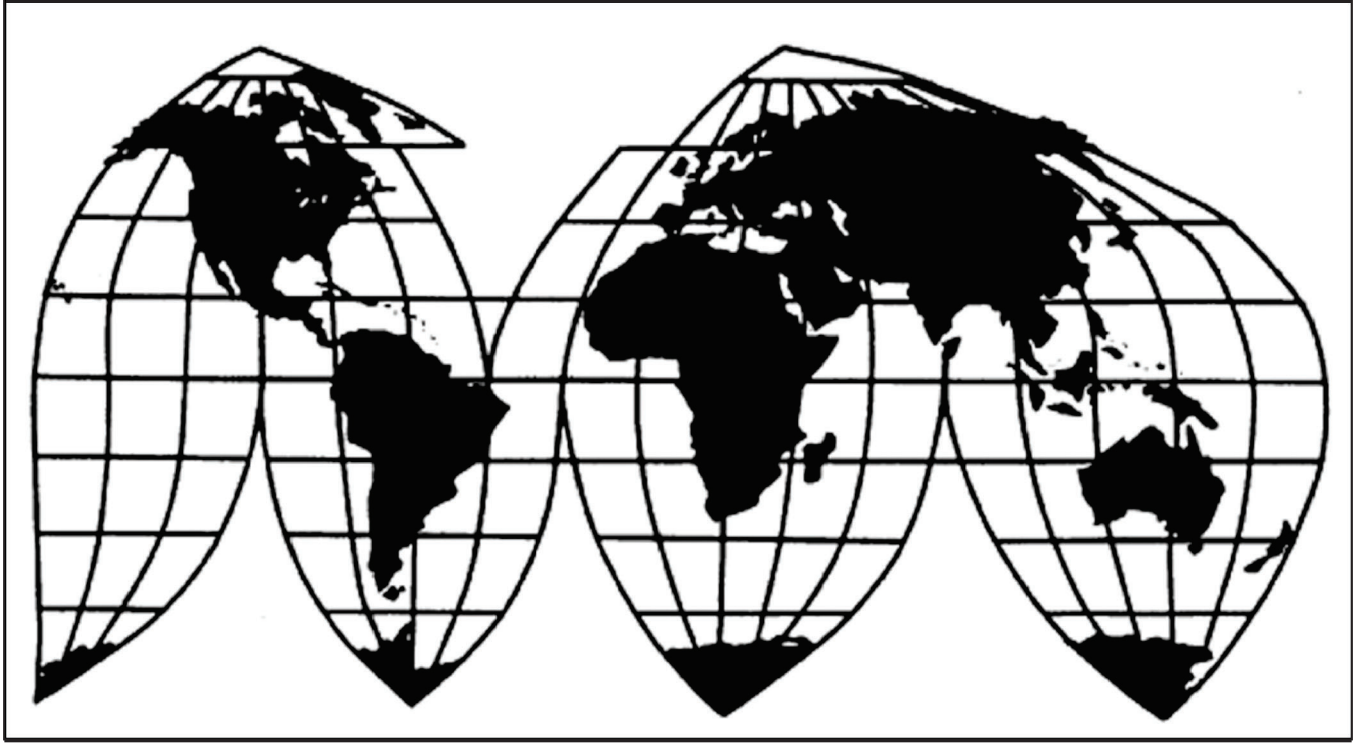
Passenger Vehicle and Light Truck Tires from Korea, Taiwan, Thailand, and Vietnam

Investigation Nos. 701-TA-647 and 731-TA-1517-1520 (Final)

Publication 5212 **July 2021**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Jason E. Kearns, Chair
Randolph J. Stayin, Vice Chair
David S. Johanson
Rhonda K. Schmidtlein
Amy A. Karpel

Catherine DeFilippo
Director of Operations

Staff assigned

Jordan Harriman, Investigator
Keysha Martinez, Investigator
Raymond Cantrell, Industry Analyst
James Horne, Economist
David Boyland, Accountant
Zachary Coughlin, Statistician
Courtney McNamara, Attorney
Mary Beth Jones, Supervisory Investigator

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Passenger Vehicle and Light Truck Tires from Korea, Taiwan, Thailand, and Vietnam

Investigation Nos. 701-TA-647 and 731-TA-1517-1520 (Final)

Publication 5212

July 2021

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

Appendixes

Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets in confidential reports and is deleted and replaced with asterisks (***) in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-647 and 731-TA-1517-1520 (Final)

Passenger Vehicle and Light Truck Tires from Korea, Taiwan, Thailand, and Vietnam

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is materially injured by reason of imports of passenger vehicle and light truck tires ("PVLT tires"), provided for in subheadings 4011.10.10, 4011.10.50, 4011.20.10, and 4011.20.50 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV") from Korea, Taiwan, and Thailand, and to be subsidized by the government of Vietnam.[2] The Commission further found that imports of these products from Vietnam that Commerce has determined are sold in the United States at less than fair value are negligible and terminates the antidumping duty investigation concerning Vietnam.

BACKGROUND

The Commission instituted these investigations effective May 13, 2020, following receipt of petitions filed with the Commission and Commerce by United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC ("USW"), Pittsburgh, Pennsylvania. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of PVLT tires from Vietnam were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)), and that imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam were sold at LTFV within the meaning of 733(b) of the Act

[1] The record is defined in § 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

[2] Commissioner David S. Johanson dissenting.

(19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on January 29, 2021 (86 FR 7561). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the Commission conducted its hearing through written testimony and video conference on May 25, 2021. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of passenger vehicle and light truck tires ("PVLT tires") from Korea, Taiwan, and Thailand found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV") and imports of the subject merchandise from Vietnam that Commerce found to be subsidized by the government of Vietnam.[1] We find that imports of PVLT tires from Vietnam that are sold in the United States at LTFV are negligible and terminate that investigation.

I. Background

United Steel, Paper, and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union AFL-CIO, CLC, ("petitioner" or "USW") filed the petitions in these investigations on May 13, 2020. Representatives of USW appeared at the hearing accompanied by counsel and submitted prehearing and posthearing briefs, and final comments.[2]

Several respondent entities participated in these investigations. They include importers of subject merchandise: American Omni Trading LLC ("American Omni"); Americana Tire Y Wheel, division of Americana Development, Inc. ("Americana"); Atturo Tire Corp. ("Atturo"); Deestone Corporation Limited ("Deestone"); ITG Voma Corporation ("ITG Voma"); and Les Schwab Warehouse Center, Inc. ("Les Schwab"). Responding foreign producers/exporters participating include: Federal Corporation and Federal Tire North America LLC, (collectively "Federal"), a producer and exporter of subject merchandise from Taiwan and its affiliated importer; General Rubber (Thailand) Co. Ltd., a producer and exporter of subject merchandise from Thailand; Hankook Tire & Technology Co., Ltd., Hankook Tire America Corp., and Hankook Tire Manufacturing Tennessee, LP (collectively "Hankook"), a domestic producer of PVLT tires with its affiliated producer of subject merchandise in Korea and affiliated importer; Kenda Rubber Ind. Co., Ltd. and American Kenda Rubber Industrial Co. Ltd. ("Kenda"), a producer and exporter of subject merchandise from Vietnam and its affiliated importer; Linglong International Tyre (Thailand) Co. Ltd and Linglong Americas Inc. ("Linglong"), a producer and exporter of subject merchandise from Thailand and its affiliated importer; Nankang Rubber Tire

[1] Commissioner David S. Johanson dissenting. Commissioner Johanson determines that an industry in the United States is neither materially injured nor threatened with material injury by reason of imports of PVLT tires from Korea, Taiwan, and Thailand found by Commerce to be sold in the United States at less than fair value and imports of the subject merchandise from Vietnam that Commerce found to be subsidized by the government of Vietnam. *See Dissenting Views of Commissioner David S. Johanson*. He joins Sections I-VI(B) of the majority views, except as noted.

[2] In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its hearing through video conference held on May 25, 2021, as set forth in procedures provided to the parties on May 17, 2021. *Passenger Vehicle and Light Truck Tires from Korea, Taiwan, Thailand, and Vietnam*; *Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations,* 86 Fed. Reg. 7561 (Jan. 21, 2021).

Corp. Ltd. ("Nankang"), a producer and exporter of subject merchandise from Taiwan; Nexen Tire Corporation ("Nexen"), a producer and exporter of subject merchandise from Korea; Prinx Chengshan Tire (Thailand) Co., Ltd. ("Prinx"), a producer and exporter of subject merchandise from Thailand; Sentury Tire (Thailand) Co. Ltd., and Sentury Tire USA Inc. ("Sentury"), a producer and exporter of subject merchandise from Thailand and its affiliated importer; Sumitomo Rubber North America, Inc., Sumitomo Rubber USA, LLC, and Sumitomo Rubber (Thailand), Ltd. (collectively "Sumitomo"), a domestic producer of PVLT tires with its affiliated producer and exporter of subject merchandise in Thailand and its affiliated importer; and Zhongce Rubber (Thailand) Co. Ltd., a producer and exporter of subject merchandise from Thailand ("Zhongce"). Representatives of Atturo, General, Hankook, Linglong, Nexen, Nankang, Prinx, Sentury, Sumitomo, and Zhongce appeared at the hearing accompanied by counsel. A representative of the government of Taiwan also appeared at the hearing. Hankook and Nankang submitted individual prehearing briefs. Americana, American Omni, Atturo, Federal, Kenda, ITG Voma, Linglong, Nexen, Prinx, Sentury, Sumitomo, and Zhongce filed a joint prehearing brief ("Joint Respondents Prehearing Brief"). Les Schwab submitted a prehearing statement. Americana, American Omni, Atturo, Federal, Kenda, Hankook, ITG Voma, Linglong, Nankang, Nexen, Prinx, Sentury, Sumitomo, and Zhongce filed a joint posthearing brief ("Joint Respondents Posthearing Brief") and final comments.

Data Coverage. Except as noted, U.S. industry data are based on the questionnaire responses of 14 firms that accounted for all U.S. production of PVLT tires in 2020.[3] U.S. import data are based on official Commerce import statistics and questionnaire responses from 50 U.S. importers, accounting for 96.9 percent of U.S. imports from Korea, 66.2 percent of U.S. imports from Taiwan, *** percent of U.S. imports from Thailand, and *** percent of U.S. imports from Vietnam under HTS subheadings 4011.10.10, 4011.10.50, 4011.20.10, and 4011.20.50.[4] The Commission received responses to its questionnaires from 31 foreign producers of subject merchandise: three producers/exporters in Korea, whose exports accounted for approximately *** percent of imports of subject merchandise from Korea in 2020; six producers/exporters in Taiwan, whose exports accounted for approximately *** percent of imports of subject merchandise from Taiwan in 2020; 17 producers/exporters in Thailand, whose exports accounted for approximately *** percent of imports of subject merchandise from Thailand in 2020; and five producers/exporters in Vietnam, whose exports accounted for approximately *** percent of imports of subject merchandise from Vietnam in 2020.[5]

[3] Confidential Report ("CR"), Memorandum INV-TT-076 (June 10, 2021); Public Report *Passenger Vehicle and Light Truck Tires from Korea, Taiwan, Thailand, and Vietnam*, Inv. Nos. 701-TA-647 and 731-TA-1517-1520 (Final), USITC Pub. 5212 at I-4 (July 2021) ("PR").

[4] CR/PR at I-4 & IV-1.

[5] CR/PR at VII-3, VII-9, VII-16 & VII-25.

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the "domestic like product" and the "industry."[6] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[7] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[8]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by Commerce.[9] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is "necessarily the starting point of the Commission's like product analysis."[10] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[11] The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[12] No single factor is dispositive, and the Commission may

---

[6] 19 U.S.C. § 1677(4)(A).

[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(10).

[9] 19 U.S.C. § 1677(10). The Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value. *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[10] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Circ. Feb. 7, 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[11] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington Co. v. United States*, 747 F. Supp. 744, 748–52 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

[12] *See*, *e.g.*, *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the (Continued...)

consider other factors it deems relevant based on the facts of a particular investigation.[13] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[14]

B. Product Description

Commerce defined the scope of the imported merchandise under investigation as follows: [15]

> The scope of these investigations is passenger vehicle and light truck tires. Passenger vehicle and light truck tires are new pneumatic tires, of rubber, with a passenger vehicle or light truck size designation. Tires covered by these investigations may be tube-type, tubeless, radial, or non-radial, and they may be intended for sale to original equipment manufacturers or the replacement market.
>
> Subject tires have, at the time of importation, the symbol "DOT" on the sidewall, certifying that the tire conforms to applicable motor vehicle safety standards. Subject tires may also have the following prefixes or suffix in their tire size designation, which also appears on the sidewall of the tire:

(…Continued)
particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[13] *See*, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

[14] *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; *see also* S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[15] *Passenger Vehicle and Light Truck Tires From the Socialist Republic of Vietnam: Final Affirmative Countervailing Duty Determination*, 86 Fed. Reg. 28566 (May 27, 2021); *Passenger Vehicle and Light Truck Tires From Korea: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 28569 (May 27, 2021); *Passenger Vehicle and Light Truck Tires From Taiwan: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 28563 (May 27, 2021); *Passenger Vehicle and Light Truck Tires From Thailand: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 28548 (May 27, 2021); *Passenger Vehicle and Light Truck Tires From Vietnam: Final Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 28559 (May 27, 2021). With the exception of correcting a typographical error, Commerce did not otherwise modify the scope of these investigations. *Id.*

Prefix designations:
P—Identifies a tire intended primarily for service on passenger cars.
LT—Identifies a tire intended primarily for service on light trucks.

Suffix letter designations:
LT—Identifies light truck tires for service on trucks, buses, trailers, and multipurpose passenger vehicles used in nominal highway service.

All tires with a “P” or “LT” prefix, and all tires with an “LT” suffix in their sidewall markings are covered by these investigations regardless of their intended use.

In addition, all tires that lack a “P” or “LT” prefix or suffix in their sidewall markings, as well as all tires that include any other prefix or suffix in their sidewall markings, are included in the scope, regardless of their intended use, as long as the tire is of a size that fits passenger cars or light trucks. Sizes that fit passenger cars and light trucks include, but are not limited to, the numerical size designations listed in the passenger car section or light truck section of the Tire and Rim Association Year Book, as updated annually. The scope includes all tires that are of a size that fits passenger cars or light trucks, unless the tire falls within one of the specific exclusions set out below.

Passenger vehicle and light truck tires, whether or not attached to wheels or rims, are included in the scope. However, if a subject tire is imported attached to a wheel or rim, only the tire is covered by the scope.

Specifically excluded from the scope are the following types of tires:

(1) Racing car tires; such tires do not bear the symbol “DOT” on the sidewall and may be marked with “ZR” in size designation;

(2) pneumatic tires, of rubber, that are not new, including recycled and retreaded tires;

(3) non-pneumatic tires, such as solid rubber tires;

(4) tires designed and marketed exclusively as temporary use spare tires for passenger vehicles which, in addition, exhibit each of the following physical characteristics:

(a) The size designation and load index combination molded on the tire's sidewall are listed in Table PCT-1R (“T” Type Spare Tires for Temporary Use on Passenger Vehicles) or PCT-1B (“T” Type Diagonal

(Bias) Spare Tires for Temporary Use on Passenger Vehicles) of the Tire and Rim Association Year Book,

(b) the designation “T” is molded into the tire's sidewall as part of the size designation, and,

(c) the tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by Tire and Rim Association Year Book, and the rated speed is 81 MPH or a “M” rating;

(5) tires designed and marketed exclusively as temporary use spare tires for light trucks which, in addition, exhibit each of the following physical characteristics:

(a) The tires have a 265/70R17, 255/80R17, 265/70R16, 245/70R17, 245/75R17, 245/70R18, or 265/70R18 size designation;

(b) “Temporary Use Only” or “Spare” is molded into the tire's sidewall;

(c) the tread depth of the tire is no greater than 6.2 mm; and

(d) Uniform Tire Quality Grade Standards (“UTQG”) ratings are not molded into the tire's sidewall with the exception of 265/70R17 and 255/80R17 which may have UTGC molded on the tire sidewall;

(6) tires designed and marketed exclusively for specialty tire (ST) use which, in addition, exhibit each of the following conditions:

(a) The size designation molded on the tire's sidewall is listed in the ST sections of the Tire and Rim Association Year Book,

(b) the designation “ST” is molded into the tire's sidewall as part of the size designation,

(c) the tire incorporates a warning, prominently molded on the sidewall, that the tire is “For Trailer Service Only” or “For Trailer Use Only”,

(d) the load index molded on the tire's sidewall meets or exceeds those load indexes listed in the Tire and Rim Association Year Book for the relevant ST tire size, and

(e) either

(i) the tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by Tire and Rim Association Year Book, and the rated speed does not exceed 81 MPH or an “M” rating; or

(ii) the tire's speed rating molded on the sidewall is 87 MPH or an “N” rating, and in either case the tire's maximum pressure and maximum load limit are molded on the sidewall and either

(1) both exceed the maximum pressure and maximum load limit for any tire of the same size designation in either the passenger car or light truck section of the Tire and Rim Association Year Book; or

(2) if the maximum cold inflation pressure molded on the tire is less than any cold inflation pressure listed for that size designation in either the passenger car or light truck section of the Tire and Rim Association Year Book, the maximum load limit molded on the tire is higher than the maximum load limit listed at that cold inflation pressure for that size designation in either the passenger car or light truck section of the Tire and Rim Association Year Book;

(7) tires designed and marketed exclusively for off-road use and which, in addition, exhibit each of the following physical characteristics:

(a) The size designation and load index combination molded on the tire's sidewall are listed in the off-the-road, agricultural, industrial or ATV section of the Tire and Rim Association Year Book,

(b) in addition to any size designation markings, the tire incorporates a warning, prominently molded on the sidewall, that the tire is “Not For Highway Service” or “Not for Highway Use”,

(c) the tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by the Tire and Rim Association Year Book, and the rated speed does not exceed 55 MPH or a “G” rating, and

(d) the tire features a recognizable off-road tread design;

(8) Tires designed and marketed for off-road use as all-terrain-vehicle (ATV) tires or utility-terrain-vehicle (UTV) tires, and which, in addition, exhibit each of the following characteristics:

(a) The tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by the Tire and Rim Association Year Book, and the rated speed does not exceed 87 MPH or an “N” rating, and

(b) both of the following physical characteristics are satisfied:

(i) The size designation and load index combination molded on the tire's sidewall does not match any of those listed in the passenger car or light truck sections of the Tire and Rim Association Year Book, and

(ii) The size designation and load index combination molded on the tire's sidewall matches any of the following size designation (American standard or metric) and load index combinations:

American standard size	Metric size	Load index
26x10R12	254/70R/12	72
27x10R14	254/65R/14	73
28x10R14	254/70R/14	75

American standard size	Metric size	Load index
28x10R14	254/70R/14	86
30X10R14	254/80R/14	79
30x10R15	254/75R/15	78
30x10R14	254/80R/14	90
31x10R14	254/85R/14	81
32x10R14	254/90R/14	95
32x10R15	254/85R/15	83
32x10R15	254/85R/15	94
33x10R15	254/90R/15	86
33x10R15	254/90R/15	95
35x9.50R15	241/105R/15	82
35x10R15	254/100R/15	97

Passenger vehicle ("PV") tires are designed for use on standard-type passenger cars and associated vehicles such as sport utility vehicles ("SUVs"), cross over vehicles ("CUVs"), and other multipurpose passenger vehicles, whereas light truck ("LT") tires are those usually used specifically on light trucks or multipurpose passenger vehicles.[16] All PVLT tires sold in the U.S. market must meet the same National Highway Traffic Safety Administration ("NHTSA") standards and comply with NHTSA and United States Department of Transportation ("DOT") marking requirements.[17] PVLT tires, whether used by original equipment manufacturers ("OEMs") for new vehicles, or by consumers as replacements on used vehicles, are all subject to

[16] CR/PR at I-13.

[17] CR/PR at I-13, I-16 - I-19. NHTSA regulations require multiple markings on PVLT tire sidewalls certified for use in the United States. The specifications molded into the tire sidewall provide a wealth of information, including the tire brand name and manufacturer; the PVLT tire type, passenger "P" and light truck "LT"; tire dimensions and construction; rim diameter in inches and tire width in millimeters (mm); tube or tubeless; load index, and speed symbol; and the U.S. DOT identification number indicating that the tire meets all federal standards. Within the DOT designation is also the plant code where the tire was manufactured, and the year and date produced. Other designations include treadwear, traction, and temperature grades which provide a consumer with comparative producer and brand performance indicators for tires through NHTSA's Uniform Tire Quality Grading System. *Id.*

the same motor vehicle standards for safety, performance, quality, grade, and marking.[18] In the U.S. market, PVLT tires typically range from 13 to 26 inches in rim diameter and are principally of tubeless, steel-belted, radial-ply design.[19]

C. Arguments of the Parties

Petitioners' *Arguments*. USW argues that the Commission should define a single domestic like product coextensive with the scope as it did in the preliminary determinations.[20]

Respondents' Arguments. No respondent party argues for a different definition of the domestic like product.

D. Domestic Like Product Analysis

In its preliminary determinations, the Commission defined a single domestic like product consisting of PVLT tires coextensive with the scope. The issue was not disputed. The Commission found that all PVLT tires are produced using the same basic raw materials, have the same basic components, and have the same end uses. It further found that, although PVLT tires can vary in size and other features, there do not appear to be any clear dividing lines among PVLT tires. Consequently, it defined a single domestic like product consisting of PVLT tires, coextensive with the scope of the investigations.

As discussed above, no party contests the Commission's definition of a single domestic like product in the preliminary determinations. The record in the final phase of these investigations contains no new information suggesting the characteristics or uses of PVLT tires have changed or argument calling into question the Commission's definition of this single domestic like product. Accordingly, we continue to define a single domestic like product consisting of PVLT tires, coextensive with the scope of these investigations.

III. Domestic Industry

A. In General

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[21] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In these investigations, we must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the

[18] CR/PR at I-13.
[19] CR/PR at I-13.
[20] USW Prehearing Br. at 3.
[21] 19 U.S.C. § 1677(4)(A).

Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[22] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[23]

B. Arguments of the Parties

Petitioner's arguments. USW contends that, based on the statutory criteria, appropriate circumstances exist to exclude *** pursuant to the related parties provision.[24] USW argues that, during the period of investigation, all three producers ***.[25]

Respondents arguments. Joint Respondents argue that *** should not be excluded from the domestic industry because they ***.[26] Hankook argues that it should not be excluded from the domestic industry because its primary interest lies in U.S. production, based on its significant capital investment plan and its declining ratio of imports to domestic production.[27]

C. Analysis

Several domestic producers are subject to possible exclusion from the domestic industry under the related party provision in the final phase of these investigations. Six U.S. producers – *** – directly imported subject merchandise;[28] eight U.S. producers are related to foreign producers and exporters of the subject merchandise (***),[29] and three U.S. producers are

---

[22] *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem*., 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[23] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

(1) the percentage of domestic production attributable to the importing producer;

(2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);

(3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;

(4) the ratio of import shipments to U.S. production for the imported product; and

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); see *also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[24] USW Prehearing Br. at 3; USW Posthearing Br., Response to Commission Questions at 43-47.

[25] USW Posthearing Br., Response to Commission Questions at 44-45.

[26] Joint Respondents Prehearing Br. at 11.

[27] Hankook Prehearing Br. at 5-7.

[28] CR/PR at III-20 n.8.

[29] CR/PR at III-6 & Table III-2.

related to U.S. importers of the subject merchandise (***).[30] *** also reported purchases of imports of PVLT tires from ***.[31]

We find that appropriate circumstances exist to exclude *** but not *** from the domestic industry based on the following analysis.

*******. *** is subject to possible exclusion under the related party provision because it imported subject merchandise during the period of investigation and is related to a foreign producer of subject PVLT tires. *** was the *** largest domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[32] The ratio of *** subject imports from *** to its domestic production was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[33] *** explained that it imported subject merchandise ***.[34] *** on the petitions.[35]

In view of the fact that *** importation of subject merchandise was small in relation to its domestic production, its principal interest appears to be in domestic production. We therefore find that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision.

*******. *** is subject to possible exclusion under the related party provision because it imported subject merchandise during the period of investigation and is related to a foreign producer of subject PVLT tires. *** was the *** domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[36] *** reported imports of PVLT tires from *** in ***, and from *** in 2018 and 2019.[37] The ratio of *** subject imports to its domestic production was *** percent in 2018 and 2019 and *** percent in 2020.[38] *** explained that it imported subject merchandise ***.[39] *** on the petitions.[40]

In view of the fact that *** importation of subject merchandise was small in relation to its domestic production, its principal interest appears to be in domestic production. We therefore find that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision.

---

[30] CR/PR at III-6 & Table III-2.

[31] CR/PR at III-20. The Commission has previously concluded that a purchaser may be treated as a related party if it controls large volumes of subject imports. The Commission has found such control to exist when, for example, the domestic producer was responsible for a predominant proportion of an importer's purchases and these purchases were substantial. *See, e.g., Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from Argentina, Brazil, Germany, and Italy,* Inv. Nos. 701-TA-362 and 731-TA-707-710 (Review), USITC Pub. 3429 at 8-9 (June 2001). *** purchases of subject imports from Vietnam were *** tires in 2018, *** tires in 2019, and *** tires in 2020. CR at III-20 n.10.

[32] CR/'PR at Table III-1.

[33] CR/PR at Table III-9. Including *** purchases, the ratios are *** percent in 2018, *** percent in 2019, and *** percent in 2020.

[34] CR/PR at Table III-9.

[35] CR/PR at Table III-1.

[36] CR/PR at Table III-1.

[37] CR/PR at Table III-9.

[38] CR/PR at Table III-9.

[39] CR/PR at Table III-9.

[40] CR/PR at Table III-1.

*******. *** is subject to possible exclusion under the related party provision because it imported subject merchandise during the period of investigation and is related to a foreign producer and exporters of subject PVLT tires. *** was the *** largest domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[41] During the period of investigation, *** imported PVLT tires from Korea in 2019 and 2020 and from Thailand throughout the period.[42] The ratio of *** subject imports to its domestic production was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[43] *** explained that it imported subject merchandise ***.[44] *** on the petitions.[45]

In view of the fact that *** importation of subject merchandise was small in relation to its domestic production, its principal interest appears to be in domestic production. We therefore find that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision.

*****.** *** is subject to possible exclusion under the related party provision because it is related to a foreign producer and importer of subject PVLT tires. *** was the *** largest domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[46] During the period of investigation, *** imported *** tires from *** in 2018, *** tires in 2019, and *** tires 2020.[47] The ratio of these subject imports to *** domestic production was *** percent in 2018, *** percent in 2019, and *** percent 2020.[48] *** explained that it relied on subject merchandise imported by its affiliated importer ***.[49] *** on the other petitions.[50]

The record in these investigations indicates that *** primary interest during the period of investigation was in importation rather than domestic production. Although the ratio of *** affiliated importer's subject imports to its domestic production declined, the ratio remained high throughout the period of investigation. Indeed, its level of subject imports was *** than its level of domestic production throughout the period of investigation. On the other hand, *** increased its domestic production during the period of investigation and reported considerable capital expenditures during the period.[51] Although ***,[52] we base our analysis on *** domestic production during the period of investigation and note that *** capital expenditures declined irregularly from $*** in 2018 to $*** in 2020.[53] On balance, we find that appropriate

[41] CR/PR at Table III-1.
[42] CR/PR at Table III-9.
[43] CR/PR at Table III-9.
[44] CR/PR at Table III-9.
[45] CR/PR at Table III-1.
[46] CR/PR at Table III-1.
[47] CR/PR at Table III-9.
[48] CR/PR at Table III-9.
[49] CR/PR at Table III-9.
[50] CR/PR at Table III-1.
[51] CR/PR at Tables III-9 and VI-4.
[52] Hankook Prehearing Brief at 5-6.
[53] CR/PR at Table VI-4.

circumstances exist to exclude *** from the domestic industry under the related party provision.[54]

*****.** *** is subject to possible exclusion under the related party provision because it is related to a foreign producer and importer of subject PVLT tires. *** was the *** largest domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[55] During the period of investigation, *** imported *** tires from *** in 2018, *** tires in 2019, and *** tires in 2020.[56] *** imported *** tires from *** in 2018, and *** tires in 2019 and 2020.[57] The ratio of these combined subject imports to *** domestic production was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[58] *** explained that it relied on subject merchandise imported by its affiliated importer ***.[59] *** the petitions.[60]

The record in these investigations indicates that *** primary interest during the period of investigation was in importation rather than domestic production. Although it did not itself import subject merchandise, the ratio of its affiliated importer's subject imports to its domestic production remained high throughout the period of investigation. Therefore, we find that appropriate circumstances exist to exclude *** from the domestic industry under the related party provision.[61]

*****.** *** is subject to possible exclusion under the related party provision because it imported subject merchandise during the period of investigation and is related to a foreign

---

[54] Commissioner Johanson does not join this paragraph and instead finds that the record in these investigations indicates that appropriate circumstances do not exist to exclude *** from the domestic industry. ***. Hearing Tr. at ***; CR/PR at Table III-9. In 2019, *** the number of tires it domestically produced in 2017, reaching *** percent capacity utilization in 2019. In interim 2020, Hankook produced more tires than it did in interim 2019, leading to *** lowest ratio of subject imports to domestic production of the period, at *** percent. Preliminary Staff Report at Tables III-3 and III-8. For full year 2020, *** accounted for *** percent of total U.S. production. CR/PR at Table III-5. *** rapid increase in production, large investment in plant and equipment, and its embarkation on a *** (CR/PR at Table III-9), combine to indicate that *** has a substantial interest in domestic production.

[55] CR/PR at Table III-1.

[56] CR/PR at Table III-9.

[57] CR/PR at Table III-9.

[58] CR/PR at Table III-9.

[59] CR/PR at Table III-9.

[60] CR/PR at Table III-1.

[61] Commissioner Johanson does not join this paragraph and instead finds that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision. *** From 2017 to 2019, domestic production by *** steadily increased by *** percent. Capacity utilization increased steadily by *** percentage points to *** percent in 2019. Both production and capacity utilization were higher in interim 2020 than in interim 2019. Preliminary Staff Report at Tables III-4 & III-8. *** subject imports also declined steadily by *** percent from 2017 to 2019 and were lower in interim 2020 than in interim 2019. These trends led to *** ratio of subject imports to domestic production dipping to its lowest point in interim 2020, at *** percent. Preliminary Staff Report at Table III-8. For full year 2020, *** accounted for *** percent of total U.S. production. CR/PR at Table III-5. *** rapid increase in production and its large investment in plant and equipment indicate that *** has a substantial interest in domestic production.

producer of subject PVLT tires. *** was the *** domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[62] During the period of investigation, *** imported PVLT tires from *** and *** in every year of the period of investigation.[63] The ratio of *** subject imports to its domestic production was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[64] *** explained that it imported subject merchandise ***.[65] *** on the petitions.[66]

In view of the fact that *** importation of subject merchandise was small in relation to its domestic production, its principal interest appears to be in domestic production. We therefore find that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision.

*****.** *** is subject to possible exclusion under the related party provision because it imported subject merchandise during the period of investigation. *** was the *** largest domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[67] During the period of investigation, *** imported PVLT tires from *** in 2018 and it imported PVLT tires from *** in 2019.[68] The ratio of *** subject imports to its domestic production was *** percent for each year.[69] *** explained that it imported subject merchandise ***.[70] *** on the petitions.[71]

In view of the fact that *** importation of subject merchandise was small in relation to its domestic production, its principal interest appears to be in domestic production. We therefore find that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision.

*****.** *** is subject to possible exclusion under the related party provision because it is related to an importer of subject merchandise and foreign producer of subject PVLT tires. *** was the *** largest domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[72] During the period of investigation, *** imported *** tires from Thailand in 2018, *** tires in 2019, and *** tires in 2020.[73] The ratio of these subject imports to *** domestic production was *** percent in 2018, *** percent in 2019, and *** percent in

[62] CR/PR at Table III-1.
[63] CR/PR at Table III-9.
[64] CR/PR at Table III-9.
[65] CR/PR at Table III-9.
[66] CR/PR at Table III-1.
[67] CR/PR at Table III-1.
[68] CR/PR at Table III-9.
[69] CR/PR at Table III-9.
[70] CR/PR at Table III-9.
[71] CR/PR at Table III-1.
[72] CR/PR at Table III-1.
[73] CR/PR at Table III-9.

2020.[74] *** explained that it imported subject merchandise ***.[75] *** on the other petitions.[76]

The record in these investigations indicates that *** primary interest during the period of investigation was in importation rather than domestic production. Although *** did not import subject merchandise during the period of investigation, the ratio of its affiliated importer's subject imports to U.S. production remained high throughout the period of investigation. Indeed, its affiliated importer's level of subject imports was *** than *** level of domestic production throughout the period of investigation. For this reason, we find that appropriate circumstances exist to exclude *** from the domestic industry under the related party provision.[77]

*****.** *** is subject to possible exclusion under the related party provision because it imported subject merchandise during the period of investigation. *** was the *** domestic producer in 2020, accounting for *** percent of domestic production of PVLT tires.[78] During the period of investigation, *** imported *** tires from *** in 2018 and 2019 and *** in 2020.[79] It imported *** tires from *** in 2018, *** tires in 2019, and *** tires in 2020.[80] The ratio of these combined subject imports to *** domestic production was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[81] *** explained that it imported subject merchandise ***.[82] *** on the other petitions.[83]

The record in these investigations indicates that *** primary interest is in domestic production rather than the importation of subject merchandise. The volume of subject merchandise that it imported declined during the period of investigation, as did its ratio of subject imports to domestic production. Further, its ratio of subject imports to domestic production was relatively low throughout the period of investigation. For these reasons, we find that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision.

[74] CR/PR at Table III-9.

[75] CR/PR at Table III-9.

[76] CR/PR at Table III-1.

[77] Commissioner Johanson finds that appropriate circumstances do not exist to exclude *** from the domestic industry under the related party provision. After years of ***. *** Postconference Br. at 4. Since that time, ***. Hearing Tr. at ***. Since 2018, *** has increased production by *** percent and its capacity utilization by *** percentage points. In full year 2020, *** accounted for *** percent of total U.S. production. CR/PR at Table III-5. *** rapid increase in production and its large investment in plant and equipment indicate that *** has a substantial interest in domestic production.

[78] CR/PR at Table III-1.

[79] CR/PR at Table III-9.

[80] CR/PR at Table III-9.

[81] CR/PR at Table III-9.

[82] CR/PR at Table III-9.

[83] CR/PR at Table III-1.

In sum, we find that appropriate circumstances exist to exclude *** but not *** from the domestic industry. Accordingly, based on our definition of the domestic like product, we define the domestic industry to include all domestic producers of PVLT tires, except for ***.[84]

IV. Negligibility

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible.[85]

Additionally, even if subject imports are found to be negligible for purposes of present material injury, they shall not be treated as negligible for purposes of a threat analysis should the Commission determine that there is a potential that subject imports from the country concerned will imminently account for more than three percent of all such merchandise imported into the United States.[86] To assess the potential for imports imminently to surpass the negligibility threshold for purposes of a threat analysis, the Commission typically has examined the share of total imports, especially toward the latter portion of the negligibility period, production capacity, capacity utilization, and inventories.[87]

During the most recent 12-month period preceding the filing of the petitions in these investigations (May 2019 through April 2020), subject imports from Korea accounted for 10.3 percent of total imports, subject imports from Taiwan accounted for 5.2 percent of total imports, and subject imports from Thailand accounted for 25.4 percent of total imports.[88] Because subject imports from each of these subject country are above the statutory threshold, we find that subject imports from each country are not negligible. PVLT tire imports from Vietnam that are subject to the countervailing duty investigation were 7.1 percent of total imports during this period and therefore were above negligible levels.[89] Because these subject

---

[84] Commissioner Johanson defines the domestic industry to include all domestic producers of PVLT tires.

[85] 19 U.S.C. §§ 1671d(b), 1673d(b), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

[86] 19 U.S.C. § 1677(24)(A)(iv).

[87] *See Certain Steel Concrete Reinforcing Bars from Belarus, China, Korea, Latvia, and Moldova*, Inv. Nos. 731-873-874 and 877-879 (Final), USITC Pub. 3440 (July 2001); *Certain Stainless Steel Butt-Weld Pipe Fittings from Germany*, Inv. No. 731-TA-864 (Final), USITC Pub. 3372 (November 2000); *Certain Cold-Rolled Steel Products from Argentina, Brazil, China, Indonesia, Japan, Russia, Slovakia, South Africa, Taiwan, Thailand, Turkey, and Venezuela*, Inv. Nos. 701-TA-33-396 and 731-TA-829-840 (Prelim), USITC Pub. 3214 (July 1999).

[88] CR at Table IV-5.

[89] CR at Table IV-5. Because the statute provides separate thresholds for certain countervailing duty investigations, the Commission considers negligibility separately for antidumping and countervailing duty investigations involving imports from the same subject country, even when developing countries are not involved. *Cold-Rolled Steel Flat Products from Brazil, India, Korea, Russia,* (Continued...)

imports were above the statutory threshold, we find that subject imports from Vietnam that are subject to the countervailing duty investigation are not negligible.

In Commerce's final antidumping duty determination on PVLT tires from Vietnam, exports produced by Kenda Rubber (Vietnam) Co. Ltd ("Kenda"), Sailun (Vietnam) Co., Ltd ("Sailun"), Bridgestone Tire Manufacturing Vietnam LLC ("Bridgestone"), Kumho Tire (Vietnam) Co., Ltd ("Kumho"), and Yokohama Tyre Vietnam Co.("Yokohama") received *de minimis* antidumping duty margins.[90] Consequently, imports from Vietnam that are subject to the antidumping duty investigation are different from those subject to the countervailing duty investigation. PVLT tire imports from Vietnam that are subject to the antidumping duty investigation (excluding exports produced by producers that received *de minimis* margins), were *** percent of total imports during the May 2019 through April 2020 period.[91] Since these imports fall below the statutory three percent negligibility threshold, we find that subject imports from Vietnam subject to the antidumping duty investigation are negligible for purposes of our present material injury analysis.

We next consider whether subject dumped imports from Vietnam have the potential imminently to exceed the three percent negligibility threshold for purposes of determining threat of material injury. Imports from exporters subject to the antidumping duty investigation were equivalent to about *** percent of total imports in 2018,[92] *** percent of total imports in 2019,[93] and *** percent of total imports in 2020.[94] Thus, although the share of imports from

---

(…Continued)
and the United Kingdom, Inv. Nos. 701-TA-540, 542-544 and 731-TA-1283, 1285, 1287, and 1289-1290 (Final), USITC Pub. 4637 at 10-11 (Sept. 2016). Consequently, If different sets of imports from the same subject country are subject to investigation (or findings) in the antidumping and countervailing duty investigations, the Commission will not combine the imports subject to investigation to make a single negligibility computation for that subject country. *Nucor Corp. v. United States*, Slip Op. 18-13 at 20 (Ct. Int'l Trade Feb. 28, 2018), *aff'g Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom*, Inv. Nos. 701-TA-545-547 and 731-TA-1291-1297 (Final), USITC Pub. 4638 at 13 (Sept. 2016).

[90] 86 Fed. Reg. 28559 (May 27, 2021).

[91] CR at Table IV-5.

[92] In 2018, exports from producers not subject to the antidumping duty investigation were *** compared to *** total imports of PVLT tires from Vietnam. Accordingly, this suggests that imports from producers subject to the antidumping duty investigation were around *** tires, which represents *** percent of total imports (174.1 million) that year. *Calculated from* Foreign Producer Questionnaire Responses of Bridgestone, Kenda, Kumho, and Sailun; official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021; and CR at Table IV-3.

[93] In 2019, exports from producers not subject to the antidumping duty investigation were *** comparted to *** total imports of PVLT tires from Vietnam. Accordingly, this suggests that imports from producers subject to the antidumping duty investigation were around *** tires, which represents *** percent of total imports (182.0 million) that year. *Calculated from* Foreign Producer Questionnaire Responses of Bridgestone, Kenda, Kumho, and Sailun; official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, (Continued...)

exporters subject to the antidumping duty investigation increased overall as a share of total imports during the period of investigation, their share of total imports remained substantially below the statutory negligibility threshold throughout the period of investigation.

Foreign Producers' questionnaire responses indicate that exporters subject to the antidumping duty investigation consistently accounted for low levels of imports from Vietnam and were a minor source of PVLT tires from Vietnam during the period of investigation.[95] There is no evidence on the record indicating that the low import levels and share of total imports from exporters subject to the antidumping duty investigation will change in the imminent future.[96] On the contrary, the record shows that producers and exporters not subject to the antidumping duty investigation will continue to account for the vast majority of imports of PVLT tires from Vietnam, given that they project an increase in their exports of PVLT tires to the U.S. market in 2021 and 2022 relative to the levels that prevailed during the period of investigation.[97]

For all of these reasons, we find that there is no potential that imports of PVLT tires from Vietnam subject to the antidumping duty investigation will imminently account for more

---

(…Continued)
4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021; and CR at Table IV-3.

[94] In 2020, exports from producers not subject to the antidumping duty investigation were *** compared to *** total imports of PVLT tires from Vietnam. Accordingly, this suggests that imports from producers subject to the antidumping duty investigation were around *** tires, which represents *** percent of total imports (170.5 million) that year. *Calculated from* Foreign Producer Questionnaire Responses of Bridgestone, Kenda, Kumho, and Sailun; official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021; and CR at Table IV-3.

[95] Rather, exports from foreign producers and exporters that are not subject to the antidumping duty investigation were equivalent to *** percent of PVLT tires imports from Vietnam in 2018, *** percent in 2019, and *** percent in 2020. Calculated from CR at Table IV-3 and Foreign Producer Questionnaire Responses of Bridgestone, Kenda, Kumho, and Sailun.

[96] The Commission received a foreign producer questionnaire from one foreign producer in Vietnam that did not receive a *de minimis* antidumping duty margin. CR at VII-25 & Table VII-16. That firm reported manufacturing only *** PVLT tires in 2020, representing an estimated *** percent of the total production of PVLT tires in Vietnam that year, and it reported *** exports of PVLT tires to the United States during that time. CR at Table VII-16. We acknowledge that there are possibly additional major producers of PVLT tires in Vietnam that did not participate in these investigations. CR at VII-25 n.21. However, the record does not indicate that these producers are likely to increase imports of PVLT tires above the negligibility threshold in the imminent future, given the consistently low level of imports from producers and exporters subject to the antidumping duty order throughout the period of investigation.

[97] Exports from producers not subject to the antidumping duty investigation were *** tires in 2018, *** tires in 2019, and *** tires in 2020; these exports are projected to increase to *** tires in 2021 and *** tires in 2022. *Calculated from* Foreign Producer Questionnaire Responses of Bridgestone, Kenda, Kumho, and Sailun.

than three percent of all such merchandise imported into the United States. Accordingly, the antidumping duty investigation for Vietnam is terminated.[98]

V. Cumulation

For purposes of evaluating the volume and effects for a determination of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

(4) whether the subject imports are simultaneously present in the market.[99]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[100] Only a "reasonable overlap" of competition is required.[101]

---

[98] 19 U.S.C. §§ 1673d(b), 1677(24).

[99] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

[100] *See*, *e.g.*, *Wieland Werke, AG v. United State*s, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[101] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902; *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

A. Arguments of the Parties

Petitioner. USW argues that imports from each subject country should be cumulated for purposes of the Commission's material injury analysis. It claims that PVLT tires from domestic and subject sources are fungible, and sold in overlapping channels of distribution, mainly to the replacement market but also to OEMs.[102] Additionally, it contends that the domestic like product and subject imports are sold throughout the United States and were simultaneously present in the U.S. market during the entire period of investigation.[103]

Respondents. No respondent challenges cumulation for purposes of analyzing present material injury.

B. Analysis

We consider subject imports sold at LTFV from Korea, Taiwan, Thailand, and subsidized imports from Vietnam on a cumulated basis because the statutory criteria for cumulation are satisfied. As an initial matter, petitioner filed the antidumping and countervailing duty petitions with respect to all four countries on the same day, May 13, 2020.[104] There is also a reasonable overlap of competition between subject imports from Korea, Taiwan, Thailand, and Vietnam, and between subject imports from each source and the domestic like product, as discussed below.

Fungibility. As discussed above, all PVLT tires regardless of source have similar physical characteristics in that they are made from the same basic raw materials and components, and have the same basic end use as wheels for passenger vehicles and light trucks. In addition, all PVLT tires sold in the U.S. market must meet NHTSA performance standards and must be marked in accordance with NHTSA and DOT requirements. During the period of investigation, U.S. shipments of both the domestic like product and imports from each subject country consisted of branded and private label tires, with branded tires accounting for the majority of shipments from each source.[105]

Although PVLT tires are produced in a variety of sizes, with differing features and varying degrees of quality, there is substantial overlap between domestic and subject imported PVLT tires in terms of these characteristics. The record indicates that the domestic like product and PVLT tires from each subject source are sold in overlapping sizes.[106] In addition, the record does not indicate a clear distinction between domestically produced PVLT tires and subject imports in terms of quality and performance characteristics. To the contrary, the majority of U.S. producers, importers, and purchasers reported that PVLT tires from each subject country are always or frequently interchangeable with PVLT tires from other subject countries and the

[102] USW Prehearing Br. at 6-7.
[103] USW Prehearing Br. at 7.
[104] None of the statutory exceptions to cumulation applies.
[105] CR/PR at Table IV-6 & Appendix D.
[106] CR/PR at Table IV-7 & Appendix E.

domestic like product.[107] Additionally, most purchasers reported that domestically produced PVLT tires and imports from each subject country are comparable with respect to most purchasing factors.[108]

Channels of Distribution. During the period of investigation, the domestic like product and subject imports were sold in overlapping channels of distribution. Specifically, domestically produced PVLT tires and subject imports from Korea, Taiwan, Thailand, and Vietnam were sold predominantly to the replacement market and, to a lesser degree, the OEM market.[109]

Geographic Overlap. The record indicates that PVLT tires from all sources served all geographic areas of the U.S. market during the period of investigation.[110]

Simultaneous Presence in Market. PVLT tires from all sources were simultaneously present in the U.S. market, with responding domestic producers and importers reporting sales of domestically produced PVLT tires and subject imports from Korea, Taiwan, Thailand, and Vietnam in every quarter of the period of investigation.[111] Subject imports from Korea, Taiwan, Thailand, and Vietnam were each present in every month of the period of investigation.[112]

Conclusion. Because the relevant antidumping and countervailing duty petitions were filed on the same day, and the record indicates that there is a reasonable overlap of competition between and among imports from each subject country and the domestic like product, we cumulate subject imports from Korea, Taiwan, Thailand sold at LTFV, and subsidized subject imports from Vietnam for purposes of our material injury analysis.

VI. Material Injury by Reason of Subject Imports

Based on the record in the final phase of this investigation, we find that an industry in the United States is materially injured by reason of imports of PVLT tires from Korea, Taiwan, and Thailand that Commerce has found to be sold in the United States at less than fair value and imports of PVLT tires from Vietnam that Commerce has found to be subsidized by the government of Vietnam.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[113] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic

[107] CR/PR at Table II-14. This description remains valid when responses from the excluded related parties are removed.

[108] CR/PR at Table II-13.

[109] CR/PR at Table II-1.

[110] CR/PR at Table II-2.

[111] CR/PR at Tables V-3 – V-18.

[112] CR/PR at Table IV-9

[113] 19 U.S.C. §§ 1671d(b), 1673d(b).

like product, but only in the context of U.S. production operations.[114] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[115] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[116] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[117]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[118] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[119] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[120]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material

---

[114] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[115] 19 U.S.C. § 1677(7)(A).

[116] 19 U.S.C. § 1677(7)(C)(iii).

[117] 19 U.S.C. § 1677(7)(C)(iii).

[118] 19 U.S.C. §§ 1671d(b), 1673d(b).

[119] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g,* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

[120] The Federal Circuit, in addressing the causation standard of the statute, observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

injury threshold.[121] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[122] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[123] It is clear that the existence of injury caused by other factors does not compel a negative determination.[124]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports."[125] The Commission ensures that it has "evidence in the record" to "show that the

---

[121] SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[122] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n,* 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e*., it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

[123] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[124] *See Nippon Steel Corp*., 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[125] *Mittal Steel*, 542 F.3d at 876 &78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United*

(Continued...)

harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other sources to the subject imports." [126] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[127]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[128] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[129]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is material injury by reason of subject imports.

1. Demand Considerations

PVLT tires are sold to OEMs for mounting on new passenger vehicles and light trucks and to distributors and retailers for the replacement market. Demand for PVLT tires in the OEM market is derived from the number of new passenger vehicles and light trucks produced in the United States, while demand for PVLT tires in the replacement market depends on the condition of the tires on existing vehicles, which is a function of the number of miles driven, road conditions, the age of the vehicles, and other factors.[130] Most questionnaire respondents reported that PVLT tires account for a very small share of the cost of the vehicles on which they

---

(…Continued)
States Steel Group v. United States, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[126] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant "other factor" may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

[127] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

[128] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[129] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp.*, 458 F.3d at 1350, *citing U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

[130] CR/PR at II-1.

are used.[131] Market participants' responses regarding PVLT tire demand trends since January 1, 2018 were mixed.[132]

Apparent U.S. consumption of PVLT tires initially increased from 314.1 million tires in 2018 to 320.8 million tires in 2019, but declined to 280.7 million tires in 2020. Apparent U.S. consumption in 2020 was 12.5 percent lower than in 2019 and 10.6 percent lower than in 2018.[133] A number of firms reported that the COVID-19 pandemic reduced demand for PVLT tires in the U.S. market during 2020.[134]

2. Supply Considerations

The U.S. PVLT tire market is supplied by U.S. producers, subject imports, and nonsubject imports.

U.S. producers. During the period of investigation, U.S. producers accounted for the largest share of the U.S. market; the domestic industry's share of apparent U.S. consumption declined from *** percent in 2018 to *** percent in 2019 and *** percent in 2020.[135] Fourteen firms accounted for all known U.S. production of PVLT tires during the period of investigation.[136] Thirteen of these firms are part of global corporations with PVLT tire production plants elsewhere in the world.[137] During the period of investigation, one firm, ***, reported a plant opening and three firms, ***, reported capacity expansions and investments.[138] Goodyear laid off 740 workers at its Gadsden, Alabama plant in November 2019 and announced further layoffs in January 2020 before permanently shutting down the plant in May 2020 and reallocating production to other Goodyear consumer tire plants.[139] Goodyear also reported acquisitions, including the announcement in February 2021 of its acquisition of U.S. producer Cooper.[140] Thirteen U.S. producers reported temporary plant

---

[131] CR/PR at II-9. Purchasers estimated that PVLT tires' share of the cost of a new car or truck ranged from 0.9 to 2.2 percent depending on the model of the vehicle. *Id.*

[132] CR/PR at II-10 & Table II-4. An equal number of U.S. producers reported that, since January 1, 2018, demand for PVLT tires in the United States increased (five) or decreased (five), while one reported no change and two reported that demand fluctuated. Twenty-two importers reported that demand increased during that time, while twelve reported that it fluctuated, eight reported that it decreased, and six reported no change. Fourteen purchasers reported that demand for PVLT tires in the United States fluctuated since January 1, 2018, while thirteen reported that it increased, four reported no change, and two reported that demand decreased. *Id.*

[133] CR/PR at Tables IV-10 & C-2.

[134] CR/PR at Tables III-3, III-4, IV-2.

[135] CR/PR at Table C-2. Domestic producers excluded pursuant to the related parties provision accounted for *** percent of apparent U.S. consumption in 2018, *** percent in 2019, and *** percent in 2020. *Id.*

[136] CR/PR at III-1.

[137] CR/PR at Table III-2.

[138] CR/PR at III-7 and Table III-3.

[139] CR/PR at III-7 and Table III-3; *see also* Joint Respondents posthearing brief at exh. 36.

[140] CR/PR at III-7 and Table III-3.

closings, production shutdowns, and/or curtailments related to the COVID-19 pandemic, ranging in duration from three weeks to three months.[141]

Subject imports. Cumulated subject imports initially accounted for the smallest share of apparent U.S. consumption but their market share increased during the period of investigation from 25.1 percent in 2018 to 26.6 percent in 2019 and 30.4 in 2020.[142] In descending order, the importers accounting for the largest percentage of cumulated subject imports in 2020 were ***, accounting for *** percent of subject imports that year; ***, accounting for *** percent; and *** accounting for *** percent.[143] Thirty-seven importers reported that COVID affected their operations, with some reporting that the effects continued throughout 2020 and beyond.[144] Such effects typically included space shortages in containers and on vessels and shipment delays as well as increased costs for ocean freight.[145]

Nonsubject imports. Nonsubject imports maintained a stable presence in the U.S. market throughout the period of investigation, accounting for 30.3 percent of apparent U.S. consumption in 2018, 30.1 percent in 2019, and 30.3 percent in 2020.[146] The largest country sources of nonsubject imports during the period of investigation were, in descending order, Mexico, Indonesia, and Canada; combined, these countries accounted for 50.5 percent of nonsubject imports in 2020.[147]

3. Substitutability and Other Conditions

a) Substitutability and the Importance of Price

We find that there is moderate-to-high degree of substitutability between the domestic like product and subject imports. PVLT tires are produced in a variety of sizes, with differing features and varying degrees of quality. All PVLT tires have similar physical characteristics, are made from the same basic raw materials, have the same basic components, have the same basic end use of being mounted on passenger vehicles and light trucks, and must meet the same NHTSA and DOT requirements.[148] During the period of investigation, U.S. shipments of both domestically produced tires and imports from each subject source consisted of branded and private label tires,[149] were sold in overlapping sizes, including below 16 inches, 16 to less than 18 inches, and above 18 inches,[150] and were sold in both the OEM and replacement markets.[151] Additionally, as discussed above, the majority of responding U.S. producers,

[141] CR/PR at III-10 and Table III-4.
[142] CR/PR at Table C-2.
[143] CR/PR at Table IV-1.
[144] CR/PR at IV-3 and Table IV-2.
[145] CR/PR at IV-3 and Table IV-2.
[146] CR/PR at Table C-2.
[147] CR/PR at II-7.
[148] CR/PR at I-13 – I-19.
[149] CR/PR at Tables D-1, D-2.
[150] CR/PR at Tables E-1, E-2.
[151] CR/PR at Tables F-1, F-2.

importers, and purchasers reported that subject imports are always or frequently interchangeable with the domestic like product,[152] and most responding purchasers reported that domestically produced PVLT tires and subject imports are comparable with respect to most purchasing factors.[153]

We also find that price is an important consideration in purchasing decisions, although non-price factors are important as well. Responding purchasers ranked price among their top three purchasing factors more frequently than any other factor but quality.[154] Responses regarding the significance of factors other than price were mixed, but most market participants reported non-price factors to be always, frequently or sometimes significant.[155] Most responding purchasers (25 out of 36) identified price as a very important purchasing factor, although a greater number of responding purchasers identified other purchasing factors as very important (35 responding purchasers cited quality meets industry standard and reliability of supply; 34 purchasers cited availability and product consistency; and 29 cited delivery time).[156]

b) Branded and Private Label PVLT tires

PVLT tires produced in the United States and subject imports were sold as both branded and private label tires. Branded tires are produced or packaged for sale under the name of the manufacturer of the tire or a brand name owned by that manufacturer, whereas private label tires are produced or packaged for sale under a name other than either the manufacturer's own name or a brand name owned by that manufacturer. Based on reported quantities, branded PVLT tires make up over three-quarters of the U.S. PVLT tire market.[157] A significant majority of domestic producers' U.S. shipments were of branded PVLT tires, with the remainder private label tires.[158] A somewhat smaller majority of U.S. importers' U.S. shipments of subject

[152] CR/PR at Table II-14. This description remains valid when responses from the excluded related parties are removed.

[153] CR/PR at Table II-13. Most purchasers reported that domestically produced tires and imports from each subject source were comparable in all nineteen purchasing factors, except most purchasers rated domestic tires to be superior in terms of delivery time compared to subject sources, while equal numbers of purchasers reported domestic tires to be comparable or inferior compared to subject imports from Vietnam in terms of price and the availability of private label offerings but superior or comparable in terms of product range. *Id.*

[154] CR/PR at Table II-10. Twenty-five purchasers reported that quality was among their top three purchasing factors, 24 purchasers reported price to be among their top three factors, and nineteen reported availability/supply. *Id.*

[155] CR/PR at Table II-16.

[156] CR/PR at Table II-11. As discussed above, most purchasers reported domestic PVLT tires and imports from each subject country to be comparable in terms of these factors, except that most purchasers reported domestic PVLT tires to be superior in terms of delivery times compared to each subject country and an equal number of purchasers reported domestic tires to be comparable or inferior to PVLT tires from Vietnam in terms of price. CR/PR at Table II-13.

[157] CR/PR at II-15.

[158] CR/PR at Table D-1. Branded tires accounted for *** percent of U.S. producers' U.S. shipments in 2018, *** percent in 2019, and *** percent in 2020. *Id.*

merchandise were of branded PVLT tires, with the remainder private labels.[159] All responding purchasers reported purchasing branded tires; slightly over half of responding purchasers (20 out of 37) reported purchasing private label tires.[160]

Most purchasers reported that branding was very or somewhat important to their firm's purchasing decisions and marketing to customers.[161] The majority of U.S. producers, importers, and purchasers reported that branding influenced the price of PVLT tires, with some indicating that brand names communicate the quality and reliability of the tire and that consumers are sometimes willing to pay more for the perception of higher quality and performance.[162] Most market participants reported branded and private label tires to be at least somewhat comparable in terms of quality and price.[163] A plurality of purchasers reported the availability of brand offerings to be somewhat important in purchasing decisions, while a plurality of purchasers reported the availability of private label offerings to be not important in purchasing decisions.[164] As indicated above, most purchasers reported domestically produced PVLT tires and imports from each subject country to be comparable in terms of availability of brand offerings and private label offerings, except that equal numbers of purchasers reported domestic tires to be comparable or inferior compared to subject imports from Vietnam in terms of the availability of private label offerings.[165]

U.S. producers, importers, and foreign producers were asked to provide information regarding their respective brands and private labels.[166] The record indicates that certain of the

---

[159] CR/PR at Table D-2. Branded tires accounted for *** percent of U.S. importers' U.S. shipments in 2018, *** percent in 2019, and *** percent in 2020. *Id.*

[160] CR/PR at II-15.

[161] CR/PR at II-16.

[162] CR/PR at II-15 – II-16. As one importer explained, consumers are willing to pay more for a known brand with a long history in the U.S. market provided that the consumer can afford it. *Id.* at II-16.

[163] CR/PR at Table II-7. Four U.S. producers reported branded and private label tires to be very comparable, three reported them to be somewhat comparable, and one reported them to be not comparable in terms of quality. Four U.S. producers reported branded and private label tires to be very comparable and four reported them to be somewhat comparable in terms of price. CR/PR at Table II-7. These figures do not include excluded producers ***. *** did not provide a response to this question. Sixteen importers reported them to be very comparable in terms of quality, 20 reported them to be somewhat comparable, and six reported them to be not comparable. Seventeen importers reported them to be very comparable in terms of price, 20 reported them to be somewhat comparable, and five reported them to be not comparable. CR/PR at Table II-7. Thirteen purchasers reported them to be very comparable in terms of quality, 19 reported them to be somewhat comparable, and one reported them to be not comparable. Nineteen purchasers reported them to be very comparable in terms of price, twelve reported them to be somewhat comparable, and two reported them to be not comparable. *Id.*

[164] CR/PR at Table II-11. Fifteen purchasers reported availability of brand offerings to be very important, 16 reported it to be somewhat important, and five reported it to be not important. Seven purchasers reported availability of private label offerings to be very important, 14 reported it to be somewhat important, and 15 reported it to be not important. *Id.*

[165] CR/PR at Table II-13.

[166] CR/PR at Appendix G.

same brands and private labels are produced by domestic producers, and are imported from and produced in subject countries as well.[167]

c) OEM and Replacement Markets

PVLT tires produced in the United States and subject imports were sold in both the OEM and replacement segments of the U.S. market. Both domestic producers and U.S. importers directed the majority of their U.S. shipments to the larger replacement market, which accounted for between 75 to almost 80 percent of U.S. shipments during the period of investigation.[168] The majority of responding U.S. producers (7 of 11), importers (35 of 46) and purchasers (21 of 31) reported that PVLT tires sold to the OEM market and to the replacement market are comparable in terms of quality; some firms reported that PVLT tires in OEM market are designed to maximize the performance of a particular vehicle.[169] The majority of U.S. producers (7 of 11) and a plurality of importers (18 of 46) and purchasers (13 of 30) reported that the price of PVLT tires sold to the OEM market was lower than PVLT tires sold in the replacement market, with some firms explaining that PVLT tires sold in the OEM are offered at lower prices due to volume discounts, economies of scale, and to achieve steady sales volumes.[170] During the period of investigation, U.S. shipments from all sources to the OEM market declined.[171] In the much larger replacement market, U.S. shipments of PVLT tires from domestic and nonsubject sources initially increased from 2018 to 2019, before declining in 2020, while U.S. shipments of subject imports increased each year of the period of investigation.[172] Subject imports increased their share of total reported U.S. shipments to the replacement market by more than nonsubject imports during the period of investigation while the domestic industry's share declined.[173]

---

[167] CR/PR at Tables G-1, G-2, G-3. These brands include ***, and private labels ***. *Id.*

[168] CR/PR at Appendix F, Tables F-1, F-2.

[169] CR/PR at II-14. These figures do not include excluded producers ***. *** did not provide a response to this question.

[170] CR/PR at II-14. These figures do not include excluded producers ***. *** did not provide a response to this question.

[171] CR/PR at Appendix F, Table F-1.

[172] CR/PR at Appendix F, Table F-2.

[173] CR/PR at Appendix F, Table F-2. U.S. producers' share of reported U.S. shipments to the replacement market decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. As a share of reported U.S. shipments to the replacement market, subject imports increased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. As a share of reported U.S. shipments to the replacement market, nonsubject imports increased only slightly from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. *Id.* In the much smaller OEM market, U.S. producers' share of U.S. shipments decreased *** percent in 2018 to *** percent in 2019 and to *** percent in 2020; subject imports' share initially increased from *** percent in 2018 and *** percent in 2019, before decreasing to *** percent in 2020; and nonsubject imports' share increased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. CR/PR at Appendix F, Table F-1.

d) "Categories" of PVLT tires

PVLT tires produced in the United States and subject imports were reportedly sold across categories or tiers of the U.S. market. U.S. producers, importers, and purchasers were asked if the U.S. PVLT tires market was divided into categories (*e.g.*, Best/Better/Good; Tier 1/Tier 2/Tier 3; Flagship/Secondary/Mass-market). The majority of U.S. producers (8 of 10), importers (39 of 48), and purchasers (30 of 37) reported that the PVLT market is divided into such categories or tiers.[174] However, the descriptions of the factors differentiating the categories or tiers were varied and subjective, with no accepted industry standards.[175] The responding producers that reported the existence of categories in the U.S. market identified anywhere from three to five categories, and questionnaire respondents disagreed widely about the relative size of any such categories.[176] When asked about the primary bases for differentiating between categories, most firms identified brand, quality, and price.[177] Questionnaire respondents mostly concurred about the characteristics differentiating the highest category 1 PVLT tires from lower categories,[178] and about the PVLT tires producers or brands serving category 1.[179] There was less agreement concerning the characteristics that differentiated among other categories of PVLT tires[180] and the producers or brands that serve the other categories.[181]

---

[174] CR/PR at Appendix H, Table H-1 (excluding U.S. producer responses of *** and ***; *** did not provide a response).

[175] CR/PR at II-11 – II-12.

[176] CR/PR at Tables II-5, II-6.

[177] CR/PR at II-11 – II-12, Appendix H, Table H-1. Some respondents reported that categories are related to certain types of tires. *Id.*; *see also* *** U.S. producer questionnaire at IV-15; *** importer questionnaire at III-16; *** importer questionnaire at III-16.

[178] CR/PR at II-11 – II-12, Appendix H, Table H-1. Other characteristics of category 1 tires included OEM presence, warranties, performance, comfort, less noise, customer service, marketing, innovative technology, unique tread patterns, extensive R&D, high quality components, and fuel efficiency. CR/PR at Table H-1.

[179] The vast majority of questionnaire respondents identified the same names for both the producers and the brands serving category 1. They most frequently identified Bridgestone, Goodyear, Michelin, Continental, and Pirelli, but other brands and producers were also identified, such as BF Goodrich, Firestone, Dunlop, General, Hankook, Apollo/Vredestein, Nexen, Kumho, Carlisle, Titan, Vogue, and Yokohama. One purchaser that identified "category 3" tires as "tier 3" and "premium" also included Toyo, Cooper, Nitto, Vogue, and Yokohama as premium brands. *Id.*

[180] The characteristics that questionnaire respondents identified to describe category 2 PVLT tires varied depending on the response and included such characteristics as average/moderate to better performance, some advertising presence, some to very good brand recognition but generally less than category 1, high quality or quality that exceeds industry performance, warranties, OEM presence, customer service, high to mid-range prices, some unique tread patterns, significant R&D, reliability, customer service, and generally higher quality raw materials. The characteristics that questionnaire respondents identified to describe category 3 PVLT tires varied depending on the response and included such characteristics as adequate performance, low/budget/economy to mid-price, minimal advertising, good to relatively weak to no brand recognition, good to average quality, consistent brand availability, (Continued...)

e) Conclusion

We find a moderate-to-high degree of substitutability between the domestic like product and subject imports, that price is an important purchasing factor, and that subject imports compete substantially with domestic PVLT tires throughout the U.S. market. The domestic industry and importers of subject merchandise supply the U.S. market primarily with branded PVLT tires but also private label tires. Further, PVLT tires from domestic and subject sources are sold in overlapping sizes and directed primarily to the replacement market but are also present in the OEM market. Although there is some differentiation in the U.S. market among PVLT tires based on brand, quality, and price, questionnaire respondents reporting the existence of categories did not agree on the number of categories, the characteristics that differentiated one category from another, or how to categorize specific brands, private labels, and producers. Moreover, the record demonstrates that PVLT tires manufactured in the United States competed in the same categories, however defined, as subject imports.

(…Continued)
product reliability, warranties, standard technology/R&D, little to no OEM presence, balanced affordability, limited technology, basic raw materials/components, simple designs, and limited technology. The characteristics that questionnaire respondents identified to describe category 4 PVLT tires varied depending on the response and included such characteristics as lowest to no brand recognition, low to average quality, minimum performance, low price, affordable, unreliable supply, standard technology, little to no investment in R&D, most affordable raw materials, little to no marketing, no OEM presence, no good warranties, simple designs, and basic materials. CR/PR at Appendix H, Table H-1. For those questionnaire respondents that reported a category 5 of PVLT tires, they reported the characteristics to include no brand recognition, highly varied quality, and cheap prices. *See* *** importer questionnaire at III-16; *** importer questionnaire at III-16; *** purchaser questionnaire at III-8; *** purchaser questionnaire at III-8.

[181] Brands and producers that were reported as serving category 2 included Firestone, BF Goodrich, General, Goodyear, Hankook, Yokohoma, Giti, Dunlop, Toyo, Nitto, Cooper, Sumitomo, Nokian, Kumho, Pirelli, Falken, Nexen, Uniroyal, Carlisle, Continental, GT Radial, Falken, Maxxis, Aurora, Marshal, Michelin, Bridgestone, Yellowstone, Kelly-Springfield, Dick Cepek, Vogue, Mastercraft, Mitas, Hercules, Ironman, and Pathfinder. As noted above, some of these brands were also frequently identified as serving category 1. Brands and producers that were reported as serving category 3 included Fuzion, Kelly, Laufenn, Mastercraft, Sailun, Blacklion, Nexen, GT Radial, Dextery, Nankang, Federal, Milestar, Atturo, Dick Cepek, Falken, Giti, Big O, Cordovan, Hercules, Multi-mile, Kenda, Nokian, Vogue, Vredestein, Hankook, Arizonian, General, Ironman, Sentury, Sumitomo, Uniroyal, Sumitomo, Hankook, Maxxis, Kumho, Apollo, Linglong, Cooper, Firestone, Deestone, Triangle, Lionheart, TBC, Blacklion, Armstrong, Westlake, and Dunlop. To the extent that market participants reported a category 4, the brands and producers that were reported as serving category 4 included Big O, Cordovan, Hercules, Multi-mile, Primewell, Sailun, Otani, Kenda, Triangle, Blackhawk, Sentury, Nankang, GT Radial, Ironman, Laufenn, Linglong, Federal, Deestone, Atturo, Landspider, Delinte, Landsail, Arroyo, Cambridge, Vee Rubber, Milestar, TBC, Road One, Goodride, Starfire, Ohtsu, and Aplus. CR/PR at Appendix H, Table H-1. To the extent that market participants reported a category 5, the brands and producers that were reported as serving category 5 included Sentida, Lionhart, Blacklion, and nonspecified private labels. *See* *** importer questionnaire at III-16; *** purchaser questionnaire at III-8; *** purchaser questionnaire at III-8.

4. Raw Materials

PVLT tires are made of natural rubber, synthetic rubber, carbon black, fabric, and steel. Raw materials are the largest component of the total cost of goods sold ("COGS") and accounted for approximately half of the total COGS throughout the period of investigation.[182] The ratio of raw materials to the domestic industry's net sales decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020.[183]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[184]

We find that the volume and increase in volume of cumulated subject imports was significant, both absolutely and relative to apparent U.S. consumption, over the period of investigation. During the period of investigation, the volume of cumulated subject imports increased 8.2 percent, rising from 79.0 million tires in 2018 to 85.4 million tires in 2019 and remaining at 85.4 million 2020, despite the decline in apparent U.S. consumption that year.[185] Cumulated subject imports also increased their market share by 5.3 percentage points, rising from 25.1 percent of apparent U.S. consumption in 2018 to 26.6 percent in 2019 and to 30.4 percent in 2020.[186] This increase came at the direct expense of the domestic industry, which lost *** percentage points of market share during the period.[187] The volume of cumulated subject imports also increased relative to domestic production; as a ratio to the domestic industry's production, cumulated subject imports increased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020.[188]

We conclude that the volume of cumulated subject imports and the increase in that volume are significant both in absolute terms and relative to U.S. consumption.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

---

[182] CR/PR at V-1.
[183] CR/PR at Appendix I, Table I-1.
[184] 19 U.S.C. § 1677(7)(C)(i).
[185] CR/PR at Table C-2.
[186] CR/PR at Table C-2.
[187] CR/PR at Table C-2.
[188] *Derived from* CR/PR at Table IV-3 and U.S. producer questionnaires of ***.

> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[189]

As discussed above, we find that there is a moderate-to-high degree of substitutability between domestically produced PVLT tires and subject imports and that price is an important consideration in purchasing decisions, among other factors.

We have examined several sources of data in our underselling analysis, including pricing data, import purchase cost data, data derived from lost sales/lost revenue survey responses, and other data on the record. The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of four pricing products, reported separately for branded and private label products, that were sold to unrelated U.S. customers during January 2018 through December 2020.[190] Seven U.S. producers and 33 importers provided usable pricing data for sales of the requested products.[191] Pricing data reported by these firms accounted for approximately 11.0 percent of U.S. producers commercial shipments of PVLT tires in 2020, and 11.1 percent of U.S. commercial shipments of subject imports from Korea, 6.1 percent of U.S. commercial shipments of subject imports from Taiwan, 8.1 percent of U.S. commercial shipments of subject imports from Thailand, and 6.9 percent of U.S. commercial shipments of subject imports from Vietnam in 2020.[192]

According to these pricing data, cumulated subject imports pervasively undersold the domestic like product throughout the period of investigation. Cumulated subject imports undersold the domestic like product in 342 out of 382 possible quarterly comparisons involving 17.2 million tires, at margins ranging from 0.3 to 66.4 percent and averaging 26.5 percent.[193] In all, underselling accounted for 89.5 percent of quarterly comparisons, and encompassed 97

---

[189] 19 U.S.C. § 1677(7)(C)(ii).

[190] CR/PR at V-3 – V-4. The four pricing products were as follows:

Product 1.—PVLT tires, size 195/65R15, 89-94 load index, H speed rating sold to the replacement market;

Product 2.—PVLT tires, size 225/65R17, 100-105 load index, H speed rating sold to the replacement market;

Product 3.—PVLT tires, size 205/55R16, 89-94 load index, H speed rating sold to the replacement market; and

Product 4.—PVLT tires, size 235/60R18, 100-105 load index, H speed rating sold to the replacement market.

Id.

[191] CR/PR at V-3 – V-4. Not all firms reported pricing for all products for all quarters. Excluded producers ***. CR/PR at V-4 n.4. Therefore, no adjustment to the pricing data is needed to account for these firms' exclusion from the domestic industry as a related party.

[192] CR/PR at V-4.

[193] CR/PR at Table V-21. Cumulated subject imports oversold the domestic like product in the remaining 40 comparisons involving 457,912 tires, at margins ranging from 0.1 to 43.9 percent and averaging 14.8 percent. *Id.*

percent of the volume involved. This underselling occurred with respect to both branded and private label pricing products. With respect to the branded pricing products, cumulated subject imports undersold the domestic like product in 185 out of 192 possible quarterly comparisons involving 13.4 million tires.[194] Underselling accounted for 96.4 percent of quarterly comparisons of branded pricing products, and encompassed 99.4 percent of the volume involved.[195] With respect to the private label pricing products, cumulated subject imports undersold the domestic like product in 157 out of 190 possible quarterly comparisons involving 3.8 million tires.[196] Underselling accounted for 82.6 percent of quarterly comparisons of private label pricing products, and encompassed 91.2 percent of the volume involved.[197]

The Commission also requested quarterly purchase cost data for the pricing products from importers that imported PVLT tires for their own use or for retail sale. Ten importers provided usable purchase cost data for all of the requested products for all quarters. Purchase cost data accounted for approximately 4.1 percent of U.S. imports from Korea, Taiwan, Thailand, and Vietnam in 2020.[198] Landed duty-paid purchase costs for cumulated subject imports were below the sales prices for U.S. produced PVLT tires in 223 out of 246 possible quarterly comparisons, involving 9.2 million tires (out of 9.4 million tires involved in these quarterly comparisons), with price-cost differentials ranging from 0.2 to 67.6 percent and averaging 35.8 percent.[199] As with the pricing data discussed above, subject import purchase costs were lower than domestic producer sales prices with respect to both branded and private label products. With respect to the branded pricing products, landed duty-paid purchase costs for cumulated subject imports were below the sales prices for U.S. produced PVLT tires in all 174 possible quarterly comparisons, involving 8.6 million tires, with price-cost differentials ranging from 6.3 to 67.6 percent and averaging 41.1 percent.[200] With respect to the private label pricing products, landed duty-paid purchase costs for cumulated subject imports were below the sales prices for U.S. produced PVLT tires in 49 out of 72 possible quarterly comparisons, involving 594,479 tires (out of 804,383 tires involved in these quarterly comparisons), with price-cost differentials ranging from 0.2 to 44.1 percent and averaging 16.8 percent.[201] Taken together, the quantity of subject imports of branded and private label

---

[194] CR/PR at Table V-21. Cumulated subject imports oversold the domestic like product in the remaining 7 comparisons involving 87,205 tires, at margins ranging from 7.0 to 35.1 percent and averaging 21.3 percent. *Id.*

[195] *Calculated* from CR/PR at Table V-21.

[196] CR/PR at Table V-21. Cumulated subject imports oversold the domestic like product in the remaining 33 comparisons involving 370,707 tires, at margins ranging 0.1 to 43.9 percent with an average of 13.5 percent. *Id.*

[197] *Calculated* from CR/PR at Table V-21.

[198] CR/PR at V-22.

[199] CR/PR at Table V-22.

[200] CR/PR at Table V-22.

[201] CR/PR at Table V-22. In the remaining 23 instances, landed duty-paid purchase costs for cumulated subject imports were above the sales prices for U.S. produced PVLT tires involving 209,904 tires, with price-cost differences ranging from 0.4 to 27.7 percent, with an average price-cost differential of 9.1 percent. *Id.*

products associated with costs were lower than domestic prices accounted for 97.8 percent of the reported subject import cost data.[202]

We recognize that the import purchase cost data may not reflect the total cost of importing. Therefore, we requested that importers that imported PVLT tires for their own use or for retail sale provide additional information regarding the costs and benefits of directly importing PVLT tires. Eight out of 16 responding importers reported that they incurred additional costs beyond landed duty-paid costs by importing PVLT tires directly rather than purchasing from a U.S. producer or U.S. importer; three of these importers provided estimates of additional costs, which ranged from 1 to 25 percent compared to the landed-duty paid value.[203] In addition, responding importers reported saving between *** percent by importing PVLT tires compared to purchasing from U.S. producers and saving between *** percent compared to purchasing from importers.[204] Given that subject import costs were on average 35.8 percent below domestic sales prices, as noted above, the inclusion of the additional costs of 1 to 25 percent would still leave the cost of importing subject imports significantly below the domestic sales prices.[205]

We have also considered purchaser lost sales/lost revenue responses. Twenty-one out of 37 responding purchasers reported that, since 2018, they purchased subject imports instead of U.S.-produced product. Fifteen of these purchasers reported that subject import prices were lower than U.S.-produced product, and eight of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Six of these eight responding purchasers provided volumes associated with these purchases, which totaled *** tires imported from subject sources instead of domestic tires primarily due to the lower price of subject imports.[206]

Based on the moderate-to-high degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, the pervasive underselling, the purchase cost data, and the indications of numerous purchasers in lost sales responses that subject imports were lower priced, we find that subject import underselling was significant during the period of investigation. The underselling by cumulated subject imports caused U.S. producers to lose sales and permitted cumulated subject imports to gain 5.3 percentage points of market share at the direct expense of the domestic industry during the period of investigation.

We are unpersuaded by the Joint Respondents' argument that the pricing data gathered by the Commission is inherently flawed because these data were not collected by brand or by category/tier.[207] Given the wide variety of brands, the lack of consensus over which brands

---

[202] CR/PR at Table V-22 (9.2 million tires of a total 9.4 million tires reported).

[203] CR/PR at V-21 – V-22.

[204] CR/PR at V-21 – V-22. Nine importers reported that they compared costs of importing to the cost of purchasing from a U.S. producer in determining whether to import PVLT tires, and 12 importers reported that they compared costs to purchasing from an importer. *Id.*

[205] CR/PR at Table V-22.

[206] CR/PR at Table V-24.

[207] Joint Respondents Prehearing Br. at 42 & n. 166.

would be considered "comparable," and the lack of consensus over the categories or tiers prevailing in the U.S. market, the collection of pricing data by brand or by category/tier would have imposed an undue burden on questionnaire respondents without yielding meaningful data for comparison. Instead, pricing data were collected separately for branded and private label products, about which there was broad agreement.

We are also unpersuaded by respondents' argument that the pricing data and apparent underselling reflect differences in "brand mix," claiming that certain brands of PVLT tires will "always" undersell other brands of tires.[208] In support, they rely on their economists' report, which they claim shows that domestic producers sell brands across a wider spectrum of price points than importers and that that the statistical analysis provided in the report show that branding explains the significant price differences between otherwise similar products.[209] As a threshold matter, we note that underselling was pervasive across all pricing products, both branded and private label, which shows that underselling by cumulated subject imports is not merely reflective of brand differences as between domestic PVLT tires and subject imports.[210]

Neither respondents' arguments nor their economic analysis detracts from our finding of significant underselling by subject imports. First, Joint Respondents' econometric analysis is not, and does not purport to be, an analysis of domestically produced versus imported products.[211] Rather, their econometric analysis is based on a comparison of brands, irrespective of the country or origin. Such comparisons could shed little light on whether "there has been significant price underselling by the imported merchandise *as compared* with the price of domestic like products of the United States,"[212] particularly given the record evidence demonstrating that certain brands, including those identified as "tier 1" or "premium" brands, are both produced domestically and imported from subject countries.[213] Accordingly, we do not find Joint Respondents' econometric analysis to be probative for our analysis of subject import underselling.

---

[208] Joint Respondents Prehearing Br. at 44-49 & Appendix A; Hankook Prehearing Br. at 25-26.

[209] Joint Respondents Prehearing Br. at 44-49 & Appendix A; *see also* Hankook Prehearing Br. at 25-26.

[210] Joint Respondents also claim that domestic private label pricing products reflect the price premiums that domestic products allegedly can command. In this regard, they "direct the Commission's attention to the performance of ***." Joint Respondents Posthearing Br. at 10-11. We find no merit to respondents' claims. As an initial matter, *** financial performance does not establish that its private label PVLT tires were sold at premium prices or call into question our finding of significant underselling in those pricing products. Further, we observe that record indicates some of *** reported private labels, including *** were reported as imported from and manufactured in subject countries. CR/PR at Appendix G, Tables G-1, G-2. Additionally, *** private label PVLT tires were most frequently identified as falling in the lower categories of PVLT tires. CR/PR at Appendix H, Table H-1.

[211] Joint Respondents Prehearing Br., Appendix A at 4.

[212] 19 U.S.C. § 1677(7)(C)(ii)(I)(emphasis added).

[213] CR/PR at Table G-1.

Furthermore, Joint Respondents' econometric analysis is based on isolated snapshots of data that are from different sources,[214] at different levels of trade,[215] and from different periods of time.[216] Indeed, contrary to respondents' assertions that premium brands command premium prices, their econometric analysis indicates that the product that commanded the highest wholesale price was Dunlop, which most responding producers, importers, and purchasers did not consider a premium brand.[217]

Nor does the record support the core premise of respondents' argument that "{t}ires of different brands differ in terms of quality and do not compete on the basis of price."[218] As discussed above, although both domestic and imported PVLT tires consist primarily of branded products, responding purchasers reported that price was a more important purchasing factor than brand availability.[219] We have also found that domestic PVLT tires and subject imports compete substantially across all segments and categories, regardless of how tires and brands are categorized.[220] Moreover, the record evidence, including evidence used in Joint Respondents' econometric analysis, shows that tires described as "tier 1" or premium brands do, in fact, compete with and face competitive pressure from what are identified as lower tiered products.[221] Indeed, some producers of subject merchandise position their low-priced PVLT tires as directly competitive to what are characterized as premium or "tier 1" brands, describing and marketing their products as offering "tier 1" quality and performance at "tier 3" or "tier 4" prices.[222] Given the moderate-to-high degree of substitutability, the importance of

---

[214] Joint Respondents Prehearing Br., Appendix A at 3-4, Attachment 1 (data collected by ***), Attachment 2 (data collected ***), Attachment 3 (various online retail price offers).

[215] Joint Respondents Prehearing Br., Appendix A at 3-4, Attachment 1 (wholesale price data), Attachment 2 (distributor pricing data), Attachment 3 (retail prices).

[216] Joint Respondents Prehearing Br., Appendix A at 3-4, Attachment 1 (June 2020), Attachment 2 (***), Attachment 3 (April 2021).

[217] Joint Respondents Prehearing Br., Appendix A at 6 (showing Dunlop as the highest priced tire in the wholesale prices); *see also id.* at 9 (alleging that "Goodyear-brand tires are widely recognized as premium tires that command a significant price premium"); CR/PR at Appendix H.

[218] Joint Respondents Final Comments at 13.

[219] As discussed above, a majority of responding purchasers reported that price was a very important purchasing factor, while a plurality of responding purchasers reported the availability of brand offerings to be only somewhat important. CR/PR at Table II-11. In addition, price was the second most frequently identified top-three purchasing factor, while purchasers did not identify brand or brand integrity as a top purchasing factor as frequently. CR/PR at Table II-10.

[220] CR/PR at Appendix H.

[221] *See, e.g.,* Joint Respondents Prehearing Br., Appendix A, Attachment B-3 (consumer reviews describing certain brands as comparable or superior quality and value compared to OEM tires that were high end brand and Michelin branded tires); USW Prehearing Br., Exhibit 2 (industry publication describing how "{t}he increasing quality and value of Tier Two and Tier Three products is expected to place even more pressure on Tier One brands."); Exhibit 7 (industry publication describing how Goodyear was having to "price down" its top brand to compete with lower tier products).

[222] *See* USW Prehearing Br., Exhibit 2, *Tire Review*, "The Tier Study: Exploring Tire Industry Rankings (January 2019) at 26 (including a description that "Kenda across all of its products offers a Tier One performance level at a Tier Three value price"); Exhibit 10, *Tire Business*, "Sailun, NTW pitch Sailun (Continued...)

price as a purchasing factor, and the evidence that domestic PVLT tires and subject imports compete substantially across the U.S. market regardless of branding and tire categories, we find the pricing data gathered in these investigations to be probative evidence that subject imports undersold the domestic like product to a significant degree, which enabled cumulated subject imports to take sales and market share from the domestic industry.

We have also examined available data on price trends. With respect to the branded pricing products, domestic price trends varied by product. For branded pricing product 1, which was the product accounting for the largest volume of domestic pricing product sales, prices for the domestic product increased by 13.8 percent from the first quarter of 2018 through the last quarter of 2020.[223] In contrast, for branded pricing products 2, 3, and 4, which were each smaller volume products, domestic prices generally decreased to but a limited degree from the beginning to the end of the period of investigation.[224] With respect to cumulated subject imports, the pricing data show that prices for all four branded pricing products declined overall during the period of investigation.[225] Similarly, the purchase cost data for cumulated subject imports show that landed-duty paid values for all four branded pricing products also declined overall during that time.[226]

Domestic price trends also varied by product with respect to the private label pricing products. For private label pricing product 1, prices for the domestic product increased overall from the first quarter of 2018 through the last quarter of 2020.[227] For private label pricing products 2, 3, and 4, domestic prices generally decreased from the first quarter of 2018 through the last quarter of 2020.[228] While the magnitude of the domestic price declines for these products was greater than that for the branded pricing products 2, 3, and 4, the volumes associated with these private label price declines were much smaller.[229] With respect to cumulated subject imports, the pricing data show that prices for all four private label pricing products generally decreased from the first quarter of 2018 through the last quarter of 2020.[230] The purchase cost data for cumulated subject imports show that landed-duty paid values for private label pricing products 1, 2, and 3 generally increased during that time, while landed-

---

(…Continued)
as 'value brand' answer," (Oct. 28, 2019) (describing a marketing even in which Sailun invited participants to take part in a blind test drive comparing its products with Tier 1 tires, promoting Sailun tires as "Tier 1 quality at Tier 4 prices").

[223] CR/PR at Table V-3.

[224] CR/PR at Tables V-5, V-7, V-9. Price declines for domestically manufactured branded product pricing 2, 3 and 4 were 2.7 percent, 3.9 percent, and 0.4 percent, respectively. CR/PR at Tables V-5, V-7, V-9.

[225] CR/PR at Tables V-3, V-5, V-7, V-9.

[226] CR/PR at Tables V-11, V-13, V-15, V-17.

[227] CR/PR at Table V-4.

[228] CR/PR at Tables V-6, V-8, V-10.

[229] CR/PR at Tables V-5, V-7, V-9.

[230] CR/PR at Tables V-4, V-6, V-8, V-10.

duty paid values for private label pricing product 4 was lower in the last quarter of 2020 compared to the first quarter of 2018.[231]

We have considered the relationship between cumulated subject imports, which pervasively undersold the domestic like product, and the domestic industry's declining prices. Although domestic prices for most pricing products declined during the period of investigation, domestic prices for the largest volume pricing product, product 1, increased. Domestic producer sales of product 1 accounted for 37.4 percent of domestic producer sales of the pricing products during the period of investigation. The price increase for the largest volume pricing product occurred as apparent U.S. consumption declined 12.5 percent between 2019 and 2020 (and by 10.6 percent over the full period of investigation).[232] As noted above, for those pricing products for which domestic prices declined over the period of investigation, the magnitude of the declines was limited, or the volumes associated with those producers were small relative to pricing product 1.

We have also considered whether cumulated subject imports prevented price increases that otherwise would have occurred to a significant degree. During the period of investigation, the domestic industry's ratio of cost of goods sold ("COGS") to net sales increased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020, for an overall increase of *** percentage points over the period of investigation.[233] However, this modest increase in the domestic industry's ratio of COGS to net sales occurred while apparent U.S. consumption declined by 10.6 percent.

Based on the above, we find that cumulated subject imports significantly undersold the domestic like product leading to lost sales and market share. We therefore find that subject imports had significant price effects.

[231] CR/PR at Tables V-12, V-14, V-16, V-18.

[232] We further note, that in the final phase of these investigations, two of three responding U.S. producers reported that they had to reduce prices during the period of investigation, and no U.S. producer reported that it had to roll back announced price increases. CR/PR at V-49.

[233] CR/PR at Appendix I, Table I-1.

E. Impact of the Subject Imports[234]

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[235] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[236]

During the period of investigation, many of the domestic industry's performance indicators declined from 2018 to 2019 and then declined further in 2020. The industry's capacity initially increased from *** tires in 2018 to *** tires in 2019, before decreasing to *** tires in 2020, for an overall decrease of 4.2 percent. Its production decreased 26.4 percent from 2018 to 2020, decreasing from *** tires in 2018 to *** tires in 2019 and to *** tires in 2020. The industry's capacity utilization rate decreased 19.2 percentage points during that time, falling from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. Inventories also declined from *** tires in 2018 to *** tires in 2019 and to *** tires in 2020.[237] The domestic industry also lost market share to cumulated subject imports. While cumulated subject imports gained *** percentage points in market share during the period of

---

[234] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determinations, Commerce found dumping margins of 14.72 to 27.05 percent for imports from Korea, 20.04 to 101.84 percent for imports from Taiwan, and 14.62 to 21.09 percent for imports from Thailand. *Passenger Vehicle and Light Truck Tires from the Republic of Korea: Final Affirmative Determination of Sales at Less than Fair Value,* 85 Fed. Reg. 28569 (May 27, 2021); *Passenger Vehicle and Light Truck Tires from Taiwan: Final Affirmative Determination of Sales at Less than Fair Value*, 85 Fed. Reg. 28563 (May 27, 2021); *Passenger Vehicle and Light Truck Tires from Thailand: Final Affirmative Determination of Sales at Less than Fair Value*, 85 Fed. Reg. 28548 (May 27, 2021). We take into account in our analysis the fact that Commerce has made final findings that producers in Korea, Taiwan, and Thailand are selling subject imports in the United States at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[235] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[236] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[237] CR/PR at Table C-2. The ratio of inventories to total shipments decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. *Id.*

investigation, the domestic industry's market share declined *** percentage points, falling from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020.[238]

Most of the domestic industry's employment indicators initially improved from 2018 to 2019, before declining in 2020. Production related workers ("PRWs") increased from *** PRWs in 2018 to *** PRWs in 2019, before decreasing to *** PRWs in 2020. Hours worked likewise increased from *** hours in 2018 to *** hours in 2019, then decreased to *** hours in 2020. Total wages paid were $*** in 2018 and 2019; they were $*** in 2020. Hourly wages were $*** per hour in 2018, $*** per hour in 2019, and $*** per hour in 2020. Productivity was *** tires per hour in 2018 and 2019; it was *** tires per hour in 2020. Unit labor costs increased steadily during the period of investigation, from $*** in 2018, to $*** in 2019, and $*** in 2020.[239]

The domestic industry's total net sales declined *** percent by quantity and *** percent by value during the period of investigation. By quantity, total net sales declined from *** tires in 2018 to *** tires in 2019 and to *** tires in 2020; by value, total net sales fell from $*** in 2018 to $*** in 2019 and to $*** in 2020. The average unit values ("AUVs") of net sales increased *** percent from 2018 to 2020, increasing from $*** in 2018 to $*** in 2019 and to $*** in 2020. Total COGS decreased *** percent during the period of investigation, decreasing from $*** in 2018 to $*** in 2019 and to $*** in 2020. Unit COGS and the ratio of COGS to net sales increased *** and *** percentage points, respectively, during that time. Unit COGS were $*** in 2018, $*** in 2019, and $*** in 2020. The ratio of COGS to net sales was *** in 2018, *** percent in 2019, and *** percent in 2020.[240]

The domestic industry's gross profits declined *** percent during the period of investigation, decreasing from $*** in 2018 to $*** in 2019 and to $*** in 2020. The domestic industry's operating income declined *** percent, decreasing from $*** in 2018 to $*** in 2019 and to $*** in 2020. Net income declined *** percent, decreasing from $*** in 2018 to $*** in 2019 and to $*** in 2020. The domestic industry's capital expenditures declined *** percent during the period of investigation, decreasing from $*** in 2018 to $*** in 2019 and to $*** in 2020. R&D initially increased from $*** in 2018 to $***, but subsequently decreased to $*** in 2020, for an overall decline of *** percent.[241]

We have found that the significant and increasing volume of cumulated subject imports undersold the domestic like product to a significant degree throughout the period of investigation. Given the moderate-to-high degree of substitutability and the importance of price in purchasing decisions, and the fact that cumulated subject imports competed substantially with domestic PVLT tires across the U.S. market, this significant underselling enabled cumulated subject imports to take sales and market share from the domestic industry. As a result, the domestic industry had fewer shipments than it would have otherwise, yielding lower production, capacity utilization, and employment, and also lower revenues, which reduced the industry's gross profit, operating profit, and net income. For these reasons, we

[238] CR/PR at Table C-2.
[239] CR/PR at Table C-2.
[240] CR/PR at Table C-2.
[241] CR/PR at Table C-2.

determine that cumulated subject imports from Korea, Taiwan, Thailand, and Vietnam had a significant impact on the domestic industry during the period of investigation.

We have also considered whether factors other than cumulated subject imports had an impact on the domestic industry during the period of investigation so as not to attribute to subject imports any injury caused by other factors. As discussed above, apparent U.S. consumption was 10.6 percent lower in 2020 compared to 2018; this reflects an initial increase of 2.2 percent in apparent U.S. consumption from 2018 to 2019, followed by a decrease of 12.5 percent in 2020, coinciding with the COVID-19 pandemic.[242] As noted above, many of the domestic industry's performance indicators, including but not limited to its market share, production, U.S. shipments, net sales by quantity and value, gross profits, operating income, and net income, declined from 2018 to 2019, while apparent U.S. consumption increased. Between 2019 and 2020, many measures of the industry's performance declined at a rate well in excess of the 12.5 percent decline in apparent U.S. consumption during the period, including domestic production (*** percent), capacity utilization (*** percentage points), U.S. shipments (*** percent), hours worked (*** percent), wages paid (*** percent), net sales by quantity (*** percent), net sales by value (*** percent), gross profits (*** percent), operating income (*** percent), net income (*** percent), capital expenditures (*** percent), and R&D expenses (*** percent).[243] Accordingly, we find that the decline in demand in 2020 does not fully explain the domestic industry's declining performance that year. Moreover, declining demand cannot explain the domestic industry's loss in market share to cumulated subject imports, which occurred in each year of the period of investigation.[244]

We have also considered nonsubject imports. As discussed above, nonsubject imports maintained a relatively steady presence in the U.S. market, accounting for approximately *** percent of the U.S. market throughout the period of investigation. In addition, the available evidence indicates that nonsubject imports were priced higher than cumulated subject imports during the period of investigation.[245]

We are also unpersuaded by respondents' arguments that factors other than cumulated subject imports accounted for the domestic industry's declining performance. Contrary to respondents' argument that domestic producers allegedly focused on larger, higher value, branded tires and ceded the market for smaller, private label, and value tires to subject imports,[246] the record shows that U.S. producers supplied both branded and private label tires,[247] and tires in the full range of sizes, including smaller tires, throughout the period of

[242] CR/PR at Table C-2.

[243] CR/PR at Table C-2.

[244] CR/PR at Table C-2.

[245] CR/PR at Table C-2. Nonsubject imports' AUVs ranged from $*** to $*** during the period of investigation whereas cumulated subject import AUVs ranged from $*** to $***. *Id.* Furthermore, the AUVs of U.S. shipments by U.S. importers of both branded and private label PVLT tires from nonsubject sources were higher than those from subject sources. CR/PR at Appendix D, Table D-2.

[246] *See, e.g.,* Joint Respondents Prehearing Br. at 22-25; Joint Respondents Posthearing Br. at 5-6; Hankook Prehearing Br. at 17-18; Les Schwab Prehearing Statement at 1-2.

[247] CR/PR at Appendix D, Table D-1.

investigation.[248] Additionally, market participants reported that domestic producers continue to supply the U.S. market with lower-priced, economy tires.[249] Thus, the record belies respondents' assertions that the domestic industry voluntarily ceded any part of the U.S. PVLT tire market to subject imports.

Moreover, the record shows that subject imports were not limited to private label or smaller sized tires. To the contrary, as described above, subject imports consisted primarily of branded tires throughout the period of investigation,[250] and some firms marketed low-priced subject imports as being comparable to premium U.S. products in terms of quality and performance.[251] Furthermore, throughout the period of investigation, both domestic producers' U.S. shipments and cumulated subject imports' U.S. shipments consisted predominantly of mid-sized tires (16- to less-than-18-inch tires), followed by the larger-sized tires (greater-than-18-inch tires),[252] while U.S. shipments of smaller tires from all sources declined. [253] Far from focusing on segments allegedly abandoned by the domestic industry, cumulated subject imports' U.S. shipments increased with respect to both the mid-size and larger-size categories during the period of investigation, while the domestic industry's U.S. shipments in both size categories declined.[254] Thus, subject imports were actively targeting those parts of the U.S. market -- branded, mid-sized, and larger tires -- that respondents allege were the focus of domestic producers.[255]

We also reject respondents' claim that domestic producers' participation in the OEM market explains the industry's declining performance. During the period of investigation, U.S. shipments from all sources to the OEM market declined by volume.[256] In the much larger

[248] CR/PR at Appendix E, Table E-1.

[249] CR/PR at Appendix H, Table H-1.

[250] CR/PR at Appendix D, Table D-2.

[251] *See* USW Prehearing Br., Exhibit 2, *Tire Review*, "The Tier Study: Exploring Tire Industry Rankings (January 2019) at 26 (including a description that "Kenda across all of its products offers a Tier One performance level at a Tier Three value price"); Exhibit 10, *Tire Business*, "Sailun, NTW pitch Sailun as 'value brand' answer," (Oct. 28, 2019) (describing a marketing event in which Sailun invited participants to take part in a blind test drive comparing its products with Tier 1 tires, promoting Sailun tires as "Tier 1 quality at Tier 4 prices").

[252] CR/PR at Appendix E, Tables E-1, E-2.

[253] CR/PR at Appendix E, Tables E-1, E-2.

[254] CR/PR at Appendix E, Tables E-1, E-2.

[255] We also find unpersuasive respondents' assertions that subject imports are pulled into the U.S market due to the allegedly low fill rates of U.S. producers. Joint Respondents Prehearing Br. at 32, Exhibit 38; Hankook Prehearing Br. at 8-9, Exhibits 5, 6. In support of their contention, respondents rely upon a single affidavit and a 2012 article that mentions both domestic and foreign manufacturers in discussing low fill rates. *Id.* We find response to the questionnaires, in which the majority of purchasers reported the domestic like product and subject imports to be comparable in terms of reliability of supply, to be more probative evidence on this issue. CR/PR at Table II-13.

[256] CR/PR at Appendix F, Table F-1. As a share of total U.S. shipments to the OEM segment, domestic producers' share declined from *** percent in 2018 to *** percent in 2020 and cumulated subject import share declined from *** to ***, while nonsubject imports share increased from *** percent in 2018 to *** percent in 2020. *Id.*

replacement segment, however, U.S. shipments of subject imports increased in every year of the period of investigation, while U.S. shipments of domestically produced tires and nonsubject imports declined irregularly over the period.[257] [258]

We are also unpersuaded by respondents' arguments that the domestic industry was disproportionately affected by the COVID-19 pandemic.[259] As an initial matter, as discussed above, we have found that key domestic industry performance indicators declined prior to the pandemic in 2020. Additionally, as also discussed above, both domestic producers and importers reported being affected by the pandemic, with most domestic producers characterizing the impact as temporary, while several importers described problems that extended beyond 2020. Indeed, Joint Respondents acknowledge that domestic producers were able to resume shipping tires at relatively high levels in *** 2020.[260] During that same time period, however, the monthly volume of cumulated subject imports rapidly increased to the highest levels of the period of investigation and continued at high levels for the remainder of 2020.[261] Thus, even as the domestic industry resumed operations and demand remained weak, subject imports continued to capture market share from the domestic industry.

We are also unpersuaded by respondents' argument that Goodyear's closure of its PVLT tire plant in Gadsden, Alabama in May 2020 drew subject imports into the U.S. market and accounted for the domestic industry's declining performance that year.[262] Contrary to respondents' suggestion that the closure was unrelated to subject imports, the smaller-size PVLT tires produced in Gadsden, Alabama competed directly with subject imports during the period of investigation.[263] Furthermore, contrary to respondents' claim that Goodyear transferred production from Gadsden to Mexico, nonsubject imports from Mexico increased little between 2019 and 2020.[264] Although the domestic industry possessed ample unused capacity with which to serve purchasers formerly supplied by the Gadsden plant, the industry instead lost substantial market share to increasing volumes of low-priced subject imports in the second half of 2020.

---

[257] CR/PR at Appendix F, Table F-2. As a result, cumulated subject import share of total U.S. shipments to the much larger replacement market increased from *** percent in 2018 to *** percent in 2020, while domestic producers' share declined from *** percent in 2018 to *** percent in 2020, and nonsubject import share increased only slightly from *** percent in 2018 to *** percent in 2020. *Id.*

[258] Given that tires produced for the OEM market can be used interchangeably and command higher prices in the replacement market, USW contends that the domestic industry would have been able to compensate for its reduced shipments to the OEM segment with shipments to the replacement market but for the increasing volumes of low-priced subject imports in the replacement market. Tr. at 150-51 (Johnsen).

[259] Joint Respondents Prehearing Br. at 26-27, 54-55; Joint Respondents Posthearing Br. at 5-6; Hankook Prehearing Br. at 26-30.

[260] Joint Respondents' Final Comments at 5.

[261] CR/PR at Table IV-9.

[262] See Joint Respondents Posthearing Br. at 4-5.

[263] CR/PR at Appendix E, Table E-2.

[264] CR/PR at Table IV-4.

We also find unavailing respondents' argument that because the petitions in these investigations were brought by the union instead of by domestic producers, the domestic producers must be opposed to the investigations or not injured.[265] As USW correctly notes, unions are entitled under the statute to file petitions seeking relief from unfairly traded imports.[266] Furthermore, most domestic producers ***.[267] Indeed, a number of domestic producers have expressed concern about the impact of imports on the U.S. market and the belief that relief would improve the U.S. market.[268] Respondents' argument that the U.S. producers' positions on the petitions somehow reflect a healthy domestic industry also conflicts with the industry's declining performance during the period of investigation. Finally, we find unavailing Joint Respondents arguments that the decrease in the volume and value of domestic producers' exports,[269] or intra-industry competition[270] fully explain the injury to the domestic industry. Neither reduced exports nor intra-industry competition could account for any of the injury resulting from the domestic industry's loss of market share to subject imports in the U.S. market.

VII. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of imports of PVLT tires from Korea, Taiwan, and Thailand found by Commerce to be sold in the United States at LTFV and imports of the subject merchandise from Vietnam that Commerce found to be subsidized by the government of Vietnam. We find that imports of PVLT tires from Vietnam that are sold in the United States at LTFV are negligible and terminate that investigation.

[265] Joint Respondents Prehearing Br. at 70-72; Joint Respondents Posthearing Br. at 12-13.

[266] 19 U.S.C. §§ 1671a(b)(1), 1673a(b)(1), 1677(9); *see also* USW Prehearing Br. at 30-33; USW Posthearing Br. at 13, Responses to Commission Questions at 32-43.

[267] CR/PR at Table III-1.

[268] *See, e.g.,* CR/PR at Table VI-8; *see also* USW Prehearing Br., Exhibit 7 (in discussing these investigations, "leveling the playfield in the U.S. is really no question a good thing for the health of the domestic tire industry . . . {and} the benefits of these more recent tariffs potentially maybe longer lived"); Exhibit 8 (describing a response strategy to these investigations to include ramping up domestic production and raise price positions).

[269] Joint Respondents Prehearing Br. at 41.

[270] Joint Respondents Prehearing Br. 41-42.

Dissenting Views of Commissioner David S. Johanson

Based on the record in the final phase of these investigations, I find that an industry in the United States is not materially injured or threatened with material injury by reason of imports of passenger vehicle and light truck (PVLT) tires from Korea, Taiwan, and Thailand found by the U.S. Department of Commerce (Commerce) to be sold in the United States at less than fair value and imports of PVLT tires from Vietnam found by Commerce to be subsidized by the government of Vietnam. I further find that imports of PVLT tires from Vietnam that are sold in the United States at LTFV are negligible and vote to terminate that investigation. I join and adopt as my own sections I–VI(B) (except where otherwise indicated) of the affirmative majority views.

My separate determination that there is no material injury or threat of material injury by reason of subject imports is based primarily on the following findings: (1) but for the disruptions caused by the COVID-19 pandemic to both demand and supply, the market share shift observed in 2020, ultimately favoring subject imports, is not likely to have occurred; (2) despite consistent price underselling by subject imports, there were no adverse price effects on the U.S. prices of the domestic like product; (3) the deterioration in the financial performance of the domestic industry, which remained at a healthy rate of profitability, was driven by declining domestic production that led to higher unit direct labor and unit "other factory costs," even as the gross values of those costs declined.

I. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[1]

Cumulated subject import volume increased by 8.2 percent over the period of investigation, with nearly all of that increase having occurred between 2018, when imports were 78.9 million tires, and 2019, when imports rose to 85.4 million tires, an increase of 6.5 million tires, or by 8.2 percent.[2] Nevertheless, because U.S. consumption increased by 2.2 percent between 2018 and 2019, subject import market share increased by only 1.5 percentage points, increasing from 25.1 percent in 2018 to 26.6 percent in 2019.[3] From 2019 to 2020, subject import volume increased by only 12,000 tires (less than 0.1 percent), yet with U.S. consumption declining by 12.5 percent due to the COVID-19 pandemic, the share held by subject imports increased by 3.8 percentage points (from 26.6 percent in 2019 to 30.4 percent in 2020), for an overall increase of 5.3 percentage points.[4]

Respondents posit that it was "the sourcing decisions of the major multinational producers, not subject imports, {which} prevented the domestic industry from increasing its replacement sales in 2019. But for these sourcing decisions, U.S. market share in the

[1] 19 U.S.C. § 1677(7)(C)(i).
[2] CR/PR at Table C-1.
[3] CR/PR at Table C-1.
[4] CR/PR at Table C-1.

replacement channel would have increased in 2019."[5] The record of these investigations does reflect that *** out of the fourteen U.S. producers imported either subject or nonsubject PVLT tires and between 2018 and 2019, those imports increased by *** tires, with *** of that increase attributable to subject imports.[6] Two U.S. producers testifying at the Commission's hearing in opposition to imposition of the orders explained that they import to complement domestic production because "U.S. demand and SKU {stock keeping units} complexity far exceed what can be produced in the United States"[7] and the U.S. PVLT tire market is "characterized by an incredible number of different products."[8] The vice president of sales for Hankook explained that "demand in the U.S. PVLT tire market is very diverse and fragmented. These factors make it impractical for U.S. tire producers to make all of the thousands of different SKUs demanded by U.S. customers at their U.S. plants."[9]

According to data from Appendix D of the staff report, subject imports of private label tires increased by *** tires in 2019, as compared to 2018.[10] Respondents also testified at the Commission's hearing that "{t}here's virtually no domestic availability of independent private brand tires. At Atturo our efforts to source tires from U.S. producers have been futile. In fact, no U.S. domestic producers are willing to make tires for Atturo."[11] Private label tires accounted for less than *** percent of U.S. producers' U.S. shipments from 2018 to 2020 and the volume of those shipments declined *** over the period.[12]

While the increases in subject imports in 2019 that are attributable to U.S. producers themselves—and to importers seeking private label PVLT tires—do not explain the entirety of the increase, such increases do account for almost half of the already modest increase in market share observed for subject imports in 2019.[13]

In 2020, while subject import volume remained essentially the same as in 2019, this nevertheless resulted in an increase in market share held by subject imports of 3.8 percentage points. Respondents have asserted that this is due to PVLT tire production being idled in the United States to a greater extent than was the case for tire producers in Asia.[14] Petitioner concedes that tire plants in the United States were shut down for four to six weeks in response

[5] Hearing Tr. at 183 (Szamosszegi). See also Hearing Tr. at 191, 223, and 245-46 (Szamosszegi).
[6] Calculations based on CR/PR at Table III-9. The *** U.S. producer that did not import was *** U.S. producers. *Compare* CR/PR at Table III-1 *with* Table III-9.
[7] Hearing Tr. at 158 (Smallwood).
[8] Hearing Tr. at 165 (Brison).
[9] Hearing Tr. at 166-67 (Brison).
[10] Calculation based on CR/PR at Table D-2. As a share of total import shipments, import shipments of private label PVLT tires started at *** percent in 2018 and rose to *** percent in 2020, with the bulk of that increase (*** percentage points) coming in 2020. In 2020, the absolute volume of subject import shipments of private label PVLT tires rose even as the total volume of subject import shipments declined. CR/PR at D-8, Table D-2.
[11] Hearing Tr. at 171-72 (Mathis).
[12] CR/PR at Table D-1.
[13] The increase in subject imports by U.S. producers in 2019 was *** tires and the increase in subject imports of private label tires was *** tires, for a total of *** tires, which is *** percent of the total increase in subject imports between 2018 and 2019 of *** tires.
[14] Hearing Tr. at 213 (Mathis) and 214 (Szamosszegi).

to the COVID-19 pandemic.[15] Respondents counter that the slow return from the pandemic shutdowns resulted in depressed domestic production for a significantly longer time, as much as four to five months.[16] Importers explain the steady subject import shipments as having provided supply continuity at an uncertain time in the U.S. market: "we were still bringing in product because it was on the water, it had already been produced, and the U.S. producers didn't have anything to sell at some point."[17] When U.S. demand for PVLT tires began rebounding in August 2020, subject imports were better positioned to fill demand that domestic producers were struggling to meet.[18] At the Commission's hearing, petitioner conceded that "it's hard to know if any, you know, lag in ramping-up was due to, you know, physical constraints or what have you, or due to the loss of market share."19 In the following sections, I will explain why, based on the record of these investigations, I conclude that the gain in market share by subject imports was predominantly due to independently occurring changes in the conditions of competition for the U.S. market that had the effect of temporarily favoring subject imports, especially in the final year of the period of investigation.

Therefore, while I conclude that the volume of subject imports is significant both in absolute terms and relative to consumption in the United States, I do not find that the volume of cumulated subject imports or any increase in that volume, either absolutely or relative to U.S consumption, warrants affirmative determinations in light of the conditions of competition in this market and my findings, to be detailed below, concerning a lack of significant price effects and impact.

II. Price Effects of Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[20]

I agree that there is a moderate-to-high degree of substitutability between the domestic like product and subject imports and that price is important in purchasing decisions.

Price underselling: Pricing product data covered 11.0 percent of U.S. producers shipments of PVLT tires in 2020, and 11.1 percent of U.S. shipments of subject imports from Korea, 6.1 percent of U.S. shipments of subject imports from Taiwan, 8.1 percent of U.S. shipments of subject imports from Thailand, and 6.9 percent of U.S. shipments of subject

[15] CR/PR at III-10 and Table III-4; Hearing Tr. at 43 (Johnsen).
[16] Hearing Tr. at 204 (Szamosszegi).
[17] Hearing Tr. at 202 (Smallwood).
[18] Hearing Tr. at 183-84 and 225 (Szamosszegi).
[19] Hearing Tr. at 88 (Drake).
[20] 19 U.S.C. § 1677(7)(C)(ii).

imports from Vietnam in 2020.[21] Cumulated subject imports undersold the domestic like product 342 out of 382 quarterly comparisons involving 17.2 million tires. Margins of underselling ranged from 0.3 to 66.4 percent and averaged 26.5 percent. Subject imports undersold the domestic product in 89.5 percent of quarterly comparisons, and for 97 percent of the volume.[22]

The Commission also obtained purchase cost data for the pricing products from importers that imported PVLT tires their own use or for retail sale. Purchase cost data accounted for approximately 4.1 percent of U.S. imports from Korea, Taiwan, Thailand, and Vietnam in 2020.[23] Landed duty-paid costs for cumulated subject imports were below the sales prices for U.S. produced PVLT tires in 223 out of 246 possible quarterly comparisons, with 9.2 million tires of the 9.4 million tires being entered at a cost lower than the U.S. sales price, with price-cost differentials spanning from 0.2 to 67.6 percent and with an average of 35.8 percent.[24]

While the data show significant underselling of the domestic like product by cumulated subject imports, I do not find, as discussed herein, that subject imports had significant adverse price effects. Despite the significant underselling, the record does not support a finding that subject imports depressed prices for the domestic like product or prevented price increases that would otherwise have occurred to a significant degree. Neither do I find that the underselling led to a significant gain in market share by subject imports at the expense of the domestic industry.

Price Depression: U.S. prices for the four pricing products, divided according to whether they were branded or private label, showed increases for both pricing product 1 offerings, and declines for the remaining three pricing products. For branded pricing products, the declines were small: 2.7 percent for product 2, 3.9 percent for product 3, and *** percent for product 4.[25] The pricing profiles for these products are steady over the period of investigation, fluctuating in a narrow range.[26] The declines for the private label products were somewhat larger: *** percent for product 2, *** for product 3, and *** percent for product 4.[27] The declines in prices for private label products 2 and 4 were both focused between QIV '18 and QII '19, after which the U.S. prices were largely stable.[28] Further, as noted above, private label tires account for a small fraction of the U.S. industry's revenues, never exceeding *** percent over the period of investigation.[29]

As noted by respondents, there *** that made deliveries of the private label tires captured in these pricing product series, ***.[30] It is clear from pricing series data that ***

[21] CR/PR at V-4.
[22] CR/PR at Table V-21.
[23] CR/PR at V-22.
[24] CR/PR at Table V-22.
[25] CR/PR at Table V-19.
[26] CR/PR at Figures V-3, V-5, and V-7. Petitioner conceded that these "were small price declines." Hearing Tr. at 95 (Schagrin).
[27] CR/PR at Table V-19.
[28] CR/PR at Figures V-4 and V-8.
[29] CR/PR at Table D-1.
[30] Joint Respondents' posthearing brief at 11.

decision to lower prices in late 2018 was an economically sound one, resulting in *** sales volume for both private label products 2 and 4. In 2018, *** realized $*** in revenue from these two products; after lowering the price of both pricing products, *** realized *** increasing revenues that rose to $*** in 2019 and $*** in 2020.[31] *** financial performance improved in almost every possible dimension between 2018 and 2019,[32] suggesting that price reductions during that time are not properly considered price depression by reason of subject imports.

Finally, there are no allegations of lost revenues on this record.[33]

Price Suppression: The COGS-to-net-sales ratio for the domestic industry increased but by only 1.0 percentage point, rising from 67.9 percent in 2018, to 68.6 percent in 2019, and to 68.9 percent in 2020.[34] Such a narrow range of fluctuation does not suggest a cost-price squeeze or price suppression. While unit COGS increased steadily over the period of investigation, by 3.4 percent, this occurred despite a steady decline in unit raw materials costs from $32.36 in 2018 to $30.38 in 2020, or by 6.1 percent.[35] The increase in unit COGS was driven by an increase in unit direct labor and unit "other factory costs," especially in 2020,[36] which resulted from lower capacity utilization (due to idling of factories due to the COVID-19 pandemic and the associated demand declines) in this high fixed costs industry.[37] It is also unlikely that increases in prices would have been observed over the period of investigation, especially with raw material costs declining steadily and demand depressed drastically for much of 2020 due to COVID-19 pandemic lockdowns and related restrictions.[38]

Lost Sales/Lost Revenue: In the lost sales-lost revenue survey, of thirty-seven responding purchasers, twenty-one stated that they had purchased subject imports instead of U.S.-produced PVLT tires. Of those, fifteen stated that subject imports were lower priced. Eight purchasers agreed that a primary reason for purchasing subject imports was due to their lower price, with those purchasers accounting for *** tires.[39] When compared to total subject import

[31] Calculated from CR/PR at Tables V-6 and V-10.

[32] CR/PR at Table VI-3. All of the following measures improved for *** between 2018 and 2019: ***). *** on the petition. CR/PR at Table III-1.

[33] CR/PR at Table V-26. While only suggestive (due to obvious product mix issues), the AUVs of U.S. producers' U.S. shipments increased over the period of investigations by 1.7 percent after dipping slightly in 2019 (by 0.4 percent). Joint respondents provide an analysis that shows how the pricing product data, in which more product series showed declines, could still be consistent with increasing AUVs overall, due to the fact that the pricing products that were increasing (especially pricing product 1) involved larger volumes than the products that showed declines. Joint respondents' Answers to Commissioners' Questions at 53-55.

[34] CR/PR at Table C-1.

[35] CR/PR at Table VI-1.

[36] CR/PR at Table VI-1.

[37] Hearing Tr. at 191 (Szamosszegi).

[38] Nevertheless, there were some U.S. price increases observed for pricing product 1 (both the branded and private label products) in 2020. CR/PR at Tables V-3 and V-4 and Figures V-1 and V-2.

[39] CR/PR at Table V-24.

volume, these lost sales are only *** percent of total shipments of subject imports over the period of investigation.[40]

In sum, despite subject imports significantly underselling the domestic like product, the record does not support a finding that the effect of subject imports was to depress prices to a significant degree or prevent price increases, which otherwise would have occurred, to a significant degree. Accordingly, I do not find that subject imports had significant adverse price effects on the domestic industry.

III. Impact of Subject Imports[41]

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[42] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[43]

This period of investigation features—in its final year—an extraordinary shock, significantly affecting both demand and supply in the U.S. market. For much of the second quarter of 2020, the COVID-19 pandemic shut down factories, kept vast numbers of vehicles that use these tires off the highways, closed retail outlets, and disrupted supply chains that U.S.

---

[40] Calculated from Tables V-24 and C-1. See also Joint Respondents' Answers to Commissioners' Questions at 30.

[41] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determinations, Commerce found dumping margins of 14.72 to 27.05 percent for imports from Korea, 20.04 to 101.84 percent for imports from Taiwan, and 14.62 to 21.09 percent for imports from Thailand. *Passenger Vehicle and Light Truck Tires from the Republic of Korea: Final Affirmative Determination of Sales at Less than Fair Value*, 85 Fed. Reg. 28569 (May 27, 2021); *Passenger Vehicle and Light Truck Tires from Taiwan: Final Affirmative Determination of Sales at Less than Fair Value*, 85 Fed. Reg. 28563 (May 27, 2021); *Passenger Vehicle and Light Truck Tires from Thailand: Final Affirmative Determination of Sales at Less than Fair Value*, 85 Fed. Reg. 28548 (May 27, 2021). I take into account in my analysis the fact that Commerce has made final findings that producers in Korea, Taiwan, and Thailand are selling subject imports in the United States at less than fair value. In addition to this consideration, my impact analysis has considered other factors affecting domestic prices. My analysis of the significant underselling of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[42] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[43] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

producers rely upon for efficient production. Coming to conclusions regarding causality under such tangled circumstances is difficult, a point emphasized by respondents[44] and conceded by petitioner.[45]

While the domestic industry experienced an increase in production capacity from 2018 to 2019, capacity dipped in 2020, reflecting the closure of Goodyear's Gadsden, Alabama facility.[46] Production quantity declined somewhat in 2019, but then dropped precipitously in 2020.[47] Capacity utilization fell by 2.1 percentage points in 2019 (from 82.4 percent in 2018 to 80.4 percent in 2019), due to both slightly higher capacity and slightly lower production;[48] then, in 2020, utilization dropped steeply by 16.0 percentage points, to 64.3 percentage points.[49] The volume of U.S. producers' U.S. shipments declined by 0.8 percent in 2019 and by 20.7 percent in 2020, for an overall decline of 21.3 percent.[50]

The reasons for the closure of the Gadsden plant are disputed. Petitioner argues that underselling by increased volumes of subject imports, and the resulting loss of market share, led to the decision to close Gadsden.[51] Respondents asserted that Goodyear had long ago identified the Gadsden plant, the oldest in its fleet, having been built in 1923, for retirement.[52] Joint respondents also asserted that union leadership at Gadsden felt that Goodyear's new plant in San Luis Potosi, Mexico, which opened in 2017, was the proximate cause of the closure, not subject imports.[53] Given that layoffs at Gadsden began in January 2019,[54] prior to any market share increase by subject imports, the connection between subject imports and

---

[44] Joint Respondents' Posthearing Brief at 3-4 and 12.

[45] Counsel for petitioner agreed that "it's hard to know if any, you know, lag in ramping-up was due to, you know, physical constraints or what have you, or due to the loss of market share." Hearing Tr. at 88 (Drake). Counsel for petitioner also noted that she believed "Respondent's strongest argument was that, well, the reason the domestic industry market share in 2020 was because they had to shut down, and so, imports had to serve the market." Hearing Tr. at 85-86 (Drake).

[46] The domestic industry's capacity increased from 188.4 million tires in 2018 to 189.8 million tires in 2019, but then declined to 181.6 million in 2020. CR/PR at Table III-5. The closure of Goodyear's Gadsden, Alabama facility removed *** tires from the domestic industry, accounting for *** of the decline from 2019 to 2020. *Id*.

[47] Production by the domestic industry declined from 155.3 million tires in 2018 to 152.5 million tires in 2019. CR/PR at Table III-5. The biggest contributor to this decline was Goodyear, whose gradual closure of its Gadsden plant, ending in November 2019, led to a *** tire decline in production in 2019. CR/PR at III-7 and Table III-5. Domestic production fell further in 2020 to 116.8 million tires. CR/PR at Table III-5.

[48] CR/PR at Tables III-5 and C-1.

[49] CR/PR at Table C-1. Respondents calculate that COVID-19 pandemic related shutdowns reduced capacity by *** tires. This loss of production resulted in a reduction in capacity utilization of *** percentage points. Joint Respondents' Answers to Commissioners' Questions, at 10. This estimate is within the range of the estimate provided by petitioner—"somewhere between eight and a half and 12 percent of the year." Hearing Tr. at 88 (Schagrin).

[50] U.S. shipments declined from 140.0 million in 2018 to 138.9 million in 2019 and then to 110.1 million in 2020. CR/PR at Tables III-7 and C-1.

[51] Hearing Tr. at 149-50 (Drake).

[52] Joint Respondents' Prehearing Brief at 35 and Exh. 40.

[53] Joint Respondents' Prehearing Brief at 34-37.

[54] Joint Respondents' Prehearing Brief at Exhibit 44.

Gadsden's closure appears tenuous at best. Indeed, Gadsden is not mentioned in petitioner's posthearing brief,[55] is given only light treatment in the petitioner's answers to Commissioners' questions,[56] and was not mentioned in petitioner's final comments.[57]

The domestic industry's market share declined by 5.3 percentage points, from 44.6 percent in 2018 to 39.2 percent in 2020.[58] This occurred as subject imports' market share increased by 5.3 percentage points, rising from 25.1 percent in 2018 to 30.4 percent in 2019.[59] A large majority of the domestic industry's loss (and of subject imports' gain) in market share came in 2020. As discussed above in the Volume section, the domestic industry's 4.0 percentage point market share loss in 2020 can be traced to reduced availability of U.S.-produced PVLT tires while subject imports did not experience the supply shock to the same degree. While petitioner was ready to concede that PVLT tire plants in the United States were shut down for four to six weeks in response to the COVID-19 pandemic,[60] respondents believe that there was a slower return from the pandemic shutdowns resulting in depressed domestic production for as much as four to five months.[61] Respondents note that steadily available subject import shipments provided supply continuity at an uncertain time in the U.S. market: "we were still bringing in product because it was on the water, it had already been produced, and the U.S. producers didn't have anything to sell at some point."[62] When U.S. demand for PVLT tires began rebounding in August 2020, subject imports were better positioned to fill the increasing demand than domestic producers.[63]

Inventories held by U.S. producers declined from 2018 to 2020 on both an absolute basis (by 31.0 percent) and as a share of total shipments (by 1.4 percentage points).[64] Respondents pointed to industry perceptions that "fill rates" (the percentage of orders that are

[55] Petitioner's Posthearing Brief at 1-15.
[56] Petitioner's Answers to Commissioners' Questions at 60-61.
[57] Petitioner's Final Comments at 1-15. In its prehearing brief, petitioner had emphasized the importance of Gadsden's closure, asserting that its closure had caused up to four percentage points of market share loss for the domestic industry. Because I find that petitioner's assertion that Gadsden's closure was by reason of subject imports was not convincingly established on this record, then by petitioner's own calculation, about three-quarters of the market share loss experienced by the domestic industry over the period of investigation (4 percentage points as compared to the total of 5.3 percentage points lost) would be attributable to causes other than subject imports.
[58] CR/PR at Table C-1. The domestic industry's market share loss in 2020 was 4.0 percent, accounting for 75.5 percent of the total loss over the period. *Id*.
[59] CR/PR at Table C-1. The subject import market share gain in 2020 was 3.8 percent, accounting for 71.7 percent of the total loss over the period. *Id*.
[60] Hearing Tr. at 43 (Johnsen).
[61] Hearing Tr. at 204 (Szamosszegi).
[62] Hearing Tr. at 202 (Smallwood).
[63] Hearing Tr. at 183-84 and 225 (Szamosszegi).
[64] Inventories decreased from 18,831 tires in 2018 to 12,994 tires in 2020. The inventories-to-total-shipments ratio declined from 12.1 percent in 2018 to 10.7 percent in 2020. CR/PR at Table C-1. Inventories held by domestic producers declined by 5.6 percent in 2019 and by 23.7 percent in 2020. *Id*.

delivered on-time) were low in the second half of 2020, caused by a combination of spiking demand, lagging production, and low levels of inventory.[65]

Employment measures also showed improvements in 2019, but those were erased by eroding market conditions in 2020. Production workers (PRWs), hours worked, wages paid, and hourly wages all improved in 2019.[66] By the end of 2020, every employment measure for the domestic industry was worse than in 2018.[67]

The domestic industry's capital expenditures declined steadily by 33.2 percent, from $1.0 billion in 2018 to $0.7 billion in 2020.[68] Research and development expenses declined irregularly by 9.7 percent.[69] These decreases follow an active period of investment in the U.S. market by multinationals that saw the addition of five new members to the domestic industry since 2015, including Nokian Tyres, Giti USA, and Kumho Tire.[70] During this period, *** built new plants through greenfield investment and another, ***, invested to establish itself and improve efficiency.[71] Any declines in these measures largely reflect a return to more normal conditions following a particularly active period.

The domestic industry's operating income margin declined steadily over the period by 2.8 percentage points, from 21.5 percent in 2018 to 18.7 percent in 2020.[72] The majority of that declined occurred in 2020 (when it declined by 1.7 percentage points). The decline in profitability is attributable to increased unit COGS and unit SG&A expenses that rose due to costs having to be allocated across a smaller production volume, in turn caused by the COVID-19 pandemic.[73] Net income as a share of net sales also declined steadily, but with an even larger percentage point loss in 2020 (by 4.5 percentage points).[74]

For the reasons stated above, I do not find that subject imports had a significant adverse impact on the domestic industry. Accordingly, I find that the domestic industry is not materially injured by reason of subject imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam.

---

[65] Joint Respondents' Answers to Commissioners' Questions at 15; Hearing Tr. at 167 (Brison) & 202 (Smallwood). A statement by Goodyear's CEO on an October 2020 earnings call noted lower than desired inventory levels, leading to lower "service levels." *Id*. at n.44.

[66] PRWs initially increased from 45,910 in 2018 to 46,409 in 2019, but then declined to 41,242 in 2020 (a decline over the period of 10.2 percent); hours worked first increased from 93.5 million in 2018 to 94.9 million in 2019 before declining to 76.8 million in 2020 (a decline over the period of 17.9 percent); wages paid initially increased from $2.36 billion in 2018 to $2.41 billion in 2019, but then declined to $1.91 billion in 2020, a decline of 19.0 percent; and hourly wages first increased from $25.27 in 2018 to $25.43 in 2019, before dropping to $24.93 in 2020. Labor productivity steadily declined from 1.7 tires per hour in 2018 to 1.5 tires per hour in 2020; this occurred at the same time that unit labor costs increased steadily from $15.22 in 2018 to $16.39 in 2020. CR/PR at Table C-1.

[67] CR/PR at Table C-1.

[68] CR/PR at Tables VI-4 and C-1.

[69] CR/PR at Tables VI-4 and C-1.

[70] Joint Respondents' Prehearing Brief at 13-14. CR/PR at II-8.

[71] Joint Respondents' Answers to Commissioners' Questions at 71.

[72] CR/PR at Table C-1.

[73] CR/PR at Table VI-1.

[74] CR/PR at Table C-1.

IV. No Threat of Material Injury By Reason of Subject Imports

a. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the domestic industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[75] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.[76] In making our determination, we consider all statutory threat factors that are relevant to these investigations.[77]

[75] 19 U.S.C. § 1677(7)(F)(ii).

[76] 19 U.S.C. § 1677(7)(F)(ii).

[77] These factors are as follows:

(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,

(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,

(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices and are likely to increase demand for further imports,

(V) inventories of the subject merchandise,

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

…

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).

19 U.S.C. § 1677(7)(F)(i). To organize my analysis, I discuss the applicable statutory threat factors using the same volume/price/impact framework that applies to my material injury analysis. Statutory threat factors (II), (III), (V), and (VI) are discussed in the analysis of subject import volume. Statutory threat factor (IV) is discussed in the analysis of subject import price effects. Statutory factors (VIII) and (IX) are discussed in the analysis of impact. Statutory factors (I) concerning countervailable subsidies and (VII) concerning agricultural products are inapplicable to this investigation.

b. Likely Volume of Subject Imports

As discussed above, I have found the volume of cumulated subject imports to be significant during the period of investigation. Nevertheless, I also found that the significant subject import volume did not injure the domestic industry.

Over the period of investigation, subject import volume increased by 8.2 percent, and the volume of subject imports increased by less than 0.1 percent (about 12,000 tires) between 2019 and 2020.[78] These subject import volume trends do not evince an increasing tendency likely to imminently threaten the domestic industry with material injury. Cumulated inventories held by foreign producers in subject countries increased from 15.2 million in 2018 to 19.9 million in 2020, an increase of 30.8 percent, but this increase did not occur due to increased production (which actually declined by 8.9 percent), but rather because of decreased home market and export shipments by subject producers in 2020, in line with declining global demand caused by the COVID-19 pandemic.[79] The record as such does not demonstrate a likelihood of an imminent increase in subject import volumes that would represent a threat to the domestic industry.

I therefore find that the increase in subject import volume during the period does not indicate a likelihood of any significant increase in subject import volume in the imminent future. Further, the record indicates that the declines in the domestic industry's output and market share were due to factors closely related to the COVID-19 pandemic and associated factory closures that occurred in the second quarter of 2020 along with supply chain difficulties that continued for some weeks after demand began to recover, situations that have since been resolved.

c. Likely Price Effects of Subject Imports[80]

In my discussion above, I found that underselling by subject imports was prevalent. However, I also found that notwithstanding the increasing volume of subject imports and underselling by those imports during the period of investigation, the subject imports did not have a significant adverse effect on prices for the domestic like product and the domestic industry has not been materially injured by reason of the subject imports. Even if there is some increase in the volumes of low-priced subject imports entering the U.S. market in the imminent

[78] CR/PR at Table C-1.

[79] CR/PR at Table VII-21.

[80] In its final countervailing duty determination concerning PVLT tires from Vietnam, Commerce found subsidy rates of 6.23 to 7.89 percent for the following subsidy programs it determined to be countervailable: Tax Benefits for New Investment; Import Duty Exemptions on Imports of Raw Materials for Exporting Goods; Exemption of Import Duties for Imports into Industrial Zones; Natural Rubber for Less Than Adequate Remuneration; Currency Exchanges; Preferential Rent for Areas with Difficult Socio-Economic Conditions; and other Income Tax Preferences. *Passenger Vehicle and Light Truck Tires from the Socialist Republic of Vietnam: Final Affirmative Countervailing Duty Determination*, 85 Fed. Reg. 28566 (May 27, 2021) and accompanying Issues and Decisions Memorandum at 3-4. The Import Duty Exemptions on Imports of Raw Materials for Exporting Goods program is a subsidy directed at exports.

future in light of increasing demand, nothing in the record indicates that subject imports will likely depress or suppress domestic prices.

I consequently find that imports of the subject merchandise are unlikely to enter at prices that are likely to have a significant depressing or suppressing effect on domestic prices or to increase demand for further imports.

d. Likely Impact of Subject Imports

As I discussed above, the domestic industry has experienced declines in operating income levels, but I have found no significant causal relationship between the subject imports and the domestic industry's performance during the period. Nothing in the record of this investigation gives me reason to believe that any further deterioration of the condition of the domestic industry will be by reason of the subject imports in the imminent future.

In view of the foregoing, I conclude that an industry in the United States is not threatened with material injury by reason of subject imports.

V. Conclusion

For the reasons stated above, I determine that an industry in the United States is not materially injured or threatened with material injury by reason of subject imports of PVLT tires from Korea, Taiwan, and Thailand found by Commerce to be sold in the United States at less than fair value and imports of subject merchandise from Vietnam that Commerce found to be subsidized by the government of Vietnam. I further find that imports of PVLT tires from Vietnam that are sold in the United States at LTFV are negligible and vote to terminate that investigation.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC ("USW"), Pittsburgh, Pennsylvania, on May 13, 2020, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of passenger vehicle and light trucks tires ("PVLT tires")[1] from Vietnam and less-than-fair-value ("LTFV") imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
May 13, 2020	Petitions filed with Commerce and the Commission; institution of Commission investigations (85 FR 29972, May 19, 2020)
May 20, 2020	Commerce's extension of initiation (85 FR 32013, May 28, 2020)
June 22, 2020	Commerce's notice of initiation of antidumping and countervailing duty investigations (85 FR 38854 and 85 FR 38850, June 29, 2020)
July 17, 2020	Commission's preliminary determinations (85 FR 44322, July 22, 2020)
November 10, 2020	Commerce's preliminary countervailing duty determination and alignment of final determination with final antidumping duty determination (85 FR 71607, November 10, 2020)
January 6, 2021	Commerce's preliminary antidumping duty determinations (86 FR 501, 504, 508, and 517, January 6, 2021); scheduling of final phase of Commission investigations (86 FR 7561, January 29, 2021)

[1] See the section entitled "The subject merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

[2] Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov).

[3] Appendix B presents the witnesses who appeared at the Commission's hearing.

Effective date	Action
May 25, 2021	Commission's hearing
May 27, 2021	Commerce's final countervailing duty determination (86 FR 28566) and final antidumping duty determinations (86 FR 28548, 28559, 28563, and 28569)
June 23, 2021	Commission's vote
July 12, 2021	Commission's views

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.*

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service*

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

Part I of this report presents information on the subject merchandise, subsidy/dumping margins, and domestic like product. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Parts IV and V present the volume of subject imports and pricing of domestic and imported products, respectively. Part VI presents information on the financial experience of U.S. producers. Part VII presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

Market summary

PVLT tires generally are mounted onto the wheels of passenger cars, sport utility vehicles, vans, and light trucks. The leading U.S. producers of PVLT tires, in alphabetical order, are Bridgestone, Cooper, Goodyear, and Michelin, while leading producers of PVLT tires outside the United States include *** of Korea and *** of Thailand. The leading U.S. importers of PVLT tires from subject sources are ***, while the leading importers of PVLT tires from nonsubject countries (primarily Mexico, Canada, and Indonesia) include ***.

[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

U.S. purchasers of PVLT tires are firms that manufacture cars and trucks or retail tires into the replacement market; leading purchasers include ***.

Apparent U.S. consumption of PVLT tires totaled approximately 280.7 million tires ($20.1 billion) in 2020. Currently, 14 firms are known to produce PVLT tires in the United States. U.S. producers' U.S. shipments of PVLT tires totaled 110.1 million tires ($10.2 billion) in 2020, and accounted for 39.2 percent of apparent U.S. consumption by quantity and 50.8 percent by value. U.S. imports from subject sources totaled 85.4 million tires ($4.4 billion) in 2020 and accounted for 30.4 percent of apparent U.S. consumption by quantity and 21.8 percent by value. U.S. imports from nonsubject sources totaled 85.1 million tires ($5.5 billion) in 2020 and accounted for 30.3 percent of apparent U.S. consumption by quantity and 27.4 percent by value.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of 14 firms that accounted for all U.S. production of PVLT tires during 2020. U.S. imports are based on official Commerce statistics and the questionnaire responses of 50 firms that accounted for *** percent of U.S. imports from Korea, Taiwan, Thailand, and Vietnam and *** percent of total U.S. imports in 2020 under Harmonized Tariff Schedule of the United States (HTS) subheadings 4011.10.10, 4011.10.50, 4011.20.10, and 4011.20.50.

Previous and related investigations

PVLT tires have been the subject of prior countervailing and antidumping duty investigations in the United States. In 2014, petitions were filed by USW alleging material injury and threat of material injury by reason of subsidized and LTFV imports of PVLT tires from China. On June 18, 2015, Commerce published affirmative final determinations of sales at LTFV and countervailable subsidies with respect to imports of PVLT tires from China.[6] On August 3, 2015, the Commission determined that an industry in the United States was materially injured by reason of subject imports.[7] Effective August 10, 2015, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margins ranging from

[6] 80 FR 34893 and 80 FR 34888, June 18, 2015.

[7] Certain Passenger Vehicle and Light Truck Tires from China, Investigation Nos. 701-522 and 731-TA-1258 (Final), USITC Publication 4545, August 2015, p. 1; and 80 FR 47000, August 6, 2015.

14.35 to 87.99 percent and countervailing duty cash deposit rates ranging from 20.73 to 116.33 percent.[8]

On July 1, 2020, the Commission instituted five-year reviews of the antidumping and countervailing duty orders on PVLT tires from China and on October 5, 2020, determined that it would conduct expedited reviews of the orders.[9] Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective February 19, 2021, Commerce issued a continuation of the antidumping and countervailing duty orders on imports of PVLT tires from China.[10]

In addition, following receipt of a petition filed on April 20, 2009, on behalf of the USW, the Commission instituted investigation No. TA–421–7 under section 421(b) of the Trade Act of 1974 (19 U.S.C. 2451(b)) to determine whether new pneumatic tires, of rubber, from China, of a kind used on motor cars (except racing cars) and on-the-highway light trucks, vans, and sport utility vehicles, provided for in subheadings 4011.10.10, 4011.10.50, 4011.20.10, and 4011.20.50 of the HTS, were being imported into the United States in such increased quantities or under such conditions as to cause or threaten to cause market disruption to the domestic producers of like or directly competitive products.[11]

On the basis of information developed in that investigation, the Commission determined, pursuant to section 421(b)(1) of the Trade Act of 1974, that certain passenger vehicle and light truck tires from China were being imported into the United States in such increased quantities or under such conditions as to cause or threaten to cause market disruption to the domestic producers of like or directly competitive products.[12]

---

[8] 80 FR 47902, August 10, 2015. An importer and several foreign producers sought review at the U.S. Court of International Trade ("CIT") of the Commission's final determination that an industry in the United States was materially injured by reason of imports of PVLT tires from China. The CIT sustained the Commission's determination. *ITG Voma Corp. v. U.S. Int'l Trade Comm'n*, 253 F. Supp. 3d 1339 (Ct. Int'l Trade 2017). The CIT's decision was subsequently appealed to the U.S. Court of Appeals for the Federal Circuit. The Court of Appeals issued a summary affirmance of the lower court's decision. *ITG Voma Corp. v. U.S. Int'l Trade Comm'n*, 753 Fed. App'x 913 (Fed. Cir. 2019).

[9] 85 FR 39526, July 1, 2020; and 86 FR 2456, January 12, 2021. See also Passenger Vehicle and Light Truck Tires from China, Inv. Nos. 701-TA-522 and 731-TA-1258 (Review), USITC Publication 5158, February 2021, p. I-1.

[10] 85 FR 70128, November 4, 2020; 85 FR 71313, November 9, 2020; 86 FR 9084, February 11, 2021; and 86 FR 10247, February 19, 2021. Commissioner David S. Johanson made a negative determination. 86 FR 9084, February 11, 2021.

[11] 74 FR 19593, April 29, 2009.

[12] 74 FR 34363, July 15, 2009. Vice Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun made a negative determination.

With regard to the Commission's recommendation on proposed remedy, Chairman Shara L. Aranoff and Commissioners Charlotte R. Lane, Irving A. Williamson, and Dean A. Pinkert proposed that the President, for a three-year period, impose a duty, in addition to the current rate of duty, on imports of certain passenger vehicle and light truck tires from China as follows: 55 percent *ad valorem* in the first year, 45 percent *ad valorem* in the second year, and 35 percent *ad valorem* in the third year. They further proposed that, if applications were filed, the President should direct the U.S. Department of Labor and the U.S. Department of Commerce to provide expedited consideration of Trade Adjustment Assistance for firms and/or workers that are affected by subject imports.[13]

Effective September 26, 2009, the President determined to provide import relief in the form of a 35 percent *ad valorem* duty above the column 1 general rate of duty in the first year; a 30 percent *ad valorem* duty above the column 1 general rate of duty for the second year; and a 25 percent *ad valorem* duty above the column 1 general rate of duty in the third year. In order to assist workers, firms, and their communities that have been or are affected by the market disruption, the President directed the Secretary of Commerce and the Secretary of Labor to expedite consideration of any Trade Adjustment Assistance applications received from domestic passenger vehicle and light truck tire producers, their workers, or communities and to provide such other requested assistance or relief as they deem appropriate, consistent with their statutory mandates.[14]

On September 14, 2009, China requested consultations with the United States under the World Trade Organization ("WTO") Understanding on Rules and Procedures Governing the Settlement of Disputes concerning the import relief measures imposed on certain passenger vehicle and light truck tires from China. In its panel report issued on December 13, 2010, the WTO Dispute Settlement Body ("DSB") ruled that the measures were not in violation of WTO rules. On May 24, 2011, China notified the DSB of its decision to appeal to the Appellate Body certain issues of law and legal interpretation covered in the panel report. On September 5,

[13] *Certain Passenger Vehicle and Light Truck Tires From the People's Republic of China*, 74 FR 34363, July 15, 2009. Vice Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun, having made a negative determination regarding market disruption, were not eligible to vote on a proposed remedy.

[14] *Presidential Proclamation No. 8414*, 74 FR 47861, September 17, 2009. *Imports of Certain Passenger Vehicle and Light Truck Tires from the People's Republic of China, Presidential Determination No. 2009-28, Memorandum for the Secretary of Commerce, the Secretary of Labor, the United States Trade Representative,* 74 FR 47433, September 16, 2009.

2011, the Appellate Body upheld the Panel's findings and at its meeting on October 5, 2011, the Dispute Settlement Body adopted the Panel and Appellate Body reports.[15]

Under the statute, the USW had the right to request an extension of the relief up to six months in advance of its expiration. In March 2012, in advance of the six-month renewal request deadline, the USW indicated to the Administration that such a request would not be made.[16]

Nature and extent of subsidies and sales at LTFV

Subsidies

On May 27, 2021, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of PVLT tires from Vietnam. Table I-1 presents Commerce's findings of subsidization of PVLT tires in Vietnam.

Table I-1
PVLT tires: Commerce's final subsidy determination with respect to imports from Vietnam

Entity	Final countervailable subsidy rate (percent)
Kumho Tire (Vietnam) Co., Ltd	7.89
Sailun (Vietnam) Co., Ltd	6.23
All Others	6.46

Source: 86 FR 28566, May 27, 2021.

Note: For further information on programs determined to be countervailable, see Commerce's associated Issues and Decision Memorandum.

Sales at LTFV

On May 27, 2021, Commerce published notices in the *Federal Register* of its final determinations of sales at LTFV with respect to imports from Korea, Taiwan, Thailand, and Vietnam. Tables I-2 through I-5 present Commerce's dumping margins with respect to imports of PLVT tires from Korea, Taiwan, Thailand, and Vietnam.

[15] http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds399_e.htm and http://www.wto.org/english/news_e/news11_e/dsb_05oct11_e.htm.

[16] "USW Acclaim Success of Trade Relief for Tire Sector; Extension Not Requested," September 24, 2012. http://www.usw.org/news/media-center/releases/2012/usw-acclaim-success-of-trade-relief-for-tire-sector-extension-not-requested, retrieved July 7, 2014.

Table I-2
PVLT tires: Commerce's final weighted-average LTFV margins with respect to imports from Korea

Exporter/Producer	Final dumping margin (percent)
Hankook Tire & Technology Co. Ltd (Hankook)	27.05
Nexen Tire Corporation (Nexen)	14.72
All Others	21.74

Source: 86 FR 28569, May 27, 2021.

Table I-3
PVLT tires: Commerce's final weighted-average LTFV margins with respect to imports from Taiwan

Exporter/Producer	Final dumping margin (percent)
Cheng Shin Rubber Ind. Co. Ltd	20.04
Nankang Rubber Tire Corp. Ltd	101.84
All Others	84.75

Source: 86 FR 28563, May 27, 2021.

Table I-4
PVLT tires: Commerce's final weighted-average LTFV margins with respect to imports from Thailand

Exporter/Producer	Final dumping margin (percent)
LLIT Thailand Co., Ltd	21.09
Sumitomo Rubber (Thailand) Co., Ltd	14.62
All Others	17.08

Source: 86 FR 28548, May 27, 2021.

Table I-5
PVLT tires: Commerce's final weighted-average LTFV margins with respect to imports from Vietnam

Exporter	Producer	Final dumping margin (percent)
Kenda Rubber (Vietnam) Co. Ltd	Kenda Rubber (Vietnam) Co. Ltd	0.00
Sailun Group (HongKong) Co., Limited/Sailun Tire Americas Inc	Sailun (Vietnam) Co., Ltd	0.00
Bridgestone Corporation	Bridgestone Tire Manufacturing Vietnam LLC	0.00
Bridgestone Tire Manufacturing Vietnam LLC	Bridgestone Tire Manufacturing Vietnam LLC	0.00
Kumho Tire (Vietnam) Co., Ltd	Kumho Tire (Vietnam) Co., Ltd	0.00
The Yokohama Rubber Co., Ltd	Yokohama Tyre Vietnam Co	0.00
Vietnam-Wide Entity		22.30

Source: 86 FR 28559, May 27, 2021.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[17]

> *The scope of these investigations is passenger vehicle and light truck tires. Passenger vehicle and light truck tires are new pneumatic tires, of rubber, with a passenger vehicle or light truck size designation. Tires covered by these investigations may be tube-type, tubeless, radial, or non-radial, and they may be intended for sale to original equipment manufacturers or the replacement market.*
>
> *Subject tires have, at the time of importation, the symbol "DOT" on the sidewall, certifying that the tire conforms to applicable motor vehicle safety standards. Subject tires may also have the following prefixes or suffix in their tire size designation, which also appears on the sidewall of the tire:*
>
> *Prefix designations:*
> *P—Identifies a tire intended primarily for service on passenger cars.*
> *LT—Identifies a tire intended primarily for service on light trucks.*
>
> *Suffix letter designations:*
> *LT—Identifies light truck tires for service on trucks, buses, trailers, and multipurpose passenger vehicles used in nominal highway service.*
>
> *All tires with a "P" or "LT" prefix, and all tires with an "LT" suffix in their sidewall markings are covered by these investigations regardless of their intended use.*
>
> *In addition, all tires that lack a "P" or "LT" prefix or suffix in their sidewall markings, as well as all tires that include any other prefix or suffix in their sidewall markings, are included in the scope, regardless of their intended use, as long as the tire is of a size that fits passenger cars or light trucks. Sizes that fit passenger cars and light trucks include, but are not limited to, the numerical size designations listed in the passenger car section or light truck section of the Tire and Rim Association Year Book, as updated annually. The scope includes all tires that are of a size that fits passenger cars or light trucks, unless the tire falls within one of the specific exclusions set out below.*

[17] 86 FR 7252, January 27, 2021. Commerce issued a notice to correct a typographical error in the scope of investigations. Ibid.

Passenger vehicle and light truck tires, whether or not attached to wheels or rims, are included in the scope. However, if a subject tire is imported attached to a wheel or rim, only the tire is covered by the scope.

Specifically excluded from the scope are the following types of tires:

(1) Racing car tires; such tires do not bear the symbol "DOT" on the sidewall and may be marked with "ZR" in size designation;

(2) pneumatic tires, of rubber, that are not new, including recycled and retreaded tires;

(3) non-pneumatic tires, such as solid rubber tires;

(4) tires designed and marketed exclusively as temporary use spare tires for passenger vehicles which, in addition, exhibit each of the following physical characteristics:

(a) The size designation and load index combination molded on the tire's sidewall are listed in Table PCT-1R ("T" Type Spare Tires for Temporary Use on Passenger Vehicles) or PCT-1B ("T" Type Diagonal (Bias) Spare Tires for Temporary Use on Passenger Vehicles) of the Tire and Rim Association Year Book,

(b) the designation "T" is molded into the tire's sidewall as part of the size designation, and,

(c) the tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by Tire and Rim Association Year Book, and the rated speed is 81 MPH or a "M" rating;

(5) tires designed and marketed exclusively as temporary use spare tires for light trucks which, in addition, exhibit each of the following physical characteristics:

(a) The tires have a 265/70R17, 255/80R17, 265/70R16, 245/70R17, 245/75R17, 245/70R18, or 265/70R18 size designation;

(b) "Temporary Use Only" or "Spare" is molded into the tire's sidewall;

(c) the tread depth of the tire is no greater than 6.2 mm; and

(d) Uniform Tire Quality Grade Standards ("UTQG") ratings are not molded into the tire's sidewall with the exception of 265/70R17 and 255/80R17 which may have UTGC molded on the tire sidewall;

(6) tires designed and marketed exclusively for specialty tire (ST) use which, in addition, exhibit each of the following conditions:

(a) The size designation molded on the tire's sidewall is listed in the ST sections of the Tire and Rim Association Year Book,

(b) the designation "ST" is molded into the tire's sidewall as part of the size designation,

(c) the tire incorporates a warning, prominently molded on the sidewall, that the tire is "For Trailer Service Only" or "For Trailer Use Only",

(d) the load index molded on the tire's sidewall meets or exceeds those load indexes listed in the Tire and Rim Association Year Book for the relevant ST tire size, and

(e) either

(i) the tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by Tire and Rim Association Year Book, and the rated speed does not exceed 81 MPH or an "M" rating; or

(ii) the tire's speed rating molded on the sidewall is 87 MPH or an "N" rating, and in either case the tire's maximum pressure and maximum load limit are molded on the sidewall and either

(1) both exceed the maximum pressure and maximum load limit for any tire of the same size designation in either the passenger car or light truck section of the Tire and Rim Association Year Book; or

(2) if the maximum cold inflation pressure molded on the tire is less than any cold inflation pressure listed for that size designation in either the passenger car or light truck section of the Tire and Rim Association Year Book, the maximum load limit molded on the tire is higher than the maximum load limit listed at that cold inflation pressure for that size designation in either the passenger car or light truck section of the Tire and Rim Association Year Book;

(7) tires designed and marketed exclusively for off-road use and which, in addition, exhibit each of the following physical characteristics:

(a) The size designation and load index combination molded on the tire's sidewall are listed in the off-the-road, agricultural, industrial or ATV section of the Tire and Rim Association Year Book,

(b) in addition to any size designation markings, the tire incorporates a warning, prominently molded on the sidewall, that the tire is "Not For Highway Service" or "Not for Highway Use",

(c) the tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by the Tire and Rim Association Year Book, and the rated speed does not exceed 55 MPH or a "G" rating, and

(d) the tire features a recognizable off-road tread design;

(8) Tires designed and marketed for off-road use as all-terrain-vehicle (ATV) tires or utility-terrain-vehicle (UTV) tires, and which, in addition, exhibit each of the following characteristics:

(a) The tire's speed rating is molded on the sidewall, indicating the rated speed in MPH or a letter rating as listed by the Tire and Rim Association Year Book, and the rated speed does not exceed 87 MPH or an "N" rating, and

(b) both of the following physical characteristics are satisfied:

(i) The size designation and load index combination molded on the tire's sidewall does not match any of those listed in the passenger car or light truck sections of the Tire and Rim Association Year Book, and

(ii) The size designation and load index combination molded on the tire's sidewall matches any of the following size designation (American standard or metric) and load index combinations:

American standard size	Metric size	Load index
26x10R12	254/70R/12	72
27x10R14	254/65R/14	73
28x10R14	254/70R/14	75
28x10R14	254/70R/14	86
30X10R14	254/80R/14	79
30x10R15	254/75R/15	78
30x10R14	254/80R/14	90
31x10R14	254/85R/14	81
32x10R14	254/90R/14	95
32x10R15	254/85R/15	83
32x10R15	254/85R/15	94
33x10R15	254/90R/15	86
33x10R15	254/90R/15	95
35x9.50R15	241/105R/15	82
35x10R15	254/100R/15	97

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations are imported under the following statistical reporting numbers of the Harmonized Tariff Schedule of the United States ("HTSUS"): 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005, and 4011.20.5010. The 2021 general rate of duty is 4 percent for HTS subheadings 4011.10.10 and 4011.20.10, and 3.4 percent ad valorem for HTS subheadings 4011.10.50, and 4011.20.50. Tires meeting the scope description may also enter under the following HTSUS subheadings: 4011.90.1010, 4011.90.1050, 4011.90.2010, 4011.90.2050, 4011.90.8010, 4011.90.8050, 8708.70.4530, 8708.70.4546, 8708.70.4548, 8708.70.4560, 8708.70.6030, 8708.70.6045, and 8708.70.6060.[18] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

The product

Description and applications

Subject new pneumatic (air pressurized) passenger vehicle (PV) and light truck (LT) tires (PVLT tires) are strategic to the operation and safe driving characteristics of on-the-road motor vehicles, providing the only contact footprint or interface between a given vehicle and the road. PV tires are designed for use on standard-type passenger cars and associated vehicles such as sport utility vehicles (SUVs), crossover vehicles (CUVs) and other multipurpose passenger vehicles, including light trucks, while light truck (LT) tires are those usually used specifically on consumer and commercial light trucks and vans, or multipurpose passenger vehicles.[19] PVLT tires of varying sizes and design configurations, radial or non-radial, tube-type or tubeless, are produced domestically or imported into the United States for fitment to original equipment (OE) vehicles or for the replacement requirements on used vehicles, each subject to the same U.S. Department of Transportation (DOT) motor vehicle safety and marking standards. Today's PVLT tires typically range from 13 to 26 inches in rim diameter and are principally of tubeless steel belted radial ply design.[20] Both the domestic and global tire industries are predominately multinational in structure.

[18] The chapter 87 provisions cover road wheels and parts and accessories thereof incorporated into motor vehicle components or subassemblies.

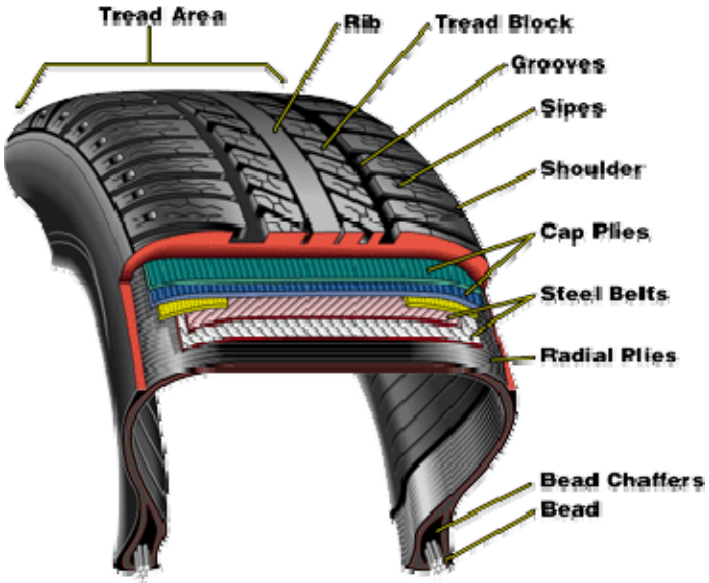
[19] Federal Motor Vehicle Safety Standard No. 139 (49 CFR 571.139).

[20] *Tire and Rim Association Year Book, 2020*, Preliminary Petition, Volume I, Exhibit I-7, May 13, 2020.

PVLT tire compositions are reported to consist for example of 43 percent rubber (24 percent synthetic—butadiene, styrene butadiene, and butyl rubbers--and 19 percent natural rubber), 24 percent carbon black and silica performance additives, 18 percent reinforcing fabric cord ply and other additives (polyester, rayon, nylon, and aramid cord, antioxidants and sulfur curing agents), together with 12 percent steel (belts and bead wire). Heavier load bearing PVLT tires may contain more natural rubber and steel than shown.[21]

The construction design features of a tubeless steel belted radial PVLT tire, today's predominant tire design, are shown in figure I-1.

Figure I-1
PVLT tires: Tubeless steel belted radial tire construction design



Source: http://www.abbsrytire.com/diagramtire.htm, retrieved June 21, 2020.

Radial tire design began to replace the bias ply design in the United States in the early-1970s, and by the mid-1990s dominated both the replacement and OE markets.[22] Radial tires provide superior strength, handling, ride quality, wear resistance and improved mileage, fuel economy, and resistance to heat buildup. The tire casing is the load bearing component of the radial tire consisting of a rubber innerliner impervious to air migration and rubberized

[21] *What's in a Tire*, U.S. Tire Manufacturers Association, https://www.ustires.org/whats-tire-0, retrieved June 13, 2020. Rubber properties and additives determine overall tire performance (rolling resistance, wear, temperature and traction). Carbon black and silica contribute to enhanced handling, treadwear, traction, fuel mileage, temperature and abrasion resistance. Carbon black additive is also responsible for the black color of tires.

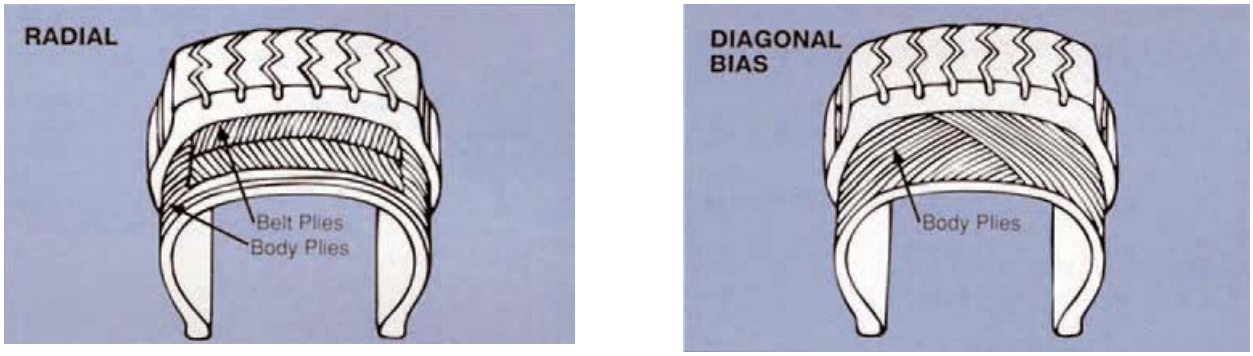
[22] National Highway Traffic Safety Administration (NHTSA), "The Pneumatic Tire," 2005.

reinforcing plies (tire cord) that run parallel across the tire to the rubberized steel bead on each side. The beads form the inner circular rim diameter of a finished tire which is fitted in an airtight manner to a given steel, aluminum, or composite wheel to form a complete tire assembly ready for mounting. Bead chaffers are a key component of the tire that provide the direct contact points between the tire and the wheel, designed to withstand forces (chafing) that the wheel puts on the tire during mounting as well as the dynamic forces of driving and braking.

Above the tire casing are steel belts which provide a stable foundation for better tread wear and traction and protect the casing against impacts and punctures. Other components include cap plies usually built into performance tires to enhance cornering and stability at higher speeds. Tread designs are multiple in nature consistent with their intended end use. The tread block provides traction at its leading and trailing edge. Within the block, sipes are often molded or cut to provide additional traction. Grooves are built into tread design for channeling away water and promoting wet traction. Shoulder designs provide protection as well as additional traction during hard cornering.

The diagram of Figure I-2 compares today's dominant steel belted radial body ply construction (left) to that of the bias ply tire standard that dominated the U.S. tire manufacturing sector up to the mid-1970s (right).

Figure I-2
PVLT tires: Radial and bias ply construction



Source: National Highway Traffic Safety Administration (NHTSA), "The Pneumatic Tire," 2005.

Bias plies, unlike radial plies, run at alternating angles from bead to bead to the direction of tire travel, and may be topped by belts, usually of fabric or other materials. Although bias ply tires may be produced by more fundamental processes than radial tires, its plies twist more as the tire rolls, creating heat buildup, rolling resistance increase and fuel economy decrease. These factors lead to reduced mileage, accelerated tire wear, and the increased risk of over-the-highway PVLT tire failure.[23] Steel-belted radial tires provide superior performance characteristics to bias ply tires, including strength, lower rolling resistance and superior fuel economy, superior resistance to heat buildup at highway speeds, and vastly increased mileage capabilities.[24]

PVLT tire definitions and standards are articulated under Title 49 of the Code of Federal Regulations (CFR), Federal Motor Vehicle Safety Standards, Part 571, Standard No. 139.[25] These standards apply to new pneumatic radial tires for use on light motor vehicles that have a gross vehicle weight rating (GVWR) of 10,000 pounds or less and that were manufactured after 1975. A passenger car tire is defined as intended for use on passenger cars, multipurpose passenger vehicles, and trucks that have a GVWR of 10,000 pounds or less. LT tires are defined as a tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles. Bias ply tires are included in the definitions; rules and regulations and testing procedures are promulgated under the authority of the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation (DOT). Additional standards, 49 CFR 571.119 (S3), apply to new pneumatic tires for motor vehicles with a GVWR of more than 10,000 pounds manufactured after 1948.[26] The maximum upper load limit per tire of the LT tires reported by the Tire and Rim Association in its LT tire chapter is about 4,190 pounds at 65 pounds per square inch (psi) air pressure.

NHTSA regulations cited above require multiple markings on PVLT tire sidewalls certified for use in the United States as shown in the passenger tire diagram of Figure I-3.

---

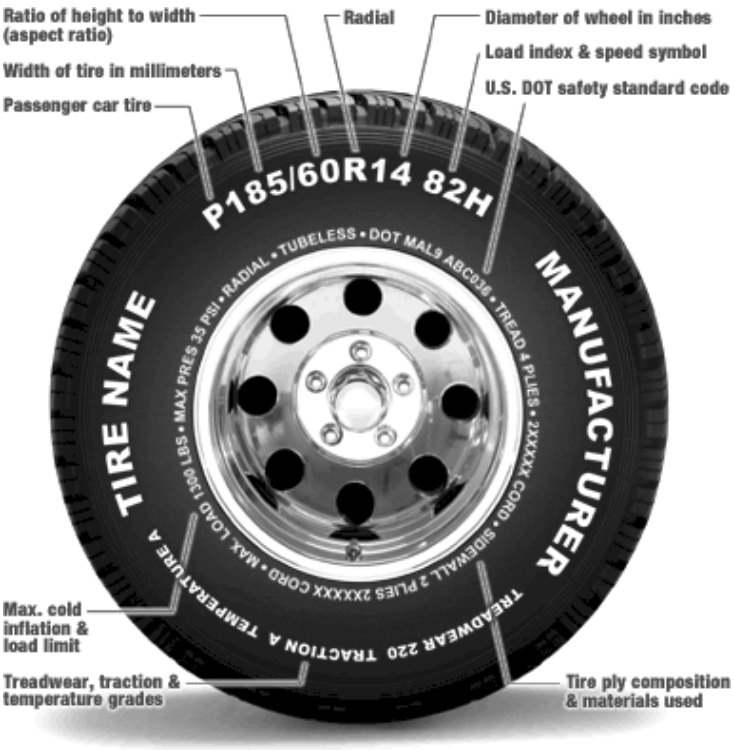
[23] National Highway Traffic Safety Administration (NHTSA), "The Pneumatic Tire," 2005.

[24] Love, Steve and David Giffels, "Wheels of Fortune, The Radial Invasion," 1999, pp. 143-154.

[25] Electronic code of federal regulations, https://gov.ecfr.io/cgi-bin/text-idx?SID=66f5119a8c1eb92e1946c943b565593d&mc=true&node=se49.6.571_1139&rgn=div8, retrieved August 18, 2020.

[26] Electronic code of federal regulations, https://gov.ecfr.io/cgi-bin/text-idx?SID=6798cf5859539a315047dbc411651bc5&mc=true&node=se49.6.571_1119&rgn=div8, retrieved August 18, 2020.

Figure I-3
PVLT tires: PVLT tire designations



Source: TBC Corp. (formerly Del-Nat Tire Corp).

The specifications molded into the tire sidewall provide a wealth of information, including the tire brand name and manufacturer; the PVLT tire type, passenger "P"; tire dimensions and construction; rim diameter in inches and tire width in millimeters (mm); tube or tubeless; load index, and speed symbol; and the U.S. DOT identification number indicating that the tire meets all federal standards. Within the DOT designation is also the plant code where the tire was manufactured, and the year and date produced.

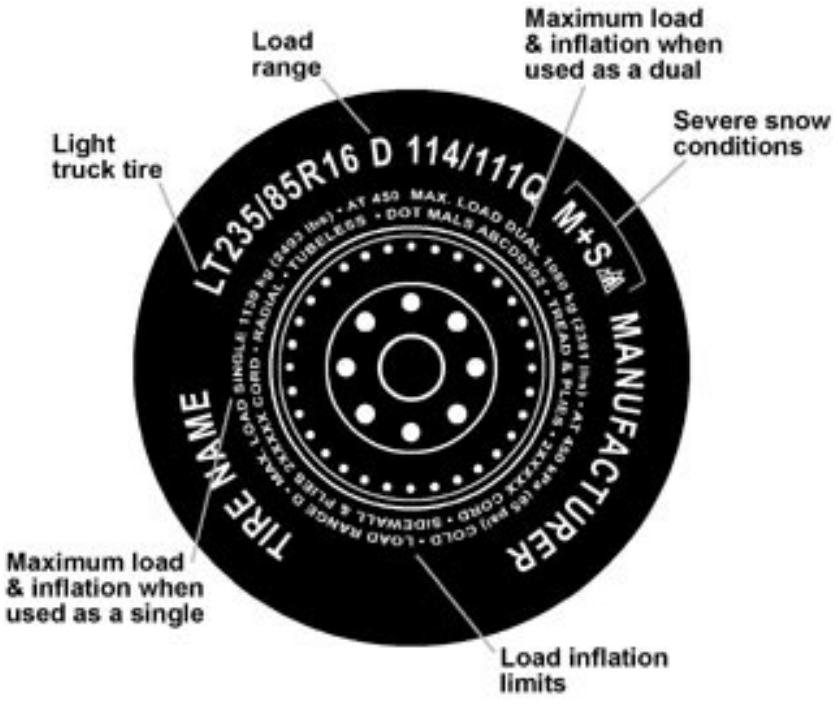
Other designations include treadwear, traction, and temperature grades which provide a consumer with comparative producer and brand performance indicators for tires through NHTSA's Uniform Tire Quality Grading System (UTQGS) wherein NHTSA has rated more than 5,000 tire lines, including most used on passenger cars, minivans, SUVs, CUVs and light pickup trucks.[27] Other designations include the tire load limits in pounds and maximum tire pressure limits in pounds per square inch (psi).

[27] National Highway Traffic Safety Administration (NHTSA), https://nhtsa.gov/equipment/tires; https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812325_2016-uniformtirequalitygrading.pdf, retrieved April 20, 2021.

Speed symbol indicators for “P” tires range from a low of Q (99 mph) to midrange H (130 mph), V (149 mph), to Y (186 mph), with ZR indicating anything above 186 mph. LT tire speed ratings typically range from N (87 mph) to S (112 mph), T (118 mph) to H (130 mph). Load index designations for consumer passenger vehicles and light trucks having a GVWR of 10,000 pounds or less, run from a low of about 75 (853 pounds per tire @ 35 psi) to an average high of around 112 (2,469 pounds per tire). Additionally, placards found on the inside passenger door panels of vehicles purchased in the United States detail original equipment tire size and the vehicle weight rating (passengers and goods) for guidance in purchasing replacement tires.

Tires designed for multiple use on PVLT vehicles carry the “P” designation, known as “P-metric,” or the “P” may be omitted altogether on “metric” tires having basically the same sidewall designations and tire sizes. In addition to the above PVLT designations shown in figure I-3, tires specifically marked “LT” for light truck are also required to carry added designations as shown in the diagram of figure I-4.

Figure I-4
PVLT tires: Additional LT tire designations



Source: National Highway Traffic Safety Administration (NHTSA).

As indicated, the symbol "LT" designates the tire is for use on light trucks and other multipurpose vehicles; the "Load Range" symbol is a gauge of the tire's load-carrying capabilities at a given pressure and speed. For example, the above tire as shown has a "load range" of D that is equivalent to a "ply rating" of 8, or a "load index" maximum of 114 (2,600 pounds at 65 psi) at speed Q (99 mph). Load range designations for light trucks typically run from C (ply rating of 6) to E (ply rating of 10), and load indices from 100 (1,765 pounds) up to around 128 (3,970 pounds). "Maximum Load & Inflation, Dual," indicates the maximum weight bearing capacity of a light truck tire at the stated pressure when the tire is used as a dual; that is, when four tires are installed on each rear axle (a total of six or more tires on the vehicle). The above tire as shown has a dual load index rating of 111 (2,405 pounds).[28]

Manufacturing processes

PVLT tire production technology in U.S. plants has continued to evolve since the introduction of the tubeless steel belted radial tire in the 1970s, accompanied by rising consumer demand for multiple types of tires to fit the large array of today's passenger cars, light trucks and multipurpose vehicles.[29] [30] Higher levels of automation and other efficiency measures have followed these trends. Each producer typically employs variable types of proprietary processes in the production of its particular lines of tires utilizing a large variety of rubberized tire component compounds produced from natural and synthetic rubber, textile and steel reinforcement plies and belts, and rubberized steel bundles that form the tire's rim.[31]

Initially, raw materials are received and undergo quality control testing. These materials include natural and synthetic rubbers, textile tire cord and steel fabric, carbon black performance additive and black pigment, silica, steel wires for rim bead, and other processing chemicals, including antioxidants, plasticizers, sulfur curing agents, processing oils, and resins.

Several basic operations are required in the production of PVLT tires as shown in the process flow diagrams presented in figure I-5. The major categories are (1) base rubber batch formulation and mixing, (2) tire component processing, (3) tire component assembly (tire building), (4) tire curing (molding and vulcanization), and (5) finishing and inspection.

---

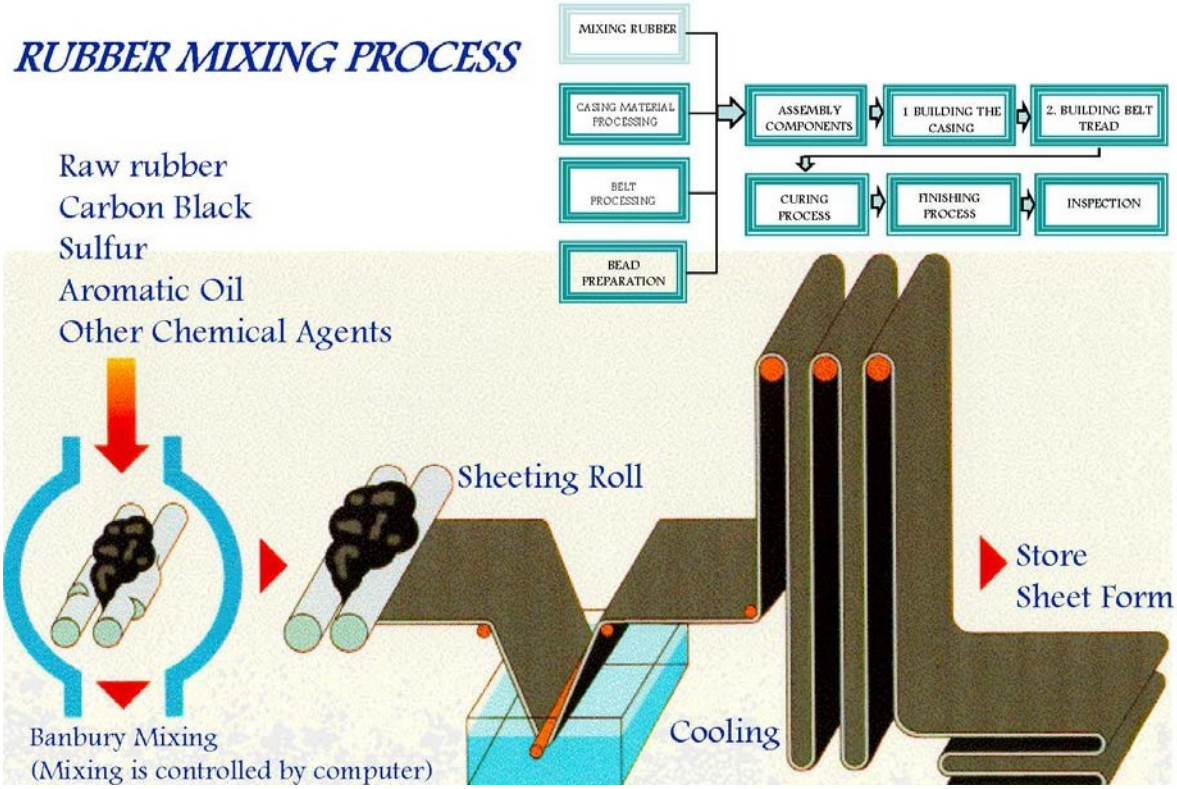
[28] *Tire and Rim Association Year Book, 2020*, Preliminary Petition, Volume I, Exhibit I-7, May 13, 2020.

[29] Zohr Tires, "How to get the most out of your EV's Tires," February 4, 2020, https://zohr.com/blog/getting-the-most-out-of-your-ev-s-tires/, retrieved April 5, 2021.

[30] Tire Review, "Michelin Launches Pilot Sport EV Tire," February 26, 2021.

[31] National Highway Traffic Safety Administration (NHTSA), "The Pneumatic Tire," 2005. Tire building machines can make a wide variety of PVLT tires depending on programming and components.

Figure I-5
PVLT tires: PVLT process flow diagrams and rubber mixing process



Source: Bridgestone Firestone North America (BFNA).

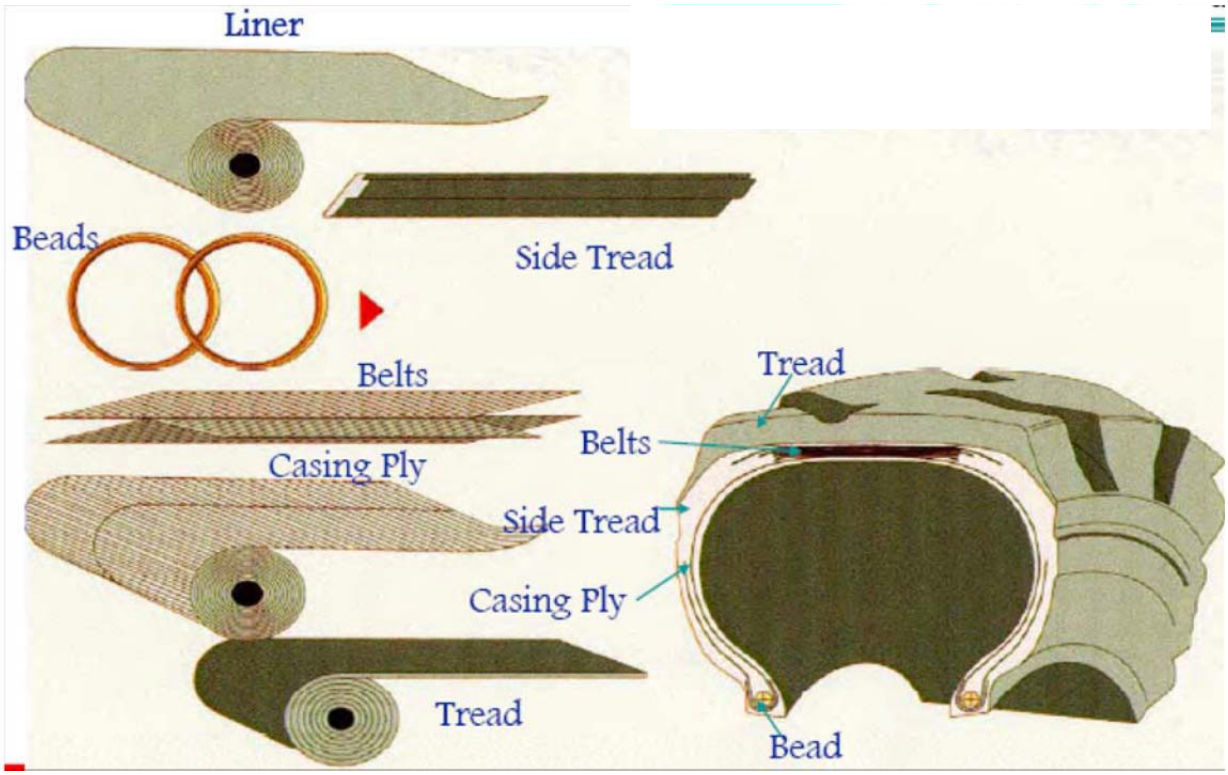
The base rubber batch formulation preparation stage involves the mixing of the various rubbers and selected raw materials into several different types of compounds or recipes designed for specific downstream process end uses, as shown in Figure I-5. Each batch is placed into a Banbury mixer where the rubber is heated, softened, and thoroughly mixed with the other ingredients under conditions of mixer blade shear and ram pressure. Following the discharge of a given rubber compound batch from the mixer, the mass is cooled, and sulfur curing agents added. Subsequent Banbury mixing is usually required to complete this step.

Several different types of equipment are used to process the rubber formulations into multiple PVLT tire components. Large machines equipped with rotating rollers known as calendars are used to produce sheets of butyl rubber interlining which prevent the migration of pressurized air through the tubeless tire casings. Calendars are also used to coat tire cord fabric or wire with selected rubber formulations for reinforcement of the tire casing which supports the weight of the vehicle.

Wire winder machinery is used to apply a given rubber batch coating to the bead wire and wrap it into an exact circular dimension needed to hold the tubeless tire securely to a given steel wheel. The smooth rubber pieces that will eventually become treads and sidewalls are produced with extruder equipment which force various softened rubber compounds of synthetic rubbers and natural rubber through a die to produce the desired configurations. The tread and sidewall rubbers typically consist of mixtures of the synthetic rubbers styrene-butadiene (SBR) and butadiene rubber (BR) in combination with natural rubber (NR).[32]

Figure I-6 details the tire components used in the tire building process.

Figure I-6
PVLT tires: PVLT tire assembly components

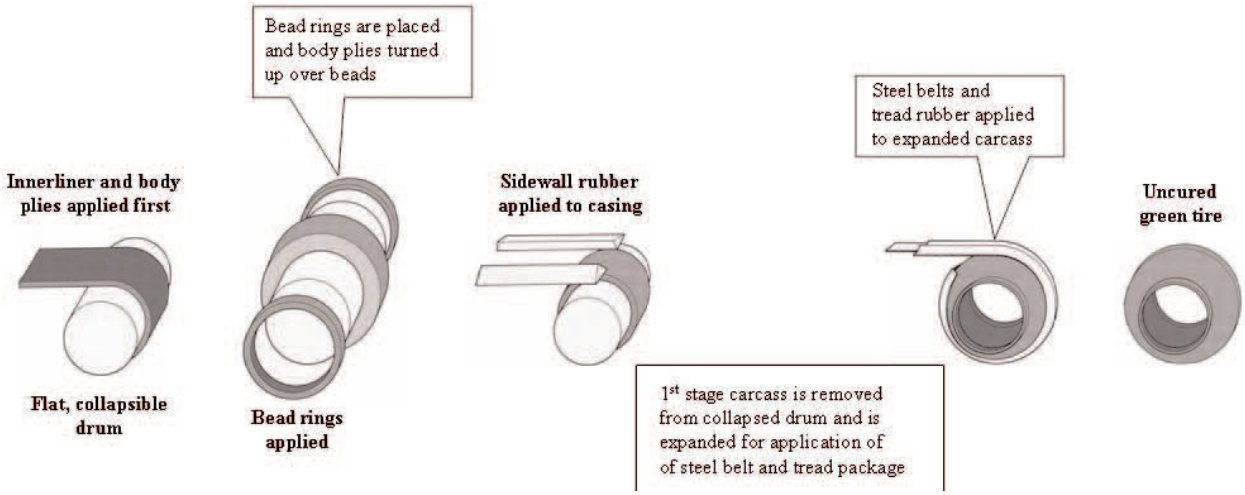


Source: Bridgestone Firestone North America (BFNA).

[32] Staff plant trip, BFNA, July 19, 2007.

Tire building is the process in which all of the above individual components that make up the tire are assembled in a circular fashion to create a green (uncured) tire structure in one or more processes. The fundamentals of radial tire assembly often proceed in two stages, as shown in figure I-7. In the first stage, the body casing consisting of the innerliner, reinforcing plies, rim beads and sidewall rubber is assembled on a rotating, collapsible drum that is slightly larger than the bead diameter, while the steel belts and tread are assembled on another rotating, inflatable drum to a diameter that is close to that of the final tire. Several tire manufacturers and equipment vendors, however, have devised automated tire assembly equipment that combines several assembly steps or links them into a continuous process.[33]

Figure I-7
PVLT tires: PVLT tire assembly process



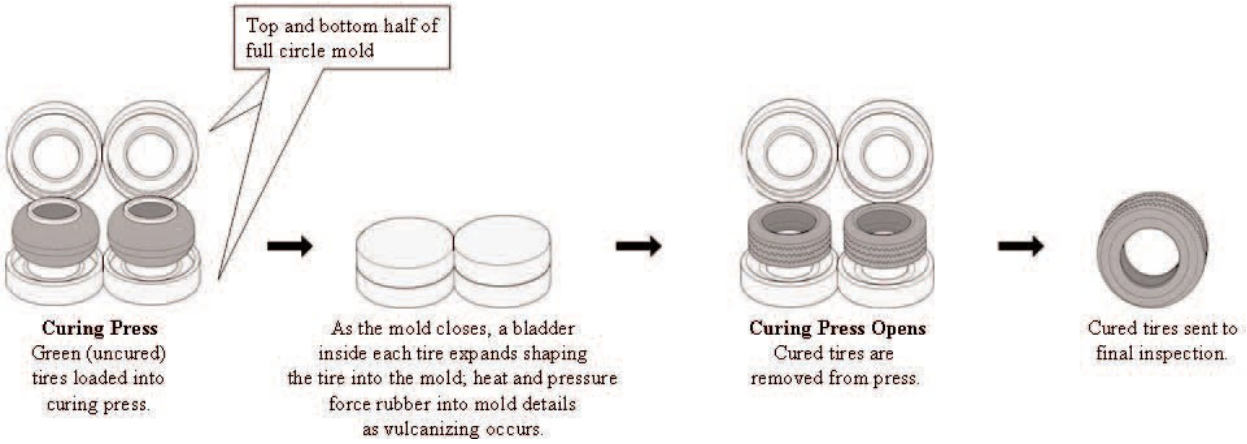
Source: National Highway Traffic Safety Administration (NHTSA), "The Pneumatic Tire," 2005.
Commission staff plant trip, Michelin BFGoodrich, Tuscaloosa, AL, April 21, 2015

As illustrated in the diagram of Figure I-7, radial ply construction involves placing innerliner around the drum circumference together with steel or fabric plies that run "radially" from bead to bead at right angles to the direction of tire travel. In bias ply tire building, the tire cord reinforcement plies are placed at alternating angles around the drum circumference as the assembly proceeds so its configuration in the finished tire will result in a crisscross herringbone reinforcement pattern running from bead to bead at angles to the direction of travel. The green (uncured) tire assembly is removed from the drum and positioned for transfer to the final molding and curing process.

[33] If required by the specified speed rating, full width nylon cap plies or cap strips are wound over the belts before the extruded tread/subtread/undertread package is applied. "The Pneumatic Tire," NHTSA, 2005, p. 24.

The final molding and curing process involves the placement of the green tire assembly about a bladder sleeve in a circular curing press tire mold of the appropriate configuration as shown in Figure I-8. After the curing press is closed, the bladder is injected with steam and expanded to force the green tire assembly out against the mold walls. The green tire thus takes on the configuration of the tire mold, including that of the sidewall and tread, together with multiple sidewall designations. Vulcanization or curing of the green tire takes place in the mold at elevated temperature and pressure. Curing times vary depending upon the size and particular design of the tire; each tire model requires its own mold. During vulcanization, the original weak green tire rubber becomes strong (thermoset), and will not again soften with heat due to molecular cross-linking or bonding of the rubber with the sulfur chemical additives.[34] [35]

Figure I-8
PVLT tires: PVLT tire curing (vulcanization) process



Source: National Highway Traffic Safety Administration (NHTSA), "The Pneumatic Tire," 2005.
Commission staff plant trip, Michelin BFGoodrich, Tuscaloosa, AL, April 21, 2015.

Following the molding and curing process, the finished tire is moved to the quality control area for a final visual and x-ray inspection. The tires that pass inspection are then moved to a warehouse for storage and shipping. Finished tires are coded to track their whereabouts, and to identify the plant of manufacture and that of the individual tire builders.[36]

[34] Commission staff plant trip, Michelin BFGoodrich, Tuscaloosa, AL, April 21, 2015.

[35] Thailand and Vietnam PVLT tire producers generally use Asian technology where available, and often Western technology if operations are publicly traded. Response to staff conference questions, American Omni Trading LLC post-conference brief, June 8, 2020.

[36] Staff field trip, BFNA, July 19, 2007.

Domestic like product issues

No issues with respect to domestic like product have been raised in these investigations. In the preliminary phase of the investigations, the petitioner proposed a single domestic like product consisting of PVLT tires, coextensive with the scope in these investigations.[37] Respondents Atturo, Maxxis, and Federal took no position with respect to the domestic like product definition; Maxxis reserved the right to address the definition of the domestic like product and any related issues in any final phase. Respondents Deestone and Les Schwab did not dispute/oppose the domestic like product definition.[38] Respondents Vogue and S.R. Tyres agreed with the proposed domestic like product definition.[39] Respondents American Omni, ATD, Hankook, ITG Voma, Nankang, Nexen, Sumitomo, and Vee Tyre did not comment on the definition of the domestic like product.[40]

In the final phase of these investigations, no party requested data or other information necessary for analysis of the domestic like product.[41] The petitioner continues to propose that the Commission find a single domestic like product consisting of PVLT tires, coextensive with the scope in these investigations.[42] No other party raised domestic like product issues in their prehearing or posthearing briefs.

[37] Petitioner's postconference brief, p. 2.

[38] Atturo's postconference brief, p. 5; Maxxis' postconference brief, exh. 1 at 1; Federal's postconference brief, p. 4; Deestone's postconference brief, p. 2; and Les Schwab's postconference brief, exh. 1, p. 1.

[39] Vogue and S.R. Tyre's postconference brief, p. 9.

[40] *See generally* American Omni, ATD, Hankook, ITG Voma, Nankang, Nexen, Sumitomo, and Vee Tyre's postconference briefs. American Omni stated that as a legal matter, the proposed definition of the domestic like product is generally coextensive with the domestic like product from the China PVLT tires investigation. American Omni's postconference brief, exh. A at 3.

[41] See individually filed comments on draft questionnaires from Deestone, Hankook, Les Schwab, Nexen, Sumitomo, and Thai respondents (Sentury, General Rubber, Zhongce, Prinx, and Llit), October 9, 2020.

[42] Petitioner's prehearing brief, p. 3.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

All PVLT tires sold in the U.S. market must meet the National Highway Traffic Safety Administration ("NHTSA") standards and be marked in accordance with NHTSA and United States Department of Transportation ("DOT") requirements. The PVLT tire market is divided into two segments: the OEM market and the replacement market. Demand for PVLT tires in the OEM market is derived from the number of new passenger vehicles and light trucks produced in the United States, while demand for PVLT tires in the replacement market depends on the condition of tires on existing vehicles, which is a function of the number of miles driven, road conditions, the age of the vehicle and other factors.

Apparent U.S. consumption of PVLT tires decreased in terms of quantity and value during 2018-20. Overall, apparent U.S. consumption in 2020 was 10.6 percent lower in terms of quantity and 12.5 percent lower in terms of value than in 2018.

U.S. purchasers

The Commission received 37 usable questionnaire responses from firms that had purchased PVLT tires during December 2018-January 2020.[1] [2] Twenty-one responding purchasers are distributors, six are OEM manufacturers, 11 are retailers, and one is both a distributor and retailer. In general, responding U.S. purchasers were located throughout the contiguous United States. The largest responding purchasers of PVLT tires in 2020 in ascending order were ***.

[1] The following firms provided purchaser questionnaire responses: ***.

[2] Of the 37 responding purchasers, 27 purchased the domestic PVLT tires, 26 purchased imports of subject merchandise from Korea, 21 purchased imports of subject merchandise from Taiwan, 30 purchased imports of subject merchandise from Thailand, 20 purchased imports of subject merchandise from Vietnam and 33 purchased imports of PVLT tires from other sources.

Channels of distribution

U.S. producers and importers sold mainly to the replacement market, as shown in table II-1.[3]

Table II-1
PVLT tires: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2018-20

* * * * * * *

[3] Shipments included in the U.S. producers "other" channel include transfers to related firms, transfers to employees, and consumption for marketing such as races and other events. Additional information on U.S. shipments by channel of distribution is available in Appendix F.

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.
Source: Compiled from data submitted in response to Commission questionnaires.

Geographic distribution

U.S. producers and importers reported selling PVLT tires to all regions of the United States (table II-2). For U.S. producers, 8.8 percent of sales were within 100 miles of their production facility, 67.5 percent were between 101 and 1,000 miles, and 23.7 percent were over 1,000 miles. Importers sold 33.2 percent within 100 miles of their U.S. point of shipment, 48.0 percent between 101 and 1,000 miles, and 18.7 percent over 1,000 miles.

Table II-2
PVLT tires: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Korea	Taiwan	Thailand	Vietnam	Subject U.S. importers
Northeast	11	7	11	27	12	36
Midwest	11	7	11	27	11	36
Southeast	14	7	11	27	11	36
Central Southwest	11	7	12	28	11	37
Mountains	10	7	12	27	11	36
Pacific Coast	11	7	14	28	12	38
Other[1]	9	6	9	26	7	30
All regions (except Other)	10	7	11	26	11	35
Reporting firms	14	7	15	30	13	40

Note: All other U.S. markets, including AK, HI, PR, and VI.
Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Supply and demand considerations

U.S. supply

Table II-3 provides a summary of the supply factors regarding PVLT tires from U.S. producers and from subject countries. U.S. producers' production capacity is approximately 60 million more PVLT tires than the largest subject country source (Thailand). With the exception of Korea, production capacity increased in each of the subject countries between 2018 and 2020.

Table II-3
PVLT tires: Supply factors that affect the ability to increase shipments to the U.S. market

	Capacity (1,000 tires)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Shipments by market, 2020 (percent)		Able to shift to alternate products
Country	2018	2020	2018	2020	2018	2020	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	188,358	181,631	82.4	64.3	12.1	10.7	90.9	9.1	1 of 14
Korea	***	***	***	***	***	***	***	***	1 of 3
Taiwan	***	***	***	***	***	***	***	***	3 of 6
Thailand	***	***	***	***	***	***	***	***	6 of 17
Vietnam	***	***	***	***	***	***	***	***	2 of 5
Subject foreign producers	251,968	253,702	86.8	78.5	6.9	10.2	24.2	34.9	12 of 31

Note: Responding U.S. producers accounted for all of U.S. production of PVLT tires in 2020. Responding foreign producer/exporter firms accounted for over 75 percent of U.S. imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam during 2020. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

Source: Compiled from data submitted in response to Commission questionnaires.

Domestic production

Based on available information, U.S. producers of PVLT tires have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced PVLT tires to the U.S. market. The main contributing factors to this degree of responsiveness of supply are unused capacity, moderate inventory levels, and some ability to shift shipments from alternate markets. The main factor mitigating responsiveness of supply is limited ability to shift production to or from alternate products.

Domestic capacity to produce PVLT tires and capacity utilization rates decreased from 2018 to 2020. U.S. producers' inventories also decreased from 2018 to 2020. The majority of responding U.S. producers (13 of 14) reported that they could not switch production from other products to PVLT tires because the machinery they use is not suited to produce anything other than PVLT tires. The responding U.S. producer, ***, who reported being able to switch production to or from other products reported that it could produce tires other than subject PVLT tires.

Subject imports from Korea

Based on available information, producers of PVLT tires from Korea have the ability to respond to changes in demand with moderate changes in the quantity of shipments of PVLT

tires to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, an ability to shift shipments from alternate markets, and moderate inventory levels. The main limiting factor mitigating responsiveness of supply is an inability to shift production to or from alternate products.

Korea's production capacity was *** percent of the U.S. production capacity and Korea's unused capacity was *** percent of U.S. production capacity in 2020. Korean production capacity and capacity utilization fell from 2018 to 2020. Inventory levels increased from 2018 to 2020. The majority of Korean producers reported that they were unable to produce other products on the equipment used to produce PVLT tires. The one Korean producer that reported it could produce other products on the equipment used to produce PVLT tires reported it could produce tires other than PVLT tires. Korean producers reported shipping slightly over a *** of their production to their home market and shipping less than *** of their production to non-U.S. markets in 2020. Korean producers could shift a large percentage of tires from their home market or non-U.S. markets in response to a change in prices in the U.S. market.

Subject imports from Taiwan

Based on available information, producers of PVLT tires from Taiwan have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of PVLT tires to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets, and low-to-moderate inventory levels. The main factors mitigating responsiveness of supply are the limited ability to shift production to or from alternate products and small production capacity relative to the United States.

Taiwan's production capacity was *** percent of the U.S. production capacity and Taiwan's unused capacity was *** percent of U.S. production capacity in 2020. The size of Taiwan's capacity of produce PVLT tires and moderate-to-low levels of available unused capacity relative to the United States limits Taiwan's ability to respond to price changes in the U.S. PVLT tire market. Taiwan increased its production capacity slightly and the level of capacity utilization fell from 2018 to 2020. Inventory levels as a ratio of total shipments increased slightly throughout the same period, while inventory levels in terms of the number of PVLT tires were lower in 2020 than in 2018. Half of responding producers in Taiwan reported they could not produce other products on the equipment used to produce PVLT tires. Producers from Taiwan that reported they could produce other products on the equipment used to produce PVLT tires reported they could produce tires other than PVLT tires. Producers from Taiwan

reported shipping slightly more than a *** of their production to their home market and shipping slightly less than a *** of their production to non-U.S. markets in 2020. Producers in Taiwan could shift quantities of tires from their home market or divert shipments away from non-U.S. markets in response to a change in prices in the U.S. market.

Subject imports from Thailand

Based on available information, producers of PVLT tires from Thailand have the ability to respond to changes in demand with moderate changes in the quantity of shipments of PVLT tires to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets, low-to-moderate inventory levels and some ability to shift production to or from alternate products.

Thailand's production capacity was *** percent of the U.S. production capacity and Thailand's unused capacity was *** percent of U.S. production capacity in 2020. Thai capacity to produce PVLT tires increased more than Thai production of PVLT tires, leading capacity utilization to decline from 2018 to 2020. Inventory levels increased throughout the same period. The majority of PVLT tire producers in Thailand (11 of 17) reported they could not produce other products on the equipment used to produce PVLT tires. Thai producers that reported they could produce other products on the equipment used to produce PVLT tires reported they could produce tires other than PVLT tires. Thai producers reported shipping slightly less than a *** of their production to their home market and shipping a *** of their production to non-U.S. markets in 2020. Producers in Thailand could shift large quantities of tires from their home market or non-U.S. markets in response to a change in prices in the U.S. market.

Subject imports from Vietnam

Based on available information, producers of PVLT tires from Vietnam have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of PVLT tires to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets, and low-to-moderate inventory levels. The main limiting factors mitigating responsiveness of supply are lower production capacity relative to the limited ability to shift production to or from alternate products.

Vietnamese producers' production capacity was *** percent of U.S. production capacity and Vietnamese unused production capacity was *** percent of U.S. production capacity in 2020. The size of Vietnam's capacity to produce PVLT tires and low levels of

available unused capacity relative to the United States limit Vietnam's ability to respond to price changes in the U.S. PVLT tire market.

Vietnam increased its production capacity from 2018 to 2020 but did not increase production at the same rate, which caused the level of capacity utilization to fall from 2018 to 2020. Inventory levels increased over the same period. A plurality of responding PVLT tire producers in Vietnam (***) reported they could not produce other products on the equipment used to produce PVLT tires. Vietnamese producers that reported they could produce other products on the equipment used to produce PVLT tires reported they could produce tires other than PVLT tires. Vietnamese producers reported shipping *** of their production to non-U.S. markets in 2020 and could shift tires from non-U.S. markets to the U.S. market in response to a change in prices in the U.S. market.

Imports from nonsubject sources

Nonsubject imports accounted for 49.9 percent of total U.S. imports in 2020. The largest sources of nonsubject imports during 2018-2020, in descending order, were Mexico, Indonesia, and Canada. Combined, these countries accounted for 50.5 percent of nonsubject imports in 2020.

Supply constraints

Half of responding U.S. producers (7 of 14), a majority of responding importers (25 of 47), and purchasers (22 of 35) reported supply constraints in the PVLT tire market since January 1, 2018. U.S. producer *** reported that it generally had the capacity to supply the PVLT tires demanded by its customers but on limited occasions it has faced production constraints for high-value tires in peak cycles. U.S. producer *** reported that a shortage of shipping containers in Europe at the end of 2020 and the beginning of 2021 caused delays in the supply chain that resulted in putting a key line on allocation. U.S. producer *** reported that it was unable to support 100 percent of demand after production shutdowns in the second quarter of 2020. U.S. producer *** reported shortfalls in deliveries when transitioning production from *** products. U.S. producer *** reported supply constraints due to the impact of COVID-19.

A plurality of importers, (***) reported that COVID-19 had caused supply constraints by disrupting the supply chain through production facility shutdowns, shipping delays or restrictions. Importer *** reported that the market demand for PVLT tires has outpaced its ability to supply the market for the past 3 years. Importer *** reported that lengthy shipping

timelines deter customers from ordering imports in a dynamic market where the quantities demanded frequently change.

A plurality of purchasers, (***) reported that COVID-19 caused supply constraints by disrupting the supply chain through production facility shutdowns or shipping delays. Purchaser *** reported that it had been refused sales by large U.S. producers such as Goodyear, Bridgestone, Firestone, Michelin and Conti-General and that the only U.S. producer willing to supply it with PVLT tires was Cooper. Purchaser *** reported that firms had allocated quantities of tires from Thailand and there had been capacity issues from Vietnam. Purchaser *** reported that imports from several countries including Taiwan had diverted shipments away from the U.S. market as a result of increased tariffs and duties. Purchaser *** reported that some manufacturers will only sell to firms in a market area where they lack a distributor. *** also reported that suppliers frequently provide a lower quantity of PVLT tires than promised and delay deliveries. Purchaser *** reported that demand changes faster than production capacity can shift, which leads to suppliers providing reduced quantities of some PVLT tires or delays in shipping.

New suppliers

Eight of 37 responding purchasers indicated that new suppliers entered the U.S. market since January 1, 2018. Purchaser *** reported that new brands frequently enter the market and purchaser *** reported that new wholesalers continue to enter the market every year. Purchaser *** reported that Hankook, Kumho and Giti opened U.S. production facilities in January 2018 and that Nokian began commercial production in a new U.S. facility in 2020.

U.S. demand

Based on available information, the overall demand for PVLT tires is likely to experience small changes in response to changes in price. The main contributing factors are the lack of substitute products, the small cost share of PVLT tires as a component of a new car, and the importance of PVLT tires as an essential and regularly-replaced component of a car or truck, which is the primary means of transportation for many households throughout the United States.

End uses and cost share

PVLT tires can be used as a component for a new car or truck and as such account for a small share of end-use product. PVLT tires can also be used a replacement part of cars or trucks, in which case they are considered to be an end-use product itself.

As a component for a new car or truck, purchaser estimates of PVLT tires' share of the end-use product range from 0.9 to 2.2 percent depending on the model of the vehicle.

Business cycles

Six of 14 U.S. producers[4], 27 of 48 importers, and 25 of 37 purchasers indicated that the market was subject to business cycles or conditions of competition. Specifically, the majority of U.S. producers, importers, and purchasers who reported that the market was subject to business cycles reported that tire sales were seasonal. U.S. producers *** and *** reported that demand for certain categories of tires varies by the season. U.S. producer *** reported that winter influences the sales of winter tires in Northern regions. Importer *** reported that mud and all-terrain tires are more popular in the fall. Importer *** reported that light truck tires are in demand for hunting season. Importers ***

[4] ***.

and *** reported that their sales peaked in the spring and summer. Purchaser *** reported that demand for PVLT tires increases in the warm summer months. Purchaser *** reported that there is a spike in demand for PVLT tires during summer holiday traveling season which runs from Memorial Day through Labor Day. Purchaser *** reported that the PVLT tire market was seasonal based on the region and the product type.

Demand trends

U.S. producers' responses regarding U.S. demand since January 1, 2018 were mixed. A majority of importers and purchasers reported that U.S. demand for PVLT tire had increased or fluctuated since January 1, 2018 (table II-4).

A plurality of U.S. producers and the majority of purchasers reported the demand outside of the United States had decreased or fluctuated since January 1, 2018. Importer responses regarding demand outside of the United States since January 1, 2018 were mixed. Purchaser responses regarding changes in the demand for end use products since January 1, 2018 were mixed.

Table II-4
PVLT tires: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	5	1	5	2
Importers	22	6	8	12
Purchasers	13	4	2	14
Demand outside the United States				
U.S. producers	2	2	3	1
Importers	6	5	6	6
Purchasers	3	1	3	3
Demand for end use product(s):				
Purchasers	3	3	3	2

Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

All responding U.S. producers[5], the majority of responding importers, and all responding purchasers reported that there were no substitutes.

[5] ***.

Substitutability issues

The degree of substitution between domestic and imported PVLT tires depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced PVLT tires and PVLT tires imported from subject sources. Several firms indicated that there are factors in addition to price that are considered in sales of PVLT tires, including quality. In addition, other record evidence indicates that there is some product differentiation in the market for PVLT tires.

Market Distinctions

U.S. producers, importers, and purchasers were asked if the U.S. PVLT tires market was divided into categories (e.g., Best/Better/Good; Tier 1/Tier 2/Tier 3; Flagship/Secondary/Mass-market). The majority of U.S. producers (10 of 12), importers (39 of 48), and purchasers (30 of 37) reported that the PVLT market is divided into categories of quality or tiers. However, the descriptions of these factors differentiating tiers were varied and subjective with no set industry standard.

While a plurality of U.S. producers, importers, and purchasers reported that customer recognition or brand was an important factor differentiating PVLT tires in each tier, U.S. producers, importers, and purchasers reported additional factors that also differentiated tiers of PVLT tires. U.S. producer *** reported that there were no clear or common definitions of categories. U.S. producer *** reported that PVLT tires are separated into tiers based on warranties and performance claims. U.S. producers *** and *** reported that high quality and brand recognition separates tiers of PVLT tires, while U.S. producer *** reported that the tiers of PVLT tires are distinguished by their brand image and retail prices. U.S. producer *** reported that price, quality, and market share were the factors that differentiated PVLT tires of all tiers.

Importer *** reported that performance separated PVLT tires into different tiers, and importer *** reported that levels of technology was the differentiating factor. Importer *** reported that sales price was the attribute that largely defined PVLT tire tiers. Importer *** reported that brand, quality, price, and performance were factors that defined the tiers of PVLT tires. Importer *** reported that the branding and unique tread patterns or compound were factors that were indicative of tiers of PVLT tires. Purchaser *** reported that the premium tiers of tires was due to branding and warranties rather

than production costs. Purchaser *** reported that handling and wear were factors, while purchaser *** reported that tiers of PVLT tire were defined by designs of the PVLT tire and materials that made up the PVLT tire.

U.S. producers, importers, and purchasers were asked to list the categories of PVLT tires and identify manufacturers and brands in each category. U.S. producers, importers, and purchasers generally reported that there are between three and four tiers. Responding U.S. producers, importers, and purchasers were inconsistent when associating brands within each tier. U.S. producers, importers, and purchasers generally reported that Bridgestone, Goodyear, and Michelin were first-tier PVLT tires, although these brands were also identified as being associated in other tiers and other brands were also reported as being associated with this category. However, U.S. producers, importers and purchasers varied when reporting the tier of several other brands of PVLT tires. U.S. producers *** and *** reported that Pirelli is a first-tier PVLT tire while U.S. producer *** reported that Pirelli is a second-tier PVLT tire. U.S. producers *** and *** reported that Hankook is a second-tier PVLT tire while U.S. producer *** reported that Hankook is a third-tier PVLT tire. Eight importers (***) reported that Pirelli is a first-tier PVLT tire; while four importers (***) reported that Pirelli is a second-tier PVLT tire. Similarly, importer *** reported that Kumho is a first-tier PVLT tire; importers ***, ***, ***, ***, ***, and *** reported that Kumho is a second-tier PVLT tire; and importers ***, ***, ***, and *** reported that Kumho is a third-tier PVLT tire. Importer *** reported that Hankook is a first-tier PVLT tire; importers ***, ***, and *** reported that Hankook is a second-tier PVLT tire; and importer *** reported that Hankook is a third-tier PVLT tire. Purchasers *** and *** reported that Pirelli was a first-tier brand while purchaser *** reported that Pirelli was a second-tier brand. Similarly purchasers ***, ***, and *** reported that Kumho was a second-tier brand while purchaser *** reported that Kumho was a third-tier brand.

U.S. producers, importers, and purchasers were asked to compare the physical characteristics of the highest/best tier of PVLT tire and the lowest/worst tier of PVLT tire. The majority of U.S. producers, importers and purchasers reported that the highest/best tier of PVLT tire sometimes or never had the same characteristics as the lowest/worst tier of PVLT tire. The majority of U.S. producers (7 of 10) and importers (32 of 40) reported that their firm's sales of PVLT tires had not shifted between categories since January 1, 2018. U.S. producer *** reported that it had shifted its sales between categories, and it had increased the

volume of third-tier PVLT tires that it sourced from third party suppliers. Importer *** reported that Goodyear and Bridgestone started a joint distribution company and discontinued their business with ***, and as a result it shifted away from the first-tier segment of the market. Importer *** reported that it shifted sales between categories as it increased its prices and began to capture a portion of the second-tier market. Importer *** reported that it had shifted its sales to a higher category of PVLT tire as their brand recognition improved. The majority of purchasers (16 of 27) reported that they had shifted sales between categories since January 1, 2018. Purchaser *** reported that its sales have shifted from second-tier to third-tier products because of tier 2 manufacturers selling directly to consumers and instituting minimum advertisement price policies through eCommerce channels. [6]

OEM and replacement markets for PVLT tires

The U.S. PVLT tire market is divided into two segments, the OEM market and the replacement market. U.S. producers, importers, and purchasers were asked to estimate the share of each tier of PVLT tire in the OEM and replacement markets (tables II-5 and II-6). U.S. producers', importers', and purchasers' estimates of the market share of each tier of PVLT tire resulted in a wide range of estimates for the market share of each category of the OEM market and replacement market.

Table II-5
PVLT tires: Firms' responses regarding the share of sales by categories in the OEM market

Category	U.S. Producers		Importers		Purchasers	
	Low Estimate (Percent)	High Estimate (Percent)	Low Estimate (Percent)	High Estimate (Percent)	Low Estimate (Percent)	High Estimate (Percent)
Category 1	39.0	51.0	25.0	85.0	45.0	90.0
Category 2	30.0	49.0	10.0	49.0	10.0	49.0
Category 3	13.0	25.0	0.6	25.0	0.6	25.0
Category 4	---	---	---	10.0	---	---
Category 5	---	---	---	3.0	---	---

Source: Compiled from data submitted in response to Commission questionnaires.

[6] Additional responses regarding categories in the U.S. market are available in Appendix H.

Table II-6
PVLT tires: Firms' responses regarding the share of sales by categories in the replacement market

Category	U.S. Producers		Importers		Purchasers	
	Low Estimate (Percent)	High Estimate (Percent)	Low Estimate (Percent)	High Estimate (Percent)	Low Estimate (Percent)	High Estimate (Percent)
Category 1	9,5	59.0	20.0	80.0	19.0	50.0
Category 2	1.8	48.0	1.8	51.0	25.0	51.0
Category 3	12.0	37.5	10.0	37.5	10.0	32.0
Category 4	9.4	12.0	5.0	45.0	12.0	30.0
Category 5	---	---	10.0	20.0	---	20.0

Source: Compiled from data submitted in response to Commission questionnaires.

Interchangeability of OEM and replacement market PVLT tires

The majority of responding U.S. producers (8 of 13), importers (35 of 46) and purchasers (21 of 31) reported that PVLT tires sold to the OEM market and to the replacement market are comparable in terms of quality. U.S. producer *** reported that vehicle manufacturers purchase tires for the OEM market that maximize the performance of the vehicle. Importer *** reported that OEM market tires are designed specifically for a type of vehicle to achieve the smoothest ride possible. Importer *** reported that while the same tire may be available on both the OEM and replacement market, PVLT tires sold to the OEM market may have a construction or component change particular to the vehicle to provide the smoothest ride possible. Purchaser *** reported that the PVLT tires it recommends in the replacement market are the same it purchases for the OEM market. Purchaser *** reported that the quality between the OEM market and replacement market is equivalent but the replacement market offers better mileage warranties.

The majority of U.S. producers (8 of 13) and a plurality of importers (18 of 46) and purchasers (13 of 30) reported that the price of PVLT tires sold to the OEM market was lower than PVLT tires sold in the replacement market. U.S. producers ***, *** and *** reported that PVLT tires in the OEM market were priced lower than PVLT tires sold in the replacement market due to volume discounts or economies of scale. Importer *** reported that the PVLT tires sold to the OEM market were priced lower than PVLT tires sold to the replacement market because even though the OEM market purchased lower quantities than the replacement market, the OEM market PVLT tires are purchased with a more regular schedule. Importer *** reported that manufacturers are willing to offer lower prices to attract clients who will purchase at a steady volume. Importer *** reported that PVLT tires sold to the OEM market are priced higher than those sold to the replacement market because PVLT tires sold to the OEM market are typically higher tier or higher quality tires.

Purchasers *** and *** reported that the OEM market consists solely of higher quality tires. While those higher quality tires are available in the replacement market, the remaining tier or lower quality tires make the average tire cheaper in the replacement market. Purchaser *** reported the OEM market purchases tires at wholesale prices which are lower than the replacement market.

Branding

The U.S. PVLT tire market consists of branded PVLT tires and private label PVLT tires. Purchasers were asked to estimate the quantities of branded and private label PVLT tires. Based on the reported quantities, branded PVLT tires make up over three-quarters of the U.S. PVLT tire market. All responding purchasers reported purchasing branded tires while slightly over half of responding purchasers (20 of 37) reported purchasing private label tires.

U.S. producers, importers and purchasers were asked to compare branded PVLT tires to private label PVLT tires in terms of quality (table II-7) and price (table II-8). Half of U.S. producers and a majority of importers and purchasers reported that branded and private label PVLT tires are somewhat comparable on quality. Half of U.S. producers, 20 of 42 importers, and 12 of 33 purchasers reported that branded and private label PVLT tires are somewhat comparable in terms of price.

Table II-7
PVLT tires: Firms' responses regarding the comparison of branded and private label PVLT tires in terms of quality

	Very Comparable	Somewhat Comparable	Not Comparable
U.S. producers	4	5	1
Importers	16	20	6
Purchasers	13	19	1

Source: Compiled from data submitted in response to Commission questionnaires

Table II-8
PVLT tires: Firms' responses regarding the comparison of branded and private label PVLT tires in terms of price

	Very Comparable	Somewhat Comparable	Not Comparable
U.S. producers	4	5	1
Importers	17	20	5
Purchasers	19	12	2

Source: Compiled from data submitted in response to Commission questionnaires

The majority of responding U.S. producers (11 of 11), importers (44 of 46), and purchasers (33 of 35) reported that branding influenced the price of PVLT tires. U.S. producer *** reported that established brands garner a higher price based on quality, reliability,

and performance history. U.S. producer *** reported that trusted brands was the highest factor of consumer purchasing decisions. Importer *** reported that consumers are willing to pay more for a known brand with a long history in the U.S. market provided that the consumer can afford it. Importer *** reported that well-known brands are perceived to have higher quality and better service and therefore command a higher price. Importer *** report that prices are driven higher by better exposure, marketing, and name recognition. Purchaser *** reported that most well-known brands have distribution guidelines that set the price across retailers.

A plurality of purchasers (18 of 37) reported that branding was very important to their firm's purchasing decisions and marketing to customers, and a plurality of purchasers (14 of 37) reported that branding was somewhat important to their firm's purchasing decisions and marketing to customers. Purchaser *** reported that familiar brands are more readily accepted by customers. Purchaser *** reported that brand is very important for the higher tiers of PVLT tires, but customers have other considerations for lower tiers of PVLT tire. Purchaser *** reported that its marketing strategy includes working with key suppliers and marketing their brands. Purchaser *** estimated that 40 percent of consumers will only purchase branded products.

Lead times

PVLT tires are primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging 52 days. The remaining *** percent of their commercial shipments came from inventories, with lead times averaging 9 days. Importers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging 87 days. Importers reported that *** percent of their commercial shipments came from U.S. inventories with lead times averaging 11 days, and the remaining *** percent of commercial shipments came from foreign inventories with lead times averaging 85 days.

Knowledge of country sources

Thirty-three purchasers indicated they had marketing/pricing knowledge of domestic products, 23 of Korean products, 21 of products from Taiwan, 28 from Thailand, 20 from Vietnam, and 28 of nonsubject countries.[7]

As shown in table II-9, most purchasers and their customers sometimes or never make purchasing decisions based on the producer or country of origin. Of the eight purchasers that reported that they always make decisions based the manufacturer, purchaser *** reported that it always made purchasing decisions based on the producer, because it has long-standing relationships with producers who supply tires that meet the required specifications such as quality and price is essential in the PVLT tire market. Purchaser *** reported that it always made purchasing decisions based on the producer because of loyalty to brands. Purchaser *** reported that it always made purchasing decisions based on the producers because of past performance of the product. Purchaser *** reported that it always made purchasing decisions based on the producer, because it only purchased products manufactured by Hankook.

Table II-9
PVLT tires: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	8	9	7	12
Purchaser's customers make decision based on producer	---	6	13	10
Purchaser makes decision based on country	---	5	15	16
Purchaser's customers make decision based on country	---	2	11	15

Source: Compiled from data submitted in response to Commission questionnaires.

Factors affecting purchasing decisions

The most often cited three factors firms consider in their purchasing decisions for PVLT tires were quality (25 firms), price (24 firms), and availability/supply (19 firms), as shown in table II-10. Quality was the most frequently cited first-most important factor (cited by 18 firms), followed by price (6 firms); availability/supply was the most frequently reported second-most important factor (9 firms); and price was the most frequently reported third-most important factor (10 firms).

[7] This includes Argentina, Brazil, Canada, Chile, China, Croatia, Czech Republic, Germany, Ecuador, Spain, Finland, France, Great Britain, Hungary, Italy Indonesia, India, Japan, Luxembourg, Mexico, Malaysia, Philippines, Portugal, Romania, Russia, Slovenia, Slovak Republic, Sierra Leone, Switzerland, and Turkey.

Table II-10
PVLT tires: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Quality	18	5	3	25
Price / Cost	6	8	10	24
Availability / Supply	2	9	8	19
All other factors	11	11	11	NA

Note: Other factors included insurance, brand, brand integrity, capacity, product range, credit terms, distribution plan, and exclusivity.

Source: Compiled from data submitted in response to Commission questionnaires.

The majority of purchasers (22 of 37) reported that they only sometimes purchase the lowest-priced product.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 19 factors in their purchasing decisions (table II-11). The factors rated as very important by more than half of responding purchasers were quality meets industry standards and reliability of supply (35 firms each), availability and product consistency (34 firms each), delivery time (29 firms), price (25 firms), delivery terms (24 firms), quality exceeds industry standards and size range (20 firms each), and product range (19 firms).

Table II-11
PVLT tires: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	34	2	---
Availability of brand offerings	15	16	5
Availability of private label offerings	7	14	15
Branding	12	17	7
Delivery terms	24	10	2
Delivery time	29	7	---
Discounts offered	15	17	4
Minimum quantity requirements	5	16	15
Packaging	2	11	23
Payment terms	14	17	4
Price	25	10	1
Product consistency	34	2	---
Product range	19	15	2
Quality meets industry standards	35	1	---
Quality exceeds industry standards	20	12	3
Reliability of supply	35	1	---
Size Range	20	13	2
Technical support/service	14	19	4
U.S. transportation costs	14	16	6

Source: Compiled from data submitted in response to Commission questionnaires.

Supplier certification

Thirteen of 36 responding purchasers require their suppliers to become certified or qualified to sell PVLT tires to their firm. Purchasers ***, *** and *** reported requiring suppliers to comply with DOT regulations of PVLT tires. Purchasers *** and *** reported that they conducted quality certifications and required suppliers to be insured. Purchaser *** reported requiring financial audits as well as quality control checks. Purchasers reported that the time to qualify a new supplier generally ranged from 14 to 180 days.[8] None of the responding purchasers reported that a domestic or foreign supplier had failed in its attempt to qualify PVLT tires, or had lost its approved status since 2018.

[8] Purchaser *** reported that it certifies suppliers in 2 years.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2018 (table II-12). Purchaser responses to changes in their purchasing pattern were mixed. Purchasers who reported increased purchases of PVLT tires from the United States reported increased production, distribution, and new product lines entering the market as the driving factors behind the change. Purchasers who reported decreased purchases from PVLT tires from the United States reported that they had faced supply constraints from U.S. producers as a result of the COVID-19 pandemic because production facilities in the United States were closed longer than production facilities in subject countries. One purchaser (***) reported that it had decreased purchases from U.S. producers because U.S. producers were increasingly selling directly to consumers.

Purchasers who reported increased purchases from Korea reported adding brands because of less competition in the market from nonsubject countries like Japan, an increase in the availability of private label tires, increased demand for brands such as Nexen, and Nexen's exclusive distribution practices. Purchasers who reported decreased purchases from Korea reported poor supply chain practices and the termination of purchasing agreements.

Purchasers who reported increased purchases from Taiwan reported that products were not available from U.S. producers, such as the new mini spare tire. Purchasers who reported decreased purchases from Taiwan because of U.S. duties and tariffs of PVLT tires from Taiwan and suppliers from Taiwan canceling purchasing agreements.

Purchases who reported increased purchases from Thailand reported that increased purchases from Thailand were a result of business trends of Thailand being a crucial supplier of mid-to-low tier private label products, while the U.S. producers focus their limited production on higher tiered branded products. Purchases who reported increased purchases from Thailand also reported increased product offerings including more niche products such as "mud tires", and improved mileage and road hazard warranties. Purchasers who reported decreased purchases from Thailand reported that increased tariffs and increased competition from subject sources had driven the change in their purchasing patterns.

Purchases who reported increased purchases from Vietnam reported increases in availability of private label tires and duties on lower quality PVLT tires from China that are not produced in the United States as reasons for increasing purchases of PVLT tires from Vietnam.

Table II-12
PVLT tires: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	1	9	8	5	9
Korea	5	7	6	5	9
Taiwan	10	2	8	2	8
Thailand	3	8	14	2	5
Vietnam	12	3	9	3	5
All other sources	---	10	10	1	13
Sources unknown	8	3	3	3	5

Source: Compiled from data submitted in response to Commission questionnaires.

Importance of purchasing domestic product

Thirty of 32 purchasers reported that most or all of their purchases did not require purchasing U.S.-produced product. Three reported that domestic product was required by law (for 0.1 to 25.0 percent of their purchases), 11 reported it was required by their customers (for 0.1 to 75.0 percent of their purchases), and four reported other preferences for domestic product. Reasons cited for preferring domestic product included customer demand for products produced exclusively in the United States.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing PVLT tires produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 19 factors (table II-13) for which they were asked to rate the importance.

Most purchasers reported that U.S. and subject PVLT tires were comparable on most factors. The majority of purchasers reported that PVLT tires from the United States were superior to PVLT tires from Korea, Taiwan, Thailand, Vietnam and nonsubject countries in terms of delivery time. A plurality of responding purchasers reported that PVLT tires from the United States were superior to PVLT tires from Vietnam in terms of product range. Half of responding purchasers reported that PVLT tires from the United States are inferior to PVLT tires from Vietnam in terms of availability of private label offerings and an equal number reported that PVLT tires from the United States are comparable or inferior to PVLT tires from Vietnam in terms of price.

The majority of purchasers reported that PVLT tires from Korea, Thailand, Taiwan, Vietnam, and nonsubject countries were comparable. The one exception is that half of responding purchasers reported that PVLT tires from Korea were inferior to PVLT tires from

Vietnam in terms of price while half reported PVLT tires from Korea and Vietnam were comparable in terms of price.

Table II-13
PVLT tires: Purchasers' comparisons between U.S.-produced and imported product

Factor	United States vs. Korea			United States vs. Taiwan			United States vs. Thailand		
	S	C	I	S	C	I	S	C	I
Availability	2	24	1	2	20	---	2	24	4
Availability of brand offerings	3	19	5	5	15	2	5	19	6
Availability of private label offerings	---	13	9	---	13	7	1	14	11
Branding	7	15	3	8	12	1	10	16	3
Delivery terms	2	22	1	4	14	1	4	22	2
Delivery time	15	9	2	12	8	1	17	8	4
Discounts offered	3	19	3	2	16	2	3	20	5
Minimum quantity requirements	8	15	2	7	12	2	10	16	3
Packaging	2	21	1	1	19	1	2	25	1
Payment terms	1	23	1	2	17	1	2	23	3
Price	1	18	8	1	11	10	2	15	13
Product consistency	---	24	1	1	19	---	2	24	2
Product range	2	19	5	7	11	3	7	16	6
Quality meets industry standards	---	25	---	1	20	---	2	26	1
Quality exceeds industry standards	4	20	---	4	17	---	6	22	1
Reliability of supply	2	23	1	2	19	---	4	24	2
Size Range	1	19	6	5	12	5	4	19	7
Technical support/service	7	18	---	9	12	---	10	17	1
U.S. transportation costs	4	18	1	4	14	1	7	19	2

Table continued on next page.

Table II-13--Continued
PVLT tires: Purchasers' comparisons between U.S.-produced and imported product

Factor	United States vs. Vietnam			Korea vs. Taiwan			Korea vs. Thailand		
	S	C	I	S	C	I	S	C	I
Availability	3	18	2	3	13	---	1	17	1
Availability of brand offerings	7	13	3	3	12	1	3	15	1
Availability of private label offerings	---	10	10	1	12	1	1	13	3
Branding	10	11	1	3	12	---	5	12	2
Delivery terms	3	18	---	3	13	---	3	15	1
Delivery time	14	6	2	2	14	---	2	16	1
Discounts offered	2	15	3	1	14	1	1	16	2
Minimum quantity requirements	8	12	2	3	13	---	3	15	1
Packaging	3	17	1	1	15	---	1	17	1
Payment terms	2	18	1	3	12	1	2	16	1
Price	1	11	11	---	11	5	---	11	8
Product consistency	2	18	1	2	14	---	2	16	1
Product range	9	9	3	5	11	---	5	13	1
Quality meets industry standards	2	19	1	1	15	---	1	17	1
Quality exceeds industry standards	7	14	1	4	12	---	4	14	1
Reliability of supply	4	17	1	2	14	---	2	16	1
Size Range	6	12	6	4	11	1	3	15	1
Technical support/service	10	12	---	5	11	---	6	12	1
U.S. transportation costs	4	15	2	---	14	---	---	16	---

Table continued on next page.

Table II-13--Continued
PVLT tires: Purchasers' comparisons between U.S.-produced and imported product

Factor	Korea vs. Vietnam			Taiwan vs. Thailand			Taiwan vs. Vietnam		
	S	C	I	S	C	I	S	C	I
Availability	2	12	2	---	17	3	2	13	1
Availability of brand offerings	4	10	2	1	16	1	2	13	1
Availability of private label offerings	1	11	4	---	15	2	2	13	1
Branding	5	9	2	2	15	1	2	14	---
Delivery terms	3	11	2	1	16	1	1	13	2
Delivery time	2	13	1	2	16	1	2	13	1
Discounts offered	1	12	3	---	17	2	1	14	1
Minimum quantity requirements	3	12	1	1	16	1	1	14	1
Packaging	2	13	1	---	18	---	2	14	---
Payment terms	2	13	1	---	18	1	---	14	1
Price	---	8	8	---	14	5	1	12	3
Product consistency	3	12	1	---	19	---	2	14	---
Product range	4	10	2	2	15	2	2	13	1
Quality meets industry standards	2	13	1	---	19	---	2	14	---
Quality exceeds industry standards	4	11	1	---	18	---	2	14	---
Reliability of supply	1	13	2	2	15	2	1	14	1
Size Range	3	11	2	1	16	2	2	13	1
Technical support/service	5	10	1	3	16	---	2	14	---
U.S. transportation costs	---	13	1	---	17	---	1	14	---

Table continued on next page.

Table II-13--Continued
PVLT tires: Purchasers' comparisons between U.S.-produced and imported product

Factor	Thailand vs. Vietnam			United States vs. Nonsubject sources			Korea vs. Nonsubject sources		
	S	C	I	S	C	I	S	C	I
Availability	2	15	---	4	13	3	---	15	---
Availability of brand offerings	3	14	---	4	14	1	1	14	---
Availability of private label offerings	1	16	---	---	11	6	1	12	1
Branding	2	15	---	5	13	---	1	13	---
Delivery terms	---	17	---	4	15	---	2	13	---
Delivery time	---	17	---	11	8	---	3	12	---
Discounts offered	---	17	---	2	16	1	1	13	1
Minimum quantity requirements	---	17	---	6	12	---	2	12	---
Packaging	---	17	---	---	17	---	---	14	---
Payment terms	---	17	---	1	17	1	2	12	---
Price	---	17	---	---	13	6	---	12	3
Product consistency	---	17	---	1	18	---	2	13	---
Product range	3	14	---	4	13	2	3	12	---
Quality meets industry standards	---	17	---	---	19	---	1	14	---
Quality exceeds industry standards	---	17	---	4	14	---	3	11	---
Reliability of supply	---	17	---	1	18	---	2	13	---
Size Range	3	14	---	4	12	3	3	12	---
Technical support/service	1	16	---	7	12	---	2	13	---
U.S. transportation costs	---	15	---	7	11	---	---	13	---

Table continued on next page.

Table II-13--Continued
PVLT tires: Purchasers' comparisons between U.S.-produced and imported product

Factor	Taiwan vs. Nonsubject sources			Thailand vs. Nonsubject sources			Vietnam vs. Nonsubject sources		
	S	C	I	S	C	I	S	C	I
Availability	1	13	---	2	18	---	---	11	---
Availability of brand offerings	1	12	1	1	19	---	---	10	1
Availability of private label offerings	2	11	---	1	18	---	1	10	---
Branding	1	10	2	1	16	2	---	9	2
Delivery terms	1	13	---	---	19	1	---	11	---
Delivery time	1	13	---	---	19	1	---	11	---
Discounts offered	1	13	---	---	19	1	---	11	---
Minimum quantity requirements	1	12	---	---	18	1	---	11	---
Packaging	1	12	---	---	18	1	---	11	---
Payment terms	1	13	---	---	19	1	---	11	---
Price	1	13	---	---	19	1	---	11	---
Product consistency	2	11	1	1	17	2	---	10	1
Product range	1	10	3	2	16	2	---	8	3
Quality meets industry standards	1	12	1	1	17	1	---	10	1
Quality exceeds industry standards	1	11	1	1	17	1	---	10	1
Reliability of supply	1	12	1	1	16	2	---	10	1
Size Range	---	11	2	2	17	1	---	9	2
Technical support/service	1	12	1	1	18	1	---	10	1
U.S. transportation costs	1	12	---	---	18	1	---	11	---

Note: A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.
Note: S=first listed country's product is superior; C=both countries' products are comparable; I=first listed country's product is inferior.

Source: Compiled from data submitted in response to Commission questionnaires.

Comparison of U.S.-produced and imported PVLT tires

In order to determine whether U.S.-produced PVLT tires can generally be used in the same applications as imports from Korea, Thailand, Taiwan, Vietnam and nonsubject countries, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-14, the majority of responding U.S. producers, importers, and purchasers reported that PVLT tires from the United States, Korea, Thailand, Taiwan, Vietnam, and nonsubject countries are always or frequently interchangeable. Importer *** reported that country specific safety ratings limit the interchangeability of PVLT tires from one country to another; while purchaser *** reported that Department of Transportation requirements limit the PVLT tires that are interchangeable within the U.S. market. Importer *** reported that characteristics such as speed rating, mileage, tread, and wear limits the interchangeability of PVLT tires. Importer *** reported that Korean tires are not interchangeable with U.S. produced

PVLT tires because of size and other physical differences. Purchaser *** reported that not all countries produce every size of PVLT tire. Purchaser *** reported that quality, performance, and size limit the interchangeability between PVLT tires from different countries. Purchaser *** reported that a tier 1 PVLT tire is not interchangeable with a tier 3 PVLT tire.

Table II-14
PVLT tires: Interchangeability between PVLT tires produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Korea	6	1	2	---	13	5	6	1	16	4	9	1
United States vs. Taiwan	6	2	1	---	15	10	7	1	13	6	7	2
United States vs. Thailand	6	3	1	---	15	10	11	2	14	6	11	1
United States vs. Vietnam	6	1	2	---	13	7	9	1	12	6	7	---
Korea vs. Taiwan	5	1	2	---	13	4	5	---	10	8	5	2
Korea vs. Thailand	5	1	2	---	13	7	7	---	11	8	6	2
Korea vs. Vietnam	5	1	2	---	13	4	5	---	8	8	4	1
Taiwan vs. Thailand	5	3	---	---	13	11	4	1	13	8	3	2
Taiwan vs. Vietnam	5	2	1	---	13	7	2	1	10	8	1	1
Thailand vs. Vietnam	5	2	1	---	13	8	4	---	9	9	2	---
United States vs. Other	6	4	1	---	13	10	6	---	13	6	10	---
Korea vs. Other	5	1	2	---	10	6	6	---	9	7	8	---
Taiwan vs. Other	5	2	1	---	10	8	4	---	10	7	6	---
Thailand vs. Other	5	3	1	---	10	10	6	---	9	7	9	---
Vietnam vs. Other	5	1	2	---	10	7	5	---	9	7	6	---

Note: A=Always, F=Frequently, S=Sometimes, N=Never.
Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

As can be seen from table II-15, the majority of responding purchasers reported that domestically produced products always met minimum quality specifications. The majority of

responding purchasers reported that PVLT tires from Korea, Taiwan, and Vietnam always met minimum quality specifications. A majority of responding purchasers reported that PVLT tires from Thailand always or usually met minimum quality specifications.

Table II-15
PVLT tires: Ability to meet minimum quality specifications, by source

Source	Always	Usually	Sometimes	Rarely or never
United States	18	12	2	---
Korea	15	9	1	---
Taiwan	11	7	1	1
Thailand	12	12	2	---
Vietnam	11	6	1	---
All other sources	10	4	1	---

Note: Purchasers were asked how often domestically produced or imported PVLT tires meets minimum quality specifications for their own or their customers' uses.

Source: Compiled from data submitted in response to Commission questionnaires.

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of PVLT tires from the United States, subject, or nonsubject countries. As seen in table II-16, the majority of U.S. producers' reports on differences other than price between PVLT tires from the United States and PVLT tires from Korea, Taiwan, Thailand and Vietnam were mixed. The majority of U.S. producers reported that there are always or frequently differences other than price between PVLT tires from Korea, Taiwan, Thailand, Vietnam, and nonsubject countries.

The majority of responding importers reported that there are always or frequently differences other than price between PVLT tires produced in the United States, Korea, Taiwan, Thailand, Vietnam, and nonsubject countries, except when comparing PVLT tires produced in Taiwan and Thailand, where the majority of importers reported that there are sometimes or never differences other than price. Importer *** reported that availability was a significant factor that differentiated U.S.-produced and imported PVLT tires. Importer *** reported that U.S. produced PVLT tires had the name brand recognition of first or second tier PVLT tires while PVLT tires from Thailand were generally third tier. Importer *** reported that availability and product range were two factors other than prices that limited the interchangeability of U.S. produced and PVLT tires from Taiwan and Thailand. Importer *** also reported that it had been unable to find a U.S. producer willing to produce its private brand tire.

The majority of responding purchasers reported that there are always or frequently differences other than price between PVLT tires produced in the United States Korea, Taiwan,

Thailand, and Vietnam except when comparing PVLT tires produced in Taiwan and Vietnam where half of purchases reported that there are sometime or never differences other than price and half reported that there are always or frequently differences other than price. Purchaser *** reported differences other than price were driven by a lack of various sizes and private label from U.S. producers. Purchaser *** reported that it was unable to source full size stand alone spare tires from U.S. producers and purchaser *** reported that private branding, product exclusivity, consistent supply, product performance, product quality, and sizes available were factors other than price that limited interchangeability between U.S. produced and imported PVLT tires.

Table II-16
PVLT tires: Significance of differences other than price between PVLT tires produced in the United States and in other countries, by country pair

	U.S. producers				U.S. importers				U.S. purchasers			
Country pair	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Korea	2	3	4	1	5	6	8	2	7	9	12	2
United States vs. Taiwan	2	3	3	1	8	10	7	2	5	10	9	2
United States vs. Thailand	2	3	5	1	14	10	10	2	8	11	11	3
United States vs. Vietnam	2	4	2	1	7	11	6	2	5	8	7	3
Korea vs. Taiwan	2	4	---	1	4	5	3	3	4	9	7	1
Korea vs. Thailand	2	4	---	1	7	8	6	1	6	10	7	2
Korea vs. Vietnam	2	4	---	1	6	5	4	1	3	7	6	1
Taiwan vs. Thailand	2	2	2	1	5	5	8	5	3	10	8	2
Taiwan vs. Vietnam	2	3	1	1	4	5	4	4	1	7	7	1
Thailand vs. Vietnam	2	3	1	1	5	5	6	3	3	7	7	1
United States vs. Other	1	3	6	1	7	7	12	1	6	7	11	4
Korea vs. Other	1	4	1	1	7	4	5	1	4	6	8	2
Taiwan vs. Other	1	3	2	1	5	4	7	1	1	7	8	2
Thailand vs. Other	1	3	3	1	6	5	10	1	3	8	8	2
Vietnam vs. Other	1	4	1	1	6	5	6	1	1	7	7	2

Note: A = Always, F = Frequently, S = Sometimes, N = Never.
Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Elasticity estimates

This section discusses elasticity estimates; Petitioners did not comment on these estimates. Respondents commented on the elasticity estimates as noted below.

U.S. supply elasticity

The domestic supply elasticity for PVLT tires measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of PVLT tires. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced PVLT tires. Analysis of these factors above indicates that the U.S. industry has the ability to greatly increase or decrease shipments to the U.S. market; an estimate in the range of 5 to 8 is suggested.

Respondents believe that the U.S. industry has a limited ability to increase or decrease shipments to the U.S. market and suggested a range of 1 to 3.[9] The staff believes that the relative size of U.S. production capacity to subject countries and the amount of unused capacity support an estimated range of 5 to 8. Although COVID-19 may have increased unused capacity in 2020, staff believes that there is sufficient unused capacity prior to COVID-19 in 2019 to justify the original estimate.

U.S. demand elasticity

The U.S. demand elasticity for PVLT tires measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of PVLT tires. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the PVLT tires in the production of any downstream products. Based on the available information, the aggregate demand for PVLT tires is likely to be inelastic; a range of -0.25 to -0.50 is suggested.

[9] Respondent's posthearing brief, exhibit 8, p. 1.

Respondents believe that the elasticity of demand ranges from -0.25 to -1.00 as pricing increases can delay the purchase of new PVLT tires or increase the likelihood of used PVLT tires being substituted for new PVLT tires.[10] Staff believes that a range of -0.25 to -0.50 is appropriate because it considers used PVLT tires to be a separate market from new PVLT tires with limited impact on each other. While the staff recognizes that an increase in price may somewhat delay the purchase of new PVLT tires, the staff believes that PVLT tires will be replaced with limited consideration of price if they are unsafe or unserviceable with new PVLT tires causing demand to be inelastic.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[11] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced PVLT tires and imported PVLT tires is likely to be in the range of 3 to 6.

Respondents believe that the elasticity of substitution ranges from 1 to 4 due to limited substitutability between brands and product differentiation between domestic and imported PVLT tires in the U.S. market. [12] While staff acknowledges that there is product differentiation in the market, there was no clear and consistent division between products which led staff to believe that this difference was caused in some part by individual and subjective perceptions. Staff found through consultation with a number of purchasers that purchasers were unable to distinguish between PVLT tires produced in the United States in foreign countries of the same brand. Several purchasers and one importer, (***), reported that they were unaware of the origins of PVLT tires by large international manufacturers. This leads staff to believe that the elasticity of substitution is in the range of 3 to 6.

[10] Respondent's posthearing brief, exhibit 8, p. 2.

[11] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

[12] Respondent's posthearing brief, exhibit 8, p. 3.

Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of 14 firms that accounted for all of U.S. production of PVLT tires during 2020.

U.S. producers

The Commission issued a U.S. producer questionnaire to 14 firms based on information contained in the petition. All 14 firms provided usable data on their operations. Staff believes that these responses represent all U.S. production of PVLT tires.

Table III-1 lists U.S. producers of PVLT tires, their production locations, positions on the petitions, and shares of total production.

Table III-1
PVLT tires: U.S. producers of PVLT tires, their positions on the petitions, production locations, and shares of reported production, 2020

Firm	Position on petition	Production location(s)	Share of production (percent)
Bridgestone	***	LaVergne, Tennessee Wilson, North Carolina Warren, Tennessee Aiken, South Carolina	***
Continental	***	Fort Mill, SC Mt. Vernon, IL Sumter, SC	***
Cooper	***	Findlay, OH Tupelo, MS Texarkana, AR Clarksdale, MS	***
Giti	***	Richburg, SC	***
Goodyear	***	Akron, OH Fayetteville, NC Gadsden, AL Lawton, OK Topeka, KS	***
Hankook	***	Clarksville, TN	***
Kumho	***	Macon, GA	***
Michelin	***	Greenville, SC Lexington, SC Dothan, AL Tuscaloosa, AL Ardmore, OK Ft. Wayne, IN	***
Nokian	***	Dayton, TN	***
Pirelli	***	Rome, GA	***
Specialty	***	Indiana, PA Unicoi, TN	***
Sumitomo	***	Tonawanda, NY	***
Toyo	***	White, GA	***
Yokohama	***	Salem, VA	***
Total			***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms.

Table III-2
PVLT tires: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Ownership:		
***	***	***
***	***	***
	***	***
***	***	***
	***	***
	***	***
***	***	***
***	***	***
	***	***
***	***	***
	***	***
***	***	***
***	***	***
***	***	***
***	***	***
	***	***
***	***	***
***	***	***
Related importers/exporters:		
	***	***
	***	***
***	***	***
***	***	***
	***	***
	***	***
***	***	***
***	***	***
	***	***
	***	***
***	***	***
***	***	***
	***	***
***	***	***
	***	***
***	***	***

Table continued on next page.

Table III-2--Continued
PVLT tires: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Related producers:		
	***	***
	***	***
	***	***
	***	***
	***	***
***	***	***
***	***	***
	***	***
	***	***
	***	***
***	***	***
	***	***
	***	***
	***	***
***	***	***
***	***	***
	***	***
	***	***
	***	***
	***	***
	***	***
***	***	***

Table continued on next page.

Table III-2--Continued
PVLT tires: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Related producers (continued):		
	***	***
	***	***
	***	***
	***	***
***	***	***
***	***	***
	***	***
***	***	***
	***	***
	***	***
	***	***
	***	***
	***	***
***	***	***

Table continued on next page.

Table III-2--Continued
PVLT tires: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Related producers (continued):		
	***	***
	***	***
	***	***
	***	***
	***	***
***	***	***
	***	***
	***	***
	***	***
***	***	***
	***	***
	***	***
	***	***
	***	***
	***	***
***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

As indicated in table III-2, eight U.S. producers are related to foreign producers of the subject merchandise (***). Further, three U.S. producers are related to U.S. importers of the subject merchandise (***), and three U.S. producers are related to U.S. importers of nonsubject merchandise (***). In addition, as discussed in greater detail below, six U.S. producers directly import the subject merchandise and *** purchases the subject merchandise from U.S. importers.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2018. Thirteen of 14 responding firms reported changes in their operations. One firm reported a plant opening while three firms reported capacity expansions and investments. Thirteen firms reported temporary plant closings, production shutdowns and/or curtailments related to the effects of the COVID-19 pandemic in 2020. In addition, Goodyear laid off 740 workers at the Gadsden, Alabama plant in November 2019 and announced further layoffs in January 2020 before permanently shutting down the plant in 2020.[1] Goodyear also reported acquisitions in 2019 and 2021, including of U.S. producer Cooper.[2]

[1] Petitioner's postconference brief, p. 18. The petitioner observed that while production from the Gadsden plant was supposed to shift to other Goodyear plants, that does not seem to have occurred. See Petitioner's prehearing brief, p. 30, and hearing transcript, p. 56 (Williams).

Counsel for petitioner argued that subject imports contributed to the closure of the Gadsden plant by gaining market share which led to decreased production from the plant. Hearing transcript, p. 148 (Drake). Several respondent parties argued that Gadsden's closure was due to Goodyear's desire to benefit from lower-cost production in Mexico and because the facility wasn't focused on producing larger tires, a part of the market which Goodyear wanted to put more focus on. See Joint Respondents' prehearing brief, pp. 35-37, and Hankook's prehearing brief, pp. 29-30.

[2] "Goodyear to acquire Cooper, creating stronger U.S. based leader in global tire trade," February 22, 2021, https://corporate.goodyear.com/en-US/media/news/goodyear-to-acquire-cooper-creating-stronger-us-based%20leader-in-global-tire-industry.html, retrieved April 27, 2021. Cooper stockholders voted to approve the merger plan with Goodyear in April 2021. "Cooper tire stockholders overwhelmingly approve proposed merger with Goodyear ," April 30, 2021, http://coopertire.com/news/corporate-news-releases/cooper-tire-stockholders-overwhelmingly-approve-pr, retrieved April 30, 2021.

Table III-3
PVLT tires: U.S. producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changed in operations
Plant openings:	
***	***
Plant closings:	
***	***
***	***
Relocations:	
***	***
Expansions:	
***	***
***	***
***	***
Acquisitions:	
***	***

Table continued on next page.

Table III-3--Continued
PVLT tires: U.S. producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changed in operations
Prolonged shutdowns or curtailments:	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-3--Continued
PVLT tires: U.S. producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changed in operations
Revised labor agreements:	
***	***
***	***
***	***
***	***
Other:	
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-4 presents U.S. producers' reported responses explaining the effects of the COVID-19 pandemic on their operations, including supply chain arrangements, production, employment, and shipments relating to PVLT tires. Thirteen of 14 responding firms reported that the pandemic had an effect on their operations. ***. U.S. producers reported effects from COVID-19 itself, ***. Some firms furloughed employees and some reported shutdowns lasting as long as ***.

Table III-4
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on U.S. producers' operations, since January 1, 2020

Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table III-4--Continued
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on U.S. producers' operations, since January 1, 2020

Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. production, capacity, and capacity utilization

Table III-5 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Domestic producers' PVLT tires capacity and production decreased overall during 2018-20, by 3.6 percent and 24.8 percent respectively. Capacity increased slightly from 2018-19 then decreased by 4.3 percent from 2019-20. Production decreased by 1.8 percent from 2018-19 then further decreased by 23.4 percent from 2019-20. Capacity utilization decreased in each year, by 2.1 percentage points from 2018-19 and 16.0 percentage points from 2019-20, decreasing overall by 18.1 percentage points, from 82.4 percent to 64.3 percent. The decreases between 2019 and 2020 are primarily due to the effects of the COVID-19 pandemic.[3]

Responding firms reported constraints in the manufacturing process that include available equipment, curing capacity, product mix requiring retooling of machinery, a skilled workforce, and market demand. One firm also reported COVID-19 related protocols as a current production constraint.

[3] See, e.g., U.S. producer questionnaire responses of ***, questions II-2a and II-2b.

Respondent Hankook contends that *** the closure of Goodyear's Gadsden facility, which it argues was driven by the company's desire to produce in Mexico. Hankook's prehearing brief, pp. 29-30. ***.

Table III-5
PVLT tires: U.S. producers' production, capacity, and capacity utilization, 2018-20

Item	Calendar year		
	2018	2019	2020
	Capacity (1,000 tires)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	188,358	189,781	181,631
	Production (1,000 tires)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	155,275	152,544	116,843

Table continued on next page.

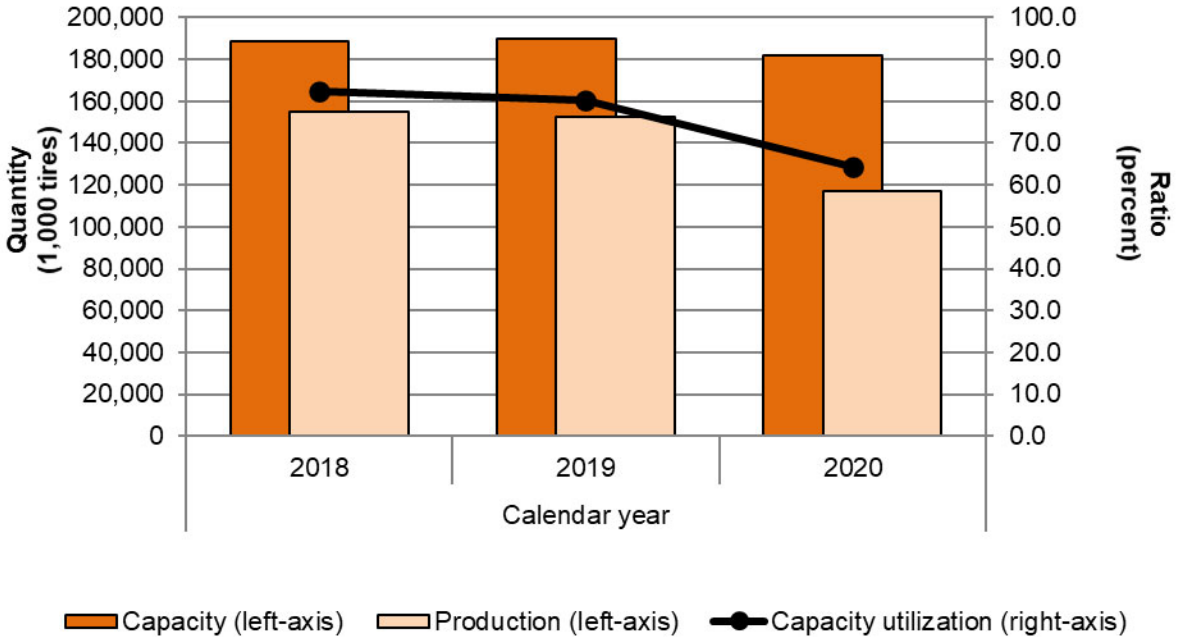
Table III-5--Continued
PVLT tires: U.S. producers' production, capacity, and capacity utilization, 2018-20

Item	Calendar year		
	2018	2019	2020
	Capacity utilization (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	82.4	80.4	64.3
	Share of production (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

Figure III-1
PVLT tires: U.S. producers' production, capacity, and capacity utilization, 2018-20



Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

As shown in table III-6, the vast majority of the product produced by U.S. producers during 2018-20 was PVLT tires. Two firms (***) reported producing alternative products (***).

Firms were asked about their ability to switch production from PVLT tires to other products. Thirteen of 14 responding firms reported that they are unable to switch production, citing that tire building machinery is specific to the type of tire and cannot be used for anything other than PVLT tires. Petitioner reports that there is limited ability for producers to switch between producing PVLT tires and other products because the machinery is limited to a particular size range.[4] Respondent American Omni similarly reports that shifting a tire plant to make a different type of tire is a major, time-consuming operation.[5] Respondent Nexen also

[4] Petitioner's postconference brief, Answers to Staff Questions, p. 4.
[5] American Omni's postconference brief, exh. A, p. 1.

notes that key facilities are not interoperable and would require additional significant capital investments and redesign of overall manufacturing process.[6]

Table III-6
PVLT tires: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Overall capacity	***	***	***
Production:			
PVLT tires	155,275	152,544	116,843
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' U.S. shipments and exports

Table III-7 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments by quantity and value decreased between 2018 and 2020, by 21.3 percent and 20.0 percent respectively. Unit values increased by 1.7 percent during the same period, from $91.24 to $92.79 per tire. Individual firms' U.S. shipment unit values varied widely due to product mix and ranged from $*** to $*** in 2020.

U.S. producers' U.S. shipments accounted for the vast majority of total shipments (90.9 percent in 2020).[7] Seven of 14 firms reported export shipments, with *** accounting for roughly 50 percent in each period. Exports decreased by 30.1 percent between 2018 and 2020.

[6] Nexen's postconference brief, att. 1, Responses to Commission Staff Questions, p. 1.

[7] Ten firms reported transfers to related firms. Three firms reported small quantities of internal consumption.

Table III-7
PVLT tires: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Commercial U.S. shipments	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
U.S. shipments	139,989	138,871	110,148
Export shipments	15,697	14,869	10,979
Total shipments	155,686	153,741	121,127
	Value (1,000 dollars)		
Commercial U.S. shipments	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
U.S. shipments	12,772,176	12,621,785	10,220,949
Export shipments	1,291,906	1,219,189	930,315
Total shipments	14,064,082	13,840,974	11,151,264
	Unit value (dollars per tire)		
Commercial U.S. shipments	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
U.S. shipments	91.24	90.89	92.79
Export shipments	82.30	81.99	84.73
Total shipments	90.34	90.03	92.06
	Share of quantity (percent)		
Commercial U.S. shipments	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
U.S. shipments	89.9	90.3	90.9
Export shipments	10.1	9.7	9.1
Total shipments	100.0	100.0	100.0
	Share of value (percent)		
Commercial U.S. shipments	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
U.S. shipments	90.8	91.2	91.7
Export shipments	9.2	8.8	8.3
Total shipments	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' inventories

Table III-8 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** U.S. producers' inventories of PVLT tires decreased by 31.0 percent during 2018-20. The ratio of inventories to production between 2018 and 2020 was relatively stable, ranging between 11.1 and 12.1 percent. The ratio of inventories to U.S. shipments ranged between 11.8 and 13.5 percent during the same period.

Table III-8
PVLT tires: U.S. producers' inventories, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' end-of-period inventories	18,831	17,607	12,994
	Ratio (percent)		
Ratio of inventories to.--			
U.S. production	12.1	11.5	11.1
U.S. shipments	13.5	12.7	11.8
Total shipments	12.1	11.5	10.7

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' imports and purchases

U.S. producers' imports and purchases of PVLT tires are presented in table III-9. All U.S. producers, with the exception of ***, reported imports of PVLT tires. Nine of 13 U.S. producers either directly imported or are related to firms that directly imported subject merchandise, and the remaining four firms imported or are related to firms that imported PVLT tires from nonsubject sources only.[8] U.S. producers' reasons for importing included insufficient capacity in the U.S. to meet demand and product mix, including lack of U.S. production for certain PVLT tires. Respondent Les Schwab claims that U.S. domestic producers import tires due to global efficiencies with tire sizes, compounds, and construction, and to achieve economies of scale.[9]

*** also reported purchases of imports of PVLT tires from ***.[10] *** reported small quantities of purchases from ***.[11]

[8] ***.
***.
[9] Les Schwab's postconference brief, pp. 1-2.
[10] ***.
[11] ***.

Table III-9
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

Table III-9--Continued
PVLT tires: U.S. producers' imports, 2018-20

* * * * * * *

U.S. employment, wages, and productivity

Table III-10 shows U.S. producers' employment-related data. All employment-related indicators were higher in 2019 than in 2018, with the exception of productivity, and were lower in 2020 than in 2018 or 2019, with the exception of unit labor costs. The number of PRWs fluctuated between 2018 and 2020, decreasing overall by 10.2 percent. Hours worked and wages paid also fluctuated during the same period and decreased overall by 17.9 percent and 19.0 percent. Productivity decreased by 8.4 percent during 2018-20 while unit labor costs increased by 7.7 percent. As mentioned previously, many U.S. producers reported production shutdowns and curtailments related to the COVID-19 pandemic and its effects on market demand, which resulted in negative employment trends in 2020 when compared to 2019.

Table III-10
PVLT tires: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2018-20

Item	Calendar year		
	2018	2019	2020
Production and related workers (PRWs) (number)	45,910	46,409	41,242
Total hours worked (1,000 hours)	93,509	94,880	76,788
Hours worked per PRW (hours)	2,037	2,044	1,862
Wages paid ($1,000)	2,362,972	2,413,112	1,914,617
Hourly wages (dollars per hour)	$25.27	$25.43	$24.93
Productivity (tires per hour)	1.7	1.6	1.5
Unit labor costs (dollars per tire)	$15.22	$15.82	$16.39

Source: Compiled from data submitted in response to Commission questionnaires.

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to 167 firms believed to be importers of subject PVLT tires, as well as to all U.S. producers of PVLT tires.[1] Usable questionnaire responses were received from 50 companies, representing *** percent of U.S. imports from Korea, Taiwan, Thailand, and Vietnam and *** percent of total U.S. imports under HTS subheadings 4011.10.10, 4011.10.50, 4011.20.10, and 4011.20.50. Firms responding to the Commission's questionnaire accounted for the following shares of imports of PVLT tires by source during 2020, based on official Commerce statistics—Korea, 96.9 percent; Taiwan, 66.2 percent; Thailand, *** percent; Vietnam, *** percent; and all other, 90.5 percent. In light of the questionnaire coverage, import data presented in this report are based on official Commerce statistics.[2]

Table IV-1 lists all responding U.S. importers of PVLT tires from Korea, Taiwan, Thailand, Vietnam, and other sources, their locations, and their shares of U.S. imports, in 2020.

[1] The Commission issued questionnaires to 57 firms that, based on a review of data from third party sources, may have accounted for more than one percent of total imports under HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010 in 2019. In addition, the Commission issued questionnaires to 110 additional firms identified in the petition for which a useable email address was provided.

[2] Petitioner notes that official Commerce statistics may include out-of-scope spare and racing tires and asserts that the volume of such tires is likely extremely low. Petitioner's postconference brief, Answers to Staff Questions, p. 52. Respondent Nankang asserts that Taiwan exports to the United States included a greater volume of out-of-scope spare tires than other countries. Nankang's postconference brief, p. 1. Thus, official Commerce statistics may be somewhat overstated.

Table IV-1
PVLT tires: U.S. importers by source, 2020

Firm	Headquarters	Share of imports by source (percent)						
		Korea	Taiwan	Thailand	Vietnam	Sub-ject	Non-subject	Total
American Omni	Katy, TX	***	***	***	***	***	***	***
American Pacific	Scottsdale, AZ	***	***	***	***	***	***	***
American Tire	Huntersville, NC	***	***	***	***	***	***	***
Americana	Reynoldsburg, OH	***	***	***	***	***	***	***
Atturo	Waukegan, IL	***	***	***	***	***	***	***
Brand	Manassas, VA	***	***	***	***	***	***	***
Bridgestone	Nashville, TN	***	***	***	***	***	***	***
Continental	Fort Mill, SC	***	***	***	***	***	***	***
Cooper	Findlay, OH	***	***	***	***	***	***	***
Economy	Dallas, TX	***	***	***	***	***	***	***
Federal Corporation	Taoyuan, TW	***	***	***	***	***	***	***
Federal Tire	Torrance, CA	***	***	***	***	***	***	***
Foreign Tire	Union, NJ	***	***	***	***	***	***	***
Giti	Rancho Cucamonga, CA	***	***	***	***	***	***	***
Goodyear	Akron, OH	***	***	***	***	***	***	***
Greenball	Anaheim, CA	***	***	***	***	***	***	***
Hankook	Nashville, TN	***	***	***	***	***	***	***
Horizon	Irwindale, CA	***	***	***	***	***	***	***
Hwa Fong	Covington, GA	***	***	***	***	***	***	***
ITG Voma	Las Vegas, NV	***	***	***	***	***	***	***
Katana	Vernon, CA	***	***	***	***	***	***	***
Kenda	Reynoldsburg, OH	***	***	***	***	***	***	***
Kolsan	Kocaeli, TR	***	***	***	***	***	***	***
Kumho	Atlanta, GA	***	***	***	***	***	***	***
Les Schwab	Bend, OR	***	***	***	***	***	***	***
Linglong	Medina, OH	***	***	***	***	***	***	***
Maxxis	Suwanee, GA	***	***	***	***	***	***	***
Michelin	Greenville, SC	***	***	***	***	***	***	***
Moa 626	Toa Baja, PR	***	***	***	***	***	***	***

Table continued on next page.

Table IV-1--Continued
PVLT tires: U.S. importers by source, 2020

Firm	Headquarters	Share of imports by source (percent)						
		Korea	Taiwan	Thailand	Vietnam	Sub-ject	Non-subject	Total
Nexen	Diamond Bar, CA	***	***	***	***	***	***	***
Nitto	Cypress, CA	***	***	***	***	***	***	***
Nokian	Nashville, TN	***	***	***	***	***	***	***
Omni	Singapore, SG	***	***	***	***	***	***	***
Pirelli	Rome, GA	***	***	***	***	***	***	***
Sailun	Brampton, ON	***	***	***	***	***	***	***
Sentury	Hialeah, FL	***	***	***	***	***	***	***
Sumitomo	Rancho Cucamonga, CA	***	***	***	***	***	***	***
TBC	Palm Beach Gardens, FL	***	***	***	***	***	***	***
Tire Group	Miami, FL	***	***	***	***	***	***	***
Tire Rack	South Bend, IN	***	***	***	***	***	***	***
Tireco	Gardena, CA	***	***	***	***	***	***	***
Toyo	Cypress, CA	***	***	***	***	***	***	***
Triangle	Franklin, TN	***	***	***	***	***	***	***
Trimax	Brea, CA	***	***	***	***	***	***	***
Turbo	Irwindale, CA	***	***	***	***	***	***	***
Unicorn	Memphis, TN	***	***	***	***	***	***	***
Vee Tyre	Bangkok, TH	***	***	***	***	***	***	***
Vogue	Mount Prospect, IL	***	***	***	***	***	***	***
Wheel Group	Ontario, CA	***	***	***	***	***	***	***
Yokohama	Santa Ana, CA	***	***	***	***	***	***	***
All firms		***	***	***	***	***	***	***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

Table IV-2 presents U.S. importers' reported responses explaining the effects of the COVID-19 pandemic on their operations, including supply chain arrangements, production, employment, and shipments relating to PVLT tires. Thirty-seven of 50 responding firms reported that the pandemic had an effect on their operations. (***.)

U.S. importers reported effects from COVID-19 itself, ***.

Table IV-2
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on supply chain arrangements, production, employment, and/or shipments

Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table IV-2--Continued
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on supply chain arrangements, production, employment, and/or shipments

Firm	Narrative
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table IV-2--Continued
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on supply chain arrangements, production, employment, and/or shipments

Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table IV-2--Continued
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on supply chain arrangements, production, employment, and/or shipments

Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

Table IV-2--Continued
PVLT tires: Firm's narrative responses relating to COVID-19 pandemic effects on supply chain arrangements, production, employment, and/or shipments

Firm	Narrative
***	***
***	***
***	***
***	***
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. imports

Tables IV-3 and IV-4 and figure IV-1 present data for U.S. imports of PVLT tires from Korea, Taiwan, Thailand, Vietnam, and all other sources. During 2018-20, total U.S. imports decreased overall by 2.0 percent, based on quantity, peaking in 2019 before decreasing to a level lower than in 2018. Subject U.S. imports also peaked from 2018-19 and remained flat from 2019-20, increasing overall by 8.2 percent. Subject imports accounted for 50.1 percent of total U.S. imports in 2020, with Thailand accounting for the largest share (26.1 percent). The ratio of subject imports to U.S. production increased by 22.3 percentage points during 2018-20, and subject imports were equivalent to 73.1 percent of U.S. production in 2020.

Imports from nonsubject sources decreased by 10.6 percent during 2018-20. Imports from nonsubject sources accounted for 49.9 percent of total U.S. imports in 2020. Leading nonsubject sources of imports include Mexico, accounting for 9.3 percent of total U.S. imports in 2020, Indonesia then Canada, accounting for 8.3 and 7.6 percent respectively.

Table IV-3
PVLT tires: U.S. imports by source, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. imports from.--			
Korea	19,327	19,142	17,077
Taiwan	8,351	8,810	10,013
Thailand	40,595	45,282	44,496
Vietnam	10,634	12,147	13,808
Subject sources	78,908	85,381	85,393
Nonsubject sources	95,166	96,590	85,119
All import sources	174,074	181,970	170,512
	Value (1,000 dollars)		
U.S. imports from.--			
Korea	1,289,189	1,279,148	1,073,819
Taiwan	375,745	410,795	490,901
Thailand	1,905,391	2,178,917	2,213,767
Vietnam	461,745	526,394	611,956
Subject sources	4,032,070	4,395,253	4,390,443
Nonsubject sources	6,186,482	6,419,978	5,509,737
All import sources	10,218,552	10,815,232	9,900,179
	Unit value (dollars per tire)		
U.S. imports from.--			
Korea	66.70	66.82	62.88
Taiwan	44.99	46.63	49.03
Thailand	46.94	48.12	49.75
Vietnam	43.42	43.34	44.32
Subject sources	51.10	51.48	51.41
Nonsubject sources	65.01	66.47	64.73
All import sources	58.70	59.43	58.06

Table continued on next page.

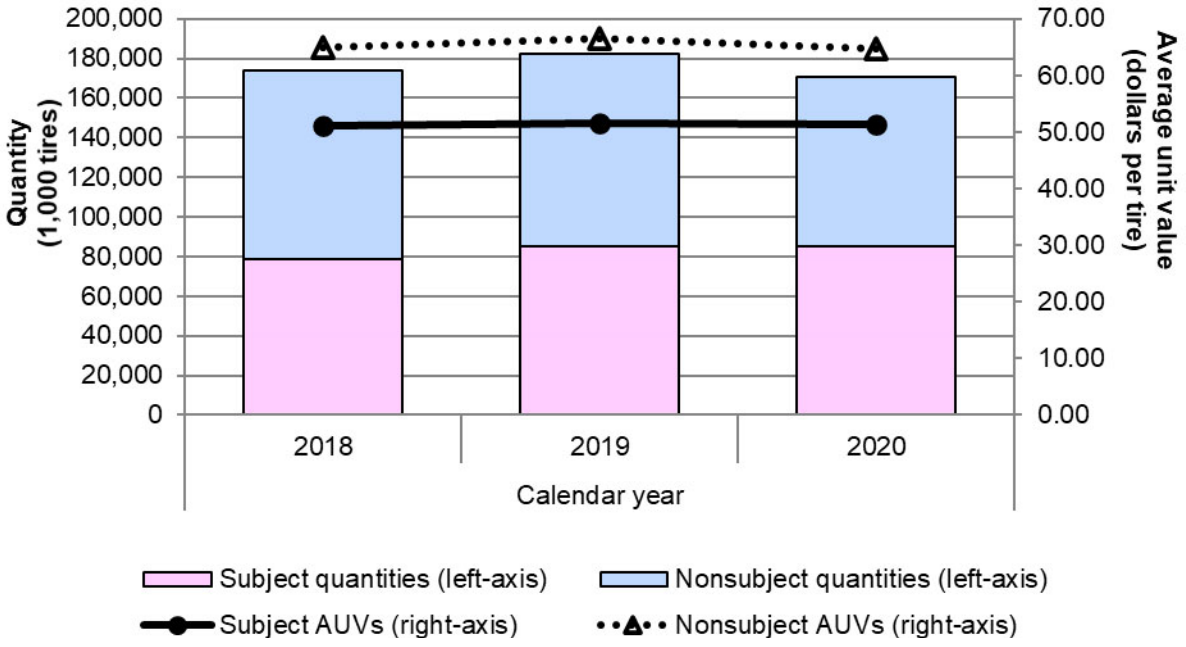
Table IV-3--Continued
PVLT tires: U.S. imports by source, 2018-20

Item	Calendar year		
	2018	2019	2020
	Share of quantity (percent)		
U.S. imports from.--			
Korea	11.1	10.5	10.0
Taiwan	4.8	4.8	5.9
Thailand	23.3	24.9	26.1
Vietnam	6.1	6.7	8.1
Subject sources	45.3	46.9	50.1
Nonsubject sources	54.7	53.1	49.9
All import sources	100.0	100.0	100.0
	Share of value (percent)		
U.S. imports from.--			
Korea	12.6	11.8	10.8
Taiwan	3.7	3.8	5.0
Thailand	18.6	20.1	22.4
Vietnam	4.5	4.9	6.2
Subject sources	39.5	40.6	44.3
Nonsubject sources	60.5	59.4	55.7
All import sources	100.0	100.0	100.0
	Ratio to U.S. production		
U.S. imports from.--			
Korea	12.4	12.5	14.6
Taiwan	5.4	5.8	8.6
Thailand	26.1	29.7	38.1
Vietnam	6.8	8.0	11.8
Subject sources	50.8	56.0	73.1
Nonsubject sources	61.3	63.3	72.8
All import sources	112.1	119.3	145.9

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Figure IV-1
PVLT tires: U.S. import quantities and average unit values, 2018-20



Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Table IV-4
PVLT tires: U.S. imports, by nonsubject sources, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. imports from nonsubject sources.--			
Canada	16,169	15,878	12,919
Indonesia	14,996	14,584	14,148
Japan	9,173	10,870	8,426
Mexico	13,251	15,793	15,913
All other sources	41,576	39,465	33,712
Nonsubject sources	95,166	96,590	85,119
	Value (1,000 dollars)		
U.S. imports from nonsubject sources.--			
Canada	1,088,909	1,045,501	862,546
Indonesia	720,422	700,950	668,883
Japan	719,631	832,737	634,182
Mexico	881,681	1,054,575	1,037,150
All other sources	2,775,840	2,786,216	2,306,976
Nonsubject sources	6,186,482	6,419,978	5,509,737
	Unit value (dollars per tire)		
U.S. imports from nonsubject sources.--			
Canada	67.34	65.85	66.77
Indonesia	48.04	48.06	47.28
Japan	78.45	76.61	75.27
Mexico	66.54	66.78	65.17
All other sources	66.76	70.60	68.43
Nonsubject sources	65.01	66.47	64.73

Table continued on next page.

Table IV-4--Continued
PVLT tires: U.S. imports, by nonsubject sources, 2018-20

Item	Calendar year		
	2018	2019	2020
	Share of quantity (percent)		
U.S. imports from nonsubject sources.-- Canada	17.0	16.4	15.2
Indonesia	15.8	15.1	16.6
Japan	9.6	11.3	9.9
Mexico	13.9	16.4	18.7
All other sources	43.7	40.9	39.6
Nonsubject sources	100.0	100.0	100.0
	Share of value (percent)		
U.S. imports from nonsubject sources.-- Canada	17.6	16.3	15.7
Indonesia	11.6	10.9	12.1
Japan	11.6	13.0	11.5
Mexico	14.3	16.4	18.8
All other sources	44.9	43.4	41.9
Nonsubject sources	100.0	100.0	100.0
	Ratio to U.S. production		
U.S. imports from nonsubject sources.-- Canada	10.4	10.4	11.1
Indonesia	9.7	9.6	12.1
Japan	5.9	7.1	7.2
Mexico	8.5	10.4	13.6
All other sources	26.8	25.9	28.9
Nonsubject sources	61.3	63.3	72.8

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise

[3] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[4] Based on official Commerce statistics, table IV-5 presents the individual shares of total imports accounted by subject countries, by quantity, during May 2019 through April 2020 , the most recent 12-month period for which data are available.

Table IV-5
PVLT tires: U.S. imports in the twelve-month period preceding the filing of the petition, May 2019 through April 2020

Item	May 2019 through April 2020	
	Quantity (1,000 tires)	Share quantity (percent)
U.S. imports from.--		
Korea	18,193	10.3
Taiwan	9,163	5.2
Thailand	44,889	25.4
Vietnam CVD	12,561	7.1
Vietnam AD	***	***
All other sources	91,950	52.0
All import sources	176,756	100.0

Note.--Data for Vietnam AD is derived by deducting from official import statistics the quantity of imports from May 2019 through April 2020 that was supplied by firms in Vietnam assigned *de minimis* final dumping margins by Commerce, as provided in questionnaire responses.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

[4] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Cumulation considerations

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution,[5] and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

Table IV-6 and figure IV-2 present U.S. producers' and U.S. importers' U.S. shipments by type (branded or private label). Branded tires and private label tires were both available from domestic producers as well as importers of PVLT tires from every subject country.[6] Nonsubject imports also included both branded and private label tires. The majority of PVLT tires sold in the U.S. market in 2020 were branded tires, accounting for *** percent of U.S. producers' shipments and *** percent of importers' shipments.[7] Branded tires accounted for *** percent of U.S. shipments from subject sources, with shipments from each source ranging from *** percent.

[5] Information on U.S. shipments by channel of distribution is available in part II and appendix F.

[6] *** U.S. producers reported shipments of private label tires in each period (***). ***.

[7] Appendix D presents additional information on U.S. shipments of branded and private label tires. Appendix G presents reported names of branded and private label tires produced by U.S. and foreign producers or imported by U.S. importers.

Table IV-6
PVLT tires: U.S. producers' and U.S. importers' U.S. shipments by product type, 2020

Source	Branded	Private label	All types
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments.-- Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
U.S. producers and U.S. importers	***	***	***
	Ratio across (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments.-- Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
U.S. producers and U.S. importers	***	***	***
	Ratio down (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments.-- Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
U.S. producers and U.S. importers	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Figure IV-2
PVLT tires: U.S. producers' and U.S. importers' U.S. shipments by product type, 2020

* * * * * * *

Table IV-7 and figure IV-3 present U.S. producers' and U.S. importers' U.S. shipments by size. PVLT tires of all sizes were sold by both producers and importers in the United States. Roughly half of producers' and importers' U.S. shipments consisted of tires sized 16 inches to less than 18 inches. U.S. shipments of tires sized 18 inches or greater was the second largest size category, accounting for *** percent and *** percent of U.S. producers' and U.S. importers' U.S. shipments respectively, followed by tires less than 16 inches, accounting for *** and *** percent respectively.[8] Roughly half of U.S. shipments from subject sources were of tires sized 16 to less than 18 inches (*** percent), followed by tires sized 18 inches or greater (*** percent), followed by tires less than 16 inches (*** percent).

[8] Appendix E presents additional information on U.S. shipments of tires by size.

Table IV-7
PVLT tires: U.S. producers' and U.S. importers' U.S. shipments by size, 2020

Source	< 16 inches	16 to < 18 inches	> 18 inches	All types
	Quantity (1,000 tires)			
U.S. producers' U.S. shipments	***	***	***	***
U.S. importers' U.S. shipments.--				
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
U.S. producers and U.S. importers	***	***	***	***
	Ratio across (percent)			
U.S. producers' U.S. shipments	***	***	***	***
U.S. importers' U.S. shipments.--				
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
U.S. producers and U.S. importers	***	***	***	***
	Ratio down (percent)			
U.S. producers' U.S. shipments	***	***	***	***
U.S. importers' U.S. shipments.--				
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
U.S. producers and U.S. importers	***	***	***	***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

Figure IV-3
PVLT tires: U.S. producers' and U.S. importers' U.S. shipments by size, 2020

* * * * * * *

Geographical markets

PVLT tires produced in the United States are shipped nationwide (see Part II for more information on geographic markets). U.S. imports of subject merchandise from Korea, Taiwan, Thailand, and Vietnam entered multiple U.S. ports of entry across the nation. Table IV-8 presents U.S. imports of PVLT tires, by source and border of entry in 2020, based on official import statistics. The majority of PVLT tires from each subject country entered through eastern and western borders of entry.

Table IV-8
PVLT tires: U.S. imports by border of entry, 2020

Item	Border of entry				
	East	North	South	West	All borders
	Quantity (1,000 tires)				
U.S. imports from.--					
Korea	6,886	2,086	2,412	5,692	17,077
Taiwan	1,776	1,857	625	5,754	10,013
Thailand	13,554	2,089	10,242	18,610	44,496
Vietnam	5,691	693	2,656	4,768	13,808
Subject sources	27,908	6,725	15,936	34,824	85,393
Nonsubject sources	27,352	14,044	23,487	20,236	85,119
All import sources	55,260	20,769	39,423	55,060	170,512
	Share across (percent)				
U.S. imports from.--					
Korea	40.3	12.2	14.1	33.3	100.0
Taiwan	17.7	18.5	6.2	57.5	100.0
Thailand	30.5	4.7	23.0	41.8	100.0
Vietnam	41.2	5.0	19.2	34.5	100.0
Subject sources	32.7	7.9	18.7	40.8	100.0
Nonsubject sources	32.1	16.5	27.6	23.8	100.0
All import sources	32.4	12.2	23.1	32.3	100.0
	Share down (percent)				
U.S. imports from.--					
Korea	12.5	10.0	6.1	10.3	10.0
Taiwan	3.2	8.9	1.6	10.5	5.9
Thailand	24.5	10.1	26.0	33.8	26.1
Vietnam	10.3	3.3	6.7	8.7	8.1
Subject sources	50.5	32.4	40.4	63.2	50.1
Nonsubject sources	49.5	67.6	59.6	36.8	49.9
All import sources	100.0	100.0	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Presence in the market

PVLT tires produced in the United States were present in the market throughout the period for which data were collected. Table IV-9 and figures IV-4 and IV-5 present monthly data for U.S. imports of PVLT tires from subject and nonsubject sources between January 2018 and December 2020. Subject U.S. imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam were present in each month during this period.

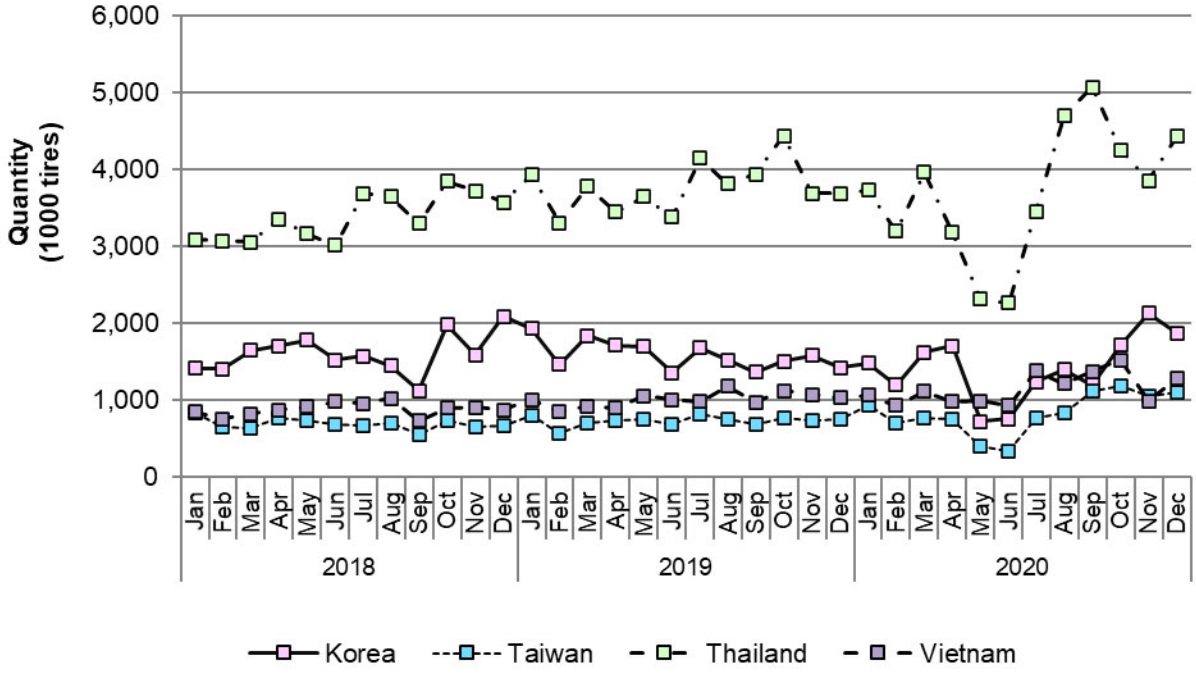
Table IV-9
PVLT tires: U.S. imports by month, January 2018 through December 2020

U.S. imports	Korea	Taiwan	Thailand	Vietnam	Subject Sources	Nonsubject sources	All import sources
	Quantity (1,000 tires)						
2018.--							
January	1,422	845	3,096	851	6,213	7,274	13,487
February	1,409	648	3,075	763	5,896	7,099	12,994
March	1,648	641	3,063	827	6,179	7,668	13,847
April	1,708	772	3,360	879	6,720	7,810	14,530
May	1,783	747	3,165	918	6,614	7,995	14,609
June	1,529	685	3,022	988	6,225	7,706	13,931
July	1,580	668	3,696	964	6,908	7,738	14,647
August	1,452	698	3,657	1,026	6,833	8,495	15,328
September	1,127	561	3,304	731	5,723	7,852	13,575
October	1,982	746	3,852	898	7,478	8,867	16,345
November	1,595	661	3,729	914	6,899	8,432	15,331
December	2,091	679	3,575	875	7,221	8,228	15,449
2019.--							
January	1,935	813	3,940	1,008	7,695	7,653	15,348
February	1,469	572	3,311	852	6,205	7,049	13,254
March	1,844	702	3,788	924	7,258	8,593	15,850
April	1,722	746	3,455	903	6,826	8,043	14,868
May	1,699	751	3,657	1,061	7,168	8,531	15,698
June	1,362	696	3,388	1,011	6,458	7,976	14,434
July	1,684	821	4,151	984	7,640	8,381	16,021
August	1,527	748	3,815	1,184	7,275	8,267	15,542
September	1,370	691	3,943	975	6,979	7,566	14,545
October	1,513	764	4,442	1,125	7,843	8,743	16,587
November	1,588	747	3,695	1,080	7,110	7,864	14,975
December	1,429	759	3,697	1,039	6,923	7,924	14,848
2020.--							
January	1,483	944	3,735	1,065	7,228	7,356	14,584
February	1,200	713	3,204	932	6,049	6,759	12,807
March	1,625	775	3,974	1,118	7,491	7,860	15,351
April	1,714	754	3,189	985	6,642	4,722	11,364
May	726	408	2,323	992	4,449	2,742	7,192
June	756	344	2,269	938	4,308	4,035	8,343
July	1,243	765	3,461	1,385	6,854	6,275	13,129
August	1,402	845	4,704	1,214	8,166	8,296	16,461
September	1,199	1,126	5,077	1,376	8,778	9,009	17,787
October	1,717	1,181	4,263	1,525	8,686	9,778	18,464
November	2,136	1,050	3,862	991	8,039	9,474	17,513
December	1,875	1,107	4,435	1,287	8,704	8,814	17,518

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

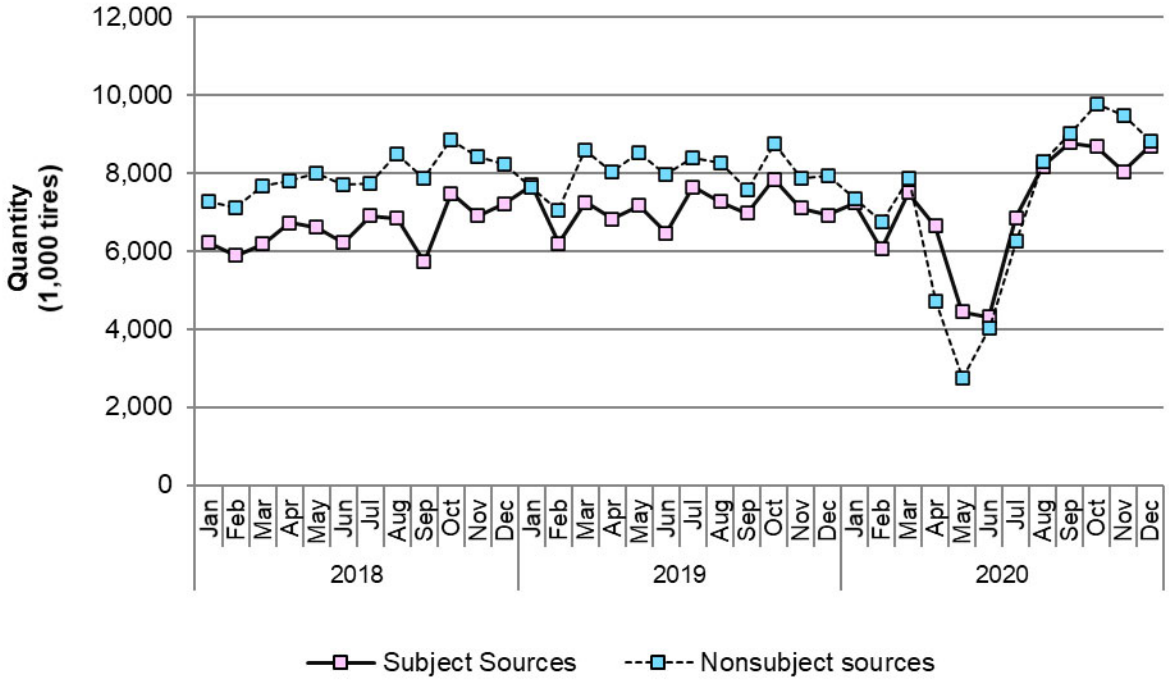
Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Figure IV-4
PVLT tires: U.S. imports from individual subject sources, by month, January 2018 through December 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Figure IV-5
PVLT tires: U.S. imports from aggregated subject and nonsubject sources, by month, January 2018 through December 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Apparent U.S. consumption

Table IV-10 and figure IV-6 present data on apparent U.S. consumption for PVLT tires. Apparent U.S. consumption increased by 2.2 percent in 2018-19 then decreased by 12.5 percent in 2019-20, decreasing overall by 10.6 percent based on quantity. Similarly, apparent U.S. consumption based on value increased by 1.9 percent in 2018-19 then decreased by 14.1 percent in 2019-20, decreasing overall by 12.5 percent, coinciding with the gain in market share by lower-valued subject imports.

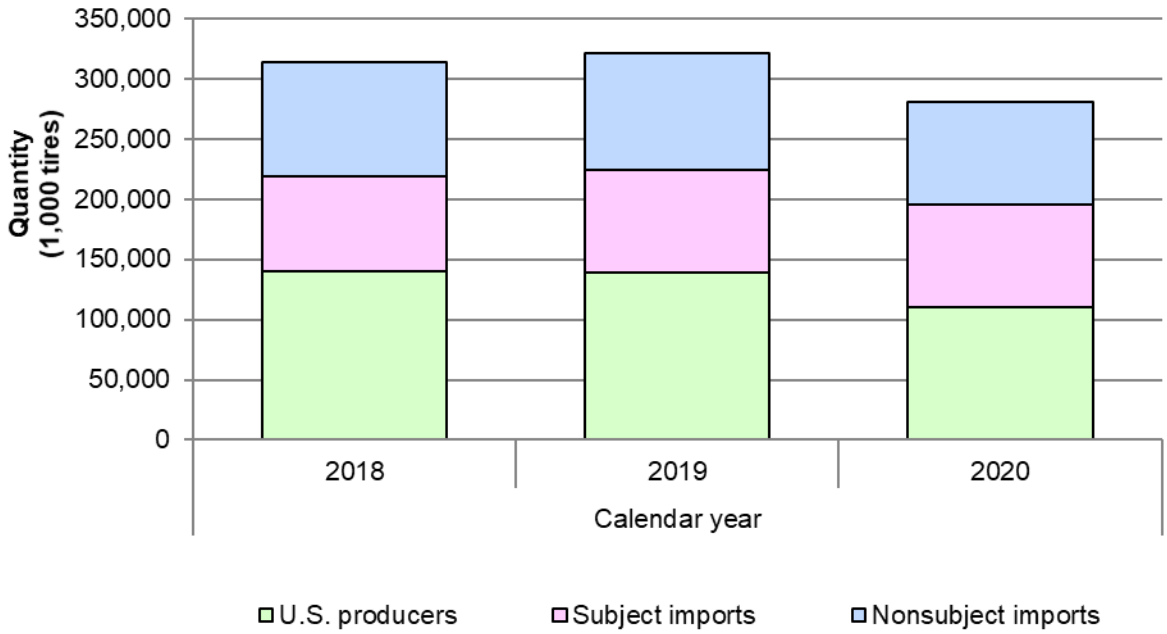
Table IV-10
PVLT tires: Apparent U.S. consumption, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments	139,989	138,871	110,148
U.S. imports from.--			
Korea	19,327	19,142	17,077
Taiwan	8,351	8,810	10,013
Thailand	40,595	45,282	44,496
Vietnam	10,634	12,147	13,808
Subject sources	78,908	85,381	85,393
Nonsubject sources	95,166	96,590	85,119
All import sources	174,074	181,970	170,512
Apparent U.S. consumption	314,063	320,842	280,660
	Value (1,000 dollars)		
U.S. producers' U.S. shipments	12,772,176	12,621,785	10,220,949
U.S. imports from.--			
Korea	1,289,189	1,279,148	1,073,819
Taiwan	375,745	410,795	490,901
Thailand	1,905,391	2,178,917	2,213,767
Vietnam	461,745	526,394	611,956
Subject sources	4,032,070	4,395,253	4,390,443
Nonsubject sources	6,186,482	6,419,978	5,509,737
All import sources	10,218,552	10,815,232	9,900,179
Apparent U.S. consumption	22,990,728	23,437,017	20,121,128

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Figure IV-6
PVLT tires: Apparent U.S. consumption, 2018-20



Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

U.S. market shares

U.S. market share data are presented in table IV-11. U.S. producers' market share decreased by 5.3 percentage points by quantity (and 4.8 percentage points by value) between 2018 and 2020. Subject import market share increased by 5.3 percentage points by quantity (and 4.3 percentage points by value) during the same period.

Table IV-11
PVLT tires: U.S. consumption and market shares, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Apparent U.S. consumption	314,063	320,842	280,660
	Share of quantity (percent)		
U.S. producers' U.S. shipments	44.6	43.3	39.2
U.S. imports from.--			
Korea	6.2	6.0	6.1
Taiwan	2.7	2.7	3.6
Thailand	12.9	14.1	15.9
Vietnam	3.4	3.8	4.9
Subject sources	25.1	26.6	30.4
Nonsubject sources	30.3	30.1	30.3
All import sources	55.4	56.7	60.8
	Value (1,000 dollars)		
Apparent U.S. consumption	22,990,728	23,437,017	20,121,128
	Share of value (percent)		
U.S. producers' U.S. shipments	55.6	53.9	50.8
U.S. imports from.--			
Korea	5.6	5.5	5.3
Taiwan	1.6	1.8	2.4
Thailand	8.3	9.3	11.0
Vietnam	2.0	2.2	3.0
Subject sources	17.5	18.8	21.8
Nonsubject sources	26.9	27.4	27.4
All import sources	44.4	46.1	49.2

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Part V: Pricing data

Factors affecting prices

Raw material costs

PVLT tires are made of natural rubber, synthetic rubber, carbon black, fabric, and steel. Raw materials are the largest component of the total cost of goods sold ("COGS") for PVLT tires and approximately half of the total COGS throughout the period.

Transportation costs to the U.S. market

Transportation costs for PVLT tires shipped from subject countries to the United States ranged from 8.0 to 10.4 percent during 2020. These estimates were derived from official import data and represent the transportation and other charges on imports.[1]

U.S. inland transportation costs

Eleven responding U.S. producers and 43 importers reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 2.0 to 9.0 percent while most importers reported costs of 1.0 to 30.0 percent.

Pricing practices

Pricing methods

U.S. producers and importers reported using price lists, contracts, and transaction-by-transaction negotiations and other methods to set prices for PVLT tires (table V-1). Of the three U.S. producers who reported using other price setting methods, two reported using transfer pricing agreements and one reported using a special sales program periodically. Of the five importers who reported using other price setting methods, all five reported that they based prices on the market or compared their prices to those of their competitors.

[1] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2020 and then dividing by the customs value based on the HTS subheading 4011.11.1010-70, 4011.10.5000, 4011.20.1005 and 4011.20.5010.

Table V-1
PVLT tires: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Importers
Transaction-by-transaction	5	16
Contract	7	10
Set price list	8	34
Other	3	5
Responding firms	14	49

Note: The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers and importers reported selling most of their PVLT tires in the spot market (table V-2). U.S. producer *** reported that short-term contracts generally lasted 90 days, while U.S. producers' long-term contracts generally lasted between 3-5 years. Importers reported that short-term contracts generally lasted 30-90 days and that long-term contracts last between 2-5 years.

Table V-2
PVLT tires: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2020

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

Note: Because of rounding, figures may not add to the totals shown.

Source: Compiled from data submitted in response to Commission questionnaires.

The majority of U.S. producers reported that they did not renegotiate prices, quantities or index prices to raw material costs in short-term or annual contracts. One U.S. producer, ***, reported fixing prices and quantities for short-term and annual contracts and indexing prices to raw material costs for annual contracts. The majority of responding U.S. producers reported that they did not renegotiate prices during long-term contracts, two U.S. producers reported fixing prices for long-term contracts, and two U.S. producers reported fixing both price and quantity for long-term contracts. The majority of U.S. producers reported that they indexed prices to raw material costs in long-term contracts. U.S. producers reported using the IHS chemical index, the rubber pricing index, and the London Metal Exchange index to index prices to raw material costs.

The majority of responding importers report that they did not renegotiate prices, fix prices or quantities, or index prices to raw material costs in short-term, annual, or long-term

contracts. Importers that report indexing prices, reported using the cost of rubber and the cost of freight to index raw material prices.

Twenty-four purchasers reported that they purchase product daily, four purchase weekly, eight purchase monthly, and one purchases quarterly. All 37 responding purchasers reported that their purchasing frequency had not changed since January 1, 2018. Most (30 of 37) purchasers contact one to ten suppliers before making a purchase.

Sales terms and discounts

U.S. producers and importers typically quote prices on a delivered basis. A plurality of U.S. producers and importers offer a variety of discounts including quantity discounts, total volume discounts, and "other" discounts. A plurality of U.S. producers and importers also reported that they did not have discount policies. U.S. producers who reported offering "other" discounts reported offering annual volume bonuses in addition to other bonuses. Importers who reported offering "other" discounts reported offering marketing discounts and early payment discounts.

Price leadership

Purchasers reported that Michelin (11 firms), Goodyear (11 firms), Bridgestone (6 firms), Continental (3 firms), Tire Easy (1 firm), Simple Tire (1 firm), Turbo Wholesale (1 firm), Tire Co (1 firm), Barron Tire (1 firm) and Lexani (1 firm) were price leaders. Purchaser *** reported that Michelin, Bridgestone, and Goodyear are typically the first to initiate price increases in the U.S. market. Purchaser *** reported that price changes are almost always initiated by tier 1 producers.

Price data

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following PVLT tires products by branded and private label sold to unrelated U.S. customers during January 2018-December 2020.

Product 1.-- PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Product 2.-- PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Product 3.-- PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Product 4.-- PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Seven U.S. producers and 33 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[2] Pricing data reported by these firms accounted for approximately 11.0 percent of U.S. producers' commercial shipments of PVLT tires and 11.1 percent of U.S. commercial shipments of subject imports from Korea, 6.1 percent of U.S. commercial shipments of subject imports from Taiwan, 8.1 percent of U.S. commercial shipments of subject imports from Thailand, and 6.9 percent of U.S. commercial shipments of subject imports from Vietnam in 2020.[3]

Price data for products 1-4 are presented in tables V-3 to V-10 and figures V-1 to V-8.[4]

[2] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[3] Pricing coverage is based on U.S. shipments reported in questionnaires.

[44] Note: ***.

Table V-3
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 sold as a branded product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	73.52	816,649	***	***	***	38.05	8,046	48.2
Apr.-Jun.	72.57	944,650	***	***	***	40.07	10,854	44.8
Jul.-Sep.	76.04	1,245,460	43.34	16,588	43.0	37.74	12,130	50.4
Oct.-Dec.	72.99	1,462,326	36.23	22,532	50.4	34.65	8,581	52.5
2019:								
Jan.-Mar.	75.92	933,588	45.24	23,317	40.4	42.60	12,287	43.9
Apr.-Jun.	74.03	1,061,540	43.53	20,427	41.2	***	***	***
Jul.-Sep.	75.19	1,220,311	44.13	14,955	41.3	***	***	***
Oct.-Dec.	73.74	1,181,347	***	***	***	***	***	***
2020:								
Jan.-Mar.	82.98	819,705	***	***	***	***	***	***
Apr.-Jun.	76.11	568,432	47.54	11,132	37.5	***	***	***
Jul.-Sep.	82.08	1,018,245	***	***	***	***	***	***
Oct.-Dec.	83.67	1,062,521	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	30.82	147,047	58.1	***	***	***	33.67	214,261	54.2
Apr.-Jun.	30.69	159,954	57.7	***	***	***	32.44	233,817	55.3
Jul.-Sep.	30.44	189,965	60.0	***	***	***	***	***	***
Oct.-Dec.	30.49	183,783	58.2	***	***	***	***	***	***
2019:									
Jan.-Mar.	30.18	184,509	60.3	***	***	***	***	***	***
Apr.-Jun.	30.45	166,479	58.9	***	***	***	32.14	241,658	56.6
Jul.-Sep.	30.21	168,654	59.8	***	***	***	31.47	251,199	58.1
Oct.-Dec.	35.91	193,817	51.3	***	***	***	35.26	282,442	52.2
2020:									
Jan.-Mar.	30.72	161,953	63.0	***	***	***	31.57	240,029	62.0
Apr.-Jun.	31.12	166,152	59.1	***	***	***	31.80	245,627	58.2
Jul.-Sep.	30.34	190,860	63.0	***	***	***	31.27	283,079	61.9
Oct.-Dec.	30.62	212,411	63.4	***	***	***	30.64	296,868	63.4

Note: Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-4
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 sold as a private label product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	30.92	75,095	***	32.13	19,881	***	31.77	132,022	***
Apr.-Jun.	29.98	70,368	***	***	***	***	31.04	114,237	***
Jul.-Sep.	31.15	77,093	***	33.16	18,409	***	31.27	114,321	***
Oct.-Dec.	30.87	75,045	***	33.26	21,805	***	31.21	117,772	***
2019:									
Jan.-Mar.	32.22	74,153	***	32.82	17,055	***	31.90	114,607	***
Apr.-Jun.	32.67	71,956	***	32.53	14,826	***	32.14	112,847	***
Jul.-Sep.	31.50	72,007	***	34.16	21,755	***	31.94	111,160	***
Oct.-Dec.	31.78	65,842	***	35.47	24,250	***	32.30	117,109	***
2020:									
Jan.-Mar.	32.00	67,285	***	39.12	20,229	***	32.64	121,542	***
Apr.-Jun.	33.17	56,885	***	37.24	19,832	***	33.68	100,483	***
Jul.-Sep.	32.15	75,341	***	34.76	21,023	***	32.04	137,083	***
Oct.-Dec.	32.35	63,359	***	30.94	29,397	***	31.12	137,162	***

Note: Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-5
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold as a branded product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	86.61	356,136	***	***	***	55.68	6,462	35.7
Apr.-Jun.	86.42	454,909	***	***	***	***	***	***
Jul.-Sep.	85.68	522,456	***	***	***	***	***	***
Oct.-Dec.	84.02	624,458	68.95	108,916	17.9	***	***	***
2019:								
Jan.-Mar.	86.64	516,625	71.30	107,545	17.7	***	***	***
Apr.-Jun.	82.86	570,195	***	***	***	57.61	9,782	30.5
Jul.-Sep.	84.74	676,590	***	***	***	57.56	4,449	32.1
Oct.-Dec.	82.36	828,088	***	***	***	62.66	15,149	23.9
2020:								
Jan.-Mar.	82.78	529,281	***	***	***	54.65	4,972	34.0
Apr.-Jun.	85.23	316,374	***	***	***	57.84	5,199	32.1
Jul.-Sep.	83.38	645,542	***	***	***	52.60	7,038	36.9
Oct.-Dec.	84.27	738,086	70.93	45,741	15.8	55.28	9,303	34.4

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	44.62	162,466	48.5	***	***	***	60.99	394,343	29.6
Apr.-Jun.	50.27	162,258	41.8	***	***	***	62.20	380,608	28.0
Jul.-Sep.	44.13	204,360	48.5	***	***	***	55.87	395,237	34.8
Oct.-Dec.	45.70	197,800	45.6	***	***	***	53.78	334,341	36.0
2019:									
Jan.-Mar.	37.16	194,319	57.1	***	***	***	49.58	326,862	42.8
Apr.-Jun.	40.21	207,936	51.5	***	***	***	50.68	347,082	38.8
Jul.-Sep.	44.89	203,725	47.0	***	***	***	53.28	336,043	37.1
Oct.-Dec.	42.25	214,526	48.7	***	***	***	50.76	342,196	38.4
2020:									
Jan.-Mar.	40.74	213,622	50.8	***	***	***	50.81	345,133	38.6
Apr.-Jun.	40.35	155,511	52.7	***	***	***	47.40	243,385	44.4
Jul.-Sep.	41.23	227,052	50.6	***	***	***	47.23	368,154	43.4
Oct.-Dec.	45.17	210,068	46.4	***	***	***	48.60	321,642	42.3

Note: Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-6
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold as a private label product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	47.15	16,031	***	***	***	***	50.69	26,584	***
Apr.-Jun.	46.54	19,584	***	***	***	***	50.00	31,170	***
Jul.-Sep.	48.42	20,915	***	***	***	***	51.40	37,206	***
Oct.-Dec.	48.71	24,759	***	***	***	***	52.13	49,443	***
2019:									
Jan.-Mar.	50.16	26,237	***	***	***	***	52.12	45,165	***
Apr.-Jun.	49.02	31,842	***	***	***	***	52.08	49,671	***
Jul.-Sep.	51.04	41,685	***	53.77	4,076	***	53.01	60,199	***
Oct.-Dec.	51.10	53,633	***	***	***	***	51.87	85,336	***
2020:									
Jan.-Mar.	49.83	51,707	***	55.15	13,062	***	50.45	97,461	***
Apr.-Jun.	50.80	53,898	***	50.87	12,780	***	50.69	95,294	***
Jul.-Sep.	49.78	76,715	***	51.11	7,208	***	50.73	133,101	***
Oct.-Dec.	51.62	61,869	***	40.04	34,866	***	47.57	145,441	***

Note: Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-7
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold as a branded product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	56.04	630,429	***	***	***	44.61	20,175	20.4
Apr.-Jun.	59.09	670,528	***	***	***	42.94	22,650	27.3
Jul.-Sep.	56.98	743,116	51.80	151,251	9.1	40.56	23,350	28.8
Oct.-Dec.	57.00	822,778	***	***	***	43.63	23,573	23.5
2019:								
Jan.-Mar.	57.85	687,656	***	***	***	43.83	23,135	24.2
Apr.-Jun.	56.47	696,238	49.40	130,637	12.5	***	***	***
Jul.-Sep.	56.14	753,138	51.09	123,934	9.0	***	***	***
Oct.-Dec.	55.62	840,662	50.82	117,638	8.6	***	***	***
2020:								
Jan.-Mar.	57.23	542,135	48.03	104,296	16.1	***	***	***
Apr.-Jun.	53.69	381,666	47.43	62,057	11.7	***	***	***
Jul.-Sep.	55.51	642,855	***	***	***	***	***	***
Oct.-Dec.	53.83	708,939	47.43	121,877	11.9	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	38.07	62,920	32.1	***	***	***	48.62	318,910	13.2
Apr.-Jun.	38.61	73,529	34.7	***	***	***	48.44	321,642	18.0
Jul.-Sep.	37.78	87,841	33.7	***	***	***	***	***	***
Oct.-Dec.	37.09	92,538	34.9	***	***	***	46.34	330,018	18.7
2019:									
Jan.-Mar.	39.58	71,496	31.6	***	***	***	47.24	282,935	18.3
Apr.-Jun.	39.29	98,621	30.4	38.59	40,745	31.7	***	***	***
Jul.-Sep.	37.91	102,378	32.5	35.46	43,591	36.8	***	***	***
Oct.-Dec.	37.95	111,314	31.8	36.08	53,319	35.1	***	***	***
2020:									
Jan.-Mar.	40.21	84,109	29.7	***	***	***	42.40	238,078	25.9
Apr.-Jun.	40.70	97,397	24.2	***	***	***	40.78	217,605	24.0
Jul.-Sep.	37.50	115,722	32.4	***	***	***	40.67	309,975	26.7
Oct.-Dec.	36.33	124,555	32.5	***	***	***	39.36	332,169	26.9

Note: Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-8
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold as a private label product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	30.85	79,747	***	***	***	***	32.49	122,371	***
Apr.-Jun.	30.55	62,715	***	***	***	***	32.25	98,876	***
Jul.-Sep.	30.54	89,302	***	***	***	***	32.05	127,932	***
Oct.-Dec.	30.80	78,641	***	***	***	***	32.41	128,395	***
2019:									
Jan.-Mar.	31.77	66,677	***	***	***	***	33.08	120,002	***
Apr.-Jun.	31.27	65,048	***	***	***	***	32.66	110,713	***
Jul.-Sep.	31.73	64,679	***	***	***	***	33.18	110,766	***
Oct.-Dec.	30.98	72,128	***	38.21	26,486	***	32.70	145,218	***
2020:									
Jan.-Mar.	32.70	73,057	***	36.92	25,940	***	33.03	153,496	***
Apr.-Jun.	33.99	57,305	***	***	***	***	34.15	122,343	***
Jul.-Sep.	34.46	94,274	***	39.91	16,381	***	34.14	174,529	***
Oct.-Dec.	34.02	90,344	***	29.69	36,192	***	32.34	208,170	***

Note: Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-9
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 sold as a branded product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	87.45	467,768	***	***	***	***	***	***
2019:								
Jan.-Mar.	86.11	445,855	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	104.41	4,731	***
Oct.-Dec.	89.45	428,875	***	***	***	***	***	***
2020:								
Jan.-Mar.	86.38	371,209	***	***	***	92.40	16,651	(7.0)
Apr.-Jun.	87.30	195,758	***	***	***	***	***	***
Jul.-Sep.	84.52	491,500	***	***	***	***	***	***
Oct.-Dec.	85.42	497,844	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	68.96	37,710	***	***	***	***	71.70	223,897	***
Apr.-Jun.	68.08	39,519	***	***	***	***	68.61	200,933	***
Jul.-Sep.	67.62	43,740	***	***	***	***	67.44	219,501	***
Oct.-Dec.	71.11	37,120	18.7	***	***	***	***	***	***
2019:									
Jan.-Mar.	64.58	27,665	25.0	63.56	7,425	26.2	***	***	***
Apr.-Jun.	62.77	27,409	***	63.39	7,784	***	***	***	***
Jul.-Sep.	61.71	28,292	***	61.67	7,453	***	***	***	***
Oct.-Dec.	60.91	39,925	31.9	63.59	9,391	28.9	68.89	221,860	23.0
2020:									
Jan.-Mar.	62.65	19,924	27.5	***	***	***	69.81	185,375	19.2
Apr.-Jun.	57.05	30,143	34.7	***	***	***	71.82	130,730	17.7
Jul.-Sep.	58.92	36,404	30.3	***	***	***	68.38	282,475	19.1
Oct.-Dec.	65.09	34,710	23.8	***	***	***	68.71	265,904	19.6

Note: Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-10
PVLT tires: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 sold as a private label product, and margins of underselling/(overselling), by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020:								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)	Price (dollars per tire)	Quantity (tires)	Margin (percent)
2018:									
Jan.-Mar.	63.50	2,943	***	***	***	***	68.57	5,615	***
Apr.-Jun.	59.27	6,590	***	***	***	***	63.06	10,867	***
Jul.-Sep.	60.01	8,201	***	***	***	***	63.54	12,291	***
Oct.-Dec.	60.69	15,073	***	***	***	***	64.13	19,173	***
2019:									
Jan.-Mar.	61.03	16,283	***	***	***	***	64.09	20,982	***
Apr.-Jun.	60.15	18,225	***	***	***	***	62.09	25,773	***
Jul.-Sep.	60.63	18,741	***	***	***	***	63.51	23,670	***
Oct.-Dec.	60.99	23,066	***	***	***	***	61.07	33,292	***
2020:									
Jan.-Mar.	59.53	22,681	***	***	***	***	59.20	34,046	***
Apr.-Jun.	59.86	23,620	***	***	***	***	59.37	32,556	***
Jul.-Sep.	59.64	26,490	***	***	***	***	59.16	36,040	***
Oct.-Dec.	59.47	28,396	***	***	***	***	58.37	39,797	***

Note: Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-1
PVLT tires: Weighted-average prices and quantities of domestic and imported product 1 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-2
PVLT tires: Weighted-average prices and quantities of domestic and imported product 1 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-3
PVLT tires: Weighted-average prices and quantities of domestic and imported product 2 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-4
PVLT tires: Weighted-average prices and quantities of domestic and imported product 2 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-5
PVLT tires: Weighted-average prices and quantities of domestic and imported product 3 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-6
PVLT tires: Weighted-average prices and quantities of domestic and imported product 3 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-7
PVLT tires: Weighted-average prices and quantities of domestic and imported product 4 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-8
PVLT tires: Weighted-average prices and quantities of domestic and imported product 4 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Import purchase cost data

The Commission also requested that importers provide quarterly purchase cost data for their own use or for retail sale. Ten importers provided usable purchase cost data of the requested products, although not all firms reported purchase costs for all products for all quarters.[5] Purchase cost data reported by these firms accounted for approximately 4.1 percent of U.S. imports from Korea, Taiwan, Thailand, and Vietnam in 2020.

Landed duty paid purchase cost data for products 1-4 are presented in tables V-11 to V-18 and figures V-9 to V-16, along with U.S. producers' sales price.[6]

Importers reporting import purchase cost data were asked to provide additional information regarding the costs and benefits of importing PVLT tires directly**.** Nine importers reported that they compared costs of importing to the cost of purchasing from a U.S. producer in determining whether to import PVLT tires, and 12 importers compare costs to purchasing from an importer.

Eight importers reported that they incurred additional costs beyond landed duty-paid costs by importing PVLT tires directly rather than purchasing from a U.S. producer or U.S. importer. Of these, three importers estimated the total additional cost incurred; estimates ranged from 1 to 25 percent compared to the landed-duty paid value. Firms were also asked to identify specific additional costs they incurred as a result of importing PVLT tires.[7] Reported costs include additional freight and transportation costs, warehouse expenses, insurance, container costs, and port expenses.

Importers reported that the benefits of importing PVLT tires directly were increased availability of sizes, consistent supply, and the ability to produce private brands with foreign producers.

Four of 16 responding importers reported that the cost of importing themselves was less than the cost of purchasing from a U.S. producer or importer without including the additional costs associated with importing directly. Four of 16 responding importers reported that the cost of direct purchasing themselves was less than the cost of purchasing from a U.S.

---

[5] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[6] LDP import value does not include any potential additional costs that a purchaser may incur by importing rather than purchasing from another importer or U.S. producer. Price-cost differentials are based on LDP import values whereas margins of underselling/overselling are based on importer sales prices.

[7] Importer *** reported additional costs beyond landed duty-paid costs of 1 percent.

producer or importer when including the additional costs associated with importing directly. Four importers estimated that they saved between *** percent by importing PVLT tires themselves instead of purchasing from a U.S. producer and five importers estimated that they saved between *** percent instead of purchasing them from importers. Six responding importers reported that they based these saving estimates on previous transactions and five reported that they based them on market research.

Table V-11

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 1 sold as a branded product, and price-cost differentials, by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:								
Jan.-Mar.	73.52	816,649	***	***	***	***	***	***
Apr.-Jun.	72.57	944,650	***	***	***	***	***	***
Jul.-Sep.	76.04	1,245,460	***	***	***	***	***	***
Oct.-Dec.	72.99	1,462,326	***	***	***	***	***	***
2019:								
Jan.-Mar.	75.92	933,588	***	***	***	***	***	***
Apr.-Jun.	74.03	1,061,540	***	***	***	***	***	***
Jul.-Sep.	75.19	1,220,311	***	***	***	***	***	***
Oct.-Dec.	73.74	1,181,347	***	***	***	***	***	***
2020:								
Jan.-Mar.	82.98	819,705	***	***	***	***	***	***
Apr.-Jun.	76.11	568,432	***	***	***	***	***	***
Jul.-Sep.	82.08	1,018,245	***	***	***	***	***	***
Oct.-Dec.	83.67	1,062,521	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2019:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2020:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***

Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-12

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 1 sold as a private label product, and price-cost differentials, by quarter, January 2018 through December 2020

* * * * * * *

Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-13

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 2 sold as a branded product, and price-cost differentials, by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:								
Jan.-Mar.	86.61	356,136	***	***	***	***	***	***
Apr.-Jun.	86.42	454,909	***	***	***	***	***	***
Jul.-Sep.	85.68	522,456	***	***	***	***	***	***
Oct.-Dec.	84.02	624,458	***	***	***	***	***	***
2019:								
Jan.-Mar.	86.64	516,625	***	***	***	***	***	***
Apr.-Jun.	82.86	570,195	***	***	***	***	***	***
Jul.-Sep.	84.74	676,590	***	***	***	***	***	***
Oct.-Dec.	82.36	828,088	***	***	***	***	***	***
2020:								
Jan.-Mar.	82.78	529,281	***	***	***	***	***	***
Apr.-Jun.	85.23	316,374	***	***	***	***	***	***
Jul.-Sep.	83.38	645,542	***	***	***	***	***	***
Oct.-Dec.	84.27	738,086	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2019:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2020:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***

Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-14

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 2 sold as a private label product, and price-cost differentials, by quarter, January 2018 through December 2020

* * * * * * *

Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-15

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 3 sold as a branded product, and price-cost differentials, by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan		
	Price (dollars per tire)	Quantity (tires)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:								
Jan.-Mar.	56.04	630,429	***	***	***	***	***	***
Apr.-Jun.	59.09	670,528	***	***	***	***	***	***
Jul.-Sep.	56.98	743,116	***	***	***	***	***	***
Oct.-Dec.	57.00	822,778	***	***	***	***	***	***
2019:								
Jan.-Mar.	57.85	687,656	***	***	***	***	***	***
Apr.-Jun.	56.47	696,238	***	***	***	***	***	***
Jul.-Sep.	56.14	753,138	***	***	***	***	***	***
Oct.-Dec.	55.62	840,662	***	***	***	***	***	***
2020:								
Jan.-Mar.	57.23	542,135	***	***	***	***	***	***
Apr.-Jun.	53.69	381,666	***	***	***	***	***	***
Jul.-Sep.	55.51	642,855	***	***	***	***	***	***
Oct.-Dec.	53.83	708,939	***	***	***	***	***	***

Period	Thailand			Vietnam			Subject sources		
	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2019:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2020:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***

Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-16

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 3 sold as a private label product, and price-cost differentials, by quarter, January 2018 through December 2020

* * * * * * *

Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-17

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 4 sold as a branded product, and price-cost differentials, by quarter, January 2018 through December 2020

Period	United States		Korea			Taiwan			
	Price (dollars per tire)	Quantity (tires)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	
Apr.-Jun.	***	***	***	***	***	***	***	***	
Jul.-Sep.	***	***	***	***	***	***	***	***	
Oct.-Dec.	87.45	467,768	***	***	***	***	***	***	
2019:									
Jan.-Mar.	86.11	445,855	***	***	***	***	***	***	
Apr.-Jun.	***	***	***	***	***	***	***	***	
Jul.-Sep.	***	***	***	***	***	***	***	***	
Oct.-Dec.	89.45	428,875	***	***	***	***	***	***	
2020:									
Jan.-Mar.	86.38	371,209	***	***	***	***	***	***	
Apr.-Jun.	87.30	195,758	***	***	***	***	***	***	
Jul.-Sep.	84.52	491,500	***	***	***	***	***	***	
Oct.-Dec.	85.42	497,844	***	***	***	***	***	***	

Period	Thailand			Vietnam			Subject sources		
	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)	Unit LDP value (dollars per tire)	Quantity (tires)	Price-cost differential (percent)
2018:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2019:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***
2020:									
Jan.-Mar.	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***

Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-18

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 4 sold as a private label product, and price-cost differentials, by quarter, January 2018 through December 2020

* * * * * * *

Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-9

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 1 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-10

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 1 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 1: PVLT tires size 195/65R15, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-11

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 2 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-12

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 2 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 2: PVLT tires, tire size 225/65R17, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-13

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 3 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-14

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 3 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 3: PVLT tires, tire size 205/55R16, 89-94 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-15

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 4 sold as a branded product, by quarter, January 2018 through December 2020

* * * * * * *

Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-16

PVLT tires: Weighted-average f.o.b. prices, costs and quantities of domestic and imported product 4 sold as a private label product, by quarter, January 2018 through December 2020

* * * * * * *

Product 4: PVLT tires, tire size 235/60R18, 100-105 load index, H speed rating sold to the replacement market

Source: Compiled from data submitted in response to Commission questionnaires.

Price trends

In general, prices decreased during January 2018-December 2020. Table V-19 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from *** to *** percent during January 2018-December 2020 while import price decreases ranged from *** to *** percent.

Indexed pricing data in figures V-17 and V-18 compares the prices of product 1-4 by branded and private labels by U.S. producers and subject importers, respectively. As shown in the figures, the price changes for U.S. products and subject imports varied throughout the period.

Table V-19

PVLT tires: Number of quarters containing observations low price, high price, and change in price over period, by product and source, January 2018 through December 2020

Item	Number of quarters	Low price (dollars per tire)	High price (dollars per tire)	Change in price over period[1] (percent)
Product 1 - Branded: United States	12	72.57	83.67	13.8
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	30.18	35.91	(0.6)
Vietnam	12	28.15	38.05	(18.8)
Product 1 - Private Label: United States	***	***	***	***
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	29.98	33.17	4.6
Vietnam	12	30.94	39.12	(3.7)
Product 2 - Branded: United States	12	82.36	86.64	(2.7)
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	37.16	50.27	1.2
Vietnam	***	***	***	***
Product 2 - Private Label: United States	***	***	***	***
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	46.54	51.62	9.5
Vietnam	***	***	***	***
Product 3 - Branded: United States	12	53.69	59.09	(3.9)
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	36.33	40.70	(4.6)
Vietnam	***	***	***	***
Product 3 - Private Label: United States	***	***	***	***
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	30.54	34.46	10.3
Vietnam	***	***	***	***

Table continued on next page.

Table V-19--Continued

PVLT tires: Number of quarters containing observations low price, high price, and change in price over period, by product and source, January 2018 through December 2020

Item	Number of quarters	Low price (dollars per tire)	High price (dollars per tire)	Change in price over period[1] (percent)
Product 4 - Branded:				
United States	***	***	***	***
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	***	***	***	***
Vietnam	***	***	***	***
Product 4 - Private Label:				
United States	***	***	***	***
Korea	***	***	***	***
Taiwan	***	***	***	***
Thailand	12	59.27	63.50	(6.4)
Vietnam	***	***	***	***

Note: Percentage change from the first quarter in which data were available to the last quarter in which price data were available.

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-17
PVLT tires: Indexed U.S. producer prices, January 2018 through December 2020

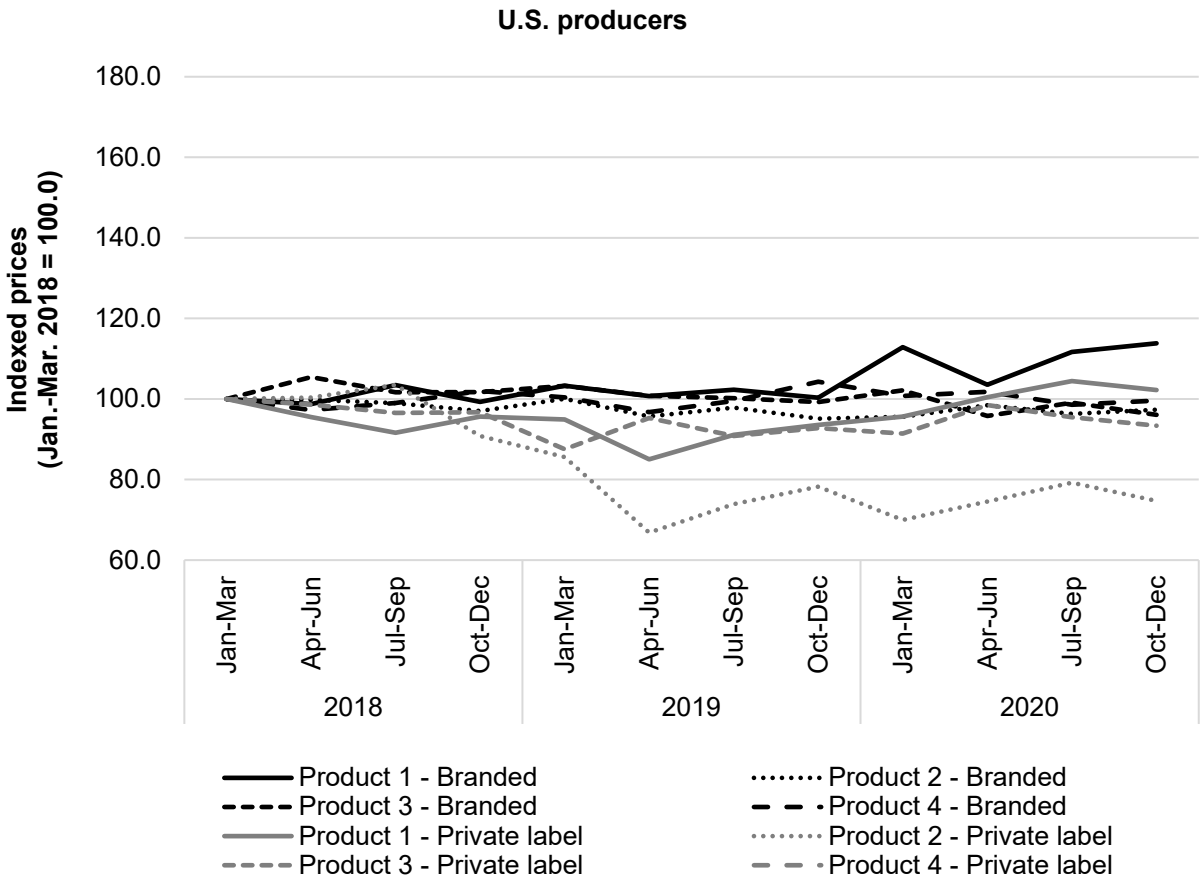
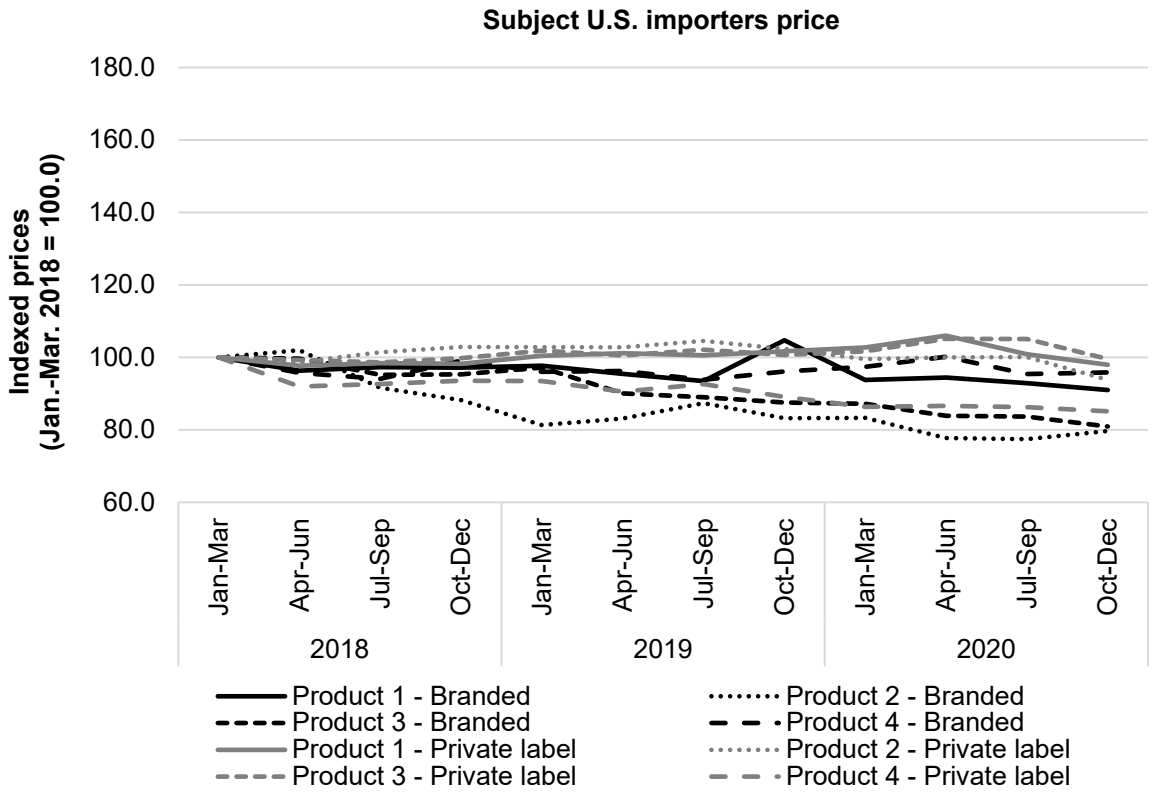


Figure V-18
PVLT tires: Indexed subject U.S. importer prices, January 2018 through December 2020



Source: Compiled from data submitted in response to Commission questionnaires.

Import purchase cost trends

Import purchase costs generally decreased during January 2018-December 2020. Table V-20 summarizes the purchase cost trends, by country and by product. As shown in the table, import purchase cost decreases ranged from *** to *** percent during January 2018-December 2020. Indexed import purchase cost data in figure V-19 compares purchase cost data by product. Purchase costs for branded products decreased the most relative to private label products. Purchase costs of private label products were more variable compared to branded products.

Table V-20

PVLT tires: Number of quarters containing observations low cost, high cost, and change in cost over period, by product and source, January 2018 through December 2020

Item	Number of quarters	Low price / cost (dollars per tire)	High price / cost (dollars per tire)	Change in price / cost over period[1] (percent)
Product 1 - Branded: United States	12	72.57	83.67	13.8
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***
Product 1 - Private Label: United States	***	***	***	***
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***
Product 2 - Branded: United States	12	82.36	86.64	(2.7)
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***
Product 2 - Private Label: United States	***	***	***	***
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***
Product 3 - Branded: United States	12	53.69	59.09	(3.9)
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***
Product 3 - Private Label: United States	***	***	***	***
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***
Product 4 - Branded: United States	***	***	***	***
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***

Table continued on next page.

Table V-20--Continued

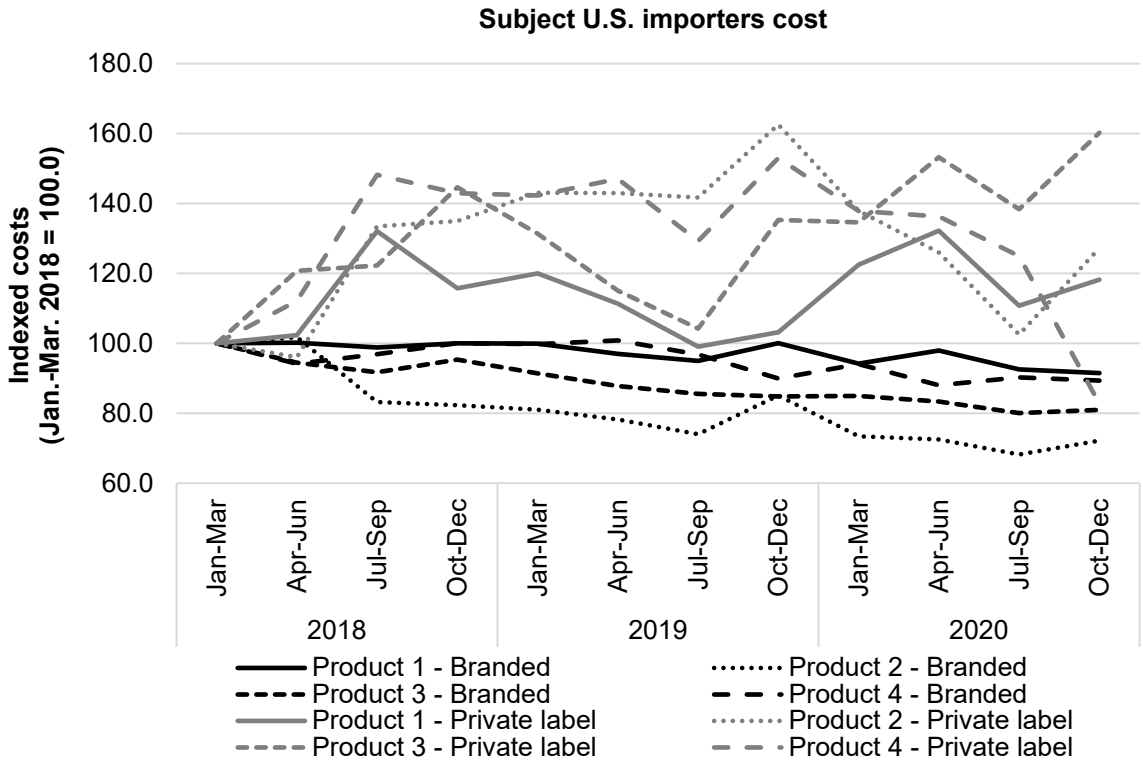
PVLT tires: Number of quarters containing observations low cost, high cost, and change in cost over period, by product and source, January 2018 through December 2020

Product 4 - Private Label: United States	***	***	***	***
Korea cost	***	***	***	***
Taiwan cost	***	***	***	***
Thailand cost	***	***	***	***
Vietnam cost	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-19

PVLT tires: Indexed subject U.S. importer purchase costs, January 2018 through December 2020



Source: Compiled from data submitted in response to Commission questionnaires.

Price comparisons

As shown in table V-21, prices for product imported from Korea, Taiwan, Thailand, and Vietnam were below those for U.S.-produced product in 342 of 382 instances (17.2 million tires); margins of underselling ranged from 0.3 to 66.4 percent. The average margin of underselling was 26.5 percent. In the remaining 40 instances (457,912 tires), prices for product from subject countries were between 0.1 and 43.9 percent above prices for the domestic product. The average margin of overselling was 14.8 percent.

Table V-21

PVLT tires: Instances of underselling/overselling and the range and average of margins, by product and by country, January 2018 through December 2020

Source	Underselling				
	Number of quarters	Quantity (tires)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1 - Branded	48	3,084,504	53.2	35.8	66.4
Product 1 - Private label	38	1,184,664	8.3	0.8	18.1
Product 2 - Branded	48	4,135,026	35.5	13.7	57.1
Product 2 - Private label	39	763,532	16.4	0.3	36.7
Product 3 - Branded	48	3,514,828	25.9	4.8	42.2
Product 3 - Private label	46	1,601,717	21.7	2.0	36.6
Product 4 - Branded	41	2,628,340	24.3	13.1	34.9
Product 4 - Private label	34	282,709	17.9	2.0	29.6
Subtotal, Branded	185	13,362,698	35.1	4.8	66.4
Subtotal, Private label	157	3,832,622	16.3	0.3	36.7
Total, underselling	342	17,195,320	26.5	0.3	66.4
Korea	89	5,889,190	19.9	1.1	57.8
Taiwan	73	1,009,559	28.7	0.3	59.7
Thailand	94	8,327,940	29.6	1.4	63.4
Vietnam	86	1,968,631	28.1	0.7	66.4
Total, underselling	342	17,195,320	26.5	0.3	66.4

Table continued on next page.

Table V-21--Continued

PVLT tires: Instances of underselling/overselling and the range and average of margins, by product and by country, January 2018 through December 2020

Source	(Overselling)				
	Number of quarters	Quantity (tires)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1 - Branded	---	---	---	---	---
Product 1 - Private label	10	245,681	(7.0)	(2.4)	(16.7)
Product 2 - Branded	---	---	---	---	---
Product 2 - Private label	9	92,539	(9.4)	(0.1)	(21.2)
Product 3 - Branded	---	---	---	---	---
Product 3 - Private label	1	21,094	(1.1)	(1.1)	(1.1)
Product 4 - Branded	7	87,205	(21.3)	(7.0)	(35.1)
Product 4 - Private label	13	11,393	(22.2)	(1.2)	(43.9)
Subtotal, Branded	7	87,205	(21.3)	(7.0)	(35.1)
Subtotal, Private label	33	370,707	(13.5)	(0.1)	(43.9)
Total, overselling	40	457,912	(14.8)	(0.1)	(43.9)
Korea	6	56,627	(10.9)	(1.2)	(22.5)
Taiwan	22	141,087	(20.1)	(1.7)	(43.9)
Thailand	2	103,798	(4.8)	(0.1)	(9.6)
Vietnam	10	156,400	(7.6)	(1.1)	(16.7)
Total, overselling	40	457,912	(14.8)	(0.1)	(43.9)

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Source: Compiled from data submitted in response to Commission questionnaires.

Purchase cost comparisons

As shown in table V-22, import purchase costs for product imported from Korea, Taiwan, Thailand, and Vietnam were below the price of U.S.-produced PVLT tires in 223 of 246 instances (9.2 million tires); price-cost differentials ranged from 0.2 to 67.6 percent. In the remaining 23 instances (209,904 tires), import purchase costs for product from Korea, Taiwan, Thailand, and Vietnam were between 0.4 and 27.7 percent above prices for the domestic product. There were instances in which purchase costs were below U.S. prices for all products and from all subject countries. Instances in which purchase costs were above U.S. prices occurred only for private label products from Thailand and Vietnam.

Table V-22

PVLT tires: Instances of lower/(higher) average unit purchase costs compared to U.S. prices and the range and average of price/cost differentials, by product and by country, January 2018 through December 2020

Source	Unit purchase cost data lower than U.S. prices				
	Number of quarters	Quantity (tires)	Average price / cost differential (percent)	Price / cost differential range (percent)	
				Min	Max
Product 1 - Branded	41	1,313,646	57.3	42.4	67.6
Product 1 - Private label	15	167,734	12.2	0.5	25.1
Product 2 - Branded	44	2,763,158	42.2	9.3	66.2
Product 2 - Private label	9	89,280	22.2	0.2	42.9
Product 3 - Branded	45	2,274,441	33.1	15.6	50.4
Product 3 - Private label	15	242,394	16.0	2.2	39.6
Product 4 - Branded	44	2,265,605	33.3	6.3	45.1
Product 4 - Private label	10	95,071	19.9	0.4	44.1
Subtotal, Branded	174	8,616,850	41.1	6.3	67.6
Subtotal, Private label	49	594,479	16.8	0.2	44.1
Total, lower	223	9,211,329	35.8	0.2	67.6
Korea	60	4,983,325	30.0	0.8	64.7
Taiwan	40	137,115	38.0	9.3	59.0
Thailand	84	3,835,018	35.9	0.2	66.8
Vietnam	39	255,871	42.2	5.1	67.6
Total, lower	223	9,211,329	35.8	0.2	67.6
Source	(Unit purchase cost data higher than U.S. prices)				
	Number of quarters	Quantity (tires)	Average price / cost differential (percent)	Price / cost differential range (percent)	
				Min	Max
Product 1 - Branded	---	---	---	---	---
Product 1 - Private label	14	47,613	(7.0)	(0.4)	(20.2)
Product 2 - Branded	---	---	---	---	---
Product 2 - Private label	6	106,928	(16.4)	(5.2)	(27.7)
Product 3 - Branded	---	---	---	---	---
Product 3 - Private label	1	38,905	(4.6)	(4.6)	(4.6)
Product 4 - Branded	---	---	---	---	---
Product 4 - Private label	2	16,458	(3.7)	(2.5)	(4.9)
Subtotal, Branded	---	---	---	---	---
Subtotal, Private label	23	209,904	(9.1)	(0.4)	(27.7)
Total, higher	23	209,904	(9.1)	(0.4)	(27.7)
Korea	---	---	---	---	---
Taiwan	---	---	---	---	---
Thailand	12	209,497	(10.6)	(1.8)	(27.7)
Vietnam	11	407	(7.3)	(0.4)	(20.2)
Total, higher	23	209,904	(9.1)	(0.4)	(27.7)

Source: Compiled from data submitted in response to Commission questionnaires.

Lost sales and lost revenue

In the preliminary phase of the investigation, the Commission requested that U.S. producers of PVLT tires report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam during January 2017–March 2020. None of the responding U.S. producers submitted lost sales and lost revenue allegations.

In the final phase of the investigation, of the 13 responding U.S. producers, 2 reported that they had to reduce prices, none reported that they had rolled back announced price increases, and three firms reported that they had lost sales.

Staff contacted 296 purchasers and received responses from 37 purchasers. Responding purchasers reported purchasing *** PVLT tires during January 2018-December 2020 (table V-23).

Of the 37 responding purchasers, 21 reported that, since 2018, they had purchased imported PVLT tires from Korea, Taiwan, Thailand, or Vietnam instead of U.S.-produced product Fifteen of these purchasers reported that subject import prices were lower than U.S.-produced product, and eight of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Six purchasers estimated the quantity of PVLT tires from Korea, Taiwan, Thailand, and Vietnam purchased instead of domestic product; quantities ranged from *** to *** PVLT tires (table V-24). Purchasers identified quality, technical performance requirements, branding, and availability of supply as non-price reasons for purchasing imported rather than U.S.-produced product.

Of the 21 responding purchasers, none reported that U.S. producers had reduced prices in order to compete with lower-priced imports from Korea, Taiwan, Thailand, and Vietnam; 15 reported that they did not know (table V-26).

Table V-23
PVLT tires: U.S. purchasers' U.S. purchases and U.S. imports, 2018-2020

* * * * * * *

Table V-23—Continued
PVLT tires: U.S. purchasers' U.S. purchases and U.S. imports, 2018-2020

* * * * * * *

Note: All other includes all other sources and unknown sources.
Note: Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-24
PVLT tires: Purchasers' responses to purchasing subject instead of domestic, by firm

* * * * * * *

Table V-24—Continued
PVLT tires: Purchasers' responses to purchasing subject instead of domestic, by firm

* * * * * * *

Table V-24—Continued
PVLT tires: Purchasers' responses to purchasing subject instead of domestic, by firm

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-25
PVLT tires: Purchasers' responses to purchasing subject instead of domestic, by country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity subject purchased (1,000 tires)
Korea	16	6	4	***
Taiwan	13	7	3	***
Thailand	20	11	6	***
Vietnam	13	9	3	***
Any subject source	21	15	8	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-26
PVLT tires: Purchasers' responses to purchasing subject instead of domestic, by country

* * * * * * *

.

Table V-26—Continued
PVLT tires: Purchasers' responses to purchasing subject instead of domestic, by country

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Part VI: Financial experience of U.S. producers

Background

Fourteen U.S. producers (Bridgestone, Continental, Cooper, Giti, Goodyear, Hankook, Kumho, Michelin, Nokian, Pirelli, Specialty, Sumitomo, Toyo, and Yokohama) reported financial results on their U.S.-produced PVLT tires operations for annual periods 2018 through 2020.[1] In 2020, *** U.S. producers accounted for *** percent of that year's total sales quantity: *** (*** percent), *** (*** percent), *** (*** percent), *** (*** percent), and *** (*** percent). The remaining *** U.S. producers accounted for shares ranging from *** percent (***) to *** percent (***).

During the period examined, the U.S. industry's operations reflect company-specific ***.[2] During 2020 most U.S. producers also reported closures and/or idling of facilities due to COVID-19.

Operations on PVLT tires

Table VI-1 and table VI-2 present income-and-loss data for U.S. producers' operations on PVLT tires and corresponding changes in average per tire values (AUVs), respectively.[3] Table VI-3 presents selected firm-specific financial information.[4]

[1] Most U.S. producers reported their financial results on the basis of either U.S. generally accepted accounting principles (GAAP) or International Financial Reporting Standards (IFRS). All U.S. producers reported their financial results for calendar-year periods. With the exception of Specialty, which has operations only in the U.S., U.S. producers are part of multinational corporations.

[2] In February 2021, subsequent to the period examined, Cooper and Goodyear formally entered into a merger agreement in which Cooper will ultimately become a wholly-owned subsidiary of Goodyear. Cooper 2020 10-K, p. 27.

[3] Appendix C and Appendix I present corresponding financial results excluding selected U.S. producers.

[4] In general, the utility of the Commission's variance analysis is enhanced when product mix remains the same throughout the period. While varying in magnitude, changes in the U.S. industry's PVLT tire product mix were noted by several U.S. producers (see *Sales* section below). As such and in conjunction with the presence of start-up costs and other changes in cost structure, a variance analysis appears less meaningful and is therefore not presented in this section of the report.

Table VI-1
PVLT tires: Results of operations of U.S. producers, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	155,043	153,806	120,496
	Value (1,000 dollars)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	13,981,659	13,889,511	11,084,729
Cost of goods sold.--			
Raw materials	5,017,512	4,914,529	3,660,798
Direct labor	2,218,935	2,284,054	1,873,170
Other factory costs	2,257,845	2,324,721	2,098,772
Total COGS	9,494,292	9,523,304	7,632,740
Gross profit	4,487,368	4,366,207	3,451,988
Advertising, marketing, and/or branding	552,520	542,041	471,643
All other SG&A expenses	926,367	987,558	908,587
Total SG&A expenses	1,478,887	1,529,599	1,380,231
Operating income	3,008,481	2,836,608	2,071,758
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income	2,749,889	2,582,786	1,561,741
Depreciation/amortization	777,380	825,919	838,340
Estimated cash flow from operations	3,527,269	3,408,705	2,400,081
	Ratio to net sales (percent)		
Cost of goods sold.--			
Raw materials	35.9	35.4	33.0
Direct labor	15.9	16.4	16.9
Other factory costs	16.1	16.7	18.9
Average COGS	67.9	68.6	68.9
Gross profit	32.1	31.4	31.1
Advertising, marketing, and/or branding	4.0	3.9	4.3
All other SG&A expenses	6.6	7.1	8.2
Total SG&A expenses	10.6	11.0	12.5
Operating income	21.5	20.4	18.7
Net income	19.7	18.6	14.1

Table continued on next page.

Table VI-1—Continued
PVLT tires: Results of operations of U.S. producers, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio to total COGS (percent)		
Cost of goods sold.-- Raw materials	52.8	51.6	48.0
Direct labor	23.4	24.0	24.5
Other factory costs	23.8	24.4	27.5
Average COGS	100.0	100.0	100.0
	Unit value (dollars per tire)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	90.18	90.31	91.99
Cost of goods sold.-- Raw materials	32.36	31.95	30.38
Direct labor	14.31	14.85	15.55
Other factory costs	14.56	15.11	17.42
Average COGS	61.24	61.92	63.34
Gross profit	28.94	28.39	28.65
Advertising, marketing, and/or branding	3.56	3.52	3.91
All other SG&A expenses	5.97	6.42	7.54
Total SG&A expenses	9.54	9.94	11.45
Operating income	19.40	18.44	17.19
Net income	17.74	16.79	12.96
	Number of firms reporting		
Operating losses	4	5	8
Net losses	4	5	8
Data	13	13	14

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-2
PVLT tires: Changes in AUVs, 2018-20

Item	Between calendar years		
	2018-20	2018-19	2019-20
	Change in AUVs (percent)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	▲2.0	▲0.1	▲1.9
Cost of goods sold.-- Raw materials	▼(6.1)	▼(1.3)	▼(4.9)
Direct labor	▲8.6	▲3.8	▲4.7
Other factory costs	▲19.6	▲3.8	▲15.2
Average COGS	▲3.4	▲1.1	▲2.3
	Change in AUVs (dollars per tire)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	▲1.81	▲0.13	▲1.69
Cost of goods sold.-- Raw materials	▼(1.98)	▼(0.41)	▼(1.57)
Direct labor	▲1.23	▲0.54	▲0.70
Other factory costs	▲2.86	▲0.55	▲2.30
Average COGS	▲2.11	▲0.68	▲1.43
Gross profit	▼(0.29)	▼(0.55)	▲0.26
Advertising, marketing, and/or branding	▲0.35	▼(0.04)	▲0.39
All other SG&A expenses	▲1.57	▲0.45	▲1.12
Total SG&A expenses	▲1.92	▲0.41	▲1.51
Operating income	▼(2.21)	▼(0.96)	▼(1.25)
Net income	▼(4.78)	▼(0.94)	▼(3.83)

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-3
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Total net sales (1,000 tires)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	155,043	153,806	120,496
	Total net sales (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	13,981,659	13,889,511	11,084,729

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Cost of goods sold (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	9,494,292	9,523,304	7,632,740
	Gross profit or (loss) (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	4,487,368	4,366,207	3,451,988

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	SG&A expenses (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	1,478,887	1,529,599	1,380,231
	Operating income or (loss) (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	3,008,481	2,836,608	2,071,758

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Net income or (loss) (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	2,749,889	2,582,786	1,561,741
	COGS to net sales ratio (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	67.9	68.6	68.9

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Gross profit or (loss) to net sales ratio (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	32.1	31.4	31.1
	SG&A expenses to net sales ratio (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	10.6	11.0	12.5

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Operating income or (loss) to net sales ratio (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	21.5	20.4	18.7
	Net income or (loss) to net sales ratio (percent)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	19.7	18.6	14.1

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit net sales value (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	90.18	90.31	91.99
	Unit raw materials (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	32.36	31.95	30.38

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

	Calendar year		
	2018	2019	2020
	Unit direct labor (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	14.31	14.85	15.55
	Unit other factory costs (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	14.56	15.11	17.42

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit COGS (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	61.24	61.92	63.34
	Unit gross profit or (loss) (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	28.94	28.39	28.65

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit SG&A expenses (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	9.54	9.94	11.45
	Unit operating income or (loss) (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	19.40	18.44	17.19

Table continued on next page.

Table VI-3—Continued
PVLT tires: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit net income or (loss) (dollars per tire)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	17.74	16.79	12.96

Note 1.—***.
Note 2.—***.

Source: Compiled from data submitted in response to Commission questionnaires.

Sales

The majority of PVLT tire sales reflects commercial sales (*** percent of the period's total sales quantity) with the remainder (*** percent) reflecting transfer sales to related firms. On a company-specific basis, however, the relative importance of each category varied: while *** reported both commercial sales and transfer sales, commercial sales predominated; *** reported only commercial sales; *** reported primarily (or only) transfer sales; *** transitioned from reporting both commercial sales and transfer sales in 2018 to only transfer sales in 2019 and 2020.[5]

[5] ***. With respect to those U.S. producers reporting transfer sales as their primary or only sales category, the following transfer valuations were reported: ***. *** U.S. producer questionnaire, response to II-7 (note 3). Email with attachment from ***, June 16, 2020. *** U.S. producer questionnaire, response to II-7 (note 3). Email with attachment from *** to USITC staff, June 2, 2020. Email with attachments from *** to USITC staff, June 3, 2020. Email with attachment from *** to USITC staff, June 2, 2020.

Sales quantity

The U.S. industry's total sales quantity declined modestly in 2019 (0.8 percent) and then more notably in 2020 (21.7 percent). In contrast with the pattern reported by most U.S. producers and reflecting plant start-up and transition to commercial operations, *** reported increases in sales quantities in 2019.[6] ***.[7] ***.[8]

After declining in the first half of 2020, PVLT tire demand reportedly increased in the second half of 2020.[9] While company-specific changes in sales quantity were directionally

[6] ***. Email with attachment from *** to USITC staff, June 4, 2020. ***. Email with attachment from *** to USITC staff, June 3, 2020.

[7] ***. Email with attachments from *** to USITC staff, June 3, 2020.

[8] ***. Email with attachment from *** to USITC staff, June 2, 2020.

[9] During 2020 the replacement and original equipment markets recovered somewhat but at different rates. Referencing PVLT tire demand in general during 2020, Michelin stated "After contracting 33 percent in the first six months of the year when demand collapsed in the wake of automotive plant shutdowns in the response to the health crisis, the Original Equipment segment saw a marked improvement in the second six months . . . in North America, automaker inventory rebuilding lifted demand back in line with 2019 levels in the second half {2020}. Fourth-quarter growth was unchanged year on year, in line with the third quarter." Michelin 2020 Results, p. 8. Describing the replacement market in general during 2020, Michelin stated "After an unprecedented 20 percent drop in demand in the first half, the global replacement tire market steadily improved throughout the second six months, ending the period 3 percent down year on year with, in particular, fourth-quarter 2020 demand coming close to the level seen in fourth quarter 2019 . . . In North and Central America, at a time of economic recovery and speculative buying ahead of possible new US duties on tires imported from South Korea, Thailand, Vietnam and Taiwan, Replacement demand rose by 2 percent in the second half (4 percent in the United States), easing the market decline to 9 percent for the year." Michelin 2020 Results, p. 9.

mixed between 2018 and 2019, almost all U.S. producers reported lower sales quantities in 2020. The exception was ***, which reported a *** increase in its 2020 sales quantity compared to 2019.

Value

The majority of U.S. producers (with operations throughout the period) indicated that product mix changed to some extent but not substantially (***).[10] In contrast, several (***) indicated that changes in product mix were more notable.[11]

U.S. producers reported a relatively wide range of average sales values (see table VI-3) with *** reporting the highest and ***, ***, and *** reporting the lowest in

[10] Email with attachment from *** to USITC staff, June 15, 2020. *** response to USITC staff follow-up questions, June 10, 2020. Email with attachment from ***, to USITC staff, June 1, 2020. Email with attachment from *** to USITC staff, June 4, 2020. Email with attachment from *** to USITC staff, June 4, 2020. Email with attachment from *** to USITC staff, June 3, 2020. Email with attachment from *** to USITC staff, June 2, 2020. Email with attachment from *** to USITC staff, June 10, 2020. Email with attachment from *** to USITC staff, May 28, 2020. Email with attachment from *** to USITC staff, June 2, 2020. Email with attachment from *** to USITC staff, June 3, 2020.

[11] ***. Email from *** to USITC staff, June 5, 2020. ***. Email with attachments from *** to USITC staff, June 3, 2020.

2018, 2019, and 2020, respectively.[12] While not uniform, the majority of U.S. producers reported increasing average sales values of varying magnitude throughout the period. On an overall basis, the U.S. industry's average sales value increased modestly during the period: 0.1 percent in 2019 and 1.9 percent in 2020.[13]

Cost of goods sold (COGS) and gross profit or loss

Raw materials

Raw material cost, which reflects a number of underlying inputs (natural rubber, synthetic rubber, carbon black, fabric and steel components, and other material inputs), is the largest component of COGS, ranging from 48.0 percent of total COGS (2020) to 52.8 percent (2018). *** U.S. producers (***) reported purchasing inputs from related suppliers.[14]

[12] As noted previously, *** reported transfer sales (see also footnote 5), while *** reported commercial sales. ***. Email with attachment from *** to USITC staff, June 10, 2020.

[13] On an overall basis, table VI-1 shows that average transfer values were lower than corresponding average commercial sales values throughout the period. For the companies noted above that reported both transfer sales and commercial sales, the extent to which average transfer sales were higher or lower compared to corresponding average commercial sales was mixed; e.g., ***. Similarly and while average transfer value declined in 2019 and increased in 2020 on an overall basis (see table VI-2), reflecting changes in both underlying transfer values and company-specific shares of total transfer sales, the directional pattern of company-specific average transfer value was mixed.

[14] ***. *** U.S. producer questionnaire, response to III-7. Email with attachment from *** to USITC staff, March 24, 2021. ***. *** U.S. producer questionnaire, response to III-7. ***. *** U.S. producer questionnaire, response to III-7. ***. *** U.S. producer questionnaire, response to III-7. ***. *** U.S. producer questionnaire, response to III-7. ***. *** U.S. producer questionnaire, response to III-7.

On a company-specific basis, natural rubber, synthetic rubber, carbon black, fabric and steel components, and other material inputs varied in terms of their share of raw material cost with no single input accounting for a predominate share. For a number of U.S. producers (***), synthetic rubber accounted for the largest share of 2020 raw material cost, ranging from *** percent (***) to *** percent (***); fabric and steel components accounted for the largest share of the 2020 raw material costs reported by ***, ranging from *** percent (***) to *** percent (***); other material inputs accounted for *** percent, respectively, of *** 2020 raw material costs; carbon black and natural rubber, respectively, accounted for the largest shares of *** 2020 raw material costs (*** percent and *** percent).[15]

On an overall basis, the U.S. industry's average raw material cost declined modestly in 2019 and then more notably in 2020. In 2019, the directional pattern reported by U.S. producers was more mixed (reflecting increases and decreases) compared to 2020 when most U.S. producers reported declines in average raw material cost.[16]

[15] ***. *** U.S. producer questionnaire, response to III-9c.

[16] With respect to its raw material costs and operations in general, Continental stated "The price of crude oil - the most important basic building block for synthetic-rubber input materials such as butadiene and styrene as well as for carbon black and various other chemicals – fell sharply in the first few months of 2020 due to the decline in demand as a result of the pandemic. From May 2020, the listings recovered again, thanks to falling production levels as well as higher demand. The average price of Brent crude oil for the year decreased by around 34 percent year-on-year on a US dollar basis. As a result, the prices of various input materials for synthetic rubber fell year-on-year . . . Butadiene and styrene, for example, decreased by 33 percent and 26 percent year-on-year on a US dollar basis . . . Prices for natural rubber initially fell in the first few months of 2020, before recovering again as the year progressed. The primary reason for this was the rise in demand for tires in Asia, particularly in China. But in Europe and North America too, demand normalized in the second half of the year. The average price of natural rubber TSR 20 for the year was down 6 percent year-on-year on a US dollar basis. The average price of ribbed smoked sheet (RSS) for the year rose by 6 percent on a US dollar basis." Continental 2020 Annual Report, p. 64. ***. Email with attachment from *** to USITC staff, March 4, 2021.

Direct labor and other factory costs

Direct labor and other factory costs made up similar shares of COGS and moved within relatively narrow ranges: direct labor ranging from 23.4 percent of total COGS (2018) to 24.5 percent (2020) and other factory costs ranging from 23.8 percent (2018) to 27.5 percent (2020).

Notwithstanding the large share of total COGS accounted for by variable raw material costs, PVLT tire manufacturing is also a capital intensive process characterized by substantial fixed costs. As such, fixed cost absorption and corresponding capacity utilization are important in order to yield average COGS consistent with target sales values. During the period average direct labor and other factory costs increased, most notably in 2020 (see table VI-2) in conjunction with reduced sales/production and corresponding capacity utilization.

Reflecting differences in cost structures and conventions for reporting costs, U.S. producers reported a fairly wide range of average direct labor costs and other factory costs. The relatively large declines in average direct labor and other factory costs reported by *** between 2018 and 2019 generally reflect transition from start-up to commercial operations. ***, also reported substantial variations in its average other factory costs between 2018 and 2019. ***.[17] *** average other factory

[17] Email with attachments from *** to USITC staff, June 3, 2020. ***. Email with attachments from *** to USITC staff, March 24, 2021.

costs, which increased throughout the period, include ***.[18]

While most U.S. producers reported higher average other factory costs throughout the period, increases in 2019 were, except as noted previously, generally modest. In contrast, increases in average other factory costs in 2020 were notable for a number of companies, generally reflecting COVID-related production disruptions. In public narrative accompanying their 2020 financial results, several companies provided similar descriptions regarding the negative impact on COGS in general due to COVID-19.[19]

Gross profit or loss

While most U.S. producers reported gross profit throughout the period, directional trends were mixed with the majority reporting declines in overall gross profit. Companies reporting *** during all or part of the period either began their PVLT tire operations

[18] ***. Email with attachment from *** to USITC staff, June 10, 2020.

[19] For example, in describing its Automotive and related distribution segment financial results during 2020, Michelin stated "The steep decline was primarily due to the 13.8 percent drop in volumes caused by the contraction in the Passenger car and Light truck markets, which led, notably in the first half, to fixed cost under-absorption and a loss of industrial efficiency that was only partially offset by government-backed furlough grants." Michelin 2020 Results, p. 12.

during the period examined (***) or somewhat prior to the period examined (***). These companies also reported primarily (or only) transfer sales.[20] [21] [22] [23]

Selling, general, and administrative (SG&A) expenses and operating income or loss

SG&A expenses

In general, U.S. producers appear to be mixed in terms of whether the business unit responding to the U.S. producer questionnaire is directly responsible for advertising, marketing, and/or branding.[24] In at least some instances, relevant expenses reflect payments to related

[20] ***. Email with attachment from *** to USITC staff, March 26, 2021.
[21] ***. Email with attachment from *** to USITC staff, March 24, 2021.
[22] ***. Email with attachment from *** to USITC staff, March 24, 2021.
[23] ***. Email with attachment from *** to USITC staff, March 19, 2021.
[24] ***. *** U.S. producer questionnaire, response to III-4a. ***. Email with attachment from *** to USITC staff, June 2, 2020. ***. Email with attachment from *** to USITC staff, March 24, 2021. In contrast *** reported that the respective business units responding to the U.S. producer questionnaire are responsible for and incur expenditures related to marketing, advertising, and branding. Email with attachment from *** to USITC staff, March 24, 2021. *** U.S. producer questionnaires, responses to III-4a.

companies.[25] As a ratio to total sales, overall expenses specific to advertising, marketing, and/or branding ranged from 3.9 percent (2019) to 4.3 percent (2020).

The U.S. industry's total SG&A expenses increased somewhat in 2019 and then declined in 2020, reflecting lower sales, as well as SG&A cost-cutting initiatives in response to reduced demand.[26] While the company-specific pattern of SG&A expenses was directionally mixed (reflecting increases and decreases) between 2018 and 2019, it was more uniform between 2019 and 2020 with most U.S. producers reporting declines in total SG&A expenses. As shown in table VI-3, U.S. producers reported a range of SG&A expense ratios (total SG&A expenses divided by total sales).[27]

Operating income or loss

*** large volume U.S. producers reported declines in overall operating income during the period, the ***, while smaller-volume U.S. producers reported a mixed pattern.[28] Among the U.S. producers with operations established for an extended period prior to the period

[25] ***. *** U.S. producer questionnaire, response to III-4a.

[26] With regard to its overall operations, Michelin reported that, in response to lower 2020 total sales, it introduced cost-cutting programs for sales and marketing expenses, as well as general and administrative expenses. Michelin 2020 Results, pp. 94-95. ***. Email from *** to USITC staff, March 24, 2021.

[27] The high initial SG&A expense ratios of *** are generally consistent with ***. *** SG&A expense ratios were notably low throughout the period, which the company generally attributed to its *** (see footnote 24).

[28] As described by Cooper, while net sales for its Americas Tire Operations segment declined in 2020 due to reduced demand related to the COVID-19 pandemic, the segment's operating income increased due to favorable variances in price and product mix, lower raw material costs, product liability expense, and SG&A and other expenses. These favorable variances were partially offset by unfavorable manufacturing costs related to COVID-19 production shut-downs in the second quarter, as well as higher restructuring costs related to its Mexican operations. Cooper 2020 10-K, pp. 31-32. In 2020, Cooper's Americas Tire Operations segment operating income was 17.9 percent higher compared to 2019. By way of comparison, Cooper's corresponding 2020 U.S.-produced PVLT tires ***.

examined, *** reported operating losses throughout the period.[29] ***, also an established producer, reported operating losses in 2019 and 2020.[30]

Regarding the impact of COVID-19 on financial results, most U.S. producers reported disruptions to their operations of varying magnitude, including plant closures, primarily during the second quarter 2020, as well as direct costs incurred for mitigation efforts.[31]

[29] ***. Email with attachment from *** to USITC staff, June 3, 2020. ***. Email with attachment from *** to USITC staff, March 19, 2021.

[30] ***. Email with attachments from *** to USITC staff, March 24, 2021.

[31] ***. *** U.S. producer questionnaire, response to III-18. ***. Email with attachment from *** to USITC staff, March 4, 2021.

Interest expense, other expenses and income, and net income or loss

*** U.S. producers reported interest expense throughout the period with the other U.S. producers either reporting no interest expense or interest expense only in a single year (***).[32] The overall increase in interest expense between 2018 and 2019 largely reflects increases reported by ***, both in the process of establishing their operations. In 2020, the overall decline in interest expense, the directional pattern reported by most U.S. producers, was partially offset by ***, which reported a relatively large increase in interest expense. Other expenses and other income fluctuated during the period, both increasing to their highest levels in 2020.[33] [34]

[32] Similar to expenses associated with advertising, marketing and/or branding (see footnotes 24 and 25), the organizational and financial structures of U.S. producers determine whether interest expense and other financial information is directly assigned to and/or incurred by the business units responding to the Commission's U.S. producer questionnaire.

[33] ***. *** U.S. producer questionnaire, response to III-10. ***. Email with attachment from *** to USITC staff, March 24, 2021. ***. *** U.S. producer questionnaire, response to III-10.

[34] ***. Email with attachment from *** to USITC staff, June 2, 2020. Note: An APA, in general, is ". . . an agreement between the taxpayer and the tax authority on the pricing of future intercompany transactions in case of a roll-back, it would also include past years. The taxpayer and tax authority mutually agree on the transfer pricing methodology (TPM) to be applied and its application for a certain period of time for covered transactions (subject to fulfillment of critical assumptions). *Advance pricing arrangements: Frequently asked questions*, p. 2. https://www.pwc.in/assets/pdfs/publications/2014/advance-pricing-arrangements.pdf, retrieved May 3, 2021.

Capital expenditures and research and development expenses

Table VI-4 presents U.S. producers' capital expenditures and research and development (R&D) expenses related to their PVLT tire operations and table VI-5 presents corresponding narrative descriptions.

Table VI-4
PVLT tires: Total capital expenditures and research and development (R&D) expenses of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Capital expenditures (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	1,034,234	964,112	691,184

Table continued on next page.

Table VI-4—Continued
PVLT tires: Total capital expenditures and research and development (R&D) expenses of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	R&D expenses (1,000 dollars)		
Bridgestone	***	***	***
Continental	***	***	***
Cooper	***	***	***
Giti	***	***	***
Goodyear	***	***	***
Hankook	***	***	***
Kumho	***	***	***
Michelin	***	***	***
Nokian	***	***	***
Pirelli	***	***	***
Specialty	***	***	***
Sumitomo	***	***	***
Toyo	***	***	***
Yokohama	***	***	***
All firms	303,621	317,325	274,104

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-5
PVLT tires: Narrative descriptions of U.S. producers' capital expenditures and R&D expenses since January 1, 2018

Firm	Narrative
Capital expenditures:	
Bridgestone	***
Continental	***
Cooper	***
Giti	***
Goodyear	***
Hankook	***
Kumho	***

Table continued on next page.

Table VI-5—Continued
PVLT tires: Narrative descriptions of U.S. producers' capital expenditures and R&D expenses since January 1, 2018

Capital expenditures--continued	
Michelin	***
Nokian	***
Pirelli	***
Specialty	***
Sumitomo	***
Toyo	***
Yokohama	***
R&D expenses:	
Bridgestone	***
Continental	***
Cooper	***
Giti	***
Goodyear	***
Hankook	***
Kumho	***

Table continued on next page.

Table VI-5—Continued
PVLT tires: Narrative descriptions of U.S. producers' capital expenditures and R&D expenses since January 1, 2018

R&D expenses--continued	
Michelin	***
Nokian	***
Pirelli	***
Specialty	***
Sumitomo	***
Toyo	***
Yokohama	***

Source: Compiled from data submitted in response to Commission questionnaires.

Assets and return on assets

Table VI-6 presents U.S. producers' total net assets and operating return on net assets related to operations on PVLT tires.[35]

Table VI-6
PVLT tires: Total net assets and operating return on net assets of U.S. producers, 2018-20

Item	Calendar year		
	2018	2019	2020
	Value (1,000 dollars)		
Net assets	9,728,739	10,112,277	9,740,797
	Ratio (percent)		
Operating return on assets	30.9	28.1	21.3

Source: Compiled from data submitted in response to Commission questionnaires.

[35] With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of current and non-current assets, which, in many instances, are not product specific. Allocation factors were presumably necessary to report total asset values specific to U.S. producers' PVLT tires operations. The ability of U.S. producers to assign total asset values to discrete product lines affects the meaningfulness of operating return on net assets.

Capital and investment

The Commission requested the U.S. producers of PVLT tires to describe any actual or potential negative effects on its return on investment or its growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of PVLT tires from Korea, Taiwan, Thailand, and Vietnam. Table VI-7 tabulates the responses regarding actual negative effects on investment, growth, and development, as well as anticipated negative effects.[36] Table VI-8 presents the narrative responses of U.S. producers regarding actual and anticipated negative effects on investment, growth, and development.

Table VI-7
PVLT tires: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Item	No	Yes
Negative effects on investment	8	4
Cancellation, postponement, or rejection of expansion projects		0
Denial or rejection of investment proposal		0
Reduction in the size of capital investments		2
Return on specific investments negatively impacted		2
Other		2
Negative effects on growth and development	10	2
Rejection of bank loans		0
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		0
Ability to service debt		0
Other		3
Anticipated negative effects of imports	7	5

Table continued on next page.

[36] *** did not respond affirmatively or negatively to questions regarding actual or anticipated negative effects of subject imports. ***. *** U.S. producer questionnaire, responses to III-15, III-16, and III-17. ***. *** U.S. producer questionnaire, response to III-19. ***. *** U.S. producer questionnaire, response to III-18.

Table VI-7—Continued
PVLT tires: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Note 1: *** did not respond affirmatively or negatively to questions regarding actual or anticipated negative effects of subject imports (see footnote 36).
Note 2: *** reported "no" regarding actual negative effects of subject imports on growth and development. *** reported "no" regarding anticipated negative effects of subject imports.

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-8
PVLT tires: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Effects/Firm	Narrative
Negative effects on investment:	
Reduction in the size of capital investments	
***	***
***	***
Return on specific investments negatively impacted	
***	***
***	***
Other	
***	***
Negative effects on growth and development:	
Other	
***	***
***	***
Anticipated negative effects:	
***	***
***	***
***	***
***	***

Table continued on next page.

Table VI-8—Continued
PVLT tires: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Anticipated negative effects--continued:	
***	***

Note.--Narrative statements provided by companies that did not indicate affirmative responses regarding actual and/or anticipated negative effects of subject imports are not presented in this table (see footnote 36).

Source: Compiled from data submitted in response to Commission questionnaires.

Part VII: Threat considerations and information on nonsubject countries

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting"; any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The industry in Korea

The Commission issued foreign producers' or exporters' questionnaires to three firms believed to produce and/or export PVLT tires from Korea.[3] Usable responses to the Commission's questionnaire were received from all three firms: Hankook, Kumho, and Nexen.[4] These firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Korea in 2020.[5] According to estimates requested of the responding Korean producers, the production of PVLT tires in Korea reported in questionnaires accounts for virtually all production of PVLT tires in Korea in 2020.[6] Table VII- 1 presents information on PVLT tire operations of the responding producers and exporters in Korea.

Table VII-1
PVLT tires: Summary data for producers in Korea, 2020

Firm	Production (1,000 tires)	Share of reported production (percent)	Exports to the United States (1,000 tires)	Share of reported exports to the United States (percent)	Total shipments (1,000 tires)	Share of firm's total shipments exported to the United States (percent)
Hankook	***	***	***	***	***	***
Kumho	***	***	***	***	***	***
Nexen	***	***	***	***	***	***
All firms	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[3] These firms were identified through a review of information submitted in the petition and presented in third-party sources.

[4] Hankook is related to U.S. producer Hankook Tire Manufacturing Tennessee LP and U.S. importer Hankook Tire America Corp., both of which have filed questionnaires for these investigations. Kumho is related to U.S. producer Kumho Tire Georgia, Inc., U.S. importer Kumho Tire U.S.A., Inc., and Vietnamese producer Kumho Tire (Vietnam) Co., Ltd. All three firms submitted questionnaires for these investigations. Nexen is related to U.S. importer Nexen Tire America, Inc., which also submitted a questionnaire for these investigations.

[5] Korean exports to the United States in 2020 were *** million tires (see table VII-1) and U.S. imports from Korea in 2020 were 17.1 million tires (see table IV-2). Accordingly, these firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Korea in 2020.

[6] Hankook, Kumho, and Nexen estimated that they accounted for *** percent, respectively, of PVLT tire production in Korea in 2020.

Changes in operations

As presented in table VII-2 producers in Korea reported several operational and organizational changes since January 1, 2018.

Table VII-2
PVLT tires: Korean producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changes in operations
Prolonged shutdowns or curtailments:	
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Operations on PVLT tires

Table VII-3 presents information on PVLT tire operations of the responding producers and exporters in Korea. Capacity and production in Korea decreased *** and *** percent, respectively, during 2018-20. Capacity and production projections are however expected to increase *** and *** percent, respectively, from 2020 to 2022. Capacity utilization decreased *** percentage points during the POI but it is projected to increase *** percentage points during 2020-22. End-of-period inventories in Korea increased *** percent during 2018-20 and are projected to continue to increase by *** percent during 2020-2022.

Total home market shipments accounted for between *** percent of total shipments from 2018-20. Export shipments to the United States accounted for between *** percent of total shipments during the same period. Korean exports to the United States decreased *** percent during 2018-20, while Korean exports to all other markets decreased *** percent during the same period. Responding Korean firms project a *** percent increase in total export shipments during 2020-22, with a *** percent increase in export shipments to all other markets during the same period but a *** percent decrease in export shipments to the United States.[7]

[7] In May 2020, Hankook, ***, completed the first phase of a 1.1 billion investment to build a tire production facility in Clarkesville, Tennessee. Hankook is currently in phase two, which is expected to create an additional 500 U.S. jobs and bring the plant's total annual production capacity to 10 million tires per year. As a result, Hankook projects decreasing the number of tires it exports to the United States from Korea. Hankook's postconference brief, June 8, 2020, pp. 27-8.

Table VII-3
PVLT tires: Data for producers in Korea, 2018-20 and projected 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Quantity (1,000 tires)				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	Ratios and shares (percent)				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

Table VII-4 shows overall capacity and production on the same equipment as in-scope PVLT tires production by producers in Korea during 2018-20. ***, reported that it was able to switch production between PVLT tires and other products using the same machinery. *** identified these other products as ***.

Table VII-4
PVLT tires: Korean producers' overall capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Overall capacity	***	***	***
Production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Exports

According to GTA, the leading export markets for PVLT tires from Korea are the United States, Russia, and Germany (table VII-5). During 2020, the United States was the top export market for PVLT tires from Korea, accounting for 36.3 percent of Korea's total exports. Russia and Germany accounted for 5.3 percent and 5.1 percent of Korea's total exports, respectively.

Table VII-5
Tires for motor vehicles: Exports from Korea, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
United States	20,182	19,505	18,059
Russia	3,130	3,332	2,626
Germany	2,390	2,435	2,527
Saudi Arabia	2,735	3,278	2,415
UAE	1,569	2,377	2,040
Netherlands	2,137	1,990	1,940
United Kingdom	2,412	2,135	1,860
Mexico	2,251	2,110	1,431
Turkey	1,116	1,010	1,298
All other destination markets	22,707	19,587	15,533
All destination markets	60,629	57,759	49,729
	Value (1,000 dollars)		
United States	1,280,582	1,269,445	1,111,348
Russia	135,378	142,456	95,577
Germany	158,769	142,648	147,416
Saudi Arabia	148,299	180,011	133,784
UAE	75,388	113,513	77,736
Netherlands	112,653	106,391	122,293
United Kingdom	129,406	108,903	94,670
Mexico	123,625	115,013	80,948
Turkey	69,214	65,725	73,080
All other destination markets	1,191,242	1,014,437	814,927
All destination markets	3,424,556	3,258,542	2,751,780

Table continued on next page.

Table VII-5--Continued
Tires for motor vehicles: Exports from Korea, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Unit value (dollars per tire)		
United States	63.45	65.08	61.54
Russia	43.26	42.75	36.39
Germany	66.44	58.57	58.33
Saudi Arabia	54.22	54.91	55.40
UAE	48.06	47.76	38.10
Netherlands	52.72	53.47	63.05
United Kingdom	53.65	51.00	50.90
Mexico	54.91	54.52	56.57
Turkey	62.00	65.08	56.29
All other destination markets	52.46	51.79	52.46
All destination markets	56.48	56.42	55.34
	Share of quantity (percent)		
United States	33.3	33.8	36.3
Russia	5.2	5.8	5.3
Germany	3.9	4.2	5.1
Saudi Arabia	4.5	5.7	4.9
UAE	2.6	4.1	4.1
Netherlands	3.5	3.4	3.9
United Kingdom	4.0	3.7	3.7
Mexico	3.7	3.7	2.9
Turkey	1.8	1.7	2.6
All other destination markets	37.5	33.9	31.2
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2020 data.

Source: Official exports statistics under HS subheading 4011.10 and 4011.20 as reported by Korea Trade Statistics Promotion Institute in the Global Trade Atlas database, accessed April 12, 2021.

The industry in Taiwan

The Commission issued foreign producers' or exporters' questionnaires to nine firms believed to produce and/or export PVLT tires from Taiwan.[8] Usable responses to the Commission's questionnaire were received from six firms (see table VII-6).[9] These firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Taiwan in 2020.[10] According to estimates requested of the responding Taiwanese producers, the production of PVLT tires in Taiwan reported in questionnaires accounts for approximately *** percent of overall production of PVLT tires in Taiwan in 2020.[11] Table VII-6 presents information on the PVLT tire operations of the responding producers and exporters in Taiwan.

[8] These firms were identified through a review of information submitted in the petition and presented in third-party sources.

[9] Bridgestone Taiwan is related to U.S. producer and U.S. importer Bridgestone Americas Tire Operations LLC, as well as foreign producers Bridgestone Tire Manufacturing Vietnam LLC and Thai Bridgestone Co., Ltd. These four firms have also submitted questionnaires for these investigations. Cheng Shin is related to U.S. importer Cheng Shin Rubber USA Inc. dba Maxxis International USA and foreign producer Maxxis International (Thailand) Co., Ltd., both of which submitted questionnaires for these investigations. Federal Corporation ("Federal") is related to U.S. importer Federal Tire North America LLC, which submitted a questionnaire for these investigations. Hwa Fong is related to U.S. importer Hwa Fong Rubber USA Inc. dba Duro Tire and Wheel, which also submitted a questionnaire for these investigations. Kenda is related to U.S. importers American Kenda Rubber Industrial Co. Ltd. and American Tire and Wheel (a division of Americana Development Inc.), as well as foreign producer Kenda Rubber (Vietnam) Co. Ltd. All three firms submitted questionnaires for these reviews. Of the six Taiwanese firms, Nankang was the only one not to be related to an U.S. producer, U.S. importer, or foreign producer participating in these investigations.

[10] Taiwan exports to the United States in 2019 were *** million tires (see table VII-6) and U.S. imports from Taiwan in 2019 were 10.0 million tires (see table IV-2). Accordingly, these firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Taiwan in 2019.

[11] *** estimated that they accounted for *** percent, respectively, of PVLT tire production in Taiwan in 2020. *** estimated that it accounted for *** percent of PVLT tire production in Taiwan in 2020 for its final phase response, but estimated that it accounted for *** percent of PVLT tire production in Taiwan in 2019 in its preliminary phase response. *** did not respond to this question for its final phase response, but estimated that it accounted for *** percent of PVLT tire production in Taiwan in 2019 in its preliminary phase response.

Table VII-6
PVLT tires: Summary data for producers in Taiwan, 2020

Firm	Production (1,000 tires)	Share of reported production (percent)	Exports to the United States (1,000 tires)	Share of reported exports to the United States (percent)	Total shipments (1,000 tires)	Share of firm's total shipments exported to the United States (percent)
Bridgestone Taiwan	***	***	***	***	***	***
Cheng Shin	***	***	***	***	***	***
Federal Corporation	***	***	***	***	***	***
Hwa Fong	***	***	***	***	***	***
Kenda	***	***	***	***	***	***
Nankang	***	***	***	***	***	***
All firms	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

As presented in table VII-7 producers in Taiwan reported several operational and organizational changes since January 1, 2018.

Table VII-7
PVLT tires: Taiwanese producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changes in operations
Consolidations:	
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Operations on PVLT tires

Table VII-8 presents information on the PVLT tires operations of the responding producers and exporters in Taiwan. Capacity in Taiwan increased *** percent during 2018-20. Production in Taiwan, however, decreased *** percent during the same period. Capacity and production are projected to decrease *** percent and *** percent, respectively, during 2020-22. Capacity utilization decreased by *** percentage points during 2018-20 and is projected to decrease *** percentage points during 2020-2022. End-of-period inventories in Taiwan decreased *** percent during 2018-20 and are projected to decrease by *** percent during 2020-2022.

Home market shipments accounted for between *** percent of total shipments during 2018-20. Total export shipments accounted for between *** percent of total exports during the POI. Exports to the United States accounted for between *** percent of total shipments, increasing by *** percent during the POI. Exports to all other markets accounted for between *** percent of total shipments, decreasing by *** percent during the POI. Taiwanese export shipments to the United States and all other markets are projected to decrease by *** percent and increase by *** percent, respectively, during 2020-22. The projected decrease in export shipments to the United States is driven by considerable reductions in shipments from 2020 to projected 2022 reported by ***, which combined reported *** tires in shipments to the United States in 2020 but *** projected shipments in 2022.[12]

Table VII-8
PVLT tires: Data for producers in Taiwan, 2018-20 and projected 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Quantity (1,000 tires)				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

Table continued on next page.

[12] Reported bases for these firms' projections include ***.

*** was the only firm to report higher projected U.S. shipments in 2022 than was reported in 2020, with shipments projected to increase by *** tires from 2020-22 (equivalent to *** percent of its reported *** U.S. shipments in 2020).

Table VII-8--Continued
PVLT tires: Data for producers in Taiwan, 2018-20 and projected 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Ratios and shares (percent)				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

Table VII-9 shows overall capacity and production on the same equipment as in-scope PVLT tires production by producers in Taiwan during 2018-20. Three firms, ***, reported that they were able to switch production between PVLT tires and other products using the same machinery. ***, which accounted for the majority of out-of-scope production in 2020, identified these other products as ***. *** identified these other products as ***. *** reported these other products as ***.

Table VII-9
PVLT tires: Taiwanese producers' overall capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Overall capacity	***	***	***
Production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Exports

According to GTA, the leading export markets for PVLT tires from Taiwan are the United States, Japan, and Canada (table VII-10). During 2020, the United States was the top export market for PVLT tires from Taiwan, accounting for 62.1 percent of Taiwan's total exports. Japan and Canada accounted for 8.4 percent and 4.0 percent of Taiwan's total exports, respectively.

Table VII-10
Tires for motor vehicles: Exports from Taiwan, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
United States	7,750	8,796	10,407
Japan	2,436	2,108	1,402
Canada	1,743	1,558	671
Germany	555	555	558
Australia	494	411	490
Saudi Arabia	265	435	255
UAE	180	280	242
United Kingdom	210	269	235
Netherlands	238	215	219
All other destination markets	3,197	2,955	2,287
All destination markets	17,068	17,582	16,767
	Value (1,000 dollars)		
United States	331,449	379,348	458,251
Japan	70,847	64,383	50,615
Canada	51,841	50,791	25,009
Germany	18,467	16,924	18,294
Australia	24,004	21,049	29,318
Saudi Arabia	11,598	18,072	10,823
UAE	7,539	10,049	7,868
United Kingdom	7,128	8,800	7,756
Netherlands	10,001	8,685	9,157
All other destination markets	128,457	122,995	95,442
All destination markets	661,330	701,095	712,533

Table continued on next page.

Table VII-10--Continued
Tires for motor vehicles: Exports from Taiwan, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Unit value (dollars per tire)		
United States	42.77	43.13	44.03
Japan	29.08	30.54	36.10
Canada	29.74	32.61	37.27
Germany	33.30	30.48	32.79
Australia	48.59	51.17	59.83
Saudi Arabia	43.76	41.51	42.43
UAE	41.94	35.95	32.56
United Kingdom	33.90	32.76	32.96
Netherlands	42.08	40.41	41.74
All other destination markets	40.18	41.62	41.73
All destination markets	38.75	39.87	42.50
	Share of quantity (percent)		
United States	45.4	50.0	62.1
Japan	14.3	12.0	8.4
Canada	10.2	8.9	4.0
Germany	3.2	3.2	3.3
Australia	2.9	2.3	2.9
Saudi Arabia	1.6	2.5	1.5
UAE	1.1	1.6	1.4
United Kingdom	1.2	1.5	1.4
Netherlands	1.4	1.2	1.3
All other destination markets	18.7	16.8	13.6
All destination markets	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 4011.10 and 4011.20 as reported by Taiwan Directorate General of Customs in the Global Trade Atlas database, accessed April 12, 2021.

The industry in Thailand

The Commission issued foreign producers' or exporters' questionnaires to 20 firms believed to produce and/or export PVLT tires from Thailand.[13] Usable responses to the Commission's questionnaire were received from 17 firms.[14] These firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Thailand in 2020.[15] According to estimates requested of the responding Thai producers, the production of PVLT tires in Thailand reported in questionnaires accounts for all production of PVLT tires in Thailand in 2020.[16] Table VII-11 presents information on the PVLT tires operations of the responding producers and exporters in Thailand.

[13] These firms were identified through a review of information submitted in the petition and presented in third-party sources.

[14] Bridgestone Thailand is related to U.S. producer and U.S. importer Bridgestone Americas Tire Operations LLC, as well as foreign producers Bridgestone Taiwan Co., Ltd. and Bridgestone Tire Manufacturing Vietnam LLC. These four firms have also submitted questionnaires for these investigations. Continental is related to U.S. producer and U.S. importer Continental Tire the Americas, LLC, each also submitting a questionnaire for these investigations. Goodyear Thailand is related to U.S. producer and U.S. importer The Goodyear Tire and Rubber Company (USA), both which have submitted a questionnaire response for these investigations. Maxxis is related to U.S. importer Cheng Shin Rubber USA Inc. dba Maxxis International USA and foreign producer Cheng Shin Rubber Ind. Co. Ltd./Maxxis International, both of which submitted questionnaires for these investigations. Michelin is related to U.S. producer and U.S. importer Michelin North America, Inc, each of which submitted a questionnaire response for these investigations. Sentury is related to U.S. importer Sentury Tire USA Inc., which also submitted a questionnaire for these investigations. Sumitomo Thailand is related to U.S. producer and U.S. importer Sumitomo Rubber North America, Inc., each of which provide a questionnaire for these investigations. Vee Tyre is related to U.S. importer Vee Tyre Rubber Co., Ltd., who submitted a questionnaire for these investigations. Yokohama Thailand is related to U.S. producer and importer, Yokohama Tire Corporation which submitted questionnaires for these investigations.

[15] Thailand exports to the United States in 2019 were *** million tires (see table VII-11) and U.S. imports from Thailand in 2019 were 44.5 million tires (see table IV-3). Accordingly, these firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Thailand in 2020.

[16] The estimation is based on combined responses from 17 questionnaires, the sum of which exceeded 100 percent.

Table VII-11
PVLT tires: Summary data for producers in Thailand, 2020

Firm	Production (1,000 tires)	Share of reported production (percent)	Exports to the United States (1,000 tires)	Share of reported exports to the United States (percent)	Total shipments (1,000 tires)	Share of firm's total shipments exported to the United States (percent)
Bridgestone Thailand	***	***	***	***	***	***
Continental	***	***	***	***	***	***
Deestone	***	***	***	***	***	***
General Rubber	***	***	***	***	***	***
Goodyear Thailand	***	***	***	***	***	***
Linglong	***	***	***	***	***	***
Maxxis	***	***	***	***	***	***
Michelin	***	***	***	***	***	***
Otani	***	***	***	***	***	***
Prinx Chengshan	***	***	***	***	***	***
S.R. Tyres	***	***	***	***	***	***
Sentury	***	***	***	***	***	***
Siam	***	***	***	***	***	***
Sumitomo Thailand	***	***	***	***	***	***
Vee Tyre	***	***	***	***	***	***
Yokohama Thailand	***	***	***	***	***	***
Zhongce	***	***	***	***	***	***
All firms	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

As presented in table VII-12 producers in Thailand reported several operational and organizational changes since January 1, 2018.

Table VII-12
PVLT tires: Thai producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changes in operations
Plant openings:	
***	***
***	***
***	***
Relocations:	
***	***
Expansions:	
***	***

Table continued on next page.

Table VII-12--Continued
PVLT tires: Thai producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changes in operations
Expansions (Continued):	
***	***
***	***
***	***
***	***
Prolonged shutdowns or curtailments:	
***	***
***	***
***	***
***	***
***	***
***	***
Revised labor agreements:	
***	***

Table continued on next page.

Table VII-12--Continued
PVLT tires: Thai producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changes in operations
Other:	
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Operations on PVLT tires

Table VII-13 presents information on the PVLT tires operations of the responding producers and exporters in Thailand. Capacity in Thailand increased *** percent during 2018-20 and it is expected to continue to increase by *** percent during 2020-22. Production, however, decreased by *** percent during the POI but it is projected to increase by *** percent during 2020-22. Capacity utilization decreased *** percentage points during 2018-20 but it is projected to increase by *** percentage points during 2020-22. End-of-period inventories in Thailand increased by *** percent during 2018-20 and are projected to continue to increase by *** percent during 2020-22.

Home market shipments accounted for between *** percent of total shipments during 2018-20. Export shipments accounted for between *** percent of total shipments during the POI. Exports to the United States accounted for between *** percent of total shipments, increasing by *** percent during the from 2018 to 2020. Exports to all other markets accounted for between *** percent of total shipments, decreasing by *** percent from 2018 to 2020. Thai export shipments to the United States are projected to increase by *** percent during 2020-22.[17] Thai exports to all other markets are expected to increase by *** percent during 2020-22.

[17] Over the period of investigation, SRUSA, parent to Sumitomo Thailand, ***, has invested in the production of tires in the United States. It invested $170 million in its Tonawanda, New York facility. SRUSA projects that increased U.S. production will diminish the quantity of imports required by Sumitomo Thailand. Sumitomo's postconference brief, June 8, 2020, p. 2 and 31. In its questionnaire response, Sumitomo Thailand projected that its export shipments to the United States would increase *** percent from 2020-22.

Table VII-13
PVLT tires: Data for producers in Thailand, 2018-20 and projected 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Quantity (1,000 tires)				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	Ratios and shares (percent)				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

Table VII-14 shows overall capacity and production on the same equipment as in-scope PVLT tires production by producers in Thailand during 2018-20. Six firms reported that they were able to switch productions between PVLT tires and other products using the same machinery. *** stated that these other products include ***. *** stated ***. *** stated ***. *** stated ***. *** stated such products include ***.

Table VII-14
PVLT tires: Thai producers' overall capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Overall capacity	***	***	***
Production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Exports

According to GTA, the leading export markets for PVLT tires from Thailand are the United States, Japan, and Australia (table VII-15). During 2020, the United States was the top export market for PVLT tires from Thailand, accounting for 56.6 percent of Thailand's total exports. Japan and Australia accounted for 4.6 percent and 4.0 percent of Thailand's total exports, respectively.

Table VII-15
Tires for motor vehicles: Exports from Thailand, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
United States	43,227	50,146	50,846
Japan	4,468	4,306	4,164
Australia	3,372	3,589	3,568
Malaysia	4,239	3,455	3,292
Korea	1,459	2,232	2,501
Vietnam	2,117	2,343	1,976
China	2,054	1,465	1,650
Egypt	1,980	1,565	1,516
UAE	1,319	1,281	1,251
All other destination markets	26,107	24,801	19,149
All destination markets	90,342	95,185	89,912
	Value (1,000 dollars)		
United States	1,964,934	2,518,240	2,555,327
Japan	165,225	176,850	172,559
Australia	189,795	217,409	214,845
Malaysia	197,096	170,916	148,248
Korea	97,296	161,828	178,422
Vietnam	167,528	179,723	155,178
China	99,021	73,234	85,777
Egypt	94,992	82,310	69,765
UAE	66,270	66,532	60,040
All other destination markets	1,346,159	1,424,696	1,105,840
All destination markets	4,388,316	5,071,739	4,746,001

Table continued on next page.

Table VII-15--Continued
Tires for motor vehicles: Exports from Thailand, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Unit value (dollars per tire)		
United States	45.46	50.22	50.26
Japan	36.98	41.07	41.44
Australia	56.29	60.58	60.22
Malaysia	46.49	49.47	45.04
Korea	66.68	72.51	71.34
Vietnam	79.13	76.70	78.54
China	48.22	50.00	52.00
Egypt	47.97	52.58	46.03
UAE	50.22	51.92	47.99
All other destination markets	51.56	57.44	57.75
All destination markets	48.57	53.28	52.78
	Share of quantity (percent)		
United States	47.8	52.7	56.6
Japan	4.9	4.5	4.6
Australia	3.7	3.8	4.0
Malaysia	4.7	3.6	3.7
Korea	1.6	2.3	2.8
Vietnam	2.3	2.5	2.2
China	2.3	1.5	1.8
Egypt	2.2	1.6	1.7
UAE	1.5	1.3	1.4
All other destination markets	28.9	26.1	21.3
All destination markets	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 4011.10 and 4011.20 as reported by Thai Customs Department in the Global Trade Atlas database, accessed April 12, 2021.

The industry in Vietnam

The Commission issued foreign producers' or exporters' questionnaires to 11 firms believed to produce and/or export PVLT tires from Vietnam.[18] Usable responses to the Commission's questionnaire were received from five firms (table VII-16).[19] These firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Vietnam in 2020.[20] [21] According to estimates requested of the responding Vietnamese producers, the production of PVLT tires in Vietnam reported in questionnaires accounts for approximately *** percent of overall production of PVLT tires in Vietnam in 2020.[22] Table VII-16 presents information on the PVLT tires operations of the responding producers and exporters in Vietnam.

[18] These firms were identified through a review of information submitted in the petition and presented in third-party sources.

[19] Bridgestone Vietnam is related to U.S. producer and U.S. importer Bridgestone Americas Tire Operations LLC, as well as foreign producers Bridgestone Taiwan Co., Ltd. and Thai Bridgestone Co., Ltd. These four firms have also submitted questionnaires for these investigations. Kenda Vietnam is related to U.S. importers American Kenda Rubber Ind. Co., Ltd. and Americana Tire and Wheel Inc., as well as foreign producer Kenda Rubber Ind. Co., Ltd. (Taiwan). All three related firms have submitted questionnaires for these investigations. Kumho Vietnam is related to U.S. producer Kumho Tire Georgia, Inc., U.S. importer Kumho Tire U.S.A., Inc., and Korean producer Kumho Tire Co., Inc. All three related firms have submitted questionnaires for these investigations.

[20] Vietnam exports to the United States in 2019 were *** million tires (see table VII-16) and U.S. imports from Vietnam in 2019 were 13.8 million tires (see table IV-2). Accordingly, these firms' exports to the United States accounted for approximately *** percent of U.S. imports of PVLT tires from Vietnam in 2020.

[21] Major Vietnamese producers *** did not participate in these investigations. Petitioner's postconference brief, June 8, 2020, p. 50.

[22] *** estimated that they accounted for *** percent, respectively, of PVLT tire production in Vietnam in 2020. *** estimated that it accounted for *** percent of PVLT tire production in Vietnam in 2020 for its final phase response, but estimated that it accounted for *** percent of PVLT tire production in Vietnam in 2019 in its preliminary phase response.

Table VII-16
PVLT tires: Summary data for producers in Vietnam, 2020

Firm	Production (1,000 tires)	Share of reported production (percent)	Exports to the United States (1,000 tires)	Share of reported exports to the United States (percent)	Total shipments (1,000 tires)	Share of firm's total shipments exported to the United States (percent)
Bridgestone Vietnam	***	***	***	***	***	***
Danang	***	***	***	***	***	***
Kenda Vietnam	***	***	***	***	***	***
Kumho Vietnam	***	***	***	***	***	***
Sailun	***	***	***	***	***	***
All firms	***	***	***	***	***	***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

As presented in table VII-17, producers in Vietnam reported several operational and organizational changes since January 1, 2018.

Table VII-17
PVLT tires: Vietnamese producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changes in operations
Expansions:	
***	***
Prolonged shutdowns or curtailments:	
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Operations on PVLT tires

Table VII-18 presents information on the PVLT tires operations of the responding producers and exporters in Vietnam. Capacity and production in Vietnam increased by *** percent and *** percent, respectively, during 2018-20; and they are expected to continue to increase by *** percent and *** percent, respectively, during 2020-22. Capacity utilization decreased *** percentage points during 2018-20, but it is projected to increase *** percentage points from 2020 to 2022. End-of-period inventories increased by *** percent during the POI, and they are projected to continue to increase by *** percent during 2020-22.

Home market shipments accounted for between *** percent of total shipments during 2018-20. In contrast, export shipments accounted for between ***

*** percent of total shipments during the same period. Of these shipments, exports to the United States were the largest, accounting for between *** percent of total shipments from 2018 to 2020, increasing by *** percent. Exports to all other markets accounted for between *** percent of total shipments from 2018 to 2020, decreasing by *** percent. Reported projections indicate that Vietnamese exports to the United States will increase *** percent during 2020-22. Vietnamese exports to all other markets are projected to increase by *** percent during 2020-22.

Table VII-18
PVLT tires: Data for producers in Vietnam, 2018-20 and projected 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Quantity (1,000 tires)				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	Ratios and shares (percent)				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

Table VII-19 shows overall capacity and production on the same equipment as in-scope PVLT tires production by producers in Vietnam during 2018-20.Two firms, ***, reported that they were able to switch production between PVLT tires and other products using the same machinery. *** identified these other products as ***. *** stated ***.

Table VII-19
PVLT tires: Vietnamese producers' overall capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Overall capacity	***	***	***
Production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production:			
PVLT tires	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Exports

According to GTA, the leading export markets for PVLT tires from Vietnam by value are the United States, Canada, and Japan (table VII-20). During 2020, the United States was the top export market for PVLT tires from Vietnam, accounting for 67.0 percent of Vietnam's total exports by value. Canada and Japan accounted for 3.7 percent and 3.6 percent of Vietnam's total exports, respectively.

Table VII-20
Tires for motor vehicles: Exports from Vietnam, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Value (1,000 dollars)		
United States	452,418	552,479	672,540
Canada	21,563	23,606	36,629
Japan	41,383	32,582	35,932
Brazil	40,782	39,554	29,911
Australia	15,811	15,516	23,005
Malaysia	27,652	23,003	18,225
Spain	7,652	20,513	16,528
Germany	3,168	8,577	13,104
China	6,481	11,149	11,332
All other destination markets	152,157	177,752	146,316
All destination markets	769,067	904,729	1,003,522
	Share of value (percent)		
United States	58.8	61.1	67.0
Canada	2.8	2.6	3.7
Japan	5.4	3.6	3.6
Brazil	5.3	4.4	3.0
Australia	2.1	1.7	2.3
Malaysia	3.6	2.5	1.8
Spain	1.0	2.3	1.6
Germany	0.4	0.9	1.3
China	0.8	1.2	1.1
All other destination markets	19.8	19.6	14.6
All destination markets	100.0	100.0	100.0

Source: Official imports statistics of imports from Vietnam (constructed export statistics for Vietnam) under HS subheadings 4011.10 and 4011.20 as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed April 12, 2020.

Subject countries combined

Table VII-21 presents summary data on PVLT tires operations of the reporting subject producers in the subject countries. Capacity in subject countries increased by 0.7 percent during 2018-20 and it is projected to continue to increase by 10.1 percent during 2020-22. Production in subject countries decreased by 8.9 percent during the POI, however it is projected to increase by 19.5 percent during 2020-22. Capacity utilization decreased 8.3 percentage points during the period of investigation, but it is projected to increase 6.7 percentage points during 2020-22. End-of-period inventories increased by 30.8 percent during the POI, and they are projected to continue to increase by 11.8 percent during 2020-22.

Home market shipments accounted for between 24.2 percent and 25.7 percent of total shipments during 2018-20. Total exports accounted for between 74.3 percent and 75.8 percent of total shipments during 2018-20. Export shipments to the United States accounted for between 34.3 percent and 40.9 percent of total shipments, increasing by 6.1 percent during 2018-20. Export shipments to all other markets accounted for between 34.9 percent and 39.9 percent of total shipments, decreasing by 22.2 percent during 2018-20. Export shipments to the United States are projected to decrease by 7.0 percent during 2020-22. Export shipments to all other markets, however, are projected to increase by 50.3 percent during 2020-22.

Table VII-21
PVLT tires: Data on the industry in subject countries, 2018-20 and projected 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Quantity (1,000 tires)				
Capacity	251,968	250,099	253,702	261,188	279,383
Production	218,678	216,428	199,197	221,265	238,133
End-of-period inventories	15,182	15,995	19,860	20,653	22,203
Shipments:					
Home market shipments:					
Internal consumption/ transfers	4,931	4,538	4,004	4,609	4,858
Commercial home market shipments	51,453	48,138	43,115	49,808	54,374
Total home market shipments	56,383	52,677	47,120	54,417	59,232
Export shipments to:					
United States	75,240	80,030	79,858	75,189	74,247
All other markets	87,528	82,875	68,106	90,866	102,387
Total exports	162,769	162,906	147,964	166,055	176,634
Total shipments	219,152	215,582	195,084	220,472	235,866
	Ratios and shares (percent)				
Capacity utilization	86.8	86.5	78.5	84.7	85.2
Inventories/production	6.9	7.4	10.0	9.3	9.3
Inventories/total shipments	6.9	7.4	10.2	9.4	9.4
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	2.2	2.1	2.1	2.1	2.1
Commercial home market shipments	23.5	22.3	22.1	22.6	23.1
Total home market shipments	25.7	24.4	24.2	24.7	25.1
Export shipments to:					
United States	34.3	37.1	40.9	34.1	31.5
All other markets	39.9	38.4	34.9	41.2	43.4
Total exports	74.3	75.6	75.8	75.3	74.9
Total shipments	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. inventories of imported merchandise

Table VII-22 presents data on U.S. importers' reported inventories of PVLT tires. Inventories of PVLT tires from subject countries and nonsubject countries decreased by *** percent and *** percent, respectively, between 2018 and 2020.

Table VII-22
PVLT tires: U.S. importers' inventories, 2018-20

Item	Calendar year		
	2018	2019	2020
	Inventories (1,000 tires); Ratios (percent)		
Imports from Korea:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Taiwan:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Thailand:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Vietnam:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from subject sources:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from nonsubject sources:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from all import sources:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of PVLT tires from after December 31, 2020. These data are presented in table VII-23. Responding importers of PVLT tires reported that *** percent of arranged imports in 2021 are from subject sources.

Table VII-23
PVLT tires: Arranged imports, January 2021 through December 2021

Item	Period				
	Jan-Mar 2021	Apr-Jun 2021	Jul-Sept 2021	Oct-Dec 2021	Total
	Quantity (1,000 tires)				
Arranged U.S. imports from.--					
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Thailand	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Antidumping or countervailing duty orders in third-country markets

On January 15, 2014, Brazil imposed an antidumping duty on imports of tires for motor cars from Korea, Vietnam, Taiwan, Thailand and Ukraine. The amount of the duty in U.S. dollars per kilogram was $1.43 per kilogram for Taiwanese exporters. For Korea and Vietnam exporters the duty ranged from $0.14 to $2.56 per kilogram, and for Thai exporters it ranged from $1.32 to $1.35 per kilogram. Ukraine was assessed a duty rate of $1.23 per kilogram. On January 16, 2020, the antidumping duty measures were extended for a period of five years for Korea, Taiwan, and Thailand, while that of Ukraine was terminated, and that on the Republic of Korea immediately suspended.[23] [24]

[23] Global Trade Alert, https://www.globaltradealert.org/intervention/17100/anti-dumping/brazil-extension-of-definitive-antidumping-duty-on-imports-of-tires-for-motor-cars-from-chinese-taipei-the-republic-of-korea-and-thailand-termination-of-duties-on-imports-from-ukraine, retrieved June 19, 2020.

[24] Responses to Commission Foreign Producers' questionnaires.

Information on nonsubject countries

The global tire industry is made up of large multinational producers that are active throughout the world, with plants located in both the developed and developing nations. Global new tire sales figures as reported by some 75 international firms reflect a relatively level value of sales of approximately $160 billion in years 2018-19, an increase of more than 12 percent over $142 billion recorded in 2016. The 10 leading firms in tire sales in 2019 accounted for sales of $165 billion or 65 percent of the global total, led in order by Michelin of France, Bridgestone (Japan), Goodyear (U.S), Continental (Germany), Sumitomo (Japan), Pirelli (Italy), Hankook (Korea), Yokohama (Japan), Maxxis (Taiwan), and Zhongce (China). Altogether, the 75 reported global tire firms are headquartered in 22 countries, led by 27 entities in China.[25]

Data on global exports of PVLT tires are presented in table VII-24. In 2020, China, Germany, Japan, and four European countries were identified as the leading nonsubject global exporters of PVLT tires by value. Of those countries reported, China, Germany, and Japan accounted for 20.1 percent, 7.7 percent, and 4.1 percent, respectively, while Poland and the Netherlands accounted for 3.6 percent and 3.5 percent, respectively, of global exports by value. China accounted for a dominant 25.4 percent of global exports by value among nonsubject countries. The four subject countries accounted for 16.2 percent of total exports.

[25] Rubber and Plastics News, "2020 Global Tire Company Rankings," December 28, 2020.

Table VII-24
Tires for motor vehicles: Global exports by exporter, 2018-20

Exporter	Calendar year		
	2018	2019	2020
	Value (1,000 dollars)		
United States	3,606,134	3,379,347	2,595,372
Korea	3,424,556	3,258,542	2,751,780
Taiwan	661,330	701,095	712,533
Thailand	4,388,316	5,071,739	4,746,001
Vietnam	769,067	904,729	1,003,522
China	13,239,113	12,922,542	11,484,843
Germany	5,506,068	5,166,968	4,410,961
Japan	2,983,094	2,947,351	2,323,900
Poland	2,177,956	2,135,963	2,035,305
Netherlands	2,175,596	2,087,145	1,997,868
France	2,010,839	1,986,031	1,669,373
Spain	1,883,096	1,791,041	1,650,880
All other exporters	23,955,250	23,521,091	19,615,537
All reporting exporters	66,780,415	65,873,587	56,997,874
	Share of value (percent)		
United States	5.4	5.1	4.6
Korea	5.1	4.9	4.8
Taiwan	1.0	1.1	1.3
Thailand	6.6	7.7	8.3
Vietnam	1.2	1.4	1.8
China	19.8	19.6	20.1
Germany	8.2	7.8	7.7
Japan	4.5	4.5	4.1
Poland	3.3	3.2	3.6
Netherlands	3.3	3.2	3.5
France	3.0	3.0	2.9
Spain	2.8	2.7	2.9
All other exporters	35.9	35.7	34.4
All reporting exporters	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official export statistics and official import statistics of imports from Vietnam (constructed export statistics for Vietnam) under HS subheadings 4011.10 and 4011.20 reported by various national statistical authorities and in the Global Trade Atlas (GTA) database, accessed April 12, 2021.

China has the largest global annual production capability for tires, peaking at some 1.1 billion production units during the 2013-14 period,[26] but a current surplus volume potential of around 300 million units is presently constrained by antidumping and countervailing duties, compounded by additional U.S. Section 301 Trade Act tariffs of 25 percent in force for an indefinite period.[27] [28] The China Rubber Industry Association (CRIA) has published guidelines for the rubber industry's development from 2021 to 2025. Total annual production of 704 million units is planned for the car, truck, agricultural, aircraft and OTR sectors by 2025, of which 96% will be radial. Of this total, 527 million units of radial passenger tire production is planned.[29]

China, Europe, and the United States in order of volume are the leading participants in the emerging electric vehicle (EV) markets. In 2019, there were some 7.2 million pure battery (BEV) and plug-in hybrid (PHEV) vehicles on the road globally compared to 2.3 million in 2017, more than a 3-fold increase.[30] [31] A continuation of exponential growth in EVs is presenting challenges to new tire design and shipments because of the heavier weight of EV batteries coupled with the higher torque (acceleration) of EV vehicles.[32]

---

[26] *Statista*, https://www.statista.com/statistics/279223/tire-production-in-china/; IBISWorld, https://www.ibisworld.com/china/market-research-reports/tire-manufacturing-industry/, retrieved June 24, 2020.

[27] Passenger Vehicle and Light Truck Tires from China, Inv. Nos. 701-TA-522 and 731-TA-1258 (Review), USITC Publication 5158, February 2021.

[28] Truck and Bus Tires from China, Inv. Nos. 701-TA-556 and 731-TA-1311 (Final) (Remand), USITC Publication 4877, April 2019.

[29] Ho, Jane, Tire Business, "China Publishes 2025 Rubber Industry Production Development Goals," December 4, 2020.

[30] International Energy Agency (IEA), "Global EV Outlook 2020," June 2020, https://www.iea.org/reports/global-ev-outlook-2020, retrieved April 24, 2021.

[31] Horowitz, Coffin, and Taylor, "Supply Chain for EV Batteries: 2020 Trade and Value-added Update," Office of Industries Staff Working Paper ID-072, January 2021. https://www.usitc.gov/sites/default/files/publications/332/working_papers/supply_chain_for_ev_batteries_2020_trade_and_value-added_010721-compliant.pdf, retrieved April 5, 2021.

[32] Butcher, Laurence, "Addressing the challenges of EV tires," July 28, 2020, https://www.tiretechnologyinternational.com/features/addressing-the-challenges-of-ev-tires.html, retrieved April 30, 2021.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
85 FR 29972, May 19, 2020	*Passenger Vehicle and Light Truck Tires From Korea, Taiwan, Thailand, and Vietnam; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-05-19/pdf/2020-10669.pdf
85 FR 32013, May 28, 2020	*Notice of Extension of the Deadline for Determining the Adequacy of the Antidumping and Countervailing Duty Petitions: Passenger Vehicle and Light Truck Tires From Korea, Taiwan, Thailand, and Vietnam*	https://www.govinfo.gov/content/pkg/FR-2020-05-28/pdf/2020-11451.pdf
85 FR 35442, June 10, 2020	*Passenger Vehicle and Light Truck Tires From Korea, Taiwan, Thailand, and Vietnam; Revised Schedule for the Subject Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-06-10/pdf/2020-12512.pdf
85 FR 38850, June 29, 2020	*Passenger Vehicle and Light Truck Tires From the Socialist Republic of Vietnam: Initiation of Countervailing Duty Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-06-29/pdf/2020-13957.pdf
85 FR 38854, June 29, 2020	*Passenger Vehicle and Light Truck Tires From the Republic of Korea, Taiwan, Thailand, and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-06-29/pdf/2020-13958.pdf
85 FR 44322, July 22, 2020	*Passenger Vehicle and Light Truck Tires From Korea, Taiwan, Thailand, and Vietnam*	https://www.govinfo.gov/content/pkg/FR-2020-07-22/pdf/2020-15889.pdf
85 FR 71607, November 10, 2020	*Passenger Vehicle and Light Truck Tires From the Socialist Republic of Vietnam: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2020-11-10/pdf/2020-24913.pdf
86 FR 501, January 6, 2021	*Passenger Vehicle and Light Truck Tires From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.govinfo.gov/content/pkg/FR-2021-01-06/pdf/2020-29299.pdf

Citation	Title	Link
86 FR 504, January 6, 2021	*Passenger Vehicle and Light Truck Tires From the Socialist Republic of Vietnam: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.govinfo.gov/content/pkg/FR-2021-01-06/pdf/2020-29301.pdf
86 FR 508, January 6, 2021	*Passenger Vehicle and Light Truck Tires From Taiwan: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.govinfo.gov/content/pkg/FR-2021-01-06/pdf/2020-29303.pdf
86 FR 517, January 6, 2021	*Passenger Vehicle and Light Truck Tires From Thailand: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.govinfo.gov/content/pkg/FR-2021-01-06/pdf/2020-29300.pdf
86 FR 7561, January 29, 2021	*Passenger Vehicle and Light Truck Tires From Korea, Taiwan, Thailand, and Vietnam; Scheduling of the Final Phase of Countervailing Duty and Anti-Dumping Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2021-01-29/pdf/2021-01983.pdf
86 FR 28548, May 27, 2021.	*Passenger Vehicle and Light Truck Tires From Thailand: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2021-05-27/pdf/2021-11264.pdf
86 FR 28559, May 27, 2021.	*Passenger Vehicle and Light Truck Tires From the Socialist Republic of Vietnam: Final Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2021-05-27/pdf/2021-11266.pdf
86 FR 28563, May 27, 2021.	*Passenger Vehicle and Light Truck Tires From Taiwan: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2021-05-27/pdf/2021-11263.pdf
86 FR 28566, May 27, 2021.	*Passenger Vehicle and Light Truck Tires From the Socialist Republic of Vietnam: Final Affirmative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2021-05-27/pdf/2021-11265.pdf
86 FR 28569, May 27, 2021.	*Passenger Vehicle and Light Truck Tires From the Republic of Korea: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2021-05-27/pdf/2021-11262.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared in the United States International Trade Commission's hearing via videoconference:

Subject:	Passenger Vehicle and Light Truck Tires from Korea, Taiwan, Thailand, and Vietnam
Inv. Nos.:	701-TA-647 and 731-TA-1517-1520 (Final)
Date and Time:	May 25, 2021 - 9:30 a.m.

CONGRESSIONAL APPEARANCES:

The Honorable Mike Braun, United States Senator, Indiana

The Honorable Raphael G. Warnock, United States Senator, Georgia

The Honorable Sanford D. Bishop, U.S. Representative, 2nd District, Georgia

The Honorable Brian Higgins, U.S. Representative, 26th District, New York

The Honorable Mark E. Green, U.S. Representative, 7th District, Tennessee

FOREIGN REPRESENTATIVE APPEARANCE:

Taipei Economic and Cultural Representative Office in the United States
Washington, DC

Andy Tsai, Senior Officer

OPENING REMARKS:

Petitioner (**Elizabeth J. Drake**, Schagrin Associates)
Respondents (**Bernd G. Janzen**, Akin Gump Strauss Hauer & Feld LLP)

In Support of the Imposition of
Antidumping and Countervailing Duty Orders:

Schagrin Associates
Washington, DC
on behalf of

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC ("USW")

Thomas M. Conway, International President, USW

Kevin Johnsen, Chair, USW Rubber and Plastics Industry Council

Terry Brewington, President, USW Local 959L

Mickey Ray Williams, President, USW Local 12L

Terry Cunningham, President, USW Local 715L

Brian Brubaker, President, USW Local 207L

Kerry Halter, President, USW Local 752L

Roger B. Schagrin)
Elizabeth J. Drake) – OF COUNSEL
Nicholas J. Birch)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Doyle, Barlow & Mazard PLLC
Washington, DC
on behalf of

Atturo Tire Corp ("Atturo")

Michael Mathis, President, Atturo

Erik Warga, Economic Consultant

Camelia C. Mazard) – OF COUNSEL

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Wilmer Cutler Pickering Hale and Dorr LLP
Washington, DC
on behalf of

Hankook Tire & Technology Co., Ltd.
Hankook Tire America Corp.
Hankook Tire Manufacturing Tennessee, LP
(collectively, "Hankook")

G. Curtis Brison, Vice President, U.S. Passenger Car and Light Truck Sales, Hankook

Patrick J. McLain)
) – OF COUNSEL
Stephanie E. Hartmann)

White & Case LLP
Washington, DC
on behalf of

NEXEN Tire Corporation ("NEXEN")

Michael Haupt, Vice President, Development and Sales, NEXEN

David E. Bond)
William J. Moran) – OF COUNSEL
Ron Kendler)

Arent Fox LLP
Washington, DC
on behalf of

Nankang Rubber Tire Corp., Ltd. ("Nankang")

Nancy A. Noonan) – OF COUNSEL

Akin Gump Strauss Hauer & Feld LLP
Washington, DC
on behalf of

Sumitomo Rubber (Thailand), Ltd. ("SRT")
Sumitomo Rubber North America, Inc. ("SRNA")
Sumitomo Rubber USA, LLC ("SRUSA")

Richard Smallwood, President and Chief Executive Officer, SRNA

Andrew Szamosszegi, Principal, Capital Trade Inc.

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Travis Pope, Project Manager, Capital Trade Inc.

Bernd G. Janzen)
Margaret C. Marsh)
) – OF COUNSEL
Julia K. Eppard)
Sydney L. Stringer)

Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP
Washington, DC
on behalf of

Sentury Tire (Thailand) Co. Ltd.; Sentury Tire USA Inc.; General Rubber (Thailand) Co., Ltd.; Zhongce Rubber (Thailand) Co., Ltd.; Prinx Chengshan Tire (Thailand) Co., Ltd.; Linglong International Tyre (Thailand) Co., Ltd.; Linglong Americas Inc.

Victor Li, Executive Vice President, Tireco, Inc.

Ned H. Marshak)
Jordan C. Kahn) – OF COUNSEL
Kavita Mohan)

REBUTTAL/CLOSING REMARKS:

Petitioner (**Roger B. Schagrin**, Schagrin Associates)
Respondents (**Ned H. Marshak**, Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP)

-END-

APPENDIX C

SUMMARY DATA

All U.S. producers

Table C-1
PVLT tires: Summary data concerning the U.S. market, 2018-20
(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. consumption quantity:						
Amount	314,063	320,842	280,660	▼(10.6)	▲2.2	▼(12.5)
Producers' share (fn1)	44.6	43.3	39.2	▼(5.3)	▼(1.3)	▼(4.0)
Importers' share (fn1):						
Korea	6.2	6.0	6.1	▼(0.1)	▼(0.2)	▲0.1
Taiwan	2.7	2.7	3.6	▲0.9	▲0.1	▲0.8
Thailand	12.9	14.1	15.9	▲2.9	▲1.2	▲1.7
Vietnam	3.4	3.8	4.9	▲1.5	▲0.4	▲1.1
Subject sources	25.1	26.6	30.4	▲5.3	▲1.5	▲3.8
Nonsubject sources	30.3	30.1	30.3	▲0.0	▼(0.2)	▲0.2
All import sources	55.4	56.7	60.8	▲5.3	▲1.3	▲4.0
U.S. consumption value:						
Amount	22,990,728	23,437,017	20,121,128	▼(12.5)	▲1.9	▼(14.1)
Producers' share (fn1)	55.6	53.9	50.8	▼(4.8)	▼(1.7)	▼(3.1)
Importers' share (fn1):						
Korea	5.6	5.5	5.3	▼(0.3)	▼(0.1)	▼(0.1)
Taiwan	1.6	1.8	2.4	▲0.8	▲0.1	▲0.7
Thailand	8.3	9.3	11.0	▲2.7	▲1.0	▲1.7
Vietnam	2.0	2.2	3.0	▲1.0	▲0.2	▲0.8
Subject sources	17.5	18.8	21.8	▲4.3	▲1.2	▲3.1
Nonsubject sources	26.9	27.4	27.4	▲0.5	▲0.5	▼(0.0)
All import sources	44.4	46.1	49.2	▲4.8	▲1.7	▲3.1
U.S. imports from:						
Korea:						
Quantity	19,327	19,142	17,077	▼(11.6)	▼(1.0)	▼(10.8)
Value	1,289,189	1,279,148	1,073,819	▼(16.7)	▼(0.8)	▼(16.1)
Unit value	$66.70	$66.82	$62.88	▼(5.7)	▲0.2	▼(5.9)
Ending inventory quantity	***	***	***	▲***	▲***	▲***
Taiwan:						
Quantity	8,351	8,810	10,013	▲19.9	▲5.5	▲13.7
Value	375,745	410,795	490,901	▲30.6	▲9.3	▲19.5
Unit value	$44.99	$46.63	$49.03	▲9.0	▲3.6	▲5.1
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Thailand:						
Quantity	40,595	45,282	44,496	▲9.6	▲11.5	▼(1.7)
Value	1,905,391	2,178,917	2,213,767	▲16.2	▲14.4	▲1.6
Unit value	$46.94	$48.12	$49.75	▲6.0	▲2.5	▲3.4
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Vietnam:						
Quantity	10,634	12,147	13,808	▲29.8	▲14.2	▲13.7
Value	461,745	526,394	611,956	▲32.5	▲14.0	▲16.3
Unit value	$43.42	$43.34	$44.32	▲2.1	▼(0.2)	▲2.3
Ending inventory quantity	***	***	***	▼***	▼***	▼***

Table continued on next page.

Table C-1--Continued
PVLT tires: Summary data concerning the U.S. market, 2018-20
(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. imports from--Continued:						
Subject sources:						
Quantity	78,908	85,381	85,393	▲8.2	▲8.2	▲0.0
Value	4,032,070	4,395,253	4,390,443	▲8.9	▲9.0	▼(0.1)
Unit value	$51.10	$51.48	$51.41	▲0.6	▲0.7	▼(0.1)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Nonsubject sources:						
Quantity	95,166	96,590	85,119	▼(10.6)	▲1.5	▼(11.9)
Value	6,186,482	6,419,978	5,509,737	▼(10.9)	▲3.8	▼(14.2)
Unit value	$65.01	$66.47	$64.73	▼(0.4)	▲2.2	▼(2.6)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
All import sources:						
Quantity	174,074	181,970	170,512	▼(2.0)	▲4.5	▼(6.3)
Value	10,218,552	10,815,232	9,900,179	▼(3.1)	▲5.8	▼(8.5)
Unit value	$58.70	$59.43	$58.06	▼(1.1)	▲1.2	▼(2.3)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
U.S. producers':						
Average capacity quantity	188,358	189,781	181,631	▼(3.6)	▲0.8	▼(4.3)
Production quantity	155,275	152,544	116,843	▼(24.8)	▼(1.8)	▼(23.4)
Capacity utilization (fn1)	82.4	80.4	64.3	▼(18.1)	▼(2.1)	▼(16.0)
U.S. shipments:						
Quantity	139,989	138,871	110,148	▼(21.3)	▼(0.8)	▼(20.7)
Value	12,772,176	12,621,785	10,220,949	▼(20.0)	▼(1.2)	▼(19.0)
Unit value	$91.24	$90.89	$92.79	▲1.7	▼(0.4)	▲2.1
Export shipments:						
Quantity	15,697	14,869	10,979	▼(30.1)	▼(5.3)	▼(26.2)
Value	1,291,906	1,219,189	930,315	▼(28.0)	▼(5.6)	▼(23.7)
Unit value	$82.30	$81.99	$84.73	▲3.0	▼(0.4)	▲3.3
Ending inventory quantity	18,831	17,607	12,994	▼(31.0)	▼(6.5)	▼(26.2)
Inventories/total shipments (fn1)	12.1	11.5	10.7	▼(1.4)	▼(0.6)	▼(0.7)
Production workers	45,910	46,409	41,242	▼(10.2)	▲1.1	▼(11.1)
Hours worked (1,000s)	93,509	94,880	76,788	▼(17.9)	▲1.5	▼(19.1)
Wages paid ($1,000)	2,362,972	2,413,112	1,914,617	▼(19.0)	▲2.1	▼(20.7)
Hourly wages (dollars per hour)	$25.27	$25.43	$24.93	▼(1.3)	▲0.6	▼(2.0)
Productivity (tires per hour)	1.7	1.6	1.5	▼(8.4)	▼(3.2)	▼(5.4)
Unit labor costs	$15.22	$15.82	$16.39	▲7.7	▲4.0	▲3.6

Table continued on next page.

Table C-1--Continued
PVLT tires: Summary data concerning the U.S. market, 2018-20
(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. producers'--Continued:						
Net sales:						
Quantity	155,043	153,806	120,496	▼(22.3)	▼(0.8)	▼(21.7)
Value	13,981,659	13,889,511	11,084,729	▼(20.7)	▼(0.7)	▼(20.2)
Unit value	$90.18	$90.31	$91.99	▲2.0	▲0.1	▲1.9
Cost of goods sold (COGS)	9,494,292	9,523,304	7,632,740	▼(19.6)	▲0.3	▼(19.9)
Gross profit or (loss) (fn2)	4,487,368	4,366,207	3,451,988	▼(23.1)	▼(2.7)	▼(20.9)
SG&A expenses	1,478,887	1,529,599	1,380,231	▼(6.7)	▲3.4	▼(9.8)
Operating income or (loss) (fn2)	3,008,481	2,836,608	2,071,758	▼(31.1)	▼(5.7)	▼(27.0)
Net income or (loss) (fn2)	2,749,889	2,582,786	1,561,741	▼(43.2)	▼(6.1)	▼(39.5)
Capital expenditures	1,034,234	964,112	691,184	▼(33.2)	▼(6.8)	▼(28.3)
Research and development expenses	303,621	317,325	274,104	▼(9.7)	▲4.5	▼(13.6)
Net assets	9,728,739	10,112,277	9,740,797	▲0.1	▲3.9	▼(3.7)
Unit COGS	$61.24	$61.92	$63.34	▲3.4	▲1.1	▲2.3
Unit SG&A expenses	$9.54	$9.94	$11.45	▲20.1	▲4.3	▲15.2
Unit operating income or (loss) (fn2)	$19.40	$18.44	$17.19	▼(11.4)	▼(5.0)	▼(6.8)
Unit net income or (loss) (fn2)	$17.74	$16.79	$12.96	▼(26.9)	▼(5.3)	▼(22.8)
COGS/sales (fn1)	67.9	68.6	68.9	▲1.0	▲0.7	▲0.3
Operating income or (loss)/sales (fn1)	21.5	20.4	18.7	▼(2.8)	▼(1.1)	▼(1.7)
Net income or (loss)/sales (fn1)	19.7	18.6	14.1	▼(5.6)	▼(1.1)	▼(4.5)

Note.--Shares and ratios shown as “0.0” percent represent non-zero values less than “0.05” percent (if positive) and greater than “(0.05)” percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as “---“. Period changes preceded by a “▲” represent an increase, while period changes preceded by a “▼” represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Related party exclusion (3 U.S. producers)

Table C-2

PVLT tires: Summary data concerning the U.S. market excluding three U.S. producers *, 2018-20**

(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. consumption quantity:						
Amount	314,063	320,842	280,660	▼(10.6)	▲2.2	▼(12.5)
Producers' share (fn1)						
Included producers	***	***	***	▼***	▼***	▼***
Excluded producers	***	***	***	▲***	▲***	▲***
All producers	44.6	43.3	39.2	▼(5.3)	▼(1.3)	▼(4.0)
Importers' share (fn1):						
Korea	6.2	6.0	6.1	▼(0.1)	▼(0.2)	▲0.1
Taiwan	2.7	2.7	3.6	▲0.9	▲0.1	▲0.8
Thailand	12.9	14.1	15.9	▲2.9	▲1.2	▲1.7
Vietnam	3.4	3.8	4.9	▲1.5	▲0.4	▲1.1
Subject sources	25.1	26.6	30.4	▲5.3	▲1.5	▲3.8
Nonsubject sources	30.3	30.1	30.3	▲0.0	▼(0.2)	▲0.2
All import sources	55.4	56.7	60.8	▲5.3	▲1.3	▲4.0
U.S. consumption value:						
Amount	22,990,728	23,437,017	20,121,128	▼(12.5)	▲1.9	▼(14.1)
Producers' share (fn1)						
Included producers	***	***	***	▼***	▼***	▼***
Excluded producers	***	***	***	▲***	▲***	▲***
All producers	55.6	53.9	50.8	▼(4.8)	▼(1.7)	▼(3.1)
Importers' share (fn1):						
Korea	5.6	5.5	5.3	▼(0.3)	▼(0.1)	▼(0.1)
Taiwan	1.6	1.8	2.4	▲0.8	▲0.1	▲0.7
Thailand	8.3	9.3	11.0	▲2.7	▲1.0	▲1.7
Vietnam	2.0	2.2	3.0	▲1.0	▲0.2	▲0.8
Subject sources	17.5	18.8	21.8	▲4.3	▲1.2	▲3.1
Nonsubject sources	26.9	27.4	27.4	▲0.5	▲0.5	▼(0.0)
All import sources	44.4	46.1	49.2	▲4.8	▲1.7	▲3.1
U.S. imports from:						
Korea:						
Quantity	19,327	19,142	17,077	▼(11.6)	▼(1.0)	▼(10.8)
Value	1,289,189	1,279,148	1,073,819	▼(16.7)	▼(0.8)	▼(16.1)
Unit value	$66.70	$66.82	$62.88	▼(5.7)	▲0.2	▼(5.9)
Ending inventory quantity	***	***	***	▲***	▲***	▲***
Taiwan:						
Quantity	8,351	8,810	10,013	▲19.9	▲5.5	▲13.7
Value	375,745	410,795	490,901	▲30.6	▲9.3	▲19.5
Unit value	$44.99	$46.63	$49.03	▲9.0	▲3.6	▲5.1
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Thailand:						
Quantity	40,595	45,282	44,496	▲9.6	▲11.5	▼(1.7)
Value	1,905,391	2,178,917	2,213,767	▲16.2	▲14.4	▲1.6
Unit value	$46.94	$48.12	$49.75	▲6.0	▲2.5	▲3.4
Ending inventory quantity	***	***	***	▼***	▲***	▼***

Table continued on next page.

Table C-2--Continued

PVLT tires: Summary data concerning the U.S. market excluding three U.S. producers *, 2018-20**

(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. imports from--Continued:						
Vietnam:						
Quantity	10,634	12,147	13,808	▲29.8	▲14.2	▲13.7
Value	461,745	526,394	611,956	▲32.5	▲14.0	▲16.3
Unit value	$43.42	$43.34	$44.32	▲2.1	▼(0.2)	▲2.3
Ending inventory quantity	***	***	***	▼***	▼***	▼***
Subject sources:						
Quantity	78,908	85,381	85,393	▲8.2	▲8.2	▲0.0
Value	4,032,070	4,395,253	4,390,443	▲8.9	▲9.0	▼(0.1)
Unit value	$51.10	$51.48	$51.41	▲0.6	▲0.7	▼(0.1)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Nonsubject sources:						
Quantity	95,166	96,590	85,119	▼(10.6)	▲1.5	▼(11.9)
Value	6,186,482	6,419,978	5,509,737	▼(10.9)	▲3.8	▼(14.2)
Unit value	$65.01	$66.47	$64.73	▼(0.4)	▲2.2	▼(2.6)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
All import sources:						
Quantity	174,074	181,970	170,512	▼(2.0)	▲4.5	▼(6.3)
Value	10,218,552	10,815,232	9,900,179	▼(3.1)	▲5.8	▼(8.5)
Unit value	$58.70	$59.43	$58.06	▼(1.1)	▲1.2	▼(2.3)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Included U.S. producers':						
Average capacity quantity	***	***	***	▼***	▲***	▼***
Production quantity	***	***	***	▼***	▼***	▼***
Capacity utilization (fn1)	***	***	***	▼***	▼***	▼***
U.S. shipments:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value	***	***	***	▲***	▼***	▲***
Export shipments:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value	***	***	***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	▼***	▼***	▼***
Inventories/total shipments (fn1)	***	***	***	▼***	▼***	▼***
Production workers	***	***	***	▼***	▲***	▼***
Hours worked (1,000s)	***	***	***	▼***	▲***	▼***
Wages paid ($1,000)	***	***	***	▼***	▲***	▼***
Hourly wages (dollars per hour)	***	***	***	▼***	▲***	▼***
Productivity (tires per hour)	***	***	***	▼***	▼***	▼***
Unit labor costs	***	***	***	▲***	▲***	▲***

Table continued on next page.

Table C-2--Continued

PVLT tires: Summary data concerning the U.S. market excluding three U.S. producers *, 2018-20**

(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
Included U.S. producers'--Continued:						
Net sales:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value	***	***	***	▲***	▲***	▲***
Cost of goods sold (COGS)	***	***	***	▼***	▼***	▼***
Gross profit or (loss) (fn2)	***	***	***	▼***	▼***	▼***
SG&A expenses	***	***	***	▼***	▲***	▼***
Operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Capital expenditures	***	***	***	▼***	▼***	▼***
Research and development expenses	***	***	***	▼***	▲***	▼***
Net assets	***	***	***	▲***	▲***	▼***
Unit COGS	***	***	***	▲***	▲***	▲***
Unit SG&A expenses	***	***	***	▲***	▲***	▲***
Unit operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
COGS/sales (fn1)	***	***	***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

Related party exclusion (2 U.S. producers)

Table C-3

PVLT tires: Summary data concerning the U.S. market excluding two U.S. producers *, 2018-20**

(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. consumption quantity:						
Amount	314,063	320,842	280,660	▼(10.6)	▲2.2	▼(12.5)
Producers' share (fn1)						
Included producers	***	***	***	▼***	▼***	▼***
Excluded producers	***	***	***	▲***	▲***	▼***
All producers	44.6	43.3	39.2	▼(5.3)	▼(1.3)	▼(4.0)
Importers' share (fn1):						
Korea	6.2	6.0	6.1	▼(0.1)	▼(0.2)	▲0.1
Taiwan	2.7	2.7	3.6	▲0.9	▲0.1	▲0.8
Thailand	12.9	14.1	15.9	▲2.9	▲1.2	▲1.7
Vietnam	3.4	3.8	4.9	▲1.5	▲0.4	▲1.1
Subject sources	25.1	26.6	30.4	▲5.3	▲1.5	▲3.8
Nonsubject sources	30.3	30.1	30.3	▲0.0	▼(0.2)	▲0.2
All import sources	55.4	56.7	60.8	▲5.3	▲1.3	▲4.0
U.S. consumption value:						
Amount	22,990,728	23,437,017	20,121,128	▼(12.5)	▲1.9	▼(14.1)
Producers' share (fn1)						
Included producers	***	***	***	▼***	▼***	▼***
Excluded producers	***	***	***	▲***	▲***	▼***
All producers	55.6	53.9	50.8	▼(4.8)	▼(1.7)	▼(3.1)
Importers' share (fn1):						
Korea	5.6	5.5	5.3	▼(0.3)	▼(0.1)	▼(0.1)
Taiwan	1.6	1.8	2.4	▲0.8	▲0.1	▲0.7
Thailand	8.3	9.3	11.0	▲2.7	▲1.0	▲1.7
Vietnam	2.0	2.2	3.0	▲1.0	▲0.2	▲0.8
Subject sources	17.5	18.8	21.8	▲4.3	▲1.2	▲3.1
Nonsubject sources	26.9	27.4	27.4	▲0.5	▲0.5	▼(0.0)
All import sources	44.4	46.1	49.2	▲4.8	▲1.7	▲3.1
U.S. imports from:						
Korea:						
Quantity	19,327	19,142	17,077	▼(11.6)	▼(1.0)	▼(10.8)
Value	1,289,189	1,279,148	1,073,819	▼(16.7)	▼(0.8)	▼(16.1)
Unit value	$66.70	$66.82	$62.88	▼(5.7)	▲0.2	▼(5.9)
Ending inventory quantity	***	***	***	▲***	▲***	▲***
Taiwan:						
Quantity	8,351	8,810	10,013	▲19.9	▲5.5	▲13.7
Value	375,745	410,795	490,901	▲30.6	▲9.3	▲19.5
Unit value	$44.99	$46.63	$49.03	▲9.0	▲3.6	▲5.1
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Thailand:						
Quantity	40,595	45,282	44,496	▲9.6	▲11.5	▼(1.7)
Value	1,905,391	2,178,917	2,213,767	▲16.2	▲14.4	▲1.6
Unit value	$46.94	$48.12	$49.75	▲6.0	▲2.5	▲3.4
Ending inventory quantity	***	***	***	▼***	▲***	▼***

Table continued on next page.

Table C-3--Continued
PVLT tires: Summary data concerning the U.S. market excluding two U.S. producers *, 2018-20**
(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. imports from--Continued:						
Vietnam:						
Quantity	10,634	12,147	13,808	▲29.8	▲14.2	▲13.7
Value	461,745	526,394	611,956	▲32.5	▲14.0	▲16.3
Unit value	$43.42	$43.34	$44.32	▲2.1	▼(0.2)	▲2.3
Ending inventory quantity	***	***	***	▼***	▼***	▼***
Subject sources:						
Quantity	78,908	85,381	85,393	▲8.2	▲8.2	▲0.0
Value	4,032,070	4,395,253	4,390,443	▲8.9	▲9.0	▼(0.1)
Unit value	$51.10	$51.48	$51.41	▲0.6	▲0.7	▼(0.1)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Nonsubject sources:						
Quantity	95,166	96,590	85,119	▼(10.6)	▲1.5	▼(11.9)
Value	6,186,482	6,419,978	5,509,737	▼(10.9)	▲3.8	▼(14.2)
Unit value	$65.01	$66.47	$64.73	▼(0.4)	▲2.2	▼(2.6)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
All import sources:						
Quantity	174,074	181,970	170,512	▼(2.0)	▲4.5	▼(6.3)
Value	10,218,552	10,815,232	9,900,179	▼(3.1)	▲5.8	▼(8.5)
Unit value	$58.70	$59.43	$58.06	▼(1.1)	▲1.2	▼(2.3)
Ending inventory quantity	***	***	***	▼***	▲***	▼***
Included U.S. producers':						
Average capacity quantity	***	***	***	▼***	▲***	▼***
Production quantity	***	***	***	▼***	▼***	▼***
Capacity utilization (fn1)	***	***	***	▼***	▼***	▼***
U.S. shipments:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value	***	***	***	▲***	▼***	▲***
Export shipments:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value	***	***	***	▲***	▼***	▲***
Ending inventory quantity	***	***	***	▼***	▼***	▼***
Inventories/total shipments (fn1)	***	***	***	▼***	▼***	▼***
Production workers	***	***	***	▼***	▲***	▼***
Hours worked (1,000s)	***	***	***	▼***	▲***	▼***
Wages paid ($1,000)	***	***	***	▼***	▲***	▼***
Hourly wages (dollars per hour)	***	***	***	▼***	▲***	▼***
Productivity (tires per hour)	***	***	***	▼***	▼***	▼***
Unit labor costs	***	***	***	▲***	▲***	▲***

Table continued on next page.

Table C-3--Continued
PVLT tires: Summary data concerning the U.S. market excluding two U.S. producers *, 2018-20**
(Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
Included U.S. producers'--Continued:						
Net sales:						
Quantity	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value	***	***	***	▲***	▲***	▲***
Cost of goods sold (COGS)	***	***	***	▼***	▼***	▼***
Gross profit or (loss) (fn2)	***	***	***	▼***	▼***	▼***
SG&A expenses	***	***	***	▼***	▲***	▼***
Operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Capital expenditures	***	***	***	▼***	▼***	▼***
Research and development expenses	***	***	***	▼***	▲***	▼***
Net assets	***	***	***	▲***	▲***	▼***
Unit COGS	***	***	***	▲***	▲***	▲***
Unit SG&A expenses	***	***	***	▲***	▲***	▲***
Unit operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
COGS/sales (fn1)	***	***	***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics using HTS statistical reporting numbers 4011.10.1010, 4011.10.1020, 4011.10.1030, 4011.10.1040, 4011.10.1050, 4011.10.1060, 4011.10.1070, 4011.10.5000, 4011.20.1005 and 4011.20.5010, accessed March 16, 2021.

APPENDIX D

U.S. SHIPMENTS BY PRODUCT TYPE

Table D-1
PVLT tires: U.S. producers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. producers' U.S. shipments.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. producers' U.S. shipments.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. producers' U.S. shipments.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. producers' U.S. shipments.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table D-2
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Korea.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from Korea.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from Korea.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Korea.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from Korea.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Table continued on next page.

Table D-2--Continued
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Taiwan.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from Taiwan.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from Taiwan.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Taiwan.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from Taiwan.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Table continued on next page.

Table D-2--Continued
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Thailand.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from Thailand.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from Thailand.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Thailand.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from Thailand.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Table continued on next page.

Table D-2--Continued
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Vietnam.-- Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from Vietnam.-- Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from Vietnam.-- Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Vietnam.-- Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from Vietnam.-- Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Table continued on next page.

Table D-2--Continued
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from subject sources.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from subject sources.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from subject sources.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from subject sources.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from subject sources.--Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Table continued on next page.

Table D-2--Continued
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from nonsubject sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from nonsubject sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from nonsubject sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from nonsubject sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from nonsubject sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Table continued on next page.

Table D-2--Continued
PVLT tires: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from all import sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. importers' U.S. shipments from all import sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Unit value (dollars per tire)		
U.S. importers' U.S. shipments from all import sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from all import sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. importers' U.S. shipments from all import sources.--			
Branded	***	***	***
Private label	***	***	***
All product types	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX E

U.S. SHIPMENTS BY SIZE

Table E-1
PVLT tires: U.S. producers' U.S. shipments by size, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. producers' U.S. shipments.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table E-2
PVLT tires: U.S. importers' U.S. shipments by size, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Korea.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Korea.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Taiwan.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Taiwan.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***

Table continued on next page.

Table E-2--Continued
PVLT tires: U.S. importers' U.S. shipments by size, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Thailand.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Thailand.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from Vietnam.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from Vietnam.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***

Table continued on next page.

Table E-2--Continued
PVLT tires: U.S. importers' U.S. shipments by size, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from subject sources.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from subject sources.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from nonsubject sources.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from nonsubject sources.-- < 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***

Table continued on next page.

Table E-2--Continued
PVLT tires: U.S. importers' U.S. shipments by size, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. importers' U.S. shipments from all import sources.--			
< 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***
	Share of quantity (percent)		
U.S. importers' U.S. shipments from all import sources.--			
< 16 inches	***	***	***
16 to < 18 inches	***	***	***
> 18 inches	***	***	***
All sizes	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX F

U.S. SHIPMENTS BY CHANNEL OF DISTRIBUTION

Table F-1
PVLT tires: U.S. producers' and importers' U.S. shipments to the OEMs, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

Table F-2
PVLT tires: U.S. producers' and importers' U.S. shipments to the replacement market, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table F-3
PVLT tires: U.S. producers' and importers' U.S. shipments to all other channels, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments of imports from.--Korea	***	***	***
Taiwan	***	***	***
Thailand	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Note.--Quantities shown as "0" represent values greater than zero, but less than "500" tires. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX G

FIRMS' BRAND AND PRIVATE LABEL NARRATIVE RESPONSES

Table G-1
PVLT tires: U.S. producers' brand and private label narrative responses

Firm	Brand(s)	Private label(s)
Bridgestone	***	***
Continental	***	***
Cooper	***	***.
Giti	***	***
Goodyear	***	***
Hankook	***	***
Kumho	***	***
Michelin	Michelin, BFGoodrich, Uniroyal	***
Nokian	***	***
Pirelli	***	***
Specialty	***	***.
Sumitomo	***	***
Toyo	***	***
Yokohama	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note.--***. Data for Michelin's brands was obtained from https://www.michelinman.com/auto/why-michelin/about-us.

Note.--An entry of *** indicates responses were not given or marked not applicable.

Table G-2
PVLT tires: U.S. importers' brand and private label narrative responses by source

Source / Firm	Brand(s)	Private label(s)
Korea:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Taiwan:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Thailand:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Table continued on next page.

Table G-2--Continued
PVLT tires: U.S. importers' brand and private label narrative responses by source

Source / Firm	Brand(s)	Private label(s)
Thailand (Continued):		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Vietnam:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Table continued on next page.

Table G-2--Continued
PVLT tires: U.S. importers' brand and private label narrative responses by source

Source / Firm	Brand(s)	Private label(s)
Nonsubject sources:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Note.--An entry of *** indicates responses were not given, marked not applicable, or marked “none”.

Table G-3
PVLT tires: Foreign producers' brand and private label narrative responses by source

Source / Firm	Brand(s)	Private label(s)
Korea:		
***	***	***
***	***	***
***	***	***
Taiwan:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Thailand:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Table continued on next page.

Table G-3--Continued
PVLT tires: Foreign producers' brand and private label narrative responses by source

Source / Firm	Brand(s)	Private label(s)
Thailand (Continued):		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Table continued on next page.

Table G-3--Continued
PVLT tires: Foreign producers' brand and private label narrative responses by source

Source / Firm	Brand(s)	Private label(s)
Vietnam:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX H

QUESTIONNAIRE RESPONSES REGARDING CATEGORIES IN THE U.S. MARKET

The Commission asked U.S. producers, importers, and purchasers to respond to the following questions:

> 1. Is the U.S. PVLT tires market divided into categories (e.g., Good/Better/Best; Tier 1/Tier 2/Tier 3; Flagship/Secondary/Mass-market)? If no, please provide a description of how, if at all, the U.S. market for PVLT tires can be categorized. If yes, please describe each category's main distinguishing characteristics and identify the producers and brands that belong in each category.
>
> 2. Please estimate the share of the total U.S. market for PVLT tires for each category. Additionally, please report the share of your firm's sales/purchases of PVLT tires for each category in the OEM and replacement market.

Responses to questions 1-2 which are presented in table H-1 and H-2 respectively. The responses are discussed further in Part II.

Tables H-1 and H-2 are confidential in their entirety, and therefore are redacted.

APPENDIX I

FINANCIAL RESULTS ON PVLT TIRES EXCLUDING SELECTED U.S. PRODUCERS

Table I-1
PVLT tires: Results of operations of U.S. producers, excluding *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
	Value (1,000 dollars)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Total COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expenses	***	***	***
Operating income	***	***	***
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income	***	***	***
Depreciation/amortization	***	***	***
Estimated cash flow from operations	***	***	***
	Ratio to net sales (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expenses	***	***	***
Operating income	***	***	***
Net income	***	***	***

Table continued on next page.

Table I-1--Continued
PVLT tires: Results of operations of U.S. producers, excluding *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Ratio to total COGS (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Unit value (dollars per tire)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expenses	***	***	***
Operating income	***	***	***
Net income	***	***	***
	Number of firms reporting		
Operating losses	***	***	***
Net losses	***	***	***
Data	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table I-2

PVLT tires: Changes in AUV's of U.S. producers, excluding *, 2018-20**

Item	Between calendar years		
	2018-20	2018-19	2019-20
	Change in AUVs (percent)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Change in AUVs (dollars per tire)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expenses	***	***	***
Operating income	***	***	***
Net income	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table I-3
PVLT tires: Results of operations of U.S. producers, excluding *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (1,000 tires)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
	Value (1,000 dollars)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Total COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income or (loss)	***	***	***
Depreciation/amortization	***	***	***
Estimated cash flow from operations	***	***	***
	Ratio to net sales (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

Table continued on next page.

Table I-3--Continued
PVLT tires: Results of operations of U.S. producers, excluding *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Ratio to total COGS (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Unit value (dollars per tire)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table I-4
PVLT tires: Changes in AUV's of U.S. producers, excluding *, 2018-20**

Item	Between calendar years		
	2018-20	2018-19	2019-20
	Change in AUVs (percent)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Change in AUVs (dollars per tire)		
Commercial sales	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
Advertising, marketing, and/or branding	***	***	***
All other SG&A expenses	***	***	***
Total SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.