November 8, 2012; interviewed industry associations, companies, and other federal agencies with related expertise by telephone, by email, and in person; and reviewed product literature and submissions made to the Commission in response to the Federal Register notice published on August 13, 2012 (appendix B). The Commission received a total of 11 written submissions, which are summarized in appendix D. The views and information contained in the submissions are incorporated into the Commission's report, as appropriate. The Commission also relied on data compiled by the WTO, U.S. Department of Commerce, United Nations, and other statistical sources for information on tariffs and trade.

The list of proposed expansion products transmitted to the Commission from the USTR is based on the 2007 Harmonized Schedule (HS). Because the ITA was signed in 1996, many of the products covered under the originally designated HS subheadings have shifted in the HS schedule to other subheadings. Therefore, the HS subheadings on the proposed product expansion list fall into 3 categories: (1) not currently covered under the existing agreement; (2) fully covered under the existing agreement; and (3) partially covered under the existing agreement. As the focus of this report is the benefits of expansion of ITA product coverage, the examination of overall benefits to U.S. industry in chapter 3 attempts to isolate the products that are not already covered under the existing agreement, and thus represent a true expansion of product coverage.

There were further complications that the Commission needed to address, but it is clear that to provide precise and accurate information to the requestor the Commission had to interpret the language in the request letter, as well as then match that language with available information and map product classification schemes to both complicated agreements as well as changing tariff classification schemes. Additionally, the information technology industry evolves very rapidly, developing new products regularly while many others face quick obsolescence. The analysis required not only deep understanding of the industry and its products, but also the intricacies of tariff classification schemes and how they change over time, and how these products are identified in various country tariff schedules and the WTO Information Technology Agreement.

¹¹²⁷ *Ibid.*

Further examples of public advice delivered to policy makers prior to negotiations, though perhaps better described as prospective rather than pre-negotiation advice, include the section 332 studies on a potential (at the time) Free Trade Agreement with Korea¹¹²⁸ and on an agreement that would include the United Kingdom in the NAFTA agreement.¹¹²⁹ In both of these studies the Commission conducted comprehensive analyses, including industry-specific and economy-wide analysis as to what might be the effects of such FTAs, very similar to those conducted under section 2104 of the 2002 Trade Act requiring the Commission to provide a comprehensive analysis of actually concluded agreements. Of course the main difference in the analysis in the prospective Korea FTA report and the later report on the actual Korea FTA produced under section 2104 was information on the actual agreement.

Post-Negotiation Analysis

In the 2002 Trade Act, with section 2104, Congress added the first of a new and very important set of requirements for the Commission. These new statutes required the Commission to provide assessments of the potential effects of agreements that have been negotiated by the President, but before they have been considered by Congress, and to also provide an assessment of all agreements signed under various Trade Acts, Fast Track, or Trade Promotion Authority. In addition to providing pre-negotiation advice the Commission was now being asked to assess the effects of the agreements the President actually negotiated. This was not the first time the Commission had conducted post agreement analysis—Congress had used section 332 over a number of years to ask the Commission to study various GATT agreements, and the USTR requested the Commission to analyze the potential effects of the NAFTA it had signed in 1992; that study was *The Economy-Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico*, USITC publications 2508 and 2516.¹¹³⁰ This study was particularly important for the Commission as it was the first time it used economy-wide modeling in the form of an applied general equilibrium model that allowed the Commission to generate insights on inter industry effects, employment, wages, and an overall economic welfare estimate rather than relying on numerous partial equilibrium affects across industries.

¹¹²⁸ USITC, *U.S. Korea FTA: The Economic Impact of Establishing a Free Trade Agreement (FTA) Between the United States and the Republic of Korea*, USITC Publication 3452, Investigation No. 332-425 (September 2001).

¹¹²⁹ USITC, *The Impact on the U.S. Economy of Including the United Kingdom in a Free Trade Arrangement with the United States, Canada, and Mexico*, USITC Publication 3339, Investigation No. 332-409 (August 2000). This study was little noted at the time since it did not correspond to an active negotiation.

¹¹³⁰ USITC Publication 2508, Investigation No. 332-317 (May 1992); USITC Publication 2516, Investigation No. 332-317 (May 1992).

Section 2104(f)(2) of the 2002 Trade Act officially required the Commission to conduct public post-agreement, economy-wide assessments.¹¹³¹ Two additional provisions asked the Commission to conduct an overall assessment of the Trade Promotion Authority related agreements: one directed the agency to assess the effect of all agreements signed from the Tokyo Round through the Uruguay Round and another provision required an assessment of all agreements signed between August of 2002 and April 2005. The Trade Acts of 2008 and 2016 continued these provisions requiring analysis of the potential effects of all agreements signed under the various legislative authorities for their duration.

In the statute the Commission was directed to assess the impact of an agreement on the U.S. economy as a whole and specific industry sectors, including GDP, exports, imports, aggregate employment and employment opportunities, the production, employment, and competitive position of industries likely to be affected by the agreement and the interests of U.S. consumers.¹¹³² The Commission was also to conduct a review of the relevant literature to help put its own analysis and economic estimates into the broader context of other analysis.¹¹³³ A limiting factor in the literature review efforts was that the Commission's analysis was usually the first to examine the actual agreement as opposed to the other studies that were making assumptions about what would be included in the agreement. The Commission was expected to complete the analysis and provide it to Congress within 90 days of the agreement being signed.¹¹³⁴ This requirement for a rapid analysis reflected the importance that Congress placed on the Commission's analysis, as it required receipt of the report before it would consider the Trade Agreement legislation. Congress made clear that the Commission's objective and independent report would play a critical role in informing its deliberations on the agreement.

The Commission has typically provided these assessments arranged chapter by chapter in a manner similar to the actual FTA negotiated by the President. As these chapters also usually reflect the principal negotiating interests of Congress as enumerated in the respective Trade Act it was critical that the Commission develop expertise and capabilities, and to be able to deploy those capabilities to conduct a comprehensive analysis of the agreements in the very short time period of 90 days. These reports typically provide a summary of the agreement as negotiated and, as with reports prepared under section 332 and pre-negotiation requests, they combine extensive qualitative and quantitative analysis.

The reports often focus their quantitative analysis on the market access chapters, which describe the specific tariff and tariff rate quota commitments for goods. Thus partial and/or

¹¹³¹ Pub. L. No. 107-210, § 2104(f)(2), 116 Stat. 933, 1012–13 (2002) (codified as amended at 19 U.S.C. § 3804(f)(2)).

¹¹³² Pub. L. No. 107-210, § 2104(f)(2), 116 Stat. 933, 1012–13 (2002).

¹¹³³ *Ibid.*

¹¹³⁴ *Ibid.*

general equilibrium simulation models are used to simulate the potential effects on production, consumption, trade, prices, wages, employment, and overall welfare effects.¹¹³⁵ Such models are largely accepted by economists as effective to illustrate the likely isolated effects of the changes in those variables. However, it is much more difficult to quantify commitments in services, investment, intellectual property rights (IPR), and various other behind the border non-tariff measures (NTMs), such as regulatory changes related to technical standards or health and safety. The difficulty is that the commitments are not usually quantitative in nature, but reflect changes in legislative or regulatory language that is challenging to translate into the effects in their respective markets. Further, while many economic models contain information about services this information is less detailed and often lacks estimates of the level of protection provided. While investment is also often included in models, like with services there is a dearth of information on foreign direct investment by country and sector, and similarly little quantitative information on impediments to this investment. For IPR there are very few models that explicitly include IPR as a factor in production, and again, information is usually limited. The economics profession has worked to enhance its abilities to identify and quantify various NTMs, including in services and FDI, and while this work has progressed and such estimates could then be included in these economic models the general view is that these estimates are at this point still too uncertain to include in core analysis of effects. It might be useful for the Commission to include analysis examining alternative scenarios with respect to potential reductions in these barriers to illustrate for policy-makers the potential size of the effects in the context of the traditional market access measures. Including such analysis in an integrated framework could usefully put the various negotiated outcomes into context. Efforts to quantify such effects are likely important as many of these areas are ones that reflect both Congressional and Presidential negotiating priorities. The Commission, particularly but not exclusively in its recent study on the economic impact of trade agreements implemented under various trade authorities,¹¹³⁶ has used econometric analysis to estimate the potential effects of commitments in these NTM areas. A challenge for the Commission, and any economists, in using econometric techniques to estimate effects is that enough time must pass before the techniques can estimate the potential effects, which is essentially impossible given the limited timeframe provided in the statute to deliver the study. Still, while the insights from those analyses are very useful, they perhaps leave policy-makers and other stakeholders wondering about the net overall effects of the agreements.

Congress has also increased its requests for the Commission to conduct more post-agreement assessments. These include more regular assessments of agreements previously entered into,

¹¹³⁵ General equilibrium models can report all of these results while partial equilibrium can only provide information on production, consumption, trade and prices.

¹¹³⁶ USITC, *Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures*, 2016 Report, USITC Publication 4614, Investigation No. 332-555 (June 2016).

what might be described as deeper assessments related to labor and manufacturing impacts, and numerous other specific provisions. There have been at least 3 such reports. The first, *The Impact of Trade Agreements: Effect of the Tokyo, U.S.-Israel FTA, U.S.-Canada FTA, NAFTA and the Uruguay Round* (TA-2111-1, 2003) was requested in the 2002 Trade Act. As the title indicates the study was a comprehensive assessment of the potential impacts of all trade agreements listed. Congress introduced this section, and has since carried the request through in updated language in 2015 trade legislation, in order to have the Commission provide an in-depth, objective assessment of the agreements negotiated under previous authorities. These studies are complicated undertakings. As stated in the abstract for the TA-2111-1:

Assessing the economic impact of the five specified agreements on the United States is complicated by the difficulty in quantitatively specifying many of the actual policies implemented by the agreements, by the difficulty in disentangling these effects from the many other changes that have taken place over the past 25 years affecting the national economy, and by the difficulty of isolating the effects of the agreements from each other, since their implementation often overlaps.¹¹³⁷

As is usually the case the Commission approach was to use several types of analysis and included an extensive review of the literature. Industry case studies, hearing testimony and submissions from interested parties, trend analysis of specific industries, and econometric and economic simulation models were used to provide qualitative and quantitative insights. A similar study was conducted in 2005, *The Impact of Trade Agreements Implemented Under Trade Promotion Authority*, under section 2103(c)(3)(B) of the Trade Act of 2002,¹¹³⁸ and in 2016 the Commission prepared a report on *The Economic Impact of Trade Agreements Implemented Under Trade Authorities Procedures, 2016 Report*¹¹³⁹ as required under section 105(f)(2) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015. With these additional requirements beginning in 2002, and continuing through the 2015 trade legislation, Congress appears to be signalling that it values Commission analysis of all agreements signed, not only immediate assessments prior to Congressional consideration.

The Commission's assessments often can only quantify certain parts of the agreement and, importantly, the Commission's approach is to try and isolate the effects of the agreement, and to ignore other trends affecting trade, such as economic growth, technology and preference changes, and other non-agreement factors. As trade agreements have evolved from largely market access, tariff reduction agreements to broader and deeper economic agreements, often referred to as "economic integration agreements" that address non-tariff, behind the border

¹¹³⁷ USITC Publication 3621, Investigation No. TA-2111-1, at iii (August 2003).

¹¹³⁸ Pub. L. No. 107-210, § 2103(c)(3)(B), 116 Stat. 933, 1007 (2002) (codified as amended at 19 U.S.C. § 3803(c)(3)(B)).

¹¹³⁹ USITC Publication 4614, Investigation No. 332-555 (June 2016).

issues (often NAFTA is identified as one of the first very deep and broad agreements), this has created challenges for the Commission's quantitative work. Economists have generated a substantial body of quantitative work around the tariff effects and therefore are more confident in those estimates. The economics profession continues to develop new techniques to try and measure behind the border effects in areas such as standards, sanitary and phyto-sanitary commitments, intellectual property rights, and other effects that affect institutional functioning and quality (See Feenstra (1995), Anderson (2003) and Koopman and Ferrantino (2014)). Certain kinds of economic models used to analyze changes in trade flows, called gravity equations, highlight the importance of these non-tariff effects in trade agreements (see Bergstran and Baier (2007 and 2009) and Bergstrand, Larch, and Yoto (2013)). However gravity models cannot generate sector-specific results, and until recently, have not been able to account for the fact that economies at a particular point in time face constraints on the amount of capital and labor available for use in production. Thus the Commission has focused on providing quantitative assessments of the market access commitments and provided limited analysis of other agreement commitments, either through gravity estimation, trend analysis and/or case study discussions. It is particularly important for economists and Commission researchers to continue to find ways to provide a more completely integrated and comprehensive assessment of the potential economic effects of these agreements, as well as work to put the analysis into the broader context of economic trends driving trade and employment.

While the Commission has invested significantly in developing world class capabilities in qualitative and quantitative approaches to provide a more realistic framework for agreement assessment, its analysis is often taken out of context by both trade supporters and opponents. The very fact that the Commission works to isolate the effects of the agreement from other factors means it is not forecasting trade flows, balances, output, or prices. Many critics have claimed the Commission analysis is wrong because it either underestimated or overestimated various effects in its quantitative analysis by comparing actual trade flows, trade balances, etc. in the years following an agreement. Such a comparison is faulty. If the opponents or proponents of trade were comparing their own isolated estimates of the agreement to the Commission estimates then the comparison would be more relevant. A simple way to understand the faulty comparison is to examine changes in trade flows between the United States and countries for which no agreements have been signed, for example U.S. and EU trade or U.S. and Brazilian trade. With no negotiated trade policy changes trade has grown in both of these examples, due to other factors such as GDP growth, changing comparative advantage, and changes in prices due to other factors (for example, falling prices in weak commodity

markets). As the Commission works to isolate such effects, critics should do the same if they want to conduct a realistic comparison.¹¹⁴⁰

Conclusions

Over the 100-year history of the Commission, it has been asked to provide in-depth industry and economic analysis by Congress, the President and USTR. While there are numerous legislative requirements, this piece has described why Congress seeks such expert advice from an independent agency, initially to try to remove politics from setting tariffs, and then later, to ensure that Congress and the President have a source of unbiased and objective analysis on possible policy changes. Unlike industry and economic analysts in the Administration Commission analysts have no policy role and are free to provide independent analysis. Unlike academics, Commission analysts have the time and expertise that cuts across both in-depth industry knowledge and knowledge of advanced economic techniques. As a result Commission analysis is usually balanced, detailed, timely, accurate, and relevant.

We see that within 14 years of its founding, in 1930, with the inclusion of section 332 in the 1930 Trade Act that Congress recognized that it and the President could benefit from this kind of expertise to answer important commercial questions of the day. This has led to over 500 studies under this statute for Congress and the President in the intervening 86 years, and increasing use of this statute since the 1970s. Further, Congressionally-required Commission input and advice prior to actual negotiations began with the early “peril point” tariff analysis followed by section 131 probable economic effects advice. Finally, in 2002 Congress required that the Commission provide assessments after agreements were negotiated, but before they were considered by Congress. Congress also instituted an ongoing request for post-implementation assessments of all agreements signed under the various authorities delegating negotiating responsibility to the President. As a result of the evolution of statutory changes we see that Commission industry and economic analysis has been playing an increasingly important role in informing U.S. trade policy based on independence and facts.

¹¹⁴⁰ The Commission has, through staff work and joint work with academics, conducted various exercises in model validation. One good example relates to NAFTA, see Maureen Rimmer and Peter Dixon, “Identifying the Effects of NAFTA on the U.S. Economy Between 1992 and 1998: A Decomposition Analysis,” Global Trade Analysis Project (April 2015), <http://tinyurl.com/gtap4657>. In this validation work one tries to bring into the modelling framework observed changes in other variables, such as GDP, exchange rates, etc. that occurred in the post implementation period to illustrate the impact on model results. This work illustrates that while estimates such as the Commission generates are imperfect, that they actually perform much better than just assuming trend growth.

