Pneumatic off-the-road Tires from India

Investigation Nos. 701-TA-552 and 731-TA-1308 (Review)

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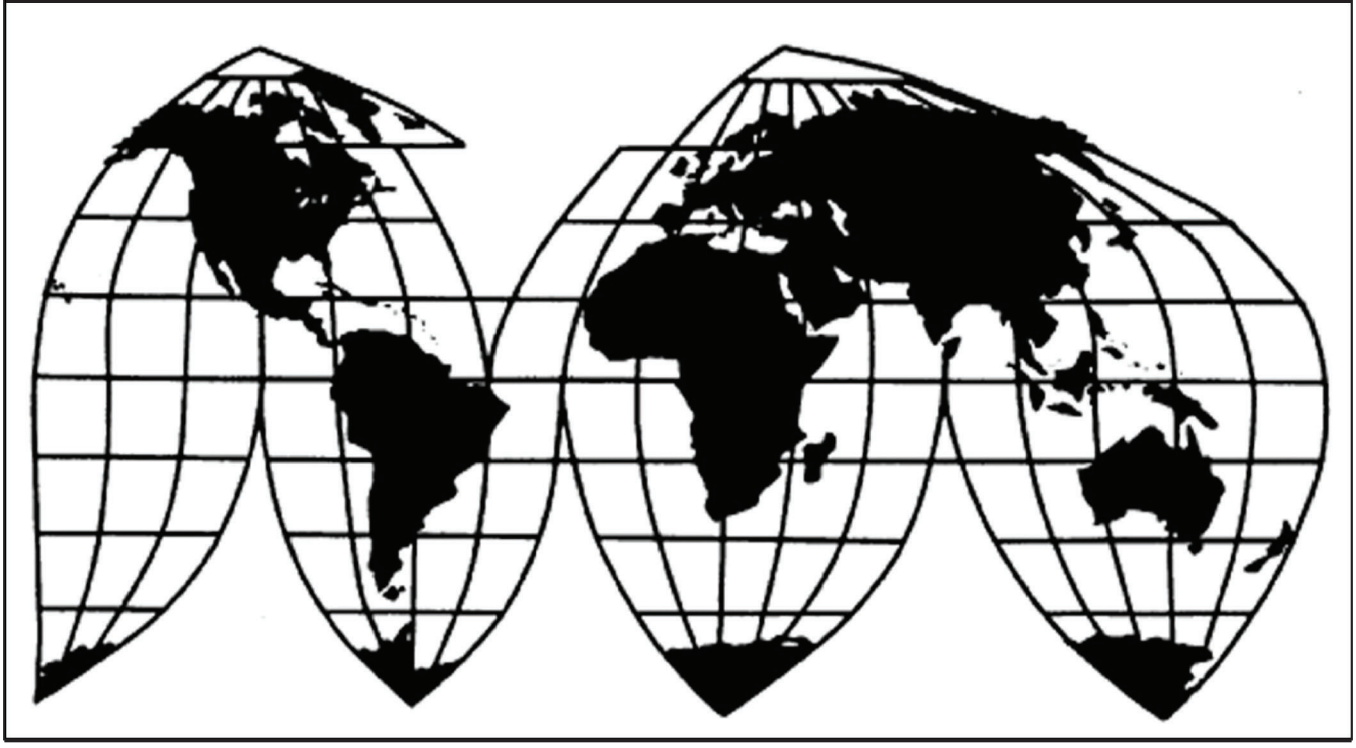
U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-552 and 731-TA-1308 (Review)

Pneumatic Off-the-Road Tires from India

DETERMINATION

On the basis of the record[1] developed in the subject five-year reviews, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the countervailing and antidumping duty orders on pneumatic off-the-road tires from India would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted these reviews on February 1, 2022 (87 FR 5505) and determined on May 9, 2022, that it would conduct full reviews (87 FR 33209, June 1, 2022). Notice of the scheduling of the Commission's reviews 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 October 21, 2022 (87 FR 64110). The Commission conducted its hearing on March 2, 2023. All persons who requested the opportunity were permitted to participate.

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

Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping and countervailing duty orders on pneumatic off-the-road tires ("OTR tires") from India would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigations. Titan Tire Corp. ("Titan") and the United Steel, Paper, and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC ("USW"), a labor union, filed antidumping and countervailing duty petitions concerning imports of OTR tires from India and Sri Lanka on January 8, 2016. In February 2017, the Commission determined that an industry in the United States was materially injured by reason of imports of OTR tires from India sold at less than fair value ("LTFV") and subsidized by the government of India and OTR tires from Sri Lanka subsidized by the government of Sri Lanka.[1] On March 6, 2017, Commerce issued antidumping and countervailing duty orders on OTR tires from India and Sri Lanka.[2] Following an appeal before the U.S. Court of International Trade, Commerce revoked the countervailing duty order on OTR tires from Sri Lanka.[3]

Current Reviews. The Commission instituted these first five-year reviews on February 1, 2022.[4] Responses to the notice of institution were submitted by Titan and five respondent interested parties. Specifically, a joint response was filed on behalf of ATC Tires Private Limited ("ATC"), an Indian producer and exporter of subject merchandise, and Yokohama Off-Highway Tires America Inc. ("YOHTA"), an importer of subject merchandise. Individual responses were filed by Apollo Tyres Limited ("Apollo"), JK Tyres and Industries Limited ("JK Tyres"), BKT, Indian

[1] *Certain New Pneumatic Off-the-Road Tires from India and Sri Lanka*¸ Inv. Nos. 701-TA-552-553 and 731-TA-1308 (Final), USITC Pub. 4669 (Mar. 2017) ("*Original Determinations*") at 1.

[2] *Certain New Pneumatic Off-the-Road Tires From India and Sri Lanka: Amended Final Affirmative Countervailing Duty Determination for India and Countervailing Duty Orders*, 82 Fed. Reg. 12556 (Mar. 6, 2017). Balkrishna Industries Ltd. ("BKT") received a de minimis margin and was excluded from the subject antidumping duty order. *See Certain New Pneumatic Off-the-Road Tires From India: Notice of Correction to Antidumping Duty Order*, 82 Fed. Reg. 25598 (June 2, 2017).

[3] *Certain New Pneumatic Off-The-Road Tires From Sri Lanka: Notice of Court Decision Not in Harmony With Final Affirmative Countervailing Duty Determination, Notice of Amended Final Determination and Revocation of Countervailing Duty Order*, 83 Fed. Reg. 35213 (Jul. 25, 2018).

[4] *New Pneumatic Off-the-Road Tires From India; Institution of Five-Year Reviews*, 87 Fed. Reg. 5505 (Feb. 1, 2022).

producers and exporters of subject merchandise. On May 9, 2022, the Commission determined that the domestic interested party group response and the respondent interested party group response to its notice of institution were adequate. Accordingly, the Commission determined to conduct full reviews.[5]

Representatives from Titan and the USW appeared at the hearing accompanied by counsel, and Titan submitted prehearing and posthearing briefs and final comments.[6] Several respondent entities also participated in these full reviews. The Commission received a joint prehearing brief from ATC, BKT, and YOHTA (collectively, "Respondents").[7] The Commission received a joint posthearing brief and final comments from ATC and YOHTA and a separate posthearing brief and final comments from BKT.[8] The Commission also received a joint prehearing brief from Automotive Tyres Manufacturers' Association ("ATMA"), an association of Indian producers of subject merchandise, and Asian Tire Factory Limited ("Asian Tire"), an Indian producer of subject merchandise (collectively, "ATA").[9] Representatives from these parties also appeared at the Commission's hearing accompanied by counsel.

In these reviews, U.S. industry data are based on the questionnaire responses of six U.S. producers that are believed to account for the vast majority of domestic production of OTR tires in 2021.[10] U.S. import data and related information are based on the questionnaire responses of 20 U.S. importers of OTR tires that accounted for the vast majority of imports of OTR tires from India, although we also consider nonsubject imports as measured by official

[5] *Certain New Pneumatic Off-the-Road Tires From India; Notice of Commission Determination To Conduct Full Five-Year Reviews*, 87 Fed. Reg. 33209 (June 1, 2022); CR/PR at I-1 n.4.

[6] Titan's Prehearing Brief, EDIS Docs. 790593 and 790594 (Feb. 17, 2023) ("Titan's Prehearing Brief"); Titan's Posthearing Brief, EDIS Docs. 792824 and 79826 (Mar. 21, 2023) ("Titan's Posthearing Brief"); Titan's Final Comments, EDIS Docs. 793732, 793735 (Apr. 4, 2023) ("Titan's Final Comments").

[7] Respondents' Prehearing Brief, EDIS Docs. 790620 (Feb. 17, 2023), 790764 and 790763 (Feb. 21, 2023) ("Respondents' Prehearing Brief").

[8] Respondents' Posthearing Brief, EDIS Docs. 79215 (Mar. 9, 2023), 792256 and 792257 (Mar. 10, 2023) ("Respondents' Posthearing Brief"); Respondents' Final Comments, EDIS Docs. 793747 (Apr. 4, 2023), 793813 (Apr. 5, 2023) ("Respondents' Final Comments"). BKT's Posthearing Brief, EDIS Docs. 792154 (Mar. 9, 2023), 792249 and 792250 (Mar. 10, 2023) ("BKT's Posthearing Brief"); BKT's Final Comments, EDIS Docs. 793716 (Apr. 4, 2023), 793810 (Apr. 5, 2023) ("BKT's Final Comments").

[9] ATA's Prehearing Brief, EDIS Docs. 790601 (Feb. 17, 2023), 790729 (Feb. 21, 2023), 791129 (Feb. 24, 2023) ("ATA's Prehearing Brief").

[10] *Confidential Staff Report*, Memorandum INV-VV-023 (Mar. 27, 2023), as revised by Memoranda INV-VV-027 (March 29, 2023) and INV-VV-028 (Apr. 6, 2023) ("CR") / Public Report ("PR") at I-30.

import statistics.[11] Foreign industry data and related information are based on the questionnaire responses of 11 responding producers in India accounting for the vast majority of OTR tires production in India in 2021, information submitted by the parties, and other publicly available information.[12]

Respondents agree that the Commission should rely on questionnaire responses for subject imports, but argue that nonsubject import data should instead be derived from official import statistics.[13] As described above, while we primarily rely on importers' questionnaire responses to measure nonsubject imports, we also consider nonsubject imports as measured by official U.S. import statistics,[14] which does not lead us to different conclusions for our findings, as discussed in more detail below.

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[11] CR/PR at IV-1. For purposes of our analyses, we primarily rely on importers' questionnaire responses to measure nonsubject imports, but also consider nonsubject imports as measured by official U.S. import statistics. Nonsubject imports reported by responding importers are specific to subject OTR tires while the official import statistics include both subject OTR tires and out-of-scope products. CR/PR at IV-1-2. Nonsubject imports reported by responding importers were equivalent to 62.1 percent of the value and 33.7 percent of the volume of nonsubject imports in 2021 based on official import statistics. *Id*. at IV-1 n.2. These figures understate the actual nonsubject import questionnaire coverage given that there are out-of-scope products imported from nonsubject sources in the official import statistics. *Id*.

Official import statistics are based on the chapter 40 HTS statistical reporting numbers included in Commerce's current scope (*i.e.*, 4011.20.1025, 4011.20.1035, 4011.20.5030, 4011.20.5050, 4011.70.0010, 4011.70.0050, 4011.80.1010, 4011.80.1020, 4011.80.2010, 4011.80.2020, 4011.80.8010, 4011.80.8020, 4011.90.1050, 4011.90.2050, and 4011.90.8050) as well as certain historical HTS statistical numbers that were superseded by these statistical reporting numbers (*i.e.*, 4011.61.0000, 4011.62.0000, 4011.63.0000, 4011.69.0090, 4011.92.0000, 4011.93.4000, 4011.93.8000, 4011.94.4000, and 4011.94.8000) on or after January 1, 2016. *See* Staff Worksheet, EDIS Doc. 793918 at Table I-1; CR/PR at I-17 & nn.17 & 18.

[12] CR/PR at IV-23.

[13] Respondents' Prehearing Brief at 24-26; Respondents' Posthearing Brief, Attachment I.

[14] Respondents' economist also argued, in the alternative, that the Commission consider adjusting official import statistics based on proprietary sources to address concerns that the data may be overstated. *See* Hearing Tr. at 133 (Groden) ("If the Commission has concerns about using HTS data, as Commissioner Schmidtlein remarked this morning, staff has previously adjusted import data using proprietary sources, and indeed did so during the original investigation. That approach would still be preferable to relying on the inadequate questionnaire data"). While the Commission was able to exclude certain out-of-scope tires from official import statistics in the original investigations in limited circumstances, such as for monthly imports and to calculate importer questionnaire coverage, it is unable to do so in these reviews pursuant to the terms of its current agreement with the U.S. Census Bureau. *See id*. at 151-52 (Schmidtlein); CR/PR at IV-1 n.2. Further, contrary to Respondents' suggestion, the Commission primarily relied on importers' questionnaire responses for nonsubject import data in the original investigations. *See Confidential Original Determinations*, EDIS Doc. 766082 (Jan. 23, 2017) at Tables IV-4-5 and IV-7-8.

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[15] 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 under this subtitle."[16] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigations and consider whether the record indicates any reason to revisit the prior findings.[17]

Commerce has defined the scope of the antidumping and countervailing duty orders in these five-year reviews as follows:

> The scope of the order is certain new pneumatic off-the-road tires (off-road tires). Off-road tires are tires with an off road tire size designation. The tires included in the scope may be either tube-radial, or non-radial, regardless of whether for original equipment manufacturers or the replacement market.
>
> Subject tires may have the following prefix or suffix designation, which appears on the sidewall of the tire:
>
> Prefix designations:
>
> DH—Identifies a tire intended for agricultural and logging service which must be mounted on a DH drop center rim.

[15] 19 U.S.C. § 1677(4)(A).

[16] 19 U.S.C. § 1677(10); *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); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

[17] *See*, *e.g.*, *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

VA—Identifies a tire intended for agricultural and logging service which must be mounted on a VA multipiece rim.

IF—Identifies an agricultural tire to operate at 20 percent higher rated load than standard metric tires at the same inflation pressure.

VF—Identifies an agricultural tire to operate at 40 percent higher rated load than standard metric tires at the same inflation pressure.

Suffix designations:

ML—Mining and logging tires used in intermittent highway service.

DT—Tires primarily designed for sand and paver service.

NHS—Not for Highway Service.

TG—Tractor Grader, off-the-road tire for use on rims having bead seats .1 .

K—Compactor tire for use on 5° drop center or semi-drop center rims having bead seats with nominal minus 0.032 diameter.

IND—Drive wheel tractor tire used in industrial service.

SL—Service limited to agricultural usage.

FI—Implement tire for agricultural towed highway service.

CFO—Cyclic Field Operation.

SS—Differentiates tires for off-highway vehicles such as mini and skid-steer loaders from other tires which use similar size designations such as 7.00-15TR and 7.00-15NHS, but may use different rim bead seat configurations.

All tires marked with any of the prefixes or suffixes listed above in their sidewall markings are covered by the scope regardless of their intended use.

In addition, all tires that lack any of the prefixes or suffixes listed above in their sidewall markings are included in the scope, regardless of their intended use, as long as the tire is of a size that is among the numerical size designations listed in the following sections of the Tire and Rim Association Year Book, as updated annually, unless the tire falls within one of the specific exclusions set forth below. The sections of the Tire and Rim Association Year Book listing numerical size designations of covered certain off road tires include:

The table of mining and logging tires included in the section on Truck-Bus tires;

The entire section on Off-the-Road tires;

The entire section on Agricultural tires; and

The following tables in the section on Industrial/ATV/Special Trailer tires:

- Industrial, Mining, Counterbalanced Lift Truck (Smooth Floors Only);
- Industrial and Mining (Other than Smooth Floors);
- Construction Equipment;
- Off-the-Road and Counterbalanced Lift Truck (Smooth Floors Only);
- Aerial Lift and Mobile Crane; and
- Utility Vehicle and Lawn and Garden Tractor.

Certain off road tires, whether or not mounted on wheels or rims, are included in the scope. However, if a subject tire is imported mounted on a wheel or rim, only the tire is covered by the scope. Subject merchandise includes certain off road tires produced in the subject countries whether mounted on wheels or rims in a subject country or in a third country.

Certain off road tires are covered whether or not they are accompanied by other parts, *e.g.*, a wheel, rim, axle parts, bolts, nuts, etc. Certain off road tires that enter attached to a vehicle are not covered by the scope.

Specifically excluded from the scope are passenger vehicle and light truck tires, racing tires, mobile home tires, motorcycle tires, all-terrain vehicle tires, bicycle tires, on-road or on-highway trailer tires, and truck and bus tires. Such tires generally have in common that the symbol "DOT" must appear on the sidewall, certifying that the tire conforms to applicable motor vehicle safety standards. Such excluded tires may also have the following prefixes and suffixes included as part of the size designation on their sidewalls:

Prefix letter designations:

AT—Identifies a tire intended for service on All-Terrain Vehicles;

P—Identifies a tire intended primarily for service on passenger cars;

LT—Identifies a tire intended primarily for service on light trucks;

T—Identifies a tire intended for one-position "temporary use" as a spare only; and

ST—Identifies a special tire for trailers in highway service.

Suffix letter designations:

TR—Identifies a tire for service on trucks, buses, and other vehicles with .1 6 .2

MH—Identifies tires for Mobile Homes;

HC— 1
rims used on trucks, buses, and other vehicles. This suffix is intended to differentiate among tires for light trucks, and other vehicles or other services, which use a similar designation.

Example: 8R17.5 LT, 8R17.5 HC;

LT—Identifies light truck tires for service on trucks, buses, trailers, and multipurpose passenger vehicles used in nominal highway service;

ST—Special tires for trailers in highway service; and

M/C—Identifies tires and rims for motorcycles.

The following types of tires are also excluded from the scope: Pneumatic tires that are not new, including recycled or retreaded tires and used tires; non-pneumatic tires, including solid rubber tires; aircraft tires; and turf, lawn and garden, and golf tires. Also excluded from the scope are mining and construction tires that have a rim diameter equal to or exceeding 39 inches. Such tires may be distinguished from other tires of similar size by the number of plies that the construction and mining tires contain (minimum of 16) and the weight of such tires (minimum 1500 pounds).[18]

The scope definition set out above is substantively unchanged from the original investigations, and Commerce has issued no scope rulings since the original investigations.[19]

All pneumatic (air pressurized) rubber tires, including OTR tires, have the same basic internal components, consisting of a base rubber inner liner or a rubber inner tube, impervious to air migration from the tire; rubberized reinforcing tire cord plies and belts that give the tire strength and stability; and a rubberized steel bead that provides an airtight seal of the tire rim with a given metal wheel. The outer components of a tire are the tread that runs around the outside of the tire, the sidewall, and the rubber rim. All tires generally contain varying amounts of natural and synthetic rubber in addition to several other components such as carbon black reinforcement, sulfur curing agents, textile fabric or steel reinforcing plies and belts, and steel bead wire that forms the rim of the tire.[20]

Compared to on-the-road passenger and light truck tires, most OTR tires are designed for more rugged use in off-the-road applications, where greater strength and heavier load-bearing characteristics are required. A generally higher content of stronger, more durable natural rubber is used in certain OTR tires relative to the more supple synthetic rubbers which are used in higher proportions in on-the-road tires. Also, more substantial internal reinforcement is required, including rubberized textile and steel tire cord plies and belts, and

[18] *Certain New Pneumatic Off-the-Road Tires From India: Final Results of Expedited Sunset Review of the Antidumping Duty Order*, 87 Fed. Reg. 34654 (June 7, 2022); *Certain New Pneumatic Off-the-Road Tires From India: Final Results of Expedited First Sunset Review of the Countervailing Duty Order*, 87 Fed. Reg. 31860 (May 25, 2022).

[19] Prior to January 1, 2017, subject merchandise was classifiable under the following deleted or discontinued HTSUS numbers: 4011.61.0000, 4011.62.0000, 4011.63.0000, 4011.69.0090, 4011.92.0000, 4011.93.4000, 4011.93.8000, 4011.94.4000, and 4011.94.8000. CR/PR at I-17 n.17.

[20] CR/PR at I-18.

heavy-duty steel bead bundles for rim construction. OTR tires are produced in a wide variety of types and sizes depending upon end use, ranging from relatively small agricultural implement and industrial forklift tires to larger tires found on farm tractors and harvesting equipment, together with earthmover/construction equipment used in mining and construction.[21]

In the original investigations, the Commission defined a single domestic like product consisting of OTR tires, coextensive with Commerce's scope, and no party argued for a different definition.[22]

In these reviews, the record does not indicate that there have been any changes in the characteristics and uses of domestically produced OTR tires since the original investigations that would warrant revisiting the definition of the domestic like product,[23] Titan argues that the Commission should adopt the same domestic like product definition from the original investigations,[24] and no party argues for a different definition.[25] Accordingly, we again define a single domestic like product consisting of all OTR tires, coextensive with Commerce's scope definition.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry 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."[26] 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.

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[21] CR/PR at I-18-19.

[22] *Original Determinations*, USITC Pub. 4669 at 9. In the preliminary determinations, the Commission considered whether unmounted and mounted OTR tires within the scope were separate domestic like products, and whether the domestic like product should include wheel assemblies outside the scope. After analyzing these issues, the Commission defined a single domestic like product, coextensive with the scope. The record in the final phase did not contain any new information and the parties agreed with the definition of the domestic like product in the preliminary determinations. In the absence of any argument to the contrary, the Commission continued to define a single domestic like product consisting of OTR tires, coextensive with Commerce's scope. *Id.*

[23] *See generally* CR/PR at I-18-28.

[24] Titan's Prehearing Brief at 6.

[25] Respondents' Prehearing Br. at 4; CR/PR at I-29.

[26] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

In the original investigations, the Commission addressed two domestic industry issues. First, it found that tire mounting operations were not sufficient production-related activities to constitute domestic production.[27] Second, the Commission addressed whether appropriate circumstances existed to exclude from the domestic industry two domestic producers, ***, also an importer of subject merchandise, and ***, a firm that shared a parent company with an importer of subject merchandise, pursuant to the related parties provision.[28] The Commission found that appropriate circumstances existed to exclude *** but not ***.[29] The Commission therefore defined the domestic industry as all U.S. producers of OTR tires except for ***.[30]

The information in the current reviews indicates that the nature of domestic tire mounting operations has not changed materially since the original investigations.[31] No party commented on whether tire mounters engage in sufficient production-related activities to be considered domestic producers. In light of these considerations, we again find that tire mounting operations are not sufficient production-related activities to constitute domestic production.

We must also determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the 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

[27] *Original Determinations*, USITC Pub. 4669 at 10. In the preliminary determinations, the Commission found that tire mounting operations comprised a relatively small portion of capital investment, required less training, required fewer workers, and paid *** wages compared to tire building operations. It found that mounting a tire added *** percent of the total value of a completed tire assembly. Lastly, it found that the raw materials required by tire mounting operations and their cost were minor and that ***. For these reasons, the Commission found that tire mounting operations were not engaged in sufficient production-related activities to be included in the domestic industry. *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 12-13.

[28] *Original Determinations*, USITC Pub. 4669 at 11-12; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 13-15.

[29] *Original Determinations*, USITC Pub. 4669, at 11-12; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 14-15. The Commission found that *** principal interests were not in domestic production as it began domestic production late in the period of investigation ("POI"), and its ratio of subject imports to domestic production was very high during the period in which it engaged in domestic production. *Id*. Regarding ***, the Commission found its principal interests appeared to lie in domestic production as it did not import any subject merchandise during the POI, and there was no evidence that it benefitted from its relationship with the ***. *Id*.

[30] *Original Determinations*, USITC Pub. 4669 at 12.

[31] *See generally* CR/PR at I-18-28.

or which are themselves importers.[32] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[33]

Titan argues that the Commission should define the domestic industry as all producers of the domestic like product.[34] Respondents take no position on the definition of the domestic industry.[35]

In the current reviews, *** qualifies for possible exclusion under the related parties provision because it imported subject merchandise during the POR.[36]

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[32] *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).

[33] 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), *aff'd*, 839 F.3d 1377 (Fed. Cir. 2018); *see also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[34] Domestic Producer's Prehearing Brief at 7.

[35] Respondents' Prehearing Br. at 4; *see generally* ATA Prehearing Br.

[36] While domestic OTR tires producer ***, it *** import subject merchandise, nor did *** export subject merchandise to the United States, during the period of review and therefore this firm is not considered for possible exclusion under the related parties provision. *See* CR/PR at III-16-17, Table I-8; *** Foreign Producers Questionnaire at II-13.

*** did not itself import subject merchandise but reported purchasing subject merchandise from importers *** and *** during the period of review. CR/PR at Table III-12. A domestic producer shall be considered to be a related party if it directly or indirectly controls an exporter, importer, or third party. 19 U.S.C. § 1677(4)(B). A domestic producer that does not itself import subject merchandise or does not share a corporate affiliation with an importer may nonetheless be deemed a related party if it controls a purchaser of large volumes of subject imports. *See* SAA at 858. The Commission has found such control to exist, for example, where the domestic producer's purchases were responsible for a predominant proportion of an importer's subject imports and the importer's subject imports were substantial. *See*, *e.g.*, *Iron Construction Castings from Brazil, Canada, and China*, Inv. Nos. 701-TA-248, 731-TA-262-263, 265 (Fourth Review), USITC Pub. 4655 at 11 (Dec. 2016); *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083 (Second Review), USITC Pub. 4646 at 12 (Nov. 2016). *** purchases of imported OTR tires from India ranged from *** tires in 2016 to *** tires in 2018, and were *** tires in 2021; they accounted for between *** and *** percent of imports by *** over the

*** was the *** largest domestic producer in 2021, accounting for *** percent of domestic industry production.[37] *** imported subject merchandise in 2018, 2020, 2021, and interim 2022. The ratio of *** subject imports to U.S. production was *** in 2019 and 2020, *** percent in 2021, and *** percent in interim 2022, compared to *** percent in interim 2021.[38] *** indicated that its reason for importing subject merchandise was to ***.[39] Additionally, *** reported significant capital expenditures during the POR.[40] *** the continuation of the orders.[41]

In view of the fact that *** importation of subject merchandise was small in relation to its domestic production and its significant capital expenditures during the POR, its principal interest appears to be in domestic production. Further, there is no evidence on the record that including *** in the domestic industry would skew the data for the rest of the industry or mask any likely injury from subject imports in the event of revocation. And finally, as noted above, no party argued for its exclusion. We therefore determine that appropriate circumstances do not exist to exclude *** from the domestic industry.

Accordingly, consistent with our definition of the domestic like product, we define the domestic industry as all U.S. producers of OTR tires.

III. Revocation of the Antidumping and Countervailing Duty Orders Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a

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POR. CR/PR at Table III-12. *** and *** account for *** and *** percent, respectively, of total subject imports in 2021. CR/PR at Table I-9. Because *** purchases from these importers accounted for a *** small proportion of its importers' imports, we find that *** does not account for a predominant portion of either importers' subject imports or a substantial proportion of overall subject import volume and therefore does not qualify for possible exclusion under the related parties provision. Moreover, even if it were a related party, appropriate circumstances would not exist to exclude it from the domestic industry. *** ratio of purchases of subject imports to its U.S. production is less than *** percent throughout the POR, indicating that its primary interest lies in domestic production and its inclusion is unlikely to skew the data for the rest of the domestic industry. CR/PR at Table III-12.

[37] CR/PR at Table I-7.

[38] CR/PR at Table III-10.

[39] CR/PR at Table III-11.

[40] CR/PR Table III-19.

[41] CR/PR at Table I-7.

determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[42] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[43] Thus, the likelihood standard is prospective in nature.[44] The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[45]

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[46] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[47]

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[42] 19 U.S.C. § 1675a(a).

[43] SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

[44] While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[45] *See NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), *aff'd mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); *Usinor v. United States*, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[46] 19 U.S.C. § 1675a(a)(5).

[47] SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[48] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[49] The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[50]

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[51] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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.[52]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the

[48] 19 U.S.C. § 1675a(a)(1).

[49] 19 U.S.C. § 1675a(a)(1). Commerce has not issued any duty absorption findings since imposition of the orders. *See* CR/PR at I-12 n.12.

[50] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[51] 19 U.S.C. § 1675a(a)(2).

[52] 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[53]

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.[54] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.[55]

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[56] The following conditions of competition inform our determinations.

[53] *See* 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

[54] 19 U.S.C. § 1675a(a)(4).

[55] The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, 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 may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

[56] 19 U.S.C. § 1675a(a)(4).

1. Original Investigations

a. Demand Conditions

In its original investigations, the Commission found that demand for OTR tires was driven by sales to the end-use markets in which they are used, including agricultural, construction/industrial, and mining. It also found that there were two distinct channels of distribution for each market: 1) tires for new equipment sold to original equipment manufacturers ("OEMs") and 2) replacement tires for existing vehicles in the aftermarket. Demand in the OEM channel of distribution was driven by the quantity of new vehicles being produced, and demand in the aftermarket channels was driven by customers that sought to replace worn tires on their vehicles with new tires. Aftermarket customers included farmers in the agricultural market, companies utilizing machinery in construction operations, and corporations engaging in commercial mining activity. The record indicated that demand drivers in the agricultural OEM market included ***, seasonal planting, harvest demand, climate, crop prices, and net farm income. Demand in the construction/industrial market was driven by housing starts and commercial and government construction projects. Demand in the mining market was driven by the prices of commodity metals such as copper, gold, and silver.[57]

Apparent U.S. consumption of OTR tires decreased from *** tires in 2013 to *** tires in 2014, and to *** tires in 2015, and was *** tires in interim 2016 compared to *** tires in interim 2015. The number of OTR tires for agricultural uses, the largest end-use sector, declined during the period, with the entire decline attributable to OEM shipments. The number of OTR tires sold for construction/industrial uses, the second largest end-use sector, increased from 2013 to 2015. The number of OTR tires sold for mining and other uses also increased between 2013 and 2015.[58]

b. Supply Conditions

During the original investigations, the domestic industry was the largest source of OTR tires in the U.S. market. U.S. producers' share of apparent U.S. consumption declined from *** percent in 2013 to *** percent in 2015, and was lower in interim 2016 compared to interim

[57] *Original Determinations*, USITC Pub. 4669 at 21-22; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 28-29.

[58] *Original Determinations*, USITC Pub. 4669 at 22; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 29.

2015. Additionally, the domestic industry reported unplanned shutdowns and production curtailments throughout the POI.[59]

Cumulated subject imports supplied an increasing portion of the U.S. OTR tires market. Cumulated subject imports as a share of apparent U.S. consumption increased from *** percent in 2013 to *** percent in 2015. Nonsubject imports also increased their share of apparent U.S. consumption from *** percent in 2013 to *** percent in 2015.[60]

c. Substitutability and Other Conditions

During the original investigations, the Commission found a moderate-to-high degree of substitutability between domestically produced OTR tires and subject imports, and that price was one of several important factors in purchasing decisions.[61]

Most responding domestic producers and a majority of responding importers and purchasers reported that the U.S. market for OTR tires consisted of three tiers. Tier 1 was characterized by brand recognition and higher quality products and service; Tier 2 was characterized by lesser brand recognition and quality and tended to be focused on availability, price, and the best performance value; and Tier 3 was characterized by products with little or no brand recognition, lower prices, and lower warranties.[62]

The Commission acknowledged that Tier 1 consisted primarily of domestic producers and that subject imports appeared concentrated in tiers 2 and 3. As the Commission explained, however, there was significant overlap between domestically produced OTR tires and subject imports in Tier 2. Additionally, purchasers provided conflicting reports regarding the appropriate tiers for different suppliers or brands. Suppliers of subject imports, by their own admission, reported that they sold OTR tires across multiple tiers, while some domestic producers also self-reported that their products were sold in more than one tier. While recognizing the existence of tiers in the OTR tires market, the Commission did not find that the tiered system substantially limited competition between cumulated subject imports and the domestic like product.[63]

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[59] *Original Determinations*, USITC Pub. 4669 at 22; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 30.

[60] *Original Determinations*, USITC Pub. 4669 at 22; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 30.

[61] *Original Determinations*, USITC Pub. 4669 at 23.

[62] *Original Determinations*, USITC Pub. 4669 at 23.

[63] *Original Determinations*, USITC Pub. 4669 at 23-24. The Commission also noted that private label products represented a small proportion of the market and were associated with lower prices and not the same quality as branded OTR tires. *Id*.

The Commission found that prices for two primary raw materials used to produce OTR tires, natural rubber and synthetic rubber, had declined during the period of investigation. Domestic producers and importers reported adjusting their selling prices to reflect changes in raw material prices.[64]

2. Current Reviews[65]

a. Demand Conditions

Demand for OTR tires is driven by demand for tractors, aerial work platforms, and earthmoving vehicles in the OEM market and replacement tires for these vehicles in the aftermarket.[66]

Most responding firms reported an increase in overall U.S. demand in the agricultural, construction/industrial, and mining market sectors over the review period and anticipate increasing demand in the future. Most responding U.S. producers and importers expect demand to increase while responding purchasers were divided between expecting increased

[64] *Original Determinations*, USITC Pub. 4669 at 24-25.

[65] Respondents argue that the Commission should not cumulate OTR tire imports from India subject to the antidumping duty investigation with OTR tire imports from India subject to the countervailing duty investigation because imports of OTR tires from BKT, an Indian producer and exporter, are subject to the countervailing duty order but not the antidumping duty order. Respondents' Prehearing Brief at 4-6; Respondents' Posthearing Brief at 3 n.9; *see* 82 Fed. Reg. 12556 (Mar. 6, 2017); 82 Fed. Reg. 25598 (June 2, 2017). Because the statutory requirements for cumulation are satisfied in these reviews, and cumulation is appropriate based on this record, we consider imports subject to the antidumping and countervailing duty orders on a cumulated basis for purposes of our analysis. *See* 19 U.S.C. § 1675a(a)(7) ("the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market"). Specifically, the reviews of the antidumping and countervailing duty orders were instituted on the same day, imports of OTR tires subject to the antidumping and countervailing duty orders compete with each other and with the domestic like product, and none of the exceptions to cumulation apply. Counsel for BKT stated at the hearing that subject imports from BKT compete with subject imports from other Indian producers and the domestic like product in the U.S. market. Hearing Tr. at 179 (Gurley), 180 (Emerson). The record also indicates that other producers in India produce OTR tires in the same types and rim sizes, and for the same sectors, as BKT. CR/PR at Tables H-2-3. Furthermore, the record indicates that *** percent of imports subject to the countervailing duty order are from Indian producers other than BKT that are also subject to the antidumping duty order. *Derived from* BKT Foreign Producer Questionnaire at II-11 and CR/PR at I-10.

[66] CR/PR at II-8.

demand or fluctuating demand.[67] Responding firms also reported that agriculture was the largest end-use sector in the U.S. market. U.S. net farm income increased substantially during the POR but is projected to decrease in 2023. Construction was the second largest end-use sector in the U.S. market, with total construction spending in the United States increasing during the POR and future increases in U.S. nonresidential construction projected for 2023 and 2024. Residential housing growth is projected to slow in 2023 before recovering somewhat in 2024. Mining and all other end uses were the smallest end-use sectors.[68] Respondents claim that demand for OTR tires in the mining sector is likely to increase given expected increases in commodity metal prices.[69]

Apparent U.S. consumption of OTR tires increased in each full year of the POR, except from 2019 to 2020, and was 41.2 percent higher in 2021, at 5.8 million tires, than in 2016, at 4.1 million tires.[70] Apparent U.S. consumption was 4.6 million tires in interim 2022, which was an increase of 4.8 percent from the total recorded in interim 2021, 4.4 million tires.[71]

b. Supply Conditions

During the POR, the domestic industry was the largest or second-largest supplier of OTR tires to the U.S. market during the POR. The domestic industry's share of apparent U.S. consumption by quantity declined from 52.2 percent in 2016 to 43.0 percent in 2021, and was 38.1 percent in interim 2022, lower than 44.4 percent in interim 2021.[72] [73]

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[67] CR/PR at II-9.

[68] CR/PR at II-8-9.

[69] Respondents' Prehearing Brief at 12-13.

[70] CR/PR at I-35, Table I-10. Apparent U.S. consumption was 4.1 million tires in 2016, 4.6 million in 2017, 5.0 million in 2018, 5.1 million in 2019, 5.0 million in 2020, 5.8 million in 2021, and 4.6 million tires in interim 2022 compared to 4.4 million in interim 2021. *Id*.

[71] CR/PR at Table I-10. As measured using official import statistics for nonsubject imports, apparent U.S. consumption increased in most years of the POR, from *** tires in 2016 to *** tires in 2021, and was higher in interim 2022 at *** tires than in interim 2021 at *** tires. Staff Worksheet, EDIS Doc. 793918 at Table I-1.

[72] CR/PR at Table I-10. As measured using official import statistics for nonsubject imports, the domestic industry's share of apparent U.S. consumption by quantity decreased irregularly from *** percent in 2016 to *** percent in 2021, and was *** percent in interim 2022, down from *** percent in interim 2021. *See* Staff Worksheet, EDIS Doc. 793918 at Table I-1.

[73] *** importer questionnaire response as originally submitted contained certain errors. Commission staff and *** undertook several rounds of revisions to *** questionnaire response in order for these data to be useable and accurate. *** Correspondence, EDIS Docs. 791998 (Mar. 6, 2023), EDIS Doc. 792442 (Mar 10, 2023). Given that *** questionnaire response accounts for *** percent of reported imports from 2016 to 2021, as well as *** and Commission staff's efforts to ensure the

The domestic industry experienced one plant opening, an expansion, and two acquisitions during the POR.[74] The domestic industry's production capacity increased irregularly by 26.1 percent from 2016 to 2021, but was 10.1 percent lower in interim 2022 than in interim 2021.[75] The domestic industry's capacity utilization decreased irregularly from 73.4 percent in 2016 to 62.8 percent in 2021, but was higher in interim 2022 (69.9 percent) than in interim 2021 (61.8 percent).[76]

Nonsubject imports were generally the second largest source of supply of OTR tires to the U.S. market during the period of review. Their share of apparent U.S. consumption increased irregularly from *** percent in 2016 to *** percent in 2021, and was *** percent in interim 2022, down from *** percent in interim 2021.[77] Sources of nonsubject imports include China, Sri Lanka, France, Thailand, Israel, and Turkey.[78]

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accuracy of the response, we decline to reject the response. *Compare* *** importer questionnaire at II-6a to CR/PR at C-1. Nevertheless, we also consider nonsubject imports as measured by official import statistics, to account for any deficiencies in the reported nonsubject import data.

Additionally, we are unpersuaded by Respondents' argument that the Commission should reject *** data, consistent with its rejection of the data reported by Michelin North America Inc. ("Michelin"). The Commission excluded Michelin's U.S. producers' questionnaire response from the report due to deficiencies in the response, ***. *Id*. at I-30 n.29, III-20 n.11; Michelin's U.S. producer questionnaire at II-3a and III-9a. Given that Michelin would have accounted for less than *** percent of domestic industry production and *** percent of the industry's net sales revenue in 2021, the exclusion of its data from domestic industry data would have had little effect on industry performance trends. Thus, the comparison to, *** complete importer questionnaire response is inapposite.

[74] CR/PR at Tables III-1 and III-2. Four of six U.S. producers, 11 of 18 importers, and 10 of 12 purchasers reported that they had experienced supply constraints since January 1, 2016, with many firms reporting supply issues with both domestic and imported OTR tires during 2020-22. Firms reported pandemic-related supply issues including factory disruptions, freight issues and shipment delays, labor challenges, and market cyclicality, as supply constraints. ***. CR/PR at II-6 and Table III-2.

[75] CR/PR at III-4, Tables III-4 and C-1. *** reported that their practical OTR tire capacity fluctuated based on the amount of rubber they were able to process depending on the size of OTR tires being produced at the time. *Id*. at III-3.

[76] CR/PR at Tables III-4 and C-1.

[77] CR/PR at Table I-10. As measured using official import statistics for nonsubject imports, nonsubject imports' share of apparent U.S. consumption increased irregularly from *** percent in 2016 to *** percent in 2021, and was *** percent in interim 2022, up from *** percent in interim 2021. *See* Staff Worksheet, EDIS Doc. 793918 at Table I-1. Based on these data, nonsubject imports were the largest source of supply in the U.S. market during the POR.

[78] CR/PR at II-6. OTR tires from China were subject to antidumping and countervailing duty orders during the earlier portion of the review period. Those orders were revoked as of June 17, 2019. CR/PR at Table I-2.

Subject imports were the smallest source of supply to the U.S. market during the POR. Their share of apparent U.S. consumption increased irregularly from *** percent in 2016 to *** percent in 2021, and was *** percent in interim 2022, up from *** percent in interim 2021.[79]

c. Substitutability and Other Conditions

We continue to find that there is a moderate-to-high degree of substitutability between domestic like product and subject imports.[80] Most responding U.S. producers, importers, and purchasers reported that the domestic like product and subject imports were at least frequently interchangeable.[81] Most responding purchasers reported that domestic and subject OTR tires were comparable with respect to nine of the 17 purchasing factors, including three factors that were rated as very important by most purchasers (product consistency, quality meets industry standards, and quality exceeds industry standards).[82]

We also continue to find that price is one of several important factors in purchasing decisions. Purchasers most frequently cited quality (11 firms), price (eight firms), and availability (five firms) as among the three most important factors in purchasing decisions. Quality was reported most frequently as the most important factor, price was reported most frequently as the second most important factor, followed by availability as the third most frequently reported important factor.[83] The vast majority of responding purchasers (10 of 12) reported that they sometimes purchase the lowest-priced product.[84] Additionally, seven of 12 responding U.S. purchasers named price as a very important factor in purchasing decisions, although a greater number of responding purchasers also reported that availability, reliability of supply, and product consistency were very important in purchasing decisions.[85] A majority of responding importers (nine of 14) and domestic producers (four of five), and half of responding purchasers (five of 10), reported that differences other than price between domestic OTR tires

[79] CR/PR at Table I-10. As measured using official import statistics for nonsubject imports, subject imports' share of apparent U.S. consumption increased irregularly from *** percent in 2016 to *** percent in 2021, and was *** percent in interim 2021 and 2022. *See* Staff Worksheet, EDIS Doc. 793918 at Table I-1.

[80] CR/PR at II-11.

[81] CR/PR at Table II-11.

[82] CR/PR at II-18 and Tables II-10, II-7.

[83] CR/PR at II-13 and Table II-6.

[84] CR/PR at II-13.

[85] CR/PR at Table II-7.

and subject imports were always or frequently significant in sales of OTR tires in the U.S. market.[86]

The record indicates that the OTR tire market continues to be divided into tiers, although the parties and market participants disagree over which brands and producers belong in which tier. There are no industry-wide accepted definitions for the several tiers. As in the original investigations, suppliers in Tier 1 are generally perceived to possess superior brand recognition and a reputation for high quality, durability, and technical service and support.[87] Tier 2 producers have some brand recognition and focus on availability and price,[88] and Tier 3 producers have little brand recognition and are driven primarily by price.[89]

We find that the overlap between domestic producers and subject imports within and between tiers appears to have increased since the original investigations, as additional subject producers joined Tier 1 and Tier 1 and 2 suppliers introduced low-tier brands. Since the original investigations, five of six U.S. producers, eight of 17 importers, and four of 11 purchasers reported changes in the tiers in which products are categorized.[90] The record indicates that several suppliers that were in Tier 2 in the original investigations are now in Tier 1, including *** and ***.[91] Additionally, Maxam moved from Tier 3 to Tier 2 and there were several new entrants in the Tier 3 market including GRI, Tiron, JK Tyre, and CEAT.[92] *** reported that Tier 1 and Tier 2 manufacturers have added secondary lower tier brands to compete with lower-cost tires.[93] Rather than being fixed, the categorization of suppliers by tier was in flux during the

[86] CR/PR at Table II-12. Four importers reported that differences other than price were "always" significant, five "frequently," and five "sometimes," while four domestic producers reported that differences other than price were "frequently" significant and one "sometimes" significant. Five purchasers reported that differences other than price were "sometimes" significant, while three reported differences were "frequently" significant, and two "always" significant. *Id*.

[87] Hearing Tr. at 124 (Mazzola).

[88] CR/PR at E-4; Hearing Tr. at 124 (Mazzola).

[89] CR/PR at E-4; Hearing Tr. 125 (Mazzola).

[90] CR/PR at II-17. Most U.S. producers (5 of 6), importers (15 of 17), and purchasers (9 of 11) reported no branding changes since 2016. *Id*.

[91] CR/PR at II-17. Although BKT contends that its tires are in Tier 2, the Tier Study exhibit included in Respondents' brief indicates that it is a Tier 1 Ag Tire. Respondents' Prehearing Brief at Exh. 22; BKT Posthearing Br. at 3. Additionally, market participants indicated that *** and *** moved from Tier 2 to Tier 1, however they were identified as having Tier 1 offerings in the original investigations. *Id*. at II-16-17.

[92] CR/PR at II-17.

[93] CR/PR at II-17. Examples cited were Bridgestone adding the Firestone OTR brand, Continental adding the General OTR brand, Michelin adding the Camso and Solideal brands, and Yokohama's merging with ATC to add lower tier Alliance/Galaxy/PrimeX brands and its recent acquisition of Trelleborg. *Id*.

POR, generally in the direction of greater overlap between subject imports and the domestic like product within each tier.[94] Thus, while we continue to acknowledge the existence of tiers in the OTR tire market, we do not find that differences in tiers substantially limit competition between subject imports and the domestic like product.

The primary raw materials for OTR tires are natural rubber, synthetic rubber, carbon black and other chemicals, textiles, and steel.[95] Natural rubber and synthetic rubber prices increased irregularly over the POR by *** percent and *** percent, respectively.[96] Domestic producers and importers generally reported that their selling prices are adjusted to reflect changes in raw material prices.[97]

C. Likely Volume of Subject Imports

1. The Original Investigations

In the original investigations, the Commission found that the volume and increase in volume of cumulated subject imports were significant in absolute terms and relative to apparent U.S. consumption. The volume of cumulated subject imports increased from 1.0 million tires in 2013 to 1.3 million tires in 2015, and was 991,000 tires in interim 2016 compared to 1.1 million tires in interim 2015.[98] Cumulated subject imports as a share of apparent U.S. consumption increased from *** percent in 2013 to *** percent in 2015, and were *** percent in interim 2016 compared to *** percent in interim 2015.[99]

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[94] Based on the evidence of record, the Commission's findings in the original investigations remain true in the instant reviews, namely that "{p}urchasers provided conflicting reports regarding the appropriate tier for different suppliers or brands; suppliers of subject imports, by their own admission, reported that they sell OTR tires across multiple tiers; and some domestic producers also self-reported that their products are sold in more than one tier." *See Original Determinations*, USITC Pub. 4669 at 24.

[95] CR/PR at V-1.

[96] CR/PR at V-1, Figure V-1.

[97] CR/PR at V-1, V-5. Generally, raw material prices are transparent in the OTR tire market. Contracts are based on publicly available indexes, and these indexes usually result in price adjustments within three to six months, depending on the specific contract. Purchasers in the aftermarket also use raw material price information in price negotiations. CR/PR at V-1.

[98] *Original Determinations*, USITC Pub. 4669 at 25. Subject imports from India increased from *** tires in 2013 to *** tires in 2014 and *** tires in 2015, and were lower in interim 2016 (*** tires) than in interim 2015 (*** tires). *Confidential Original Determinations Staff Report*, INV-PP-011, EDIS Doc. 766082 (Jan. 23, 2017) ("*Confidential Original Determinations Staff Report*") at Table IV-2.

[99] Original Determinations, USITC Pub. 4669 at 25; *Confidential Original Determinations*, EDIS Doc. 766081 at 34-35. As a share of apparent U.S. consumption, subject imports from India increased from *** percent in 2013 to *** percent in 2014 and *** percent in 2015, and were higher in interim 2016 at *** percent than in interim 2015 at *** percent. CR/PR at Table C-1 (2013-Sept. 2016).

The Commission found that subject imports had gained market share entirely at the expense of the domestic industry, whose market share declined during the period of investigation. The Commission found that cumulated subject imports had increased their sales quantities and market share in the agricultural OEM market even as demand declined, contrary to respondents' argument that the domestic industry's declining market share resulted entirely from declining demand in the segment.[100] The Commission also rejected respondents' argument that the domestic industry's declining market share reflected its lack of interest in serving the aftermarket, noting that the domestic industry made a substantial share of its commercial shipments to the three segments of the aftermarket and lost market share to subject imports in all three segments.[101] The Commission concluded that the record did not support either the proposition that cumulated subject imports gained market share in markets where domestic industry participation was limited or that the domestic industry's lost market share was simply a function of declining agricultural OEM demand.[102]

2. The Current Reviews

Subject imports maintained a continuous and substantial presence in the U.S. market throughout the POR, even under the disciplining effect of the orders. The record indicates that shipments of subject imports increased from *** tires in 2016, to *** tires in 2017, and *** in 2018 and 2019, declined to *** tires in 2020, and then increased to *** tires in 2021, for an overall increase of *** percent over the full years of the review period. Subject imports were *** tires in interim 2022, up from *** tires in interim 2021, an increase of *** percent. Subject imports' share of apparent U.S. consumption increased from *** percent in 2016 and 2017, to *** percent in 2018, and *** percent in 2019, declined to *** percent in 2020, and then increased to *** percent in 2021; it was *** percent in interim 2022, up from *** percent in interim 2021.[103]

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[100] *Original Determinations*, USITC Pub. 4669 at 25-26.

[101] *Original Determinations*, USITC Pub. 4669 at 26; *Confidential Original Determinations*, EDIS Doc 766081 at 35-36.

[102] *Original Determinations*, USITC Pub. 4669 at 26-27.

[103] CR/PR at Table I-10. As measured using official import statistics for nonsubject imports, subject imports' share of apparent U.S. consumption increased irregularly during the POR. Subject imports' share was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in 2019, *** percent in 2020, *** percent in 2021, and *** percent in interim 2021 and 2022. Staff Worksheet, EDIS Doc. 793918 at Table I-1. Therefore, whether nonsubject imports are measured on the basis of questionnaire responses or by official import statistics, subject imports increased their share of apparent U.S. consumption over the review period.

The OTR tires industry in India grew over the POR. Responding subject producers reported that there were several new subject suppliers to the U.S. market, plant openings, and expansions during the POR.[104] They also reported that their practical OTR tire capacity increased from 11.2 million tires in 2016 to 15.2 million tires in 2021, and was 12.2 million tires in interim 2022, up from 11.4 million tires in interim 2021.[105] Even as responding producers irregularly increased their practical OTR tires capacity utilization from 75.7 percent in 2016 to 91.8 percent in 2021, they maintained significant excess practical capacity ranging from 1.2 million tires in 2021 to 3.0 million tires in 2019, and capacity utilization was lower in interim 2022 at 83.2 percent than in interim 2021 at 93.5 percent.[106] Subject producers reported manufacturing other products on the same equipment used to produce subject OTR tires, with substantial capacity potentially available to shift to OTR tires production.[107] Subject producers also reported substantial end-of-period inventories that fluctuated but increased by *** percent from *** tires in 2016 to *** tires in 2021.[108] Their inventories were higher in interim 2022 (*** tires) than in interim 2021 (*** tires).[109] Moreover, U.S. importers' arranged imports of OTR tires from India for the fourth quarter of 2022 and the first quarter of 2023 totaled ***

[104] CR/PR at Tables IV-9-10. Two new subject producers have entered the U.S. market since 2016, including Ascenso and CEAT. CR/PR at II-7. Yokohama acquired ATC operations in 2016. Additionally, Yokohama/ATC and Mahansaria Tyres each had a plant opening since 2016. Balkrishna added 50,000 metric tons of radial agricultural tire capacity and plans to add a third U.S. warehouse in the Midwest. *Id*. at Table IV-9.

[105] CR/PR at Table IV-11. All responding subject producers increased their practical OTR tires capacity overall from 2016-2021. CR/PR at IV-28. Subject producers reported that their practical overall capacity increased from 31.4 million tires in 2016 to 34.8 million tires in 2021 and was 26.7 million tires in interim 2022, up from 26.1 million in interim 2021. Their overall installed capacity increased from 34.0 million tires in 2016 to 38.0 million tires in 2021, and was 29.6 million tires in interim 2022, up from 28.3 million tires in interim 2021. *Id*. at Table IV-11.

[106] CR/PR at Table IV-11. Subject producers reported that their practical OTR tires production increased irregularly from 8.5 million tires in 2016 to 13.9 million tires in 2021; their production was 10.7 million tires in interim 2021, and 10.2 million tires in interim 2022. *Id*. at Table IV-11. Excess capacity based on overall production ranged between *** tires in 2021 and *** tires in 2020. CR/PR at Table IV-11.

[107] *See* CR/PR at Table IV-11.

[108] *Calculated from* CR/PR at Tables I-10 and IV-12.

[109] CR/PR at IV-12. *** of 11 subject producers reported being able to shift production from out-of-scope merchandise to OTR tires. CR/PR at IV-15. Subject producers reported that OTR tires accounted for *** percent of production on shared equipment that is also used to produce out-of-scope merchandise in 2021, and total capacity utilization of such equipment was *** percent in 2021. CR/PR at Table IV-11. Thus, subject producers could use product shifting to increase their production of OTR tires for export to the United States.

tires.[110] Given their substantial excess capacity and inventories, we find that subject producers have the ability to increase their exports of OTR tires to the United States after revocation.

We also find that subject producers are export oriented. Export shipments constituted the majority of subject producers' total shipments of OTR tires in each year of the period of review, and in both interim periods, increasing irregularly from 60.3 percent in 2016 to 62.4 percent in 2021.[111] Responding subject producers and resellers reported that their export shipments increased irregularly from 5.1 million tires in 2016 to 8.5 million tires in 2021, and were higher in interim 2022 (6.5 million tires) compared to interim 2021 (6.3 million tires).[112] According to Global Trade Atlas ("GTA") data concerning new pneumatic tires of rubber, which includes OTR tires and out-of-scope products, the subject industry was the second-largest global exporter of such merchandise in 2021.[113] These data also show that India's exports of new pneumatic tires of rubber increased by 116.9 percent during the POR, from $758.8 million in 2016 to $1.6 billion in 2021.[114]

The United States remains an attractive export market for subject producers, providing them with the incentive to export significant and increasing volumes of subject merchandise to the United States in the event of revocation. Subject imports maintained a substantial and increasing presence in the U.S. market throughout the POR, indicating that subject producers possess the infrastructure, customer relationships, and logistics to continue increasing their already significant exports to the United States in the event of revocation.[115] According to GTA data concerning new pneumatic tires of rubber, including OTR tires and out-of-scope products, the United States was the subject industry's largest single-country export market for such merchandise.[116] Indeed, responding subject producers and resellers' made approximately 23.4

[110] CR/PR at Tables IV-6 and C-1.

[111] CR/PR at Table IV-12. Exports as a share of total shipments were higher in interim 2022, at 64.7 percent, than in interim 2021, at 60.6 percent. *Id*.

[112] CR/PR at Table IV-13.

[113] CR/PR at Table IV-17 & note. We also note that Commerce reported that six of the subsidy programs it found were likely to continue or recur were export subsidy programs within the meaning of Article 3.1 of the Agreement on Subsidies and Countervailing Measures of the World Trade Organization (WTO). *See Issues and Decision Memorandum for the Expedited Sunset Review of the Countervailing Duty Order on Certain New Pneumatic Off-the-Road Tires From India* (May 18, 2023) at 12. Such programs would likely create an economic incentive for subject producers to export OTR tires in the event of revocation.

[114] CR/PR at IV-39 and Table IV-17.

[115] CR/PR at Table IV-13; Titan's Prehearing Brief at 23-24. We note that imports of OTR tires from China are subject to Section 232 duties. Titan's Prehearing Brief at 23-24.

[116] CR/PR at Table IV-16 & note. OTR tires from India have not been subject to antidumping or countervailing duty investigations in other markets during the POR. *Id*. at IV-39.

percent of their exports to the United States in 2021.[117] Enhancing the attractiveness of the U.S. market to subject producers and resellers, the average unit values ("AUVs") of their exports to the United States were consistently higher than the AUVs of their shipments to home market customers during the POR, though lower than the AUVs of their exports to third country markets.[118] And, as noted above, responding importers reported significant quantities of arranged imports of OTR tires from India in the fourth quarter of 2022 and first quarter of 2023, reflecting the subject producers' continued interest in serving the U.S. market with significant volumes of OTR tires.[119]

Accordingly, based on the foregoing, including the significant and increasing volume of subject imports during the original investigations, the substantial and increasing presence of subject imports in the U.S. market during the POR, subject producers' substantial production capacity, excess capacity, inventories, and exports, and the attractiveness of the U.S. market, we find that the volume of subject imports would likely be significant both in absolute terms and relative to consumption, in the event of revocation of the orders.

D. Likely Price Effects

1. The Original Investigations

In the original investigations, the Commission found that there was a moderate-to-high degree of substitutability between subject imports and domestically produced OTR tires and that price was an important factor in purchasing decisions. The Commission collected quarterly pricing data for eight OTR tire products, for sales to both OEM and aftermarket customers. The Commission observed that cumulated subject imports undersold the domestic like product in 132 of 135 quarterly comparisons, or 97.8 percent of the time, at margins ranging from 3.6 to 47.5 percent. It also found reported subject import sales of *** tires in quarters of

[117] CR/PR at Table IV-13.

[118] CR/PR at Tables IV-12-13. We examine AUV data with caution as we recognize that differences in AUVs may reflect differences in product mix or changes in product mix over time. Subject producer *** reported that prices in U.S. market are generally higher than in the Indian home market and similar to prices in the European market for comparable tires, and *** reported generally no price differences between the home market, U.S. market, and third-country markets, although prices can vary if there are additional duties or taxes in a particular country. *Id*. at V-33.

[119] CR/PR at Table IV-6.

underselling, compared to reported subject import sales of *** tires in quarters of overselling. The Commission found the underselling to be significant.[120] [121]

The Commission rejected respondents' argument that underselling by cumulated subject imports reflected brand or tier price premiums. While acknowledging that there were performance/price tradeoffs in the OTR tire market, the Commission noted that opinions differed widely as to the existence and range of such price premiums. The Commission also observed that the average underselling margins exceeded the high end of the reported average price premium range, and that there was not a clear tier distinction between the domestic like product and subject imports.[122]

The Commission did not find that cumulated subject imports depressed prices of the domestic like product to a significant degree. The Commission observed that although prices for domestically produced OTR tires declined, raw materials costs fell substantially during a time of declining apparent U.S. consumption.

The Commission also did not find that cumulated subject imports prevented price increases that otherwise would have occurred to a significant degree. The Commission observed that the U.S. market was characterized by declining apparent U.S. consumption and decreasing raw material costs during the POI. Additionally, raw material prices were based on publicly available indexes and thus transparent and widely known throughout the OTR tire market.[123]

The Commission found that significant underselling had enabled cumulated subject imports to gain market share at the expense of the domestic industry. It therefore concluded that low-priced cumulated subject imports had significant effects on the domestic industry.[124]

2. The Current Reviews

As discussed in section III.B.2.c above, we have found that there is a moderate-to-high degree of substitutability between subject imports and the domestic like product, and that price is one of several important factors in purchasing decisions.

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[120] *Original Determinations*, USITC Pub. 4669 at 28; *Confidential Original Determinations*, EDIS Doc. 766081 (Feb. 15, 2017) at 39-40.

[121] Subject imports from India undersold the domestic like product in 142 of 144 quarterly comparisons (by channel of distribution), with sales of *** tires in quarters of underselling and *** tires in the quarters of overselling. *Confidential Original Determinations Staff Report* at Tables V-15–16.

[122] *Original Determinations*, USITC Pub. 4669 at 28-29.

[123] *Original Determinations*, USITC Pub. 4669 at 29.

[124] *Original Determinations*, USITC Pub. 4669 at 29-30.

The Commission collected pricing data for five pricing products in these reviews, requesting separate pricing data for products 1-4 in the OEM market and products 1-5 in the aftermarket.[125] Six U.S. producers and eight importers provided usable pricing data for sales of the requested products, although not all firms reported data for all products for all quarters.[126] Data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of OTR tires and *** percent of U.S. shipments of subject imports in 2021.[127]

Subject imports undersold the domestic like product in 169 of 210 quarterly comparisons, (80.5 percent of the comparisons), at underselling margins that ranged from 0.2 to 68.6 percent and averaged 22.6 percent. Subject imports oversold the domestic like product in 41 of 210 quarterly comparisons (19.5 percent of the comparisons), at overselling margins that ranged from 0.1 to 43.3 percent and averaged 9.3 percent.[128] There were 386,314 subject imported tires sold in quarters in which subject imports undersold the domestic like product, accounting for 60.7 percent of reported subject import sales volume, and 250,437 subject imported tires in quarters of overselling, accounting for 39.3 percent of reported subject import sales volume.[129] Thus, subject imports undersold the domestic like product in the vast majority of quarterly comparisons during the POR, accounting for a majority of the reported volume of subject imports covered by the Commission's pricing data.

Between the first quarter of 2016 and the third quarter of 2022, domestic prices increased with respect to six pricing products and declined with respect to two pricing products.[130] Domestic price increases ranged from *** percent for *** to *** percent for

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[125] CR/PR at V-7. The Commission requested pricing data for the following products:
Product 1.-- Skid steer tire, size 12-16.5, ply rating of 10, weight from 50 to 90 lbs., rim width 9.75 inches, unmounted, tire only.
Product 2.-- Radial drive farm tire, metric size 380/85R24 (standard size 14.9R24), load index of 131, weight from 136 to 170 lbs., rim width 12 inches, unmounted, tire only.
Product 3.-- Backhoe loader tire, size 19.5L-24, ply rating of 12, weight from 175 to 230 lbs., rim width 15 inches, unmounted, tire only.
Product 4.--Radial farm implement tire, metric size 320/70R15, load index 142 to 145, weight from 65-75 lbs., rim width 10 inches, unmounted, tire only.
Product 5.--Radial rear farm tire, metric size 480/80R46 (standard size 18.4R46), load index of 158, weight from 350 to 450 lbs., rim width 15 inches, unmounted, tire only. *Id*.

[126] CR/PR at V-7.

[127] CR/PR at V-7.

[128] CR/PR at Table V-15.

[129] CR/PR at Table V-15.

[130] CR/PR at Table V-12. Domestic prices increased with respect to products ***, and declined with respect to products ***. *Id.* Pricing data covering the entire POR were unavailable for ***. *Id.*

***.[131] Domestic prices for *** decreased by *** percent and *** percent, respectively.[132] Subject import prices increased over the period for all seven pricing products for which pricing data spanning the POR are available, with the price increases ranging from *** to *** percent.[133]

We are unpersuaded by Respondents' argument that the apparent underselling by subject imports is a function of price comparisons of OTR tires in different tiers. As discussed above in section III.B.2.c, the parties and market participants disagree over which brands and producers belong in which tier, and there are no industry-wide accepted definitions for the several tiers. The overlap between domestic and subject OTR tires within the three tiers has increased since the original investigations, as several suppliers changed tiers and Tier 1 and Tier 2 manufacturers added secondary lower tier brands that compete in lower-cost tiers.[134] Furthermore, we note that the Tier Study exhibit included in Respondents' prehearing brief, which is a survey of 241 tire dealers contacted in the third quarter of 2018 (*i.e.*, before the midpoint of the POR),[135] indicates that the same tire manufacturer is often listed in more than a single tier.[136] Moreover, half of responding purchasers (five of ten) indicated that domestically produced OTR tires were either comparable or inferior to subject imports with respect to tiers or branding, indicating that domestically produced OTR tires are not always superior in terms of this factor.[137] Accordingly, we find that any differences in brands or tiers do not substantially

[131] CR/PR at Table V-12.

[132] CR/PR at Table V-12.

[133] CR/PR at Table V-12. Subject import prices increased with respect to products ***, and data were unavailable for ***. *Id.*

[134] CR/PR at II-17. Consistent with this information, firms report competition between subject imports and the domestic like product in multiple tiers. *See, e.g.*, Hearing Tr. at 60-61, 73-74 (Hogan), 124-25 (Mazzola).

[135] This study, generated by *Tire Review*, includes the disclaimer that "No effort was made to sort the respondents into groups of business specialization or expertise." Respondents' Prehearing Brief, Exh. 22 at 1.

[136] For example, while BKT is characterized overall as a Tier 2 manufacturer, it is listed as a Tier 1 manufacturer for both agricultural tires and OTR-industrial tires. While Camso and Galaxy/ATC are both characterized overall as Tier 3 manufacturers, they are listed as Tier 2 manufacturers for materials handling tires. While BF Goodrich is characterized overall as a Tier 2 manufacturer, it is listed as a Tier 1 manufacturer for mud-terrain and all-terrain (M/T and A/T) tires. Respondents' Prehearing Brief, Exh. 22 at 2.

[137] CR/PR at Table II-10. Insofar as Respondents contend that attenuated competition is demonstrated by subject imports' pervasive underselling during the POR unaccompanied by domestic industry loss of market share to subject imports, Tr. at 11 (Emerson), we note that even using official import statistics for nonsubject imports, the data show that subject imports took market share from the domestic industry from 2016 to 2021. *See* Staff Worksheet, EDIS Doc. 793918 at Table I-1.

attenuate competition between subject imports and the domestic like product, nor fully explain likely subject import underselling in the event of revocation.

Given the significant underselling in the original investigations and the predominant underselling observed during the period of review, we find that significant underselling by subject imports is likely in the event of revocation. Given the moderate-to-high degree of substitutability between subject imports and the domestic like product and the importance of price in purchasing decisions, the significant volume of low-priced subject imports that is likely after revocation would likely force the domestic industry to either reduce its prices, forego needed price increases, or lose sales and market share to subject imports. Consequently, we find that subject imports would likely have significant price effects in the event of revocation within a reasonably foreseeable time.

E. Likely Impact

1. The Original Investigations

In the original investigations, the Commission found that nearly all the domestic industry's performance indicators declined during the POI.[138] While recognizing that declining demand in the agricultural OEM market had undoubtedly affected the domestic industry, the Commission found that cumulated subject import volume had increased significantly during this time as low-priced subject imports undersold domestic OTR tires and gained market share at the expense of the domestic industry. As a result of the domestic industry's lost market share, the Commission found, the domestic industry's production, shipments, and net sales revenues were lower than they would have been absent subject import competition, even when accounting for declining demand in the agricultural OEM market.[139] The Commission therefore found that cumulated subject imports had as significant impact on the domestic industry.

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[138] *Original Determinations*, USITC Pub. 4669 at 30-31.

[139] *Original Determinations*, USITC Pub. 4669 at 31-32. The Commission rejected respondents' argument, based on several economic models, that the decline in the domestic industry's financial indicators was largely due to declining demand. *Id.* at 32 n.170. The Commission observed that the governing statute did not require it to weigh factors in its causation analysis. *Id.* (*citing* 19 U.S.C. § 1677(7)(C)(iii)). Additionally, the Commission noted that respondents' own economic model estimated that *** percentage points of the decline in the domestic industry's operating margin was not due to declining demand and did not find that this decline would necessarily be immaterial. *Id.* The Commission also found that Respondents' economic models did not fully address why subject imports increased during a time of declining apparent U.S. consumption and noted that the models suffered from various technical flaws and unpersuasive baseline assumptions. *Id*.

In its non-attribution analysis, the Commission considered the role of nonsubject imports in the U.S. market. The Commission observed that while nonsubject imports were higher in volume than cumulated subject imports throughout the POI, they declined between 2013 and 2015. Additionally, the Commission found that although nonsubject imports' share of apparent U.S. consumption increased over the POI, the increase was not nearly as sharp as the increase in subject import market share during the same period. Consequently, the Commission found nonsubject imports did not negate the domestic industry's loss of market share to cumulated subject imports and the resulting adverse impact.[140]

2. The Current Reviews

The domestic industry's performance generally improved from 2016 through 2019, declined in 2020, and then improved in 2021 to the highest level of the POR. The domestic industry's practical OTR production capacity increased irregularly throughout the POR by 26.1 percent but was 10.1 percent lower in interim 2022 compared to interim 2021.[141] Its production increased irregularly by 8.0 percent from 2016 to 2021 and was 1.7 percent higher in interim 2022 compared to interim 2021.[142] As the domestic industry's production increased at a slower rate than its capacity, the industry's capacity utilization rate decreased by 10.5

[140] *Original Determinations*, USITC Pub. 4669 at 32-33.

[141] The domestic industry's practical OTR tire capacity was 3.3 million tires in 2016, 3.9 million tires in 2017, 3.9 million tires in 2018, 3.5 million tires in 2019, 3.9 million tires in 2020, and 4.2 million tires in 2021; it was 3.2 million tires in interim 2021 and 2.9 million tires in interim 2022. The industry's practical overall capacity was 9.1 million tires in 2016, 9.4 million tires in 2017, 9.1 million tires in 2018, 8.7 million tires in 2019, 8.4 million tires in 2020, and 8.9 million tires in 2021; it was 6.7 million tires in interim 2021 and 6.1 million tires in interim 2022. CR/PR at Table III-4, C-1.

During the POI, the industry's capacity was *** tires in 2013, *** tires in 2014, and *** tires in 2015; it was *** tires in interim 2015 and *** tires in interim 2016. CR/PR at C-9. We recognize that the Commission requested capacity data in the original investigations on a different basis than in these reviews, complicating comparisons of these data. We also recognize that comparisons of the domestic industry's performance during the POR to its performance during the original investigations may be influenced by differences in data coverage, although responding domestic producers accounted for the vast majority of domestic production of OTR tires in both the original investigations and these reviews. *See* CR/PR at I-11; *Original Determinations*, USITC Pub. 4669 at 3.

[142] The domestic industry's production was 2.4 million tires in 2016, 2.7 million tires in 2017, 2.7 million tires in 2018, 2.5 million tires in 2019, 2.3 million tires in 2020, and 2.6 million tires in 2021; it was 2.0 million tires in interim 2021 and interim 2022. CR/PR at Tables III-4, C-1.

During the POI, the industry's production was *** tires in 2013, *** tires in 2014, and *** tires in 2015; it was *** tires in interim 2015 and *** tires in interim 2016. CR/PR at C-9.

percentage points from 2016 to 2021; it was 8.2 percentage points higher in interim 2022 than in interim 2021.[143]

The domestic industry's employment-related indicators fluctuated but generally improved during the POR. The number of production related workers ("PRWs"), wages paid, hourly wages, hours worked, and productivity all increased irregularly between 2016 and 2021.[144] Hours worked per PRW remained steady from 2016 to 2021 and over the interim

[143] The domestic industry's practical capacity utilization rate was 73.4 percent in 2016, 68.2 percent in 2017, 69.7 percent in 2018, 69.2 percent in 2019, 60.3 percent in 2020, and 62.8 percent in 2021; it was 61.8 percent in interim 2021 and 69.9 percent in interim 2022. CR/PR at Tables III-4, C-1.

During the POI, the industry's capacity utilization rate was *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was *** percent in interim 2015 and *** percent in interim 2016. CR/PR at C-9.

[144] The number of PRWs was 6,022 workers in 2016, 5,957 workers in 2017, 6,040 workers in 2018, 5,371 workers in 2019, 5,584 workers in 2020, and 6,060 workers in 2021; it was 6,144 workers in interim 2021 and 5,839 workers in interim 2022. CR/PR at Tables III-13, C-1. During the POI, the industry's number of PRWs was *** workers in 2013, *** workers in 2014, and *** workers in 2015; there were *** workers in interim 2015 and *** workers in interim 2016. CR/PR at C-9.

Wages paid were $224.9 million in 2016, $231.1 million in 2017, $235.6 million in 2018, $210.0 million in 2019, $212.2 million in 2020, and $245.5 million in 2021; they were $181.6 million in interim 2021 and $187.3 million in interim 2022. CR/PR at Tables III-13, C-1. During the POI, the industry's wages paid were $*** in 2013, $*** in 2014, and $*** in 2015; they were $*** in interim 2015 and $*** in interim 2016. CR/PR at C-9.

Hourly wages were $17.35 in 2016, $17.69 in 2017, $18.07 in 2018, $17.93 in 2019, $18.02 in 2020, and $18.71 in 2021; they were $18.15 in interim 2021 and $20.01 in interim 2022. CR/PR at Tables III-13, C-1. During the POI, the industry's hourly wages were *** in 2013, *** in 2014, and *** in 2015; they were *** in interim 2015 and *** in interim 2016. CR/PR at C-9.

Hours worked were 13.0 million in 2016, 13.1 million in 2017, 13.0 million in 2018, 11.7 million in 2019, 11.8 million in 2020, and 13.1 million in 2021; they were 10.0 million in interim 2021 and 9.4 million in interim 2022. CR/PR at Tables III-13, C-1. During the POI, the industry's hours worked were *** hours in 2013, *** hours in 2014, and *** hours in 2015; they were *** hours in interim 2015 and *** hours in interim 2016. CR/PR at C-9.

Productivity in tires per thousand hours was 186.7 tires in 2016, 204.4 tires in 2017, 207.5 tires in 2018, 209.7 tires in 2019, 198.1 tires in 2020, and 199.4 tires in 2021; it was 197.3 tires in interim 2021 and 214.5 tires in interim 2022. CR/PR at Tables III-13, C-1. During the POI, the industry's productivity was *** tires per thousand hours in 2013, *** in 2014, and *** in 2015; it was *** in interim 2015 and *** in interim 2016. CR/PR at C-9.

periods.[145] Wages paid, hourly wages, and productivity were all higher in interim 2022 than interim 2021, while PRWs and hours worked were lower.[146]

The quantity of the domestic industry's total U.S. shipments and net sales increased irregularly between 2016 and 2021 but were lower in interim 2022 compared to interim 2021.[147] The domestic industry's share of apparent U.S. consumption decreased 9.2 percentage points from 52.2 percent in 2016 to 43.0 percent 2021, and was 6.2 percentage points lower in interim 2022 at 44.4 percent compared to 38.1 percent in interim 2021.[148] The industry's end-of-period inventories, both in absolute terms and as a share of U.S. shipments, decreased irregularly from 2016 to 2021, but were substantially higher in interim 2022 compared to interim 2021.[149]

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[145] CR/PR at Tables III-13, C-1. Hours worked per PRW were 2,153 hours in 2016, 2,193 hours in 2017, 2,159 hours in 2018, 2,180 hours in 2019, 2,108 hours in 2020, and 2,165 hours in 2021; they were 1,629 hours in interim 2021 and 1,603 hours in interim 2022. CR/PR at Tables III-13, C-1. During the POI, the industry's hours worked per PRW were *** hours in 2013, *** hours in 2014, and *** hours in 2015; they were *** hours in interim 2015 and *** hours in interim 2016. *Confidential Original Determinations Staff Report* at Table III-9.

[146] CR/PR at Tables III-13, C-1.

[147] U.S. producers' U.S. shipments were 2.2 million tires in 2016, 2.4 million tires in 2017, 2.5 million tires in 2018, 2.4 million tires in 2019, 2.3 million tires in 2020, and 2.5 million tires in 2021; they were 2.0 million tires in interim 2021 and 1.8 million tires in interim 2022. CR/PR at Tables III-8, C-1. The domestic industry's net sales were 2.4 million tires in 2016, 2.6 million tires in 2017, 2.7 million tires in 2018, 2.6 million tires in 2019, 2.4 million tires in 2020, and 2.7 million tires in 2021; they were 2.1 million tires in interim 2021 and 1.9 million tires in interim 2022. CR/PR at Tables III-14, C-1.

During the POI, the industry's U.S. shipments were *** tires in 2013, *** tires in 2014, and *** tires in 2015; they were *** tires in interim 2015 and *** tires in interim 2016. Its net sales were *** in 2013, *** in 2014, and *** in 2015; they were *** in interim 2015 and *** in interim 2016. CR/PR at C-9.

[148] The domestic industry's share of apparent U.S. consumption was 52.2 percent in 2016, 50.6 percent in 2017, 49.0 percent in 2018, 46.5 percent in 2019, 45.1 percent in 2020, 43.0 percent in 2021; it was 44.4 percent in interim 2021 and 38.1 percent in interim 2022. CR/PR at Tables I-10, C-1.

As measured using official import statistics for nonsubject imports, the domestic industry's share of apparent U.S. consumption was *** percent in 2016, *** percent in 2017, *** percent in 2018, *** percent in 2019, *** percent in 2020, and *** percent in 2021; it was *** percent in interim 2022, down from *** percent in interim 2021. *See* Staff Worksheet, EDIS Doc. 793918 at Table I-1.

During the POI, the industry's share of apparent U.S. consumption was *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was *** percent in interim 2015 and *** percent in interim 2016. CR/PR at C-9. We recognize that comparisons of the relative shares of apparent U.S. consumption during the POI and the POR may be affected by differences in data coverage from questionnaire responses (although responding domestic producers accounted for the vast majority of domestic production of OTR tires in both the original investigations and these reviews).

[149] The domestic industry's end-of-period inventories were 505,000 tires in 2016, 535,000 tires in 2017, 514,000 tires in 2018, 406,000 tires in 2019, 305,000, tires in 2020, and 203,000 tires in 2021;

The domestic industry's financial performance indicia fluctuated but improved overall from 2016 to 2021. The domestic industry's net sales revenues,[150] gross profits,[151] operating income,[152] operating margin,[153] net income,[154] net income margin,[155] and return on assets[156] all

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they were 156,000 tires in interim 2021 and 275,000 tires in interim 2022. CR/PR at Tables III-9, C-1. As a share of U.S. shipments, they were 23.4 percent in 2016, 22.8 percent in 2017, 20.8 percent in 2018, 17.1 percent in 2019, 13.5 percent in 2020, and 8.1 percent in 2021; they were 6.0 percent in interim 2021 and 11.7 percent in interim 2022. *Id.* at Table III-9.

During the POI, the domestic industry's end-of-period inventories were *** tires in 2013, *** tires in 2014, and *** tires in 2015; they were *** tires in interim 2015 and *** tires in interim 2016. CR/PR at C-9. As a share of U.S. shipments, they were *** percent in 2013, *** percent in 2014, and *** percent in 2015; they were *** percent in interim 2015 and *** percent in interim 2016. *Confidential Original Determinations Staff Report* at Table III-7.

[150] Net sales revenues were $930.4 million in 2016, $1.0 billion in 2017, $1.1 billion in 2018, $1.0 billion in 2019, $934.1 million in 2020, and $1.2 billion in 2021; they were $883.2 million in interim 2021, and $991.2 million in interim 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's net sales revenues were $*** in 2013, $*** in 2014, and $*** in 2015; they were $*** in interim 2015 and $*** in interim 2016. CR/PR at C-9.

[151] Gross profits were $171.0 million in 2016, $167.6 million in 2017, $199.0 million in 2018, $183.7 million in 2019, $147.8 million in 2020, and $215.2 million in 2021; they were $167.1 million in interim 2021 and $182.9 million in interim 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's gross profits were $*** in 2013, $*** in 2014, and $*** in 2015; they were $*** in interim 2015 and $*** in interim 2016. CR/PR at C-9.

[152] Operating income was $20.1 million in 2016, $21.5 million in 2017, $60.3 million in 2018, $54.3 million in 2019, $45.4 million in 2020, and $110.6 million in 2021; it was $88.5 million in interim 2021 and $99.1 million in interim 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's operating income was $*** in 2013, $*** in 2014, and $*** in 2015; it was $*** in interim 2015 and $*** in interim 2016. CR/PR at C-9.

[153] The domestic industry's operating income margin was 2.2 percent in 2016, 2.0 percent in 2017, 5.4 percent in 2018, 5.3 percent in 2019, 4.9 percent in 2020, and 9.4 percent in 2021; it was 10.0 percent in interim 2021 and 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's income margin was *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was *** percent in interim 2015 and *** percent in interim 2016. CR/PR at C-9.

[154] Net income was $*** in 2016, $*** in 2017, $*** in 2018, $*** in 2019, $*** in 2020, and $*** in 2021; it was $*** in interim 2021 and $*** in interim 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's net income was $*** in 2013, $*** in 2014, and $*** in 2015; it was $*** in interim 2015 and $*** in interim 2016. CR/PR at C-9.

[155] The domestic industry's net income margin was *** percent in 2016 and 2017, *** percent in 2018, *** percent in 2019, *** percent in 2020, and *** percent in 2021; it was *** percent in interim 2021 and *** percent in interim 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's net income margin was *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was *** percent in interim 2015 and *** percent in interim 2016. CR/PR at C-9.

[156] The domestic industry's return on assets was 3.6 percent in 2016, 3.7 percent in 2017, 9.2 percent in 2018, 8.9 percent in 2019, 7.3 percent in 2020, and 16.3 percent in 2021. CR/PR at Table III-24. During the POI, the industry's return on assets was *** percent in 2013, *** percent in 2014, and *** percent in 2015. *Confidential Original Determinations Staff Report* at Table VI-5.

increased irregularly between 2016 and 2021, generally increasing between 2017 and 2018, decreasing in 2019 and 2020, and increasing in 2021. These measures were also higher in interim 2022 than in interim 2021. The domestic industry's cost of goods sold ("COGS") to net sales ratio fluctuated over the POR, from 81.6 percent in 2016 to 81.8 percent in 2021, and was slightly higher in interim 2022 at 81.5 percent than in interim 2021 at 81.1 percent.[157] The domestic industry's operating income margin increased irregularly by 7.2 percentage points from 2016 to 2021, from 2.2 percent in 2016 to 9.4 percent in 2021, and was 10.0 percent in interim 2021 and 2022.[158] Its capital expenditures and research and development expenses increased by 50.4 percent and 22.3 percent, respectively, from 2016 to 2021, and were higher in interim 2022 than interim 2021.[159]

In assessing the vulnerability of the domestic industry, we observe that most measures of the domestic industry's performance, including production, employment, and financial indicators such as operating and net income margins, generally improved over the POR, reaching the highest levels in 2021 or interim 2022. In light of the foregoing, we do not find that the domestic industry is in a vulnerable condition.

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[157] The domestic industry's COGS to net sales ratio was 81.6 percent in 2016, 84.0 percent in 2017, 82.1 percent in 2018, 82.0 percent in 2019, 84.2 percent in 2020, and 81.8 percent in 2021; it was 81.1 percent in interim 2021 and 81.5 percent in interim 2022. CR/PR at Tables III-14, C-1. CR/PR at Tables III-14, C-1. During the POI, the industry's COGS to net sales ratio was *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was *** percent in interim 2015 and *** percent in interim 2016. CR/PR at C-9.

[158] The domestic industry's operating margin was 2.2 percent in 2016, 2.0 percent in 2017, 5.4 percent in 2018, 5.3 percent in 2019, 4.9 percent in 2020, and 9.4 percent in 2021; it was 10.0 percent in interim 2021 and interim 2022. CR/PR at Tables III-14, C-1. During the POI, the industry's operating margin was *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was *** percent in interim 2015 and *** percent in interim 2016. CR/PR at C-9.

[159] Capital expenditures were $11.0 million in 2016, $14.0 million in 2017, $14.4 million in 2018, $16.7 million in 2019, $12.6 million in 2020, and $16.6 million in 2021; they were $10.1 million in interim 2021 and $11.9 million in interim 2022. CR/PR at Tables III-19, C-1. During the POI, the industry's capital expenditures were $*** in 2013, $*** in 2014, and $*** in 2015; they were $*** in interim 2015 and $*** in interim 2016. CR/PR at C-9.

Research and development expenses were $4.9 million in 2016, $6.2 million in 2017 and 2018, $5.9 million in 2019, $5.4 million in 2020, and $6.1 million in 2021; they were $4.5 million in interim 2021 and $4.8 million in interim 2022. CR/PR at Tables III-21, C-1. The industry's assets and return on assets both increased from 2016 to 2021 by 22.6 percent and 12.7 percentage points, respectively. *See* CR/PR at Tables III-23, III-24.

During the POI, the industry's research and development expenses were *** in 2013, *** in 2014, and *** in 2015; they were *** in interim 2015 and *** in interim 2016. The industry's assets were *** in 2013, *** in 2014, and *** in 2015. Its return on assets were *** percent in 2013, *** percent in 2014, and *** percent in 2015. *Confidential Original Determinations Staff Report* at Tables VI-4 and VI-5.

We find that the domestic industry's improved condition during the POR compared to the original investigations is due, at least in part, to the orders under review. Since imposition of the orders in March 2017, the domestic industry's performance has generally improved with stronger indicators in 2021, by most measures, than in 2015, the last year of the POI. The domestic industry's performance generally improved during the POR after declining by nearly all measures during the POI, although U.S. demand generally increased during the POR after declining during the POI.[160] U.S. producers report that the orders have maintained price discipline in the market,[161] while importers', purchasers', and foreign producers' responses were mixed.[162] The pricing data on the record also indicate that the orders had a disciplining effect on subject import prices. As noted above in Section III.D, subject imports from India oversold the domestic like product more frequently during the POR, with the orders in place, than during the POI.[163] In contrast to during the original investigations, from 2017 to 2021 and between the interim periods of the POR, the domestic industry's average net sales unit value increased more than its unit COGS.[164] Due at least in part to the price disciplining effect of the orders, during the POR domestic producers have been able to pass on rising costs and increase profitability. Further, given the declining trends during the POI, particularly with respect to market share, it appears likely that subject import volumes during the POR would have been greater but for the disciplining effect of the orders. We therefore conclude that the orders

[160] *See* CR/PR at Appendix C.

[161] For example, *** CR/PR at Table D 1.

[162] CR/PR at Table D 1.

[163] While the pricing products for the final and review phases of these investigations mostly differ, pricing product 2 (the same as product 7 in the original investigations) similarly shows a disciplining effect on subject import prices: subject imports of this product more frequently oversold the domestic like product during the POR than the POI, with smaller average margins of underselling for sales to both OEM and aftermarket purchasers. *Compare Confidential Original Determinations Staff Report* at Table V 9 *with* CR/PR at Table V 15.

[164] *Compare Confidential Original Determinations Staff Report* at Table VI 1 with CR/PR at Tables III 14 15. During the POI from 2013 to 2015, the domestic industry's net sales unit value decreased by $*** per tire and its unit raw material costs and unit total COGS decreased by $*** and $*** per tire, respectively. In interim 2016, the industry's unit net sales value was $*** per tire lower than in interim 2015, and unit raw material costs and unit total COGS were $*** and $*** per tire lower in interim 2016 than in interim 2015. *Confidential Original Determinations Staff Report* at Table VI 1. From 2017 to 2021, the domestic industry's net sales unit value increased by $37 per tire while unit raw material costs increased by $17 per tire and unit total COGS increased by $21 per tire. The industry's unit net sales value was $96 per tire higher in interim 2022 than in interim 2021, while unit raw material costs and unit total COGS were $73 and $81 per tire higher, respectively, in interim 2022 than in interim 2021. CR/PR at Tables III 14 15.

have helped to prevent further declines to the condition of the domestic industry since the POI and in fact helped lead to improvements during the POR.

As discussed above, we have found that the volume of subject imports would likely be significant if the orders under review were revoked, and that subject imports would likely undersell the domestic like product to a significant degree, forcing the domestic industry to either cut prices or forgo price increases, or else lose sales and market share to subject imports. Consequently, the likely significant volume of low-priced subject imports and their significant price effects would likely adversely impact the production, shipments, and revenues of the domestic industry, which, in turn, would have an adverse impact on the industry's profitability and employment, as well as its ability to raise capital and make and maintain necessary investments. We conclude that, if the orders were revoked, subject imports would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

We are unpersuaded by Respondents' argument that certain factors served to limit competition between subject imports and the domestic like product such that subject imports could have little impact on the domestic industry after revocation.[165] First, the record indicates that subject imports and the domestic like product compete in the same end-use markets, channels of distribution, and product types.[166] Domestic producers report competing directly with subject imports for sales to the same customers during the POR, with subject import prices influencing domestic pricing.[167] Second, there is no evidence that that limited changes in the U.S. producers' number of stock keeping units ("SKUs") have left any purchasers without

[165] Respondents' Posthearing Brief Attachment V at 1-3, 6-8; BKT's Posthearing Brief Attachment V at 1-3, 6-8. We are unpersuaded by Respondents' argument that supply chain disruptions and labor shortages limited the domestic industry's ability to compete with subject imports during the POR, and would continue to limit such competition after revocation. Respondents' Posthearing Brief at 13-15. The record indicates that supply constraints were tied to the COVID-19 pandemic and affected all sources of supply, including domestic producers and importers of OTR tires from India. *Id*. at II-6-7. A majority of responding U.S. producers, importers, and purchasers reported experiencing supply constraints during the POR, with many firms reporting supply issues with both the domestic and subject imported OTR tires from 2020 to 2022. *Id*. Moreover, representatives of Titan testified at the hearing that the supply constraints related to the pandemic have ended. Hearing Tr. at 16 (Reitz), 22 (Hawkins), 46 (Reitz). Indeed, a majority of responding purchasers rated domestic OTR tires as comparable or superior to subject imports with respect to availability and reliability of supply. *Id*. at Table II-10.

[166] CR/PR at Tables II-1, IV-4, F-1-4. Notwithstanding Respondents' arguments to the contrary, the domestic industry was substantially present in the aftermarket channel of distribution, with the industry's shipments to the aftermarket channel accounting for *** to *** percent of its annual U.S. shipments during the POR. *Id*. at Table II-1.

[167] *See* Hearing Tr. at 22, 75 (Hawkins) 52, (Beck); Titan's Posthearing Brief at Exh. 5.

supply.[168] Titan, the only producer that reported reducing its number of SKUs during the POR, stated that it did ***."[169] Titan also stated that these efforts have been premised on maintaining its presence in all the markets it serves.[170] Additionally, a majority of responding purchasers reported that domestic and subject OTR tires are comparable with respect to product range.[171] Moreover, no responding purchasers identified a reduction in the number of SKUs offered by the domestic industry as causing supply constraints, nor the number of SKUs offered by subject producers as a reason for their purchases of subject imports.[172]

We have considered the likely role of nonsubject imports in the U.S. market. Nonsubject imports increased irregularly during the POR both in terms of volume and market share, accounting for *** percent of apparent U.S. consumption in 2021.[173] Given the moderate-to-high degree of substitutability between the subject merchandise and the domestic like product and the importance of price in purchasing decisions, the presence of nonsubject imports would likely not prevent the significant volume of low-priced subject imports that is likely after revocation from taking market share from the domestic industry and/or forcing U.S. producers to either lower prices or forgo price increases to retain market share. As discussed above, subject imports and the domestic like product compete in substantial volumes in the same end-use markets, channels of distribution, and product types.[174] For these reasons, we find that subject imports would likely cause adverse effects on the domestic industry that are distinct from any effects attributable to nonsubject imports in the event of revocation.

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[168] A majority of U.S. producers (four of six) reported that their number of SKUs remained stable or increased over the POR. One producer reported that its number of SKUs fluctuated based on customer demand, while Titan reported that it reduced its number of SKUs during the POR. CR/PR at Table IV-3.

[169] CR/PR at IV-7, Table IV-3. Firms indicated that some but not all SKUs may be interchangeable and that there are common sizes and some market-specific sizes. *Id*. at II-5.

[170] Titan's Prehearing Brief at 9.

[171] CR/PR at Table II-10.

[172] CR/PR at II-16, Table II-7.

[173] CR/PR at Tables I-10, C-1. Nonsubject import volume increased from *** tires in 2016 to *** tires in 2021; it was higher in interim 2022 (*** tires) than interim 2021 (*** tires). *Id*. Nonsubject imports' share of apparent U.S. consumption by volume increased from *** percent in 2016 to *** percent in 2021; it was lower in interim 2022, at *** percent, than in interim 2021, when it was *** percent. *Id.*

As measured using official import statistics for nonsubject imports, nonsubject import volume increased from 3.1 million tires in 2016 to 4.3 million tires in 2021 and was higher in interim 2022 (5.1 million tires) than interim 2021 (3.1 million tires). Staff Worksheet, EDIS Doc. 793918 at Table I-1. Nonsubject imports' share of apparent U.S. consumption by quantity increased irregularly from *** percent in 2016 to *** percent in 2021 and was higher in interim 2022, at *** percent, than in interim 2021, when it was *** percent. *Id.*

[174] *See* CR/PR at Tables II-1, IV-4, F-1-4.

We have also considered the likely effects of demand trends on the domestic industry. Apparent U.S. consumption increased irregularly over the POR, and responding firms generally expect that demand will continue to increase.[175] Given the likely significant volume and likely significant price effects of subject imports in the event of revocation (as evidenced by, *inter alia,* the increasing volume and market share of subject imports during the POI and the POR, the large and growing production and capacity in the subject industry, the moderate-to-high degree of substitutability between domestically produced OTR tires and subject imports, the importance of price in purchasing decisions, and the likely underselling by subject imports), we find that growing U.S. demand would not preclude the likely significant volume of low-priced subject imports from taking market share from the domestic industry or forcing domestic producers to lower prices or forego price increases in order to retain sales or market share in the reasonably foreseeable future.

In sum, we conclude that, if the orders were revoked, subject imports from India would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the above reasons, we determine that revocation of the antidumping and countervailing duty orders on OTR tires from India would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

[175] CR/PR at II-9, Table C-1.

Part I: Introduction

Background

On February 1, 2022, U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted reviews to determine whether revocation of the countervailing duty order on OTR tires ("OTR tires") from India and the antidumping duty order on OTR tires from India would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On May 9, 2022, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act. [4] Table I-1 presents information relating to the background and schedule of this proceeding.[5]

[1] 19 U.S.C. 1675(c).

[2] 87 FR 5505, February 1, 2022. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

[3] In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders. 87 FR 5467, February 1, 2022.

[4] 87 FR 33209, June 1, 2022. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (87 FR 5505, February 1, 2022) were adequate.

[5] The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy are referenced in appendix A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Commissioners' votes on whether to conduct expedited or full reviews may also be found at the web site. Appendix B is for the witnesses who appeared at the Commission's hearing.

Table I-1
OTR tires: Information relating to the background and schedule of this proceeding

Effective date	Action
March 6, 2017	Commerce's countervailing and antidumping duty orders on OTR tires from India (82 FR 12553 and 82 FR 12556, March 6, 2017)
February 1, 2022	Notice of initiation by Commerce (87 FR 5467, February 1, 2022)
February 1, 2022	Notice of institution by Commission (87 FR 5505, February 1, 2022)
May 9, 2022	Commission's determinations to conduct full five-year reviews (87 FR 33209, June 1, 2022)
May 25, 2022	Commerce's final results of expedited five-year review of the countervailing duty order (87 FR 31860, May 25, 2022)
June 7, 2022	Commerce's final results of expedited five-year review of the antidumping duty order (87 FR 34654, June 7, 2022)
October 18, 2022	Commission's scheduling of the reviews (87 FR 64110, October 21, 2022)
March 2, 2023	Commission's hearing
April 7, 2023	Commission's vote
April 27, 2023	Commission's determinations and views

The original investigations

The original investigations resulted from petitions filed on January 8, 2016 with Commerce and the Commission by Titan Tire Corporation ("Titan") (Des Moines, Iowa) and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFLCIO, CLC ("USW") (Pittsburgh, Pennsylvania).[6] On February 2, 2017, Commerce determined that imports of OTR tires from India were being sold at less than fair value ("LTFV")[7] and on January 10, 2017, determined that subject imports were subsidized by the Governments of India and Sri Lanka.[8] The Commission determined on February 23, 2017 that the domestic industry was materially injured by reason of LTFV and subsidized imports of OTR tires from India and Sri Lanka.[9] On March 6, 2017, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margin of 3.67 percent and net subsidy rates ranging from 4.72 to 5.36 percent with respect to subject imports from India

[6] Certain New Pneumatic Off-the-Road-Tires from India and Sri Lanka, Investigation Nos. 701-TA-552-553 and 731-TA 1308 (Final), USITC Publication 4669, March 2017 ("Original publication"), p. I-1.

[7] 82 FR 9056, February 2, 2017. Commerce had previously determined that imports of OTR tires from India were not being sold at less than fair value (82 FR 4848, January 17, 2017), then amended its determination to correct ministerial errors with respect to ATC, one of the mandatory respondents in the investigation. BKT, the other mandatory respondent, received a *de minimis* margin and was excluded from the antidumping duty order.

[8] 82 FR 2946, January 10, 2017. Commerce found that critical circumstances existed, in part, with respect to imports subject to the countervailing duty order. The countervailing duty order was subsequently amended to correct ministerial errors. 82 FR 12556, March 6, 2017.

[9] 82 FR 12128, February 28, 2017.

and a rate of 2.18 percent with respect to subject import from Sri Lanka.[10] Following litigation at the Court of International Trade, Commerce issued a notice that the final judgment of the case was not in harmony with its final determination pertaining to the countervailing duty investigation of OTR tires imported from Sri Lanka, and revoked the countervailing duty order on OTR tires from Sri Lanka.[11]

Previous and related investigation

The Commission has conducted one previous import relief proceeding on OTR tires, as outlined in table I-2.

Table I-2
OTR tires: Previous and related Commission proceedings and status of orders

Date	Numbers	Country	Determination	Current Status of Orders
2007	701-TA-448 and 731-TA-1117	China	Affirmative	Orders revoked during the adequacy phase of the second review, June 17, 2019

Source: U.S. International Trade Commission publications and Federal Register notices.

Note: "Date" refers to the year in which the investigations or reviews were instituted by the Commission.

[10] 82 FR 12553 and 82 FR 12556, March 6, 2017. As noted above, BKT, the other mandatory respondent, received a *de minimis* margin and was excluded from the antidumping duty order. 82 FR 25598, June 2, 2017.

[11] 83 FR 35213, July 25, 2018. Pursuant to the Court of International Trade's ("CIT") final judgement, the mandatory respondent received a *de minimis* rate.

Summary data

Table I-3, table I-4, and figure I-1 present a summary of data from the original investigations and the current full five-year reviews. Table I-4 presents historic U.S. consumption during 2013-21. Summary data from the original proceeding and the current reviews appear in Appendix C.

U.S. producers' U.S. shipments, by quantity and by value, were *** percent and *** percent higher in 2021 compared to 2015, respectively. Apparent U.S. consumption was *** percent greater in 2021 compared to 2015. In terms of quantity, U.S. producers held a higher (by *** percentage points) market share of apparent U.S. consumption in 2021 compared to 2015 (*** percentage points, in terms of value).

The quantity and value of U.S. importers' U.S. shipments of imports of OTR tires from India were higher by *** percent and by *** percent, respectively, when comparing 2021 to 2015. U.S. shipments of imports from nonsubject sources were lower, in terms of quantity and in terms of value, by *** percent and by *** percent, respectively. As a result, the market share of U.S. shipments of imports from India increased, in terms of quantity and in terms of value, when comparing 2021 with 2015 whereas the market share of U.S. shipments of imports from nonsubject sources decreased, in terms of quantity and in terms of value, when comparing 2021 with 2015. Apparent U.S. consumption, both in terms of quantity and in terms of value, declined from 2015 to 2016 then began recovering in 2017. Apparent U.S. consumption, both in terms of quantity and in terms of value, then declined in 2020 and recovered to their highest values for the period in 2021.

Table I-3
OTR tires: Comparative data from the original investigations and subsequent review, by terminal year

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; shares in percent

Item	Measure	2015	2021
Apparent consumption	Quantity	***	5,829
U.S. producers market share	Share of quantity	***	43.0
India market share	Share of quantity	***	***
Nonsubject market share	Share of quantity	***	***
Import market share	Share of quantity	***	57.0
Apparent consumption	Value	***	2,165,099
U.S. producers market share	Share of value	***	49.9
India market share	Share of value	***	***
Nonsubject market share	Share of value	***	***
Import market share	Share of value	***	50.1
India	Quantity	***	***
India	Value	***	***
India	Unit value	***	***
Nonsubject sources	Quantity	1,907	***
Nonsubject sources	Value	898,821	***
Nonsubject sources	Unit value	***	***
All import sources	Quantity	2,711	3,324
All import sources	Value	1,076,878	1,084,450
All import sources	Unit value	397	326

Table continued.

Table I-3 Continued
OTR tires: Comparative data from the original investigations and subsequent review, by terminal year

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; shares and ratios in percent

Item	Measure	2015	2021
Capacity	Quantity	***	4,161
Production	Quantity	***	2,615
Capacity utilization	Ratio	***	62.8
Producer U.S. shipments	Quantity	***	2,505
Producer U.S. shipments	Value	***	1,080,649
Producer U.S. shipments	Unit value	***	431
Producer inventories	Quantity	***	203
Producer inventory ratio to total shipments	Ratio	***	7.5
Production workers (number)	Noted in label	***	6,060
Hours worked (in 1,000 hours)	Noted in label	***	13,117
Wages paid (1,000 dollars)	Value	***	245,481
Hourly wages (dollars per hour)	Value	***	18.71
Productivity (tires per 1,000 hours)	Noted in label	***	199.4
Net sales	Quantity	***	2,718
Net sales	Value	***	1,179,321
Net sales	Unit value	***	434
Cost of goods sold	Value	***	964,161
Gross profit or (loss)	Value	***	215,160
SG&A expense	Value	***	104,545
Operating income or (loss)	Value	***	110,615
Unit COGS	Unit value	***	355
Unit operating income	Unit value	***	41
COGS/ Sales	Ratio	***	81.8
Operating income or (loss)/ Sales	Ratio	***	9.4

Source: Office of Investigations memorandum INV-PP-011 (January 23, 2017 and data submitted in response to Commission questionnaires.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Data for 2015 are from the last year of the original investigations and 2021 the last year of this first reviews. Sri Lanka was subject in the original investigations but due to a CIT ruling retroactively determined to be de minimus and therefore nonsubject. Data for Sri Lanka in 2015 have been classified as nonsubject. Import data are U.S. importers' U.S. shipments of imports.

Table I-4
OTR tires: Historic U.S. consumption based on quantity and value, by period and source

Quantity in 1,000 tires; value in 1,000 dollars

Source	Measure	2013	2014	2015
U.S. producers	Quantity	***	***	***
India	Quantity	***	***	***
Nonsubject sources	Quantity	***	***	***
All import sources	Quantity	2,437	2,642	2,711
All sources	Quantity	5,003	4,940	4,580

Table continued.

Table I-4 Continued
OTR tires: Historic U.S. consumption based on quantity and value, by period and source

Quantity in 1,000 tires; value in 1,000 dollars

Source	Measure	2016	2017	2018	2019	2020	2021
U.S. producers	Quantity	2,153	2,352	2,470	2,376	2,256	2,505
India	Quantity	***	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***	***
All import sources	Quantity	1,974	2,294	2,571	2,730	2,740	3,324
All sources	Quantity	4,127	4,646	5,041	5,106	4,996	5,829

Source: Office of Investigations memorandum INV-PP-011 (January 23, 2017) and data submitted in response to Commission questionnaires.

Note: Sri Lanka was subject in the original investigations but due to a CIT ruling retroactively determined to be de minimus and therefore nonsubject. Data for Sri Lanka in 2013-15 have been classified as nonsubject. Import data are U.S. importers' U.S. shipments of imports.

Figure I-1
OTR tires: U.S. producers' U.S. shipments and U.S. imports, by period and source

* * * * * * *

Source: Office of Investigations memorandum INV-PP-011 (January 23, 2017 and data submitted in response to Commission questionnaires.

Note: Sri Lanka was subject in the original investigations but due to a CIT ruling retroactively determined to be de minimus and therefore nonsubject. Data for Sri Lanka in 2013-15 have been classified as nonsubject. Import data are U.S. importers' U.S. shipments of imports.

Statutory criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury."

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

> *(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--*
>
> *(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,*
>
> *(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,*
>
> *(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and*
>
> *(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption . . ..*
>
> *(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--*
>
> *(A) any likely increase in production capacity or existing unused production capacity in the exporting country,*

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

(D) 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.

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to–

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

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

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement."

Organization of report

Information obtained during the course of the reviews that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for OTR tires as collected in the reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of six U.S. producers of OTR tires that are believed to have accounted for the vast majority of domestic production of OTR tires in 2021. U.S. import data and related information are based on the questionnaire responses of 20 U.S. importers of OTR tires that are believed to have accounted for a vast majority of subject U.S. imports during 2021. Foreign industry data and related information are based on the questionnaire responses of 11 producers in India that are believed to have accounted for a vast majority of total production. Responses by U.S. producers, importers, purchasers, and foreign producers of OTR tires to a series of questions concerning the significance of the existing antidumping and countervailing duty orders and the likely effects of revocation of such orders are presented in appendix D.

Commerce's reviews[12]

Administrative reviews

Commerce has not completed an administrative review of the outstanding countervailing duty order on OTR tires from India. Commerce has initiated and rescinded one administrative review with regard to the antidumping duty order on OTR tires from India.[13]

Five-year reviews

Commerce has issued the final results of its expedited reviews with respect to all orders.[14] Table I-5 presents the countervailable subsidy margins and table I-6 presents the dumping margins calculated by Commerce in its original investigations and first reviews. Information on the industry in India excluding Balkrishna is available in appendix H.

Table I-5
OTR tires: Commerce's original and first five-year countervailable subsidy for producers/exporters in India

Producer/exporter	Original margin (*percent*)	First five-year review margin (*percent*)
ATC Tires Private Limited	4.72	4.72
Balkrishna Industries Limited	5.36	5.36
All others	4.94	4.94

Source: 82 FR 12556, March 6, 2017; and 87 FR 31860, May 25, 2022.

Table I-6
OTR tires: Commerce's original and first five-year countervailable dumping margins for producers/exporters in India

Producer/exporter	Original margin (*percent*)	First five-year review margin (*percent*)
ATC Tires Private Limited	3.67	Not Specified
Balkrishna Industries Limited	0.00	0.00
All others	3.67	Up to 3.67

Source: 82 FR 9056, February 2, 2017; 82 FR 12553, March 6, 2017; and 87 FR 34654, June 7, 2022.

Note: Individual company information was not specified in Commerce's Federal Register notice concerning the final results of the expedited sunset review of the antidumping duty order.

[12] Commerce has not conducted any changed circumstances review or scope rulings since the completion of the original investigations. In addition, Commerce has not issued any duty absorption findings, any company revocations, anti-circumvention findings since the imposition of the order.

[13] 83 FR 35619, July 27, 2018.

[14] 87 FR 31860, May 25, 2022; and 87 FR 34654, June 7, 2022.

Commerce's scope

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

> *The scope of the order is certain new pneumatic off-the-road tires (off-road tires). Off-road tires are tires with an off road tire size designation. The tires included in the scope may be either tube-type or tubeless, radial, or non-radial, regardless of whether for original equipment manufacturers or the replacement market.*
>
> *Subject tires may have the following prefix or suffix designation, which appears on the sidewall of the tire:*
>
> *Prefix designations:*
>
> *DH—Identifies a tire intended for agricultural and logging service which must be mounted on a DH drop center rim.*
>
> *VA—Identifies a tire intended for agricultural and logging service which must be mounted on a VA multipiece rim.*
>
> *IF—Identifies an agricultural tire to operate at 20 percent higher rated load than standard metric tires at the same inflation pressure.*
>
> *VF—Identifies an agricultural tire to operate at 40 percent higher rated load than standard metric tires at the same inflation pressure.*
>
> *Suffix designations:*
>
> *ML—Mining and logging tires used in intermittent highway service.*
>
> *DT—Tires primarily designed for sand and paver service.*
>
> *NHS—Not for Highway Service.*
>
> *TG—Tractor Grader, off-the-road tire for use on rims having bead seats with nominal +0.188" diameter (not for highway service).*
>
> *K—Compactor tire for use on 5° drop center or semi-drop center rims having bead seats with nominal minus 0.032 diameter.*
>
> *IND—Drive wheel tractor tire used in industrial service.*
>
> *SL—Service limited to agricultural usage.*
>
> *FI—Implement tire for agricultural towed highway service.*

CFO—Cyclic Field Operation.

SS—Differentiates tires for off-highway vehicles such as mini and skid-steer loaders from other tires which use similar size designations such as 7.00-15TR and 7.00-15NHS, but may use different rim bead seat configurations.

All tires marked with any of the prefixes or suffixes listed above in their sidewall markings are covered by the scope regardless of their intended use.

In addition, all tires that lack any of the prefixes or suffixes listed above in their sidewall markings are included in the scope, regardless of their intended use, as long as the tire is of a size that is among the numerical size designations listed in the following sections of the Tire and Rim Association Year Book, as updated annually, unless the tire falls within one of the specific exclusions set forth below. The sections of the Tire and Rim Association Year Book listing numerical size designations of covered certain off road tires include:

The table of mining and logging tires included in the section on Truck-Bus tires;

The entire section on Off-the-Road tires;

The entire section on Agricultural tires; and

The following tables in the section on Industrial/ATV/Special Trailer tires:

- *Industrial, Mining, Counterbalanced Lift Truck (Smooth Floors Only);*
- *Industrial and Mining (Other than Smooth Floors);*
- *Construction Equipment;*
- *Off-the-Road and Counterbalanced Lift Truck (Smooth Floors Only);*
- *Aerial Lift and Mobile Crane; and*
- *Utility Vehicle and Lawn and Garden Tractor.*

Certain off road tires, whether or not mounted on wheels or rims, are included in the scope. However, if a subject tire is imported mounted on a wheel or rim, only the tire is covered by the scope. Subject merchandise includes certain off road tires produced in the subject countries whether mounted on wheels or rims in a subject country or in a third country.

Certain off road tires are covered whether or not they are accompanied by other parts, e.g., a wheel, rim, axle parts, bolts, nuts, etc. Certain off road tires that enter attached to a vehicle are not covered by the scope.

Specifically excluded from the scope are passenger vehicle and light truck tires, racing tires, mobile home tires, motorcycle tires, all-terrain vehicle tires, bicycle tires, on-road or on-highway trailer tires, and truck and bus tires. Such tires generally have in common that the symbol "DOT" must appear on the sidewall, certifying that the tire conforms to applicable motor vehicle safety standards. Such excluded tires may also have the following prefixes and suffixes included as part of the size designation on their sidewalls:

Prefix letter designations:

AT—Identifies a tire intended for service on All-Terrain Vehicles;

P—Identifies a tire intended primarily for service on passenger cars;

LT—Identifies a tire intended primarily for service on light trucks;

T—Identifies a tire intended for one-position "temporary use" as a spare only; and

ST—Identifies a special tire for trailers in highway service.

Suffix letter designations:

TR—Identifies a tire for service on trucks, buses, and other vehicles with rims having specified rim diameter of nominal plus 0.156" or plus 0.250";

MH—Identifies tires for Mobile Homes;

HC—Identifies a heavy duty tire designated for use on "HC" 15" tapered rims used on trucks, buses, and other vehicles. This suffix is intended to differentiate among tires for light trucks, and other vehicles or other services, which use a similar designation.

Example: 8R17.5 LT, 8R17.5 HC;

LT—Identifies light truck tires for service on trucks, buses, trailers, and multipurpose passenger vehicles used in nominal highway service;

ST—Special tires for trailers in highway service; and

M/C—Identifies tires and rims for motorcycles.

The following types of tires are also excluded from the scope: Pneumatic tires that are not new, including recycled or retreaded tires and used tires; non-pneumatic tires, including solid rubber tires; aircraft tires; and turf, lawn and garden, and golf tires. Also excluded from the scope are mining and construction tires that have a rim diameter equal to or exceeding 39 inches. Such tires may be distinguished from other tires of similar size by the number of plies that the construction and mining tires contain (minimum of 16) and the weight of such tires (minimum 1500 pounds).[15]

[15] 82 FR 12553, March 6, 2017.

Tariff treatment

Subject OTR tires are currently imported under the following Harmonized Tariff Schedule of the United States (HTSUS) statistical reporting numbers: 4011.20.1025, 4011.20.1035, 4011.20.5030, 4011.20.5050, 4011.70.0010, 4011.80.1010[16], 4011.80.1020, 4011.90.1050, 4011.70.0050, 4011.80.2010, 4011.80.8010, 4011.80.2020, 4011.80.8020, 8431.49.9038, 8431.49.9090, 8709.90.0020, and 8716.90.1020.[17] Tires meeting the scope description may also be reported under HTSUS statistical reporting numbers 4011.90.2050, 4011.90.8050, 8424.90.9080, 8431.20.0000, 8431.39.0010, 8431.49.1090, 8431.49.9030, 8432.90.0020, 8432.90.0040, 8432.90.0050, 8432.90.0060, 8432.90.0081, 8433.90.5010, 8503.00.9560, 8708.70.0500, 8708.70.2500, 8708.70.4530, 8716.90.5035, 8716.90.5056 and 8716.90.5059.[18] OTR tires imported from India come into the U.S. market at a column 1 general duty rate of "free" for agricultural, mining, construction and industrial tires of herringbone tread-types, and 3.4 or 4.0 percent for radial and non-radial tire design. Section 301 tariffs on certain scope tires from nonsubject country China imposed an additional 25 percent ad valorem rate,[19] while Russia's recent loss of normal trade relations status resulted in the imposition of a column 2 duty rate of 35 percent.[20] HTSUS provisions are provided for convenience and customs purposes, however the written description of the subject merchandise is dispositive. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

[16] Statistical reporting number HTSUS 4011.80.1010 replaced 4011.62.0000 effective January 1, 2017.

[17] Prior to January 1, 2017, subject merchandise was provided for or reported under the following HTSUS provisions that were superseded on or after that date: 4011.61.0000, 4011.62.0000, 4011.63.0000, 4011.69.0090, 4011.92.0000, 4011.93.4000, 4011.93.8000, 4011.94.4000, and 4011.94.8000.

[18] Other scope merchandise prior to January 1, 2017, was provided for or reported under the following HTSUS provisions that were superseded on or after that date: 4011.99.4550, 4011.99.8550, 8432.90.0005, 8432.90.0015, 8432.90.0030, 8432.90.0080, and 8716.90.5055.

[19] Section 301 tariffs were imposed on products of China of 10 percent by Presidential Order in September 2018, and raised to 25 percent in May 2019 (83 FR 47974, September 21, 2018; 84 FR 20459, May 9, 2019).

[20] On April 8, 2022, normal trade relations with Russia were suspended (19 USC 2434 note) (Suspending NTR Act) providing for a shift to prevailing column 2 duty rates, typically 10 percent for certain scope OTR Tires of HTS Chapter 40. On June 27, 2022, substitute column 2 rates of 35 percent on certain scope OTR tires, typically agricultural and other OTR tires of radial design, were authorized by Presidential Proclamation 10420 (87 FR 38875, June 30, 2022).

The product

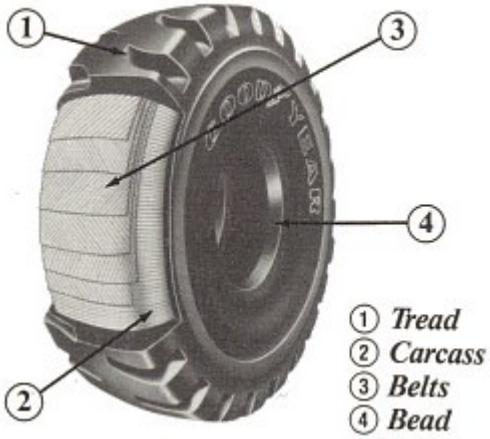
Description and applications

All pneumatic (air pressurized) rubber tires, whether passenger car, truck, or OTR, have the same basic generic components, but structurally, are markedly different.[21] The basic components of a tire consist internally of a base rubber inner liner or a rubber inner tube, each impervious to air migration from the tire; rubberized reinforcing tire cord plies and belts that give the tire strength and stability; and a rubberized steel bead that provides an airtight seal of the tire rim with a given metal wheel. The outer components of a tire that can be seen on an assembled tire are the tread that runs around the outside of the tire, the sidewall, and the rubber rim. All tires generally contain varying amounts of natural and synthetic rubber in addition to several other components such as carbon black reinforcement, sulfur curing agents, textile fabric or steel reinforcing plies and belts, and steel bead wire that forms the rim of the tire.

Compared to on-the-road passenger and light truck tires, most OTR tires are designed for more rugged use where physical strength is imperative to absorb the abuses experienced in off-the-road applications, and where heavier load bearing and power traction characteristics are required. Natural and synthetic rubber blends are essential components, the exact combinations of which are dependent upon the performance characteristics required of an enormous array of types and sizes of OTR tires produced in the agricultural, mining and construction, and industrial sectors. Natural rubber displays strength and resilience to impact in harsh field environments, tear resistance, high tensile strength and excellent inherent adhesion, an essential property used in tire assembly and manufacture. Natural rubber compounds are generally cooler running under heavy loads, which reduces tire heat buildup in mining vehicles, for example. Synthetic rubber also displays excellent tear resistance and high tensile strength, but is easier to process and has better traction and cut resistance than natural rubber, an advantage in the agricultural sector. Overall, generally higher loadings of natural rubber are reported to be favored in aggregate across the full spectrum of OTR tires owing to its combination of physical durability and impact resilience relative to synthetic rubbers, which in general are used in higher proportions in consumer on-the-road tires. Also, more substantial internal reinforcement is required in OTR tires, including rubberized textile and steel tire cord plies and belts, and heavy-duty steel bead bundles for rim construction as shown in figure I-2.

[21] Structurally, OTR tires are both radial and bias ply in design, while on-the-road passenger vehicle, truck and bus tires are predominately radial ply in design. Original publication, p. I-11.

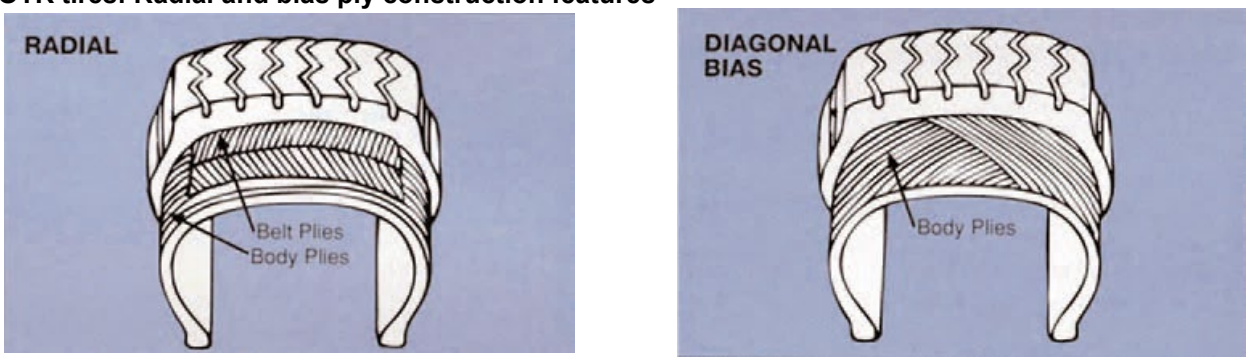
Figure I-2
OTR tires: Mining and construction tire features



Source: Original publication, p. I-13.

OTR tires are produced in a wide variety of types and sizes depending upon end use, ranging from relatively small agricultural implement and industrial forklift tires, larger tires found on the more familiar farm tractors and harvesting equipment, and earthmover/construction equipment type tires used in mining and construction such as on haulage and dump trucks, front end loaders, dozers, graders, lift trucks, and mobile cranes (figure I-2). Unlike on-the-road tires, OTR tires are typically designed to run at lower speeds. These tires may be of bias ply or radial construction (figure I-3) depending upon the end use, and consist of multiple tread types depending on the types of equipment and end-use requirements. OTR tires may be of the tubeless or tube variety, but are predominately tubeless, while all are pneumatic (air pressurized) in nature, as defined in the scope.

Figure I-3
OTR tires: Radial and bias ply construction features



Source: Original publication, p. I-14.

In radial construction, the reinforcing rubber-coated tire cord body plies run parallel from bead to bead, or perpendicular to the direction of travel, while bias ply tire cords run diagonally to the direction of travel. Radial tires typically have a longer tire life and higher speed rating than bias ply tires. Radials provide a wider footprint affording excellent traction and superior performance in agricultural and other OTR tire sectors, including reduced soil compaction and improved handling, smoother ride, fuel economy, and higher resistance to cuts, punctures, and tears in selected applications. Bias ply tires are typically used in lower speed applications where sidewall strength, stiffness, and heavy load and lifting applications are important; however, both bias and radial ply tires are used on agricultural, mining, and construction/ industrial equipment.

In the United States and several other countries, OTR tire producers have generally adopted the Tire and Rim Association ("TRA") standards: OTR tires are defined as those used principally on earthmover and construction vehicles; agricultural tires on farm tractors, farm implements, and other agricultural machinery; and industrial tires on counterbalanced lift trucks for mining, skid-steers/mini-loaders, and other industrial applications. TRA standards identify the type of equipment on which the tire is used, the tire type and size, inflation pressure, speed and load carrying capabilities, and ply ratings. These designations are typically molded into the sidewall. Foreign tires may not conform exclusively to TRA standards, but usually carry a manufacturer and tire name, tire size and country-of-origin markings, together with construction materials and end-use types.

Figure I-4
OTR tires: Tire and Rim Association specifications

OTR tire: 35/65/R33 NHS *** L		Agricultural tire: 14.5/75-16.1 SL 10PR 121		Industrial tire: 23x10.50-12 NHS	
35	Width of tire cross section (inches)	14.5	Width of tire cross section (inches)	23	Overall diameter (inches)
65	Aspect ratio (ratio of sidewall height to section	75	Aspect ratio	10.50	Width of tire cross section (inches)
R	Radial ply	-	Bias ply	-	Bias ply
33	Rim diameter (inches)	16.1	Rim diameter (inches)	12	Rim diameter (inches)
NHS	Suffix (Not for highway service)—Optional	SL	Service limited to agricultural usage	NHS	Suffix (Not for highway service)
		10PR	Ply rating	4PR	Ply rating
***	Load symbol (rated for 116 psi)	121	Load index (max. load)		
L	Loader/Dozer (5 mph)	A8	Speed symbol (25 mph)		

Source: Original publication, p. I-15

Examples of TRA tire standards described in figure I-4 serve to demonstrate certain of the physical properties reported, in this case specifications for an in-scope radial mining and construction tire, a smaller bias ply agricultural front wheel tractor steer tire, and an industrial skid steer tire. In contrast, larger standard agricultural tractor drive wheel scope tires range up to 54-inches in rim diameter, and are constructed to support loads typically up to 10,000-12,000 pounds. The 33-inch rim diameter scope mining and construction tire reported in figure I-4 is capable of supporting loads ranging from 50,000 to 70,000 pounds.[22]

[22] *2022 Year Book*, Tire and Rim Association.

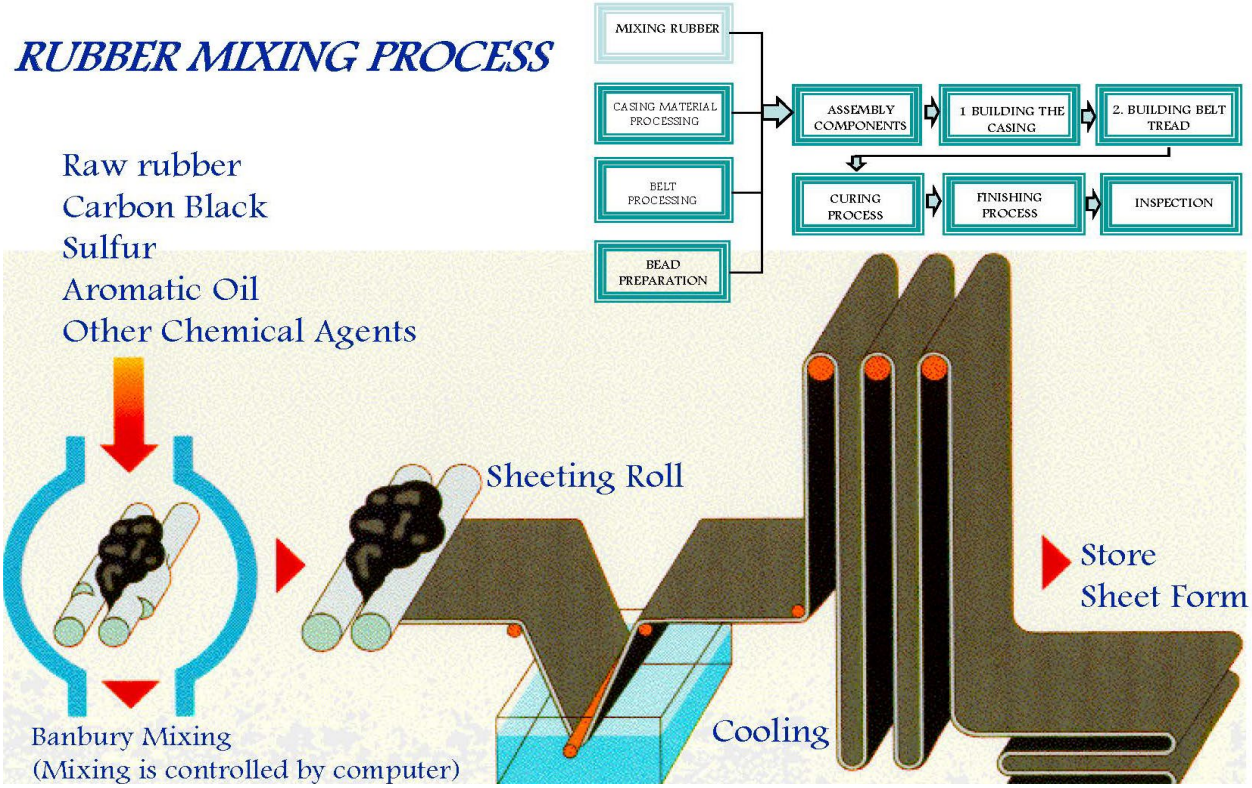
Manufacturing processes

The fundamental production processes for OTR tires are generally comparable across the subject industries, but more labor intensive and typically require more manual production sequences than for on-the-road passenger and truck tires. This is due to the combination of larger sizes and heavier types, number of components, and higher strength properties demanded in OTR tire end-use applications. OTR tires may be of radial or bias ply construction, tubeless or tube-type, i.e., may or may not be designed to contain inflatable inner tubes on selected rim types.

Several stages are required for the production of OTR tires, including rubber batch formulation and mixing, tire component processing, tire assembly, tire curing, and final inspection as shown in figure I-5. The initial stage is the receiving and testing of various raw materials. These include natural and synthetic rubbers, textile and steel tire cord, carbon black and reinforcing pigment, steel wires for rim bead, and other rubber processing chemicals, including antioxidants, accelerators, plasticizers, sulfur curing agents, silica, processing oils, and resins.

The rubber 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 are added. Subsequent Banbury mixing is usually required to complete this step.

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



Source: Original publication, p. I-17.

During the mixing process, heat and friction soften the rubber for several applications, including a type of rubber compound designed to hold air on the inside of the tubeless tire; various types of rubber compounds designed to adhere to wire and fabric used to make the casing; and other types of rubber compounds designed for the outside of the tire (e.g., the steel bead, sidewalls, and tread). Following the mixing process, the various rubber compounds or batches are milled into slab form for use in the factory.

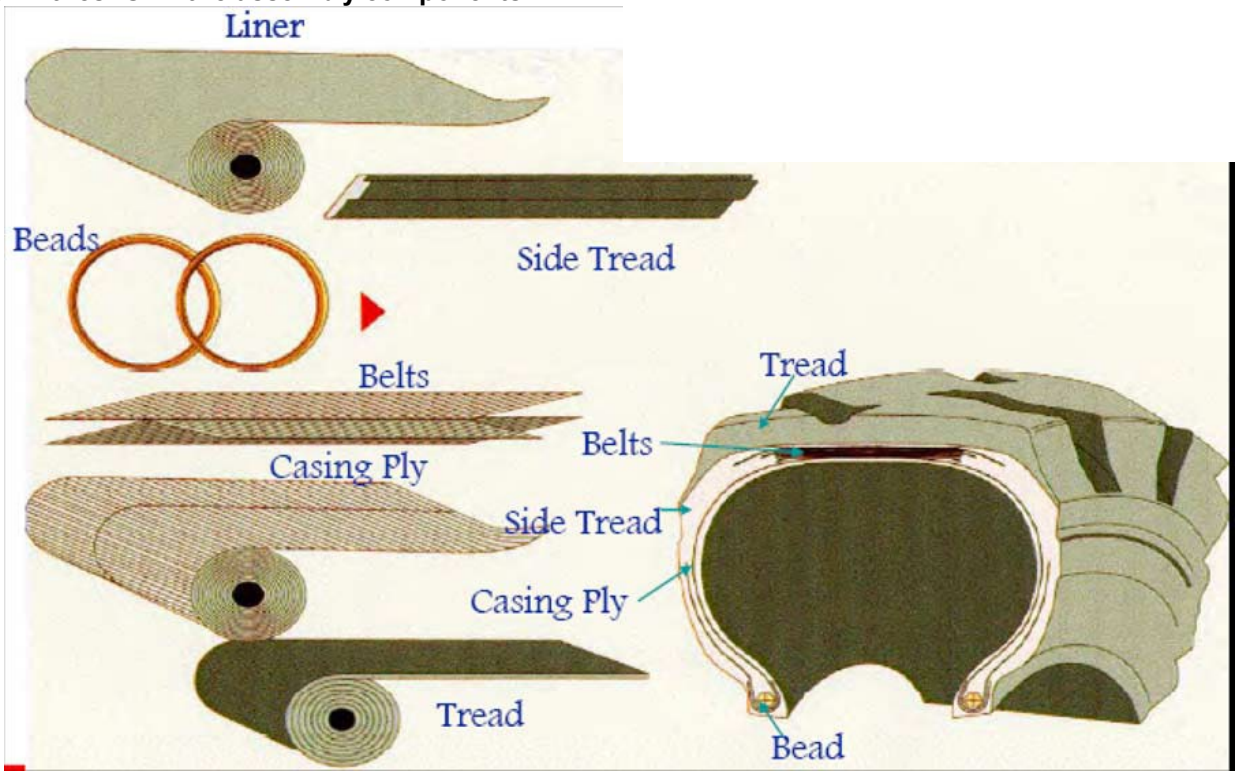
Several different types of equipment are used to process the rubber formulations into multiple OTR tire components. Large machines equipped with rollers known as calendars are used to produce sheets of butyl rubber interlining which prevent the migration of pressurized air through a tubeless tire casing. 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.

Machines known as wire winders are 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 the steel wheel. The smooth rubber pieces that will eventually become treads and sidewalls

are produced with machines called extruders, which force various softened rubber compounds through a die to produce the desired configurations.

The multiple components that are processed into rubberized assembly elements in preparation for tire building process are shown in figure I-6.

Figure I-6
OTR tires: OTR tire assembly components

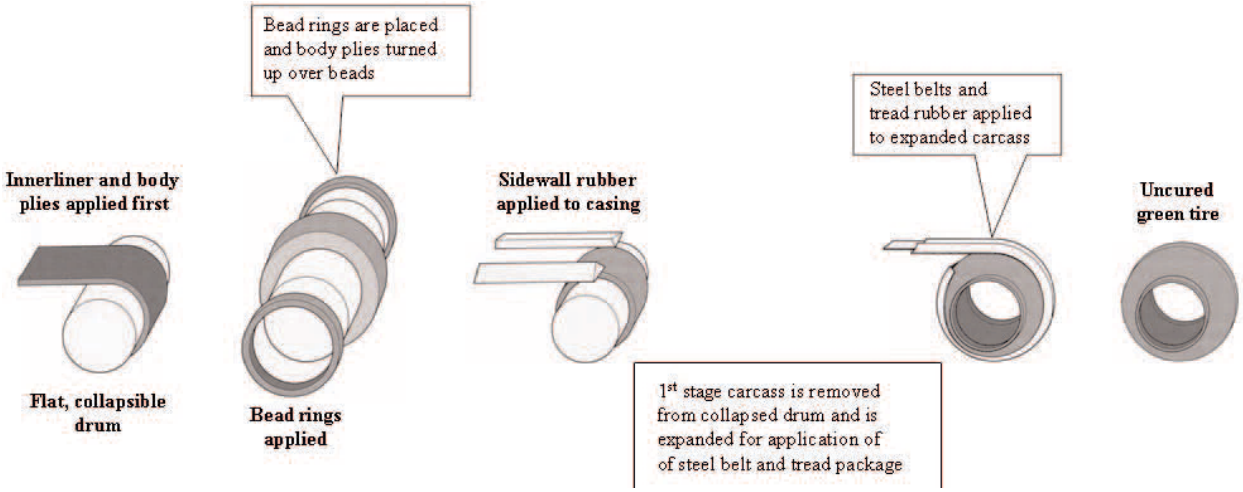


Source: Original publication, p. I-18.

OTR tire building is the process in which all of the above individual components that make up the tire are sequentially assembled by employees in a circular fashion about a horizontally positioned cylindrical drum to create a green (uncured) tire structure. The fundamentals of tire assembly may proceed in either one or two stages. Many bias ply assemblies are completed in one stage, while radial tire building often proceeds in two stages as shown in figure I-7. In the first stage, a radial body casing consisting of the inner liner, 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 typically assembled on another rotating drum to a diameter that is close to that of the final tire. Several tire manufacturers and equipment vendors have devised automated or semi-automated tire

assembly equipment that combines various assembly steps or links them into a continuous process.

Figure I-7
OTR tires: OTR tire assembly process

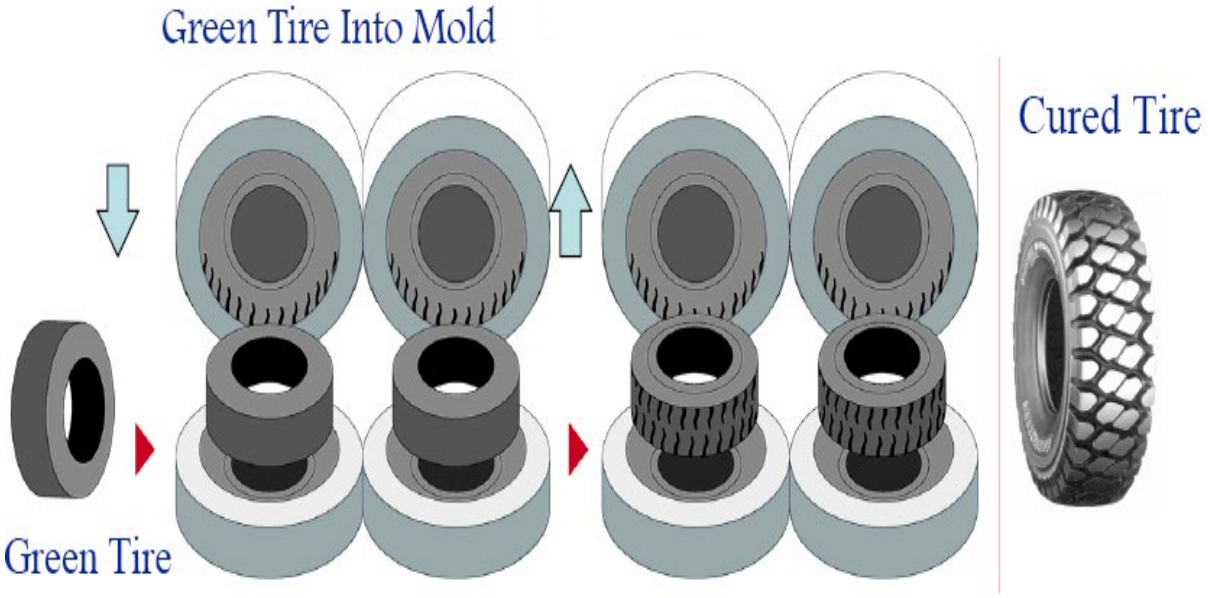


Source: Original publication, p. I-19.

OTR tire building is typically performed manually or semi-manually by employees. The time necessary to complete a single tire building cycle can vary from a few minutes or more depending upon the type of tire being assembled. In bias ply tire building, the tire cord reinforcement body plies are placed at alternating angles around the drum circumference as the assembly proceeds so that 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; otherwise, radial construction involves placing parallel steel or fabric body plies that run "radially" from bead to bead at right angles to the direction of tire travel.

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, sidewall size designations, tread type, and other specifications. Vulcanization or curing of the green tire takes place in the mold at elevated temperature and pressure. Curing times vary widely depending upon the size of the tire, and may vary nominally from a few minutes to several hours; each tire model requires its own mold. During vulcanization, the original weak green tire rubber takes on a strong, durable nature (thermoset), and will not again soften with heat due to molecular cross-linking or bonding of the rubber with the sulfur chemical additives.

Figure I-8
OTR tires: Tire Curing Process



Source: Original publication, p. I-20.

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, unmounted tires are coded to track their whereabouts, and to identify the plant of manufacture and other important information.

OTR rims, wheels, and tire assemblies

Rim and wheel assembly manufacturing reportedly becomes more complex for most products depending on the end-use sectors, beginning with the more fundamental assemblies for certain out-of-scope consumer wheels, to more advanced processes required for certain OTR agricultural equipment wheels, and heavier earthmoving/construction and industrial equipment wheels.

Most of Titan's agricultural wheels are produced using a rim and center disc.[23] A rim is produced by first cutting large steel sheets to required width and length specifications. These steel sections are rolled and welded to form a circular rim, which is flared and formed in the roll form operation. The majority of discs are manufactured using presses that both blank and form the center to specifications in multiple stage operations. This is followed by e-coating wheels using a multi-step process prior to the final paint top coating.

[23] Titan SEC Form 10-K, December 31, 2022.

Larger earthmoving mining and construction steel wheels are manufactured by Titan from hot-and cold-rolled steel sections. Hot-rolled sections are generally used to increase cross section thickness in high stress areas of large diameter wheels. A special cold forming process for certain wheels is used to increase cross section thickness while reducing the number of wheel components. Rims are built from a series of hoops that are welded together to form a rim base. The complete rim base is made from either three or five separate parts that lock together after the rubber tire has been fitted to the wheel and inflated. Many OTR rim and wheel assemblies for ease of mounting and tire change, are composed of multi piece design.

In contrast, most nonsubject consumer wheels are manufactured from rims and center discs from steel sheets. Rims are rolled and welded, and discs are stamped and formed from the sheets. The completed wheel assembly entails welding the rims to the centers and painting the assembled product.

The rim and center disc combination that make up a wheel are shown in figure I-9. As stated in Titan's cited form 10-K, the center piece configuration may be either welded or pressed in multiple stage operations.

Figure I-9
OTR tires: OTR Rim and Wheel Assembly

Source: Original publication, p. I-20

A complete agricultural wheel and tire assembly is shown in figure I-10. The completed operation includes the process of mounting the tire to the wheel.

Figure I-10
OTR tires: OTR agricultural wheel and tire assembly

Source: Original publication, p. I-20

Domestic like product issues

In its original determinations, the Commission defined the domestic like product consisting of certain new pneumatic off-the-road tires coextensive with Commerce's scope.[24] In its notice of institution in these current five-year reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[25] The domestic interested party agreed with the Commission's definition of the domestic like product.[26] No respondent interested parties commented on the Commission's definition of the domestic like product. No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires.

[24] 87 FR 5505, February 1, 2022; and original publication, pp. 9 and 12.
[25] 87 FR 5505, February 1, 2022.
[26] *Substantive Response of the domestic interested party*, p. 5.

U.S. market participants

U.S. producers

During the original investigations, six firms supplied the Commission with information on their U.S. operations with respect to OTR tires.[27] These firms accounted for the vast majority of U.S. production of OTR tires in 2015.[28] In this current proceeding, the Commission issued U.S. producers' questionnaires to eight firms, six of which provided the Commission with information on their product operations: Bridgestone Americas ("Bridgestone"), The Carlstar Group, LLC ("Carlstar"), The Goodyear Tire & Rubber Company ("Goodyear"), Specialty Tires of America, Inc. ("Specialty"), Titan, and Trelleborg Wheel Systems Americas, Inc. ("Trelleborg").[29] These firms are believed to account for the vast majority of U.S. production of OTR tires in 2021. *** indicated that it has not produced in-scope OTR tires since January 1, 2016. Presented in table I-7 is a list of current domestic producers of OTR tires and each company's position on continuation of the orders, production locations(s), related and/or affiliated firms, and share of reported production of OTR tires in 2021.

[27] Original publication, p. III-1.

[28] The six U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: Bridgestone, Goodyear, Mitas, Specialty, Titan, and Trelleborg.

[29] An additional firm, Michelin North America, Inc. indicated production of OTR tires but was unable to supply the Commission with a complete usable questionnaire response and is therefore not included in the dataset. In 2021, Michelin produced ***. Michelin's U.S. producer questionnaire response, section II-4.

Table I-7
OTR tires: U.S. producers, positions on orders, U.S. production locations, and shares of reported U.S. production, 2021

Shares in percent

Firm	Position on orders	Production location(s)	Share of production
Bridgestone	***	Aiken, SC Bloomington, IL Des Moines, IA	***
Carlstar	***	Clinton, TN Jackson, TN	***
Goodyear	***	Topeka, KS	***
Specialty	***	Indiana, PA Unicoi, TN Indiana, PA	***
Titan	***	Des Moines, IA Freeport, IL Bryan, OH	***
Trelleborg	***	Spartanburg, SC Charles City, IA Wakefield, MA	***
All firms	Various	Various	100.0

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

As indicated in table I-8, two U.S. producers *** are related to foreign producers and U.S. importers of the subject merchandise. In addition, as discussed in greater detail in part III, one U.S. producer directly imported the subject merchandise from India, four U.S. producers directly imported the subject merchandise from nonsubject sources, two firms purchased the subject merchandise from U.S. importers who imported OTR tires from nonsubject sources, one firm purchased the subject merchandise from U.S. importers who imported OTR tires from India, and two firms purchased OTR tires from domestic producers.[30]

[30] In addition, ***. U.S. producer questionnaire response, section II-11.

Table I-8
OTR tires: U.S. producers' ownership, related and/or affiliated firms

Reporting firm	Relationship type and related firm	Details of relationship
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

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

U.S. importers

In the original investigations, 37 U.S. importing firms supplied the Commission with usable information on their operations involving the importation of OTR tires, accounting for approximately *** percent of U.S. imports of OTR tires from India during 2015.[31] Of the responding U.S. importers, four were domestic producers: ***.

In the current proceedings, the Commission issued U.S. importers' questionnaires to 44 firms believed to be importers of OTR tires, as well as to all U.S. producers of OTR tires. Usable questionnaire responses were received from 20 firms, representing the vast majority of U.S. imports from India. Table I-9 lists all responding U.S. importers of OTR tires from India and other sources, their locations, and their shares of U.S. imports in 2021.

[31] Investigation Nos. 701-TA-552-553 and 731-TA-1308 (Final): Certain New Pneumatic Off-the-Road Tires from India and Sri Lanka, Confidential Report, INV-PP-011, January 23, 2017, as revised in INV-PP-015, January 27, 2017("Original confidential report"), p. I-5.

Table I-9
OTR tires: U.S. importers, their headquarters, and share of imports within each source, 2021

Shares in percent

Firm	Headquarters	India	Nonsubject sources	All import sources
American Pacific	Scottsdale, AZ	***	***	***
Apollo	Atlanta, GA	***	***	***
Balkrishna	Mumbai, India	***	***	***
BKT	Holmdel, NJ	***	***	***
Bridgestone	Nashville, TN	***	***	***
Carlstar	Franklin, TN	***	***	***
Commercial	North Canton, OH	***	***	***
Continental	Fort Mill, SC	***	***	***
Deere	Moline, IL	***	***	***
Goodyear	Akron, OH	***	***	***
Kenda	Reynoldsburg, OH	***	***	***
Michelin	Greenville, SC	***	***	***
Nokian	Dayton, TN	***	***	***
Omni	Katy, TX	***	***	***
TBC	Palm Beach Gardens, FL	***	***	***
Titan	Des Moines, IA	***	***	***
Triangle	Franklin, TN	***	***	***
Tyres International	Stow, OH	***	***	***
YOHTA	Wakefield, MA	***	***	***
Yokohama	Santa Ana, CA	***	***	***
All firms	Various	100.0	100.0	100.0

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

U.S. purchasers

The Commission received 12 usable questionnaire responses from firms that bought OTR tires during January 2016-September 2022.[32] Nine responding purchasers are aftermarket distributors, four are in the agricultural OEM sector, three are in the construction OEM sector, and two reported other roles (including servicing dealer).[33] The largest responding purchasers of OTR tires (in order of decreasing 2021 purchases) were ***.

[32] Of the 12 responding purchasers, 10 purchased the domestic product, 8 purchased imports of the subject merchandise from India, and 7 purchased imports of OTR tires from other sources. Three firms reported purchases from unknown sources.

[33] Several purchasers reported more than one role.

Apparent U.S. consumption and market shares

Quantity

Table I-10 and figure I-11 present data on apparent U.S. consumption and U.S. market shares by quantity for OTR tires. During 2016-21, apparent U.S. consumption increased, in terms of quantity, by 41.2 percent (45.0 percent by value). Apparent U.S. consumption, in terms of quantity, was 4.8 percent higher in the January-September interim period ("interim") 2022 compared to interim 2021 (19.6 percent by value). U.S. producers' market share, in terms of quantity, decreased by 9.2 percentage points during 2016-21 and was 6.2 percentage points lower in interim 2022 compared to interim 2021. The market share of U.S. producers was highest in 2016 (52.2 percent) and decreased annually to its lowest share in 2021 (43.0 percent).

The market share of subject imports, in terms of quantity, remained somewhat constant during 2016-2020 then increased in 2021. During 2016-21, the market share of subject imports increased by *** percentage points. The market share of subject imports was *** percentage points higher in interim 2022 compared to interim 2021. During 2016-21, the market share of nonsubject imports fluctuated and overall increased by *** percent. The market share of nonsubject imports was highest in 2020 (*** percent) and lowest in 2017 (*** percent). The market share of nonsubject imports was *** percentage points lower in interim 2022 compared to interim 2021.

Table I-10
OTR tires: Apparent U.S. consumption and market shares based on quantity, by source and period

Quantity in 1,000 tires; shares in percent

Source	Measure	2016	2017	2018
U.S. producers	Quantity	2,153	2,352	2,470
India	Quantity	***	***	***
Nonsubject sources	Quantity	***	***	***
All import sources	Quantity	1,974	2,294	2,571
All sources	Quantity	4,127	4,646	5,041
U.S. producers	Share	52.2	50.6	49.0
India	Share	***	***	***
Nonsubject sources	Share	***	***	***
All import sources	Share	47.8	49.4	51.0
All sources	Share	100.0	100.0	100.0

Table continued.

Table I-10 Continued
OTR tires: Apparent U.S. consumption and market shares based on quantity, by source and period

Quantity in 1,000 tires; shares in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. producers	Quantity	2,376	2,256	2,505	1,952	1,759
India	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	2,730	2,740	3,324	2,448	2,852
All sources	Quantity	5,106	4,996	5,829	4,400	4,611
U.S. producers	Share	46.5	45.1	43.0	44.4	38.1
India	Share	***	***	***	***	***
Nonsubject sources	Share	***	***	***	***	***
All import sources	Share	53.5	54.9	57.0	55.6	61.9
All sources	Share	100.0	100.0	100.0	100.0	100.0

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

Figure I-11
OTR tires: Apparent U.S. consumption based on quantity, by source and period

* * * * * * *

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

Value

Table I-11 and figure I-12 present data on apparent U.S. consumption and U.S. market shares by value for OTR tires. During 2016-21, apparent U.S. consumption increased, in terms of value, by 45.0 percent. Apparent U.S. consumption, in terms of value, was 19.6 percent higher in interim 2022 compared to interim 2021. U.S. producers' market share, in terms of value, remained somewhat constant during 2016-18 then decreased 4.0 percentage points in 2019 and remained somewhat constant during 2019-21. Overall, U.S. producers' market share, in terms of value, decreased by 4.6 percentage points during 2016-21 and was 3.2 percentage points lower in interim 2022 compared to interim 2021. The market share of subject imports, in terms of value, increased by *** percentage points during 2016-21. The market share of subject imports was *** percentage points higher in interim 2022 compared to interim 2021.

The market share of nonsubject imports, remained somewhat constant during 2016-21, ranging between *** percent and *** percent. The market share of nonsubject imports was *** percentage points lower in interim 2022 compared to interim 2021.

Table I-11
OTR tires: Apparent U.S. consumption and market shares based on value, by source and period

Value in 1,000 dollars; shares in percent

Source	Measure	2016	2017	2018
U.S. producers	Value	813,496	921,663	1,000,369
India	Value	***	***	***
Nonsubject sources	Value	***	***	***
All import sources	Value	679,437	725,211	835,294
All sources	Value	1,492,933	1,646,874	1,835,663
U.S. producers	Share of value	54.5	56.0	54.5
India	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	45.5	44.0	45.5
All sources	Share of value	100.0	100.0	100.0

Table continued.

Table I-11 Continued
OTR tires: Apparent U.S. consumption and market shares based on value, by source and period

Value in 1,000 dollars; shares in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. producers	Value	924,279	860,918	1,080,649	807,543	904,028
India	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	910,527	818,131	1,084,450	781,676	996,217
All sources	Value	1,834,806	1,679,049	2,165,099	1,589,219	1,900,245
U.S. producers	Share of value	50.4	51.3	49.9	50.8	47.6
India	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	49.6	48.7	50.1	49.2	52.4
All sources	Share of value	100.0	100.0	100.0	100.0	100.0

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

Figure I-12
OTR tires: Apparent U.S. consumption based on value, by source and period

* * * * * * *

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

Part II: Conditions of competition in the U.S. market[1]

U.S. market characteristics

OTR tires vary widely by size and are used on vehicles in a wide array of sectors, including the agriculture and forestry, construction, mining, and industrial sectors. The types of vehicles using OTR tires include farm tractors, combine harvesters, irrigation equipment, log skidders, off-road dump trucks, run-in loaders, graders, mobile cranes, lift trucks, and skid-steer mini-loaders. These tires include a wide range of sizes and features but are all designed specifically for off-road applications. OTR tires may be bias ply or radial. Radial tires are more expensive, are more likely to be used in larger tire sizes with heavier loads or used at higher speeds and are used mainly in agricultural applications. Radial tires have a longer life than bias tires. OTR tires are also sold as unmounted and mounted tires.[2]

Apparent U.S. consumption of OTR tires increased in 2016-2019, decreased in 2020, and increased in 2021. Overall, apparent U.S. consumption in 2021 was 41.2 percent higher than in 2016. It was 4.8 percent higher in January-September 2022 than in January-September 2021.

Channels of distribution

OTR tires are sold both to original equipment manufacturers ("OEMs") and to the aftermarket. Tires sold to the aftermarket must fit the same machines and equipment that are served by OTR tires in the OEM market. There are different distributors for different sectors. The construction and agricultural industries are serviced by specific dealers, and mining companies purchase directly and service their own tires.[3]

U.S. producers and importers sold OTR tires to both OEMs and to aftermarket distributors during the review period (table II-1). The majority of U.S. producers' sales were to OEMs during 2016-18, 2021, and the interim periods and were to the aftermarket in 2019 and 2020. Most sales of subject and nonsubject imports were to the aftermarket throughout the review period. The shares of both subject and nonsubject imports sold to the aftermarket increased over the period.

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[1] Four of the six U.S. producers (Bridgestone, Carlstar, Goodyear, and Titan) also submitted importer questionnaires and one (***) also submitted a purchaser questionnaire. Importer and purchaser counts include responses from these U.S. producers. These firms' narrative responses are not duplicated in importer and purchaser discussions in parts II and V.

[2] The information in this paragraph is from the original publication, p. II-1.

[3] The information in this paragraph is from the original publication, p. II-2.

Table II-1
OTR tires: Share of U.S. shipments by source, channel of distribution, and period

Shares in percent

Source	Channel	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
United States	OEM	51.1	52.7	53.8	48.9	45.4	56.1	54.3	56.8
United States	Aftermarket	48.9	47.3	46.2	51.1	54.6	43.9	45.7	43.2
India	OEM	***	***	***	***	***	***	***	***
India	Aftermarket	***	***	***	***	***	***	***	***
Nonsubject sources	OEM	***	***	***	***	***	***	***	***
Nonsubject sources	Aftermarket	***	***	***	***	***	***	***	***
All import sources	OEM	40.6	39.3	34.1	29.0	23.1	27.6	26.2	26.4
All import sources	Aftermarket	59.4	60.7	65.9	71.0	76.9	72.4	73.8	73.6

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

Geographic distribution

U.S. producers and subject importers reported selling OTR tires in all U.S. regions (table II-2). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers of OTR tires from India sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

Table II-2
OTR tires: Count of U.S. producers' and U.S. importers' geographic markets

Region	U.S. producers	India
Northeast	6	10
Midwest	6	9
Southeast	6	10
Central Southwest	6	10
Mountain	6	9
Pacific Coast	6	10
Other	3	4
All regions (except Other)	6	9
Reporting firms	6	10

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

Note: Other U.S. markets include AK, HI, PR, and VI.

Supply and demand considerations

U.S. supply

Table II-3 provides a summary of the supply factors regarding OTR tires from U.S. producers and from India. As can be seen in the table, Indian producers reported much higher capacity to produce OTR tires than U.S. producers and they also reported higher capacity utilization rates in 2021. U.S. producers serve mainly the U.S. market whereas most Indian shipments are to export markets.

Table II-3
OTR tires: Supply factors that affect the ability to increase shipments to the U.S. market, by country

Quantity in 1,000 tires; ratio and share in percent

Factor	Measure	United States	India
Capacity 2016	Quantity	3,300	***
Capacity 2021	Quantity	4,161	***
Capacity utilization 2016	Ratio	73.4	***
Capacity utilization 2021	Ratio	62.8	***
Inventories to total shipments 2016	Ratio	20.8	***
Inventories to total shipments 2021	Ratio	7.5	***
Home market shipments 2021	Share	92.1	***
Non-US export market shipments 2021	Share	7.9	***
Ability to shift production (firms reporting “yes”)	Count	3 of 6	***

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

Note: Responding U.S. producers accounted for the vast majority of U.S. production of OTR tires in 2021. Responding foreign producer/exporter firms accounted for a vast majority of U.S. imports of OTR tires from India during 2021. For additional data on the number of responding firms and their share of U.S. production and of subject imports, please refer to Part I, “Summary Data and Data Sources.”

Domestic production

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

U.S. producers reported both higher capacity and higher production in 2021 compared to 2016, but lower capacity utilization in 2021, as capacity increases outpaced production increases.[4] Exports accounted for less than 12 percent of the quantity of U.S. producers' shipments during the review period. U.S. producers reported exports to the Americas including *** but reported difficulty exporting to other markets. *** reported that North American OTR tire plants rely on demand from North American markets and *** reported that it can shift sales between regional markets, depending on customer demand, pricing, and logistics and freight availability.

Three of six U.S. producers reported that they can produce other products on the same equipment as OTR tires, but they reported that the ability to switch is limited. ***.

Subject imports from India

Based on available information, producers of OTR tires from India have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of OTR tires to the U.S. market. The main contributing factors to this degree of responsiveness of supply are large and growing capacity and the ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include limited availability of unused capacity and a limited ability to shift production to or from alternate products.

Foreign producers reported increased capacity from 2016 to 2021 but also reported much higher production in 2021 than in 2016. Capacity utilization ranged between *** percent during 2016-2020 but was much higher in 2021 (*** percent).

[4] Although production was higher in 2021 than in 2016, it decreased between 2018 and 2020. Capacity utilization in 2021 (56.2 percent) was much higher than capacity utilization in 2015 (*** percent). See table I-3.

Foreign producers reported exports to the EU (*** percent of foreign producers' total shipments in 2021), Asia (*** percent), and other markets (*** percent), as well as the United States. Firms reported that there were no trade barriers that would prevent shifting between markets. However, firms reported that several factors make it difficult to shift to other markets including goods produced to order, different product types required in different markets, local certification requirements in the U.S. market, and investments made in developing customers in other markets including long-term customer relationships in the EU and India.

Foreign producers listed a large number of OTR tires producers in India, identifying Balkrishna and ATC as the largest producers, and reported that there are many smaller producers as well as some producers that are primarily focused on automotive tires. *** described strong competition between Indian manufacturers and added that many of the manufacturers have the capital to build additional capacity. *** described the industry as highly fragmented with various suppliers and manufacturers.

Seven of the 10 responding foreign producers reported that they do not face import competition in the Indian home market while three reported that they face limited competition on certain stock-keeping units ("SKUs"). Most responding foreign producers (7 of 11) reported that the OTR tires they produce and sell in their home market are interchangeable with the OTR tires they export to the United States and/or to third-country markets. Firms reported that some but not all SKUs may be interchangeable and that there are some common sizes and some market-specific sizes. *** reported that since *** produces OTR tires to order, many tires produced for customers in the home market cannot be used interchangeably in other markets. *** reported that tires sold to the EU market must meet regulations for that market.

Other products that responding foreign producers reportedly can produce on the same equipment as OTR tires include commercial, industrial, mining, truck, and bus tires. Factors limiting foreign producers' ability to shift production include: not all machinery can be used for OTR tires and other types of tires (some equipment is limited to OTR tires), low demand for other types of tires, machinery constraints, worker training, equipment placement in the plant, unavailability of molds, and the financial and time costs of changeovers.

Imports from nonsubject sources

Nonsubject imports accounted for *** percent of total U.S. imports in 2021 (see table IV-1). Sources of nonsubject imports listed by purchasers included China, Sri Lanka, France, Thailand, Israel, and Turkey.[5]

As described in part I, OTR tires imported from China are subject to section 301 tariffs. Five of 12 purchasers reported that section 301 tariffs on Chinese tires impacted the U.S. OTR tires market. Firms reported higher prices for Chinese tires and changing of supply sources, including one firm that reported that it increased purchases from India because of the higher costs for Chinese tires. Another purchaser reported that China is a very large producer of OTR tires, and that if the tariffs are lowered, "those factories are ready to go."

Supply constraints

Four of six U.S. producers, 11 of 18 importers, and 10 of 12 purchasers reported that they had experienced supply constraints since January 1, 2016, with many firms reporting supply issues with both domestic and imported OTR tires during 2020-22. Firms reported pandemic-related supply issues including factory disruptions, freight issues and shipment delays, labor challenges, and market cyclicality, as supply constraints. U.S. producer ***. ***. ***. ***. Titan stated that it had reduced its labor force prior to 2020, during a period of low demand for OTR tires, and that it took time to build the labor force back up when demand increased in 2020-22.[6]

[5] Sources listed in order of number of purchasers listing each country.

[6] Hearing transcript, p. 43-49 (Beck and Gordon). It takes 6 to 12 months to train new production employees for OTR tires. Hearing transcript, p. 66 (Brewer).

Among importers, *** reported that lack of shipping space led to production allocation during the pandemic. *** reported being "unable to meet customer demands due to supply and loss of competitiveness." *** reported that during 2021-22, demand exceeded global production capacity and *** reported pandemic-related factory disruptions led to an inability to meet demand during 2020-2022. *** reported that since the production capacity can vary by tire size, there can be times when it cannot accept orders if demand is higher than the production capability or *** does not produce the required tire size. It also reported limited shipments during the COVID-19 pandemic-related shutdown. *** reported that demand has exceed supply during the last two years and that both OEM and aftermarket customers "were on allocation or on delay delivery schedules to a certain extent," with delivery delays up to one year.

Ten of 12 responding purchasers reported experiencing supply constraints from their suppliers. Multiple purchasers reported pandemic-related supply issues. *** reported supply shortages from 2020 to 2022. *** reported delays and shortages and being put on allocation by several suppliers. *** reported that suppliers were unable to meet its *** demand. *** reported supply issues with shipments to distributors from Goodyear/Titan and Firestone, reporting that they "are almost certainly on some sort of allocation, controlled entry." It added, ***.

New suppliers

Five of 12 purchasers indicated that new suppliers entered the U.S. market since January 1, 2016, and four expect additional entrants. Purchasers listed the following new entrants since 2016: Ascenso (2 purchasers), Petlas, CEAT, and Michelin. *** reported that ***.[7] Firms did not name any specific new expected entrants, but one purchaser said it has already seen more Chinese tires enter the U.S. market and it expects more Chinese tires in the future since it believes that some duties on Chinese tires were removed.

[7] Most of the firms listed by purchasers as new suppliers were identified as suppliers to the U.S. market during the original investigations, including Apollo, CEAT, Maxam, Michelin, Petlas, and Vredestein. Original publication, p. II-7, II-14-15, and IV-1.

U.S. producer *** reported that Indian producer Ascenso was a new entrant to the U.S. market and U.S. producer *** reported that Maxam has moved from Tier 3 and to Tier 2 and that GRI, Tiron, JK Tyre, and CEAT were new entrants in Tier 3 (table E-1).

U.S. demand

Based on available information, the overall demand for OTR tires is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors to this degree of responsiveness are the limited substitutes for OTR tires and the small cost share of OTR tires in most OEM vehicles and equipment.

End uses and cost share

U.S. demand for OTR tires depends on the demand for tractors, aerial work platforms, and earthmoving vehicles in the OEM market and replacement tires for these vehicles in the aftermarket. In the original investigations, most responding firms reported that cost shares of OTR tires in OEM vehicles were less than 10 percent. Industry witnesses indicated that OTR tires generally should last for four to five years before requiring replacement.[8]

In these reviews, almost all (5 of 6) responding U.S. producers, all importers, and most purchasers reported no changes in end uses since January 1, 2016.[9] U.S. producer *** reported an increase in tire size because of farm consolidations and increased use of larger equipment.

Questionnaire data indicate that agriculture was the largest end-use sector in the U.S. market for OTR tires (59 percent of U.S. producers' and importers' U.S. shipments in 2021), followed by construction (31 percent), mining (less than 1 percent), and all other end uses accounting for almost 10 percent of U.S. shipments.[10] U.S. net farm income increased from $62.3 billion in 2016 to $162.7 billion in 2022, or by 158 percent.[11] U.S. net farm income is projected to decrease in 2023, by 15.9 percent.[12] Total construction spending in the United States increased from $1.2 billion in 2016 to $1.8 billion in 2022, or by 47 percent.[13] The American Institute of Architects (AIA) consensus forecasts 5.8 percent growth in U.S.

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[8] The information in this paragraph is from the original publication, p. II-7.

[9] Two purchasers checked the "yes" box for changes in end uses but did not explain the changes.

[10] Part IV and app. F present data on U.S. shipments by end-use sector.

[11] U.S. net farm income increased by 21 percent in 2017 and 8 percent in 2018, decreased by 2 percent in 2019, increased by 19 percent in 2020, by 49 percent in 2021, and by 14 percent in 2022. U.S. Department of Agriculture, "U.S. farm sector financial indicators, 2016-2023F," http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-us-and-state-levelfarm-income-and-wealth-statistics.aspx, accessed March 13, 2023.

[12] U.S. Department of Agriculture, Economic Research Service. *Farm Sector Income & Finances: Farm Sector Income Forecast*, February 7, 2023.

[13] U.S. total construction spending increased by 5 percent in 2017, by 4 percent in both 2018 and 2019, by 8 percent in both 2020 and 2021, and by 10 percent in 2022. U.S. Census Bureau, Annual Rate for Total Construction, seasonally adjusted, retrieved March 13, 2023.

nonresidential construction in 2023 and 0.8 percent growth in 2024.[14] The National Association of Home Builders (NAHB) projects slower residential housing growth in 2023 followed by some recovery in 2024.[15]

Business cycles

Most responding firms (4 of 6 U.S. producers, 13 of 18 importers, and 10 of 12 purchasers) reported that the OTR tires market was subject to business cycles.[16] Firms reported both seasonality during the year as well as multi-year business cycles. Factors affecting business cycles include the agricultural market and crop prices, economic growth including infrastructure investments, and the seasonality of the agricultural and construction markets. U.S. producer *** reported higher agriculture tire sales in the first half of the year as farmers buy new equipment to prepare for spring planting. Purchaser *** reported the production and usage of machinery with OTR tires during spring through fall months.

Demand trends

Most firms reported an increase in overall U.S. demand for OTR tires since January 1, 2016 (table II-4). Most U.S. producers and importers expect demand to continue to increase while purchasers were divided between expecting an increase (3 firms) or fluctuation (4 firms). Most firms reported increased demand for OTR tires in all three specified markets (agricultural, construction/industrial, and mining), both during the review period and in the future.

Almost all foreign producers (10 of 11) reported increased demand in the U.S., Indian, and third-country export markets since 2016 and almost all (10 of 11) anticipate increased demand in each of these markets.[17] Indian producer *** reported strong growth in the Indian market for OTR tires, stating that India had record tractor sales in 2020-21, that high metal prices have increased demand for mining, and that the construction sector is in recovery after a temporary downturn.

[14] https://www.aia.org/resources/10081-consensus-construction-forecast, retrieved March 13, 2023.
[15] https://www.nahb.org/news-and-economics/press-releases/2023/01/housing-downturn-in-2023-followed-by-recovery-in-2024, retrieved March 13, 2023.
[16] Most firms reported that OTR tires were not subject to other distinctive conditions of competition.
[17] One foreign producer reported "fluctuated" for both during the review period and anticipated.

Table II-4
OTR tires: Count of firms' responses regarding U.S. demand since January 1, 2016, and anticipated U.S. demand, by market type and firm type

Period and market	Firm type	Increase	No change	Decrease	Fluctuate
POR overall market	U.S. producers	3	0	0	1
POR overall market	Importers	11	2	0	3
POR overall market	Purchasers	5	0	0	4
POR agricultural market	U.S. producers	2	0	0	1
POR agricultural market	Importers	10	1	0	3
POR agricultural market	Purchasers	6	0	0	4
POR construction/industrial market	U.S. producers	3	0	0	2
POR construction/industrial market	Importers	11	2	0	4
POR construction/industrial market	Purchasers	7	0	0	3
POR mining market	U.S. producers	3	0	1	1
POR mining market	Importers	9	1	2	3
POR mining market	Purchasers	2	3	0	3
Anticipated overall market	U.S. producers	3	0	0	2
Anticipated overall market	Importers	10	2	0	4
Anticipated overall market	Purchasers	3	0	0	4
Anticipated agricultural market	U.S. producers	2	0	0	0
Anticipated agricultural market	Importers	9	3	0	2
Anticipated agricultural market	Purchasers	3	1	1	4
Anticipated construction/industrial market	U.S. producers	3	0	0	2
Anticipated construction/industrial market	Importers	11	2	0	4
Anticipated construction/industrial market	Purchasers	4	2	0	4
Anticipated mining market	U.S. producers	2	0	0	2
Anticipated mining market	Importers	8	3	0	4
Anticipated mining market	Purchasers	3	2	0	2

Note: POR is period of review.

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

Substitute products

Substitutes for OTR tires are limited. In the original investigations, most U.S. producers, importers, and purchasers reported that there were no substitutes for OTR tires.[18] In these reviews, almost all responding U.S. producers (5 of 6), all responding importers, all responding foreign producers, and almost all responding purchasers (11 of 12) reported no changes in substitutes since January 1, 2016. One firm that reported substitutes, ***, reported increased use of rubber track equipment.

Substitutability issues

This section assesses the degree to which U.S.-produced OTR tires and imports of OTR tires from India can be substituted for one another by examining the importance of certain purchasing factors and the comparability of OTR tires from domestic and imported sources based on those factors. Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced OTR tires and OTR tires imported from India.[19] Factors contributing to this level of substitutability include similar quality and interchangeability between domestic and subject sources, similar lead times for OTR tires shipped from U.S. inventories, little preference for particular countries of origin, and similarities between domestically produced OTR tires and OTR tires imported from India across multiple purchase factors. Factors reducing substitutability include the reported limited availability of U.S.-produced OTR tires, longer lead times for produced-to-order tires from India, and some reported differences in product range including quality tier differences.

[18] The original investigation report stated that solid tires may be substituted for OTR tires in telehandlers, mechanical irrigation systems, industrial machinery, skid steers, wheel loaders, and counter-balanced lift trucks; retreaded tires may be substituted in earthmoving applications and farm equipment; and tracks may be substituted for some construction applications, agricultural tractors and machinery, and skid steel loaders. It also stated that one importer reported that both recapped tires and tracks affect the price of OTR tires. Original publication, p. II-18.

[19] The degree of substitution between domestic and imported OTR tires depends upon the extent of product differentiation between the domestic and imported products and reflects how easily purchasers can switch from domestically produced OTR tires to the OTR tires imported from subject countries (or vice versa) when prices change. The degree of substitution may include such factors as relative prices (discounts/rebates), quality differences (e.g., grade standards, defect rates, etc.), and differences in sales conditions (e.g., lead times between order and delivery dates, reliability of supply, product services, etc.).

Factors affecting purchasing decisions[20]

Purchaser decisions based on source

As shown in table II-5, most purchasers and their customers usually or sometimes make purchasing decisions based on the producer. Country of origin was less often a reason for purchase decisions.

Table II-5
OTR tires: Count of purchasers' responses regarding frequency of purchasing decisions based on producer and country of origin

Firm making decision	Decision based on	Always	Usually	Sometimes	Never
Purchaser	Producer	1	5	5	1
Customer	Producer	0	4	5	2
Purchaser	Country	0	3	5	3
Customer	Country	0	1	7	3

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

Most purchasers (7 of 10) reported that there were not certain types of OTR tires that were only available from one source. Among the three other purchasers, an aftermarket distributor (***) reported that U.S. producers focus on higher-profit radial tires and do not produce a lot of the small bias tires and bias farm tires. In addition, one purchaser reported that premium large earthmover tires are only available from the United States and Japan, and one purchaser reported that only foreign manufacturers produce some OTR sizes for European-manufactured equipment.

Importance of purchasing domestic product

Most purchasers reported that most or all of their purchases did not require U.S.-produced product. Two purchasers reported that some of their customers prefer domestic product, although one of these firms (***) added that when U.S. producers are not supplying much product and its customers need tires, customers will take what they can get.

[20] Nine purchasers indicated they had marketing/pricing knowledge of domestic product, nine of Indian product, and seven of product from nonsubject countries. Firms listed 17 nonsubject countries including China (5 firms), Sri Lanka (4), France (3), Thailand (3), Israel (2), and Turkey (2).

Most important purchase factors

The most often cited top three factors firms consider in their purchasing decisions for OTR tires were quality (11 firms), price (8 firms), and availability (5 firms) as shown in table II-6. Quality was the most frequently cited first-most important factor (cited by 9 firms); price was the most frequently reported second-most important factor (5 firms); and availability was the most frequently reported third-most important factor (4 firms). Most purchasers (10 of 12) reported that they sometimes purchase the lowest-priced product.

Table II-6
OTR tires: Count of ranking of factors used in purchasing decisions as reported by purchasers, by factor

Factor	First	Second	Third	Total
Quality	9	2	0	11
Price	0	5	3	8
Availability	0	1	4	5
All other factors	3	4	5	12

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

Note: Other factors include end use brand preference, capacity, and customer preference, for first factor; product range (2 firms), profitability, and ability to supply for second factor; and ability to meet proprietary requirements, service, supplier support, total acquisition cost (performance, quality, competitiveness), and traditional supplier for third factor.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 17 factors in their purchasing decisions (table II-7). The factors rated as very important by more than half of responding purchasers were availability and reliability of supply (11 each); product consistency (10); and delivery time, price, quality meets industry standards, and quality exceeds industry standards (7 each).

Lead times

OTR tires are sold from both inventories and produced-to-order. U.S. producers reported that *** percent of their commercial U.S. shipments were produced-to-order and the remaining *** percent were from inventory. Aftermarket sales were nearly evenly divided between shipments from inventory and produced-to-order and OEM sales were mainly produced-to-order (*** percent). U.S. producers' lead times from inventory averaged *** days and lead times for produced-to-order product averaged *** days.

Importers reported that *** percent of their commercial U.S. shipments came from inventories and *** percent were produced-to-order. Importers' lead times from U.S. inventories averaged *** days and lead times for produced-to-order product averaged *** days.

Table II-7
OTR tires: Count of purchasers' responses regarding importance of purchase factors, by factor

Factor	Very important	Somewhat important	Not important
Aftermarket/distribution services	4	6	0
Availability	11	1	0
Delivery terms	5	7	0
Delivery time	7	5	0
Discounts offered	4	7	1
Minimum quantity requirements	3	5	4
Packaging	0	6	6
Payment terms	1	8	3
Price	7	5	0
Product consistency	10	2	0
Product range	6	6	0
Quality meets industry standards	7	4	0
Quality exceeds industry standards	7	5	0
Reliability of supply	11	1	0
Technical support/service	4	7	1
Tier or branding	4	8	0
U.S. transportation costs	1	9	2

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

Supplier certification

Half of responding purchasers require their suppliers to become certified or qualified to sell OTR tires to their firm. Two purchasers reported the time to qualify a new supplier, with responses of 14 and 30 days, respectively. No purchasers reported that any supplier had failed in its attempt to qualify OTR tires or had lost its approved status since 2016.

Minimum quality specifications

As can be seen from table II-8, purchasers reported that OTR tires produced in the United States and imported from India and nonsubject countries always or usually met minimum quality specifications.

Table II-8
OTR tires: Count of purchasers' responses regarding suppliers' ability to meet minimum quality specifications, by source

Source of purchases	Always	Usually	Sometimes	Rarely or never	Don't Know
United States	6	5	0	0	1
India	3	7	0	0	2
Nonsubject sources	3	6	0	0	0

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

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

Purchasers reported factors that determined quality included product performance including expected hours of service. Other factors mentioned included appearance, design for soil compaction, material integrity, reputation, technical specs meeting engineering requirements, and tread depth. Purchasers reported using test data, factory visits, warranty rates, and customer feedback to assess quality.

Changes in purchasing patterns

Eight of the 12 responding purchasers reported that they had purchased subject imports from India before the orders. Four of these firms reported no changes in their purchases since the orders and four reported changes in their purchases but for reasons other than the orders. *** reported that it has continued to purchase tires from India because there is not enough U.S. tire capacity. *** reported that some business has shifted back to China since it believes some duties were removed, but that it continues to buy much more from India than from China. *** reported that it stopped doing business with an Indian supplier (***) "due to lack of sales." *** reported that its sourcing depends on customer preference, supplier capacity, availability, and competitiveness.

When asked about changes in purchases of nonsubject imports since 2016, eight purchasers reported that their pattern of purchasing was essentially unchanged, three reported changes for reasons other than the orders, and one reported that it did not purchase from nonsubject sources before or after the orders. No purchasers reported increased purchases from nonsubject sources because of the orders. *** reported finding new opportunities in other countries and *** reported it began purchasing OTR tires from China in 2019 "due to more favorable purchasing conditions."

Purchasers were asked about changes in their purchasing patterns from different sources since 2016 (table II-9). *** reported decreased domestic purchases because of lack of supply from U.S. producers, reporting that there are routinely backorders of more than a year. It attributed the lack of supply to workforce issues and some manufacturers (such as Firestone, owned by Bridgestone) being more focused on passenger or other tires rather than OTR tires. *** reported increased Indian purchases for diversification and to meet customer needs. Three firms reported fluctuating purchases from different sources based on suppliers' capacity and availability and customer preference. *** reported that U.S. producers had supply challenges due to COVID impacts on raw material availability from foreign sources, labor shortages, and factory shutdowns. It reported that foreign producers face similar supply challenges, with the pandemic impacting their raw materials, factory shutdowns, and

high freight costs from India and China. It reported that it began increasing its share of purchases from China in 2019 as conditions, including freight costs, became more favorable.

Table II-9
OTR tires: Count of purchasers' responses regarding changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Decreased	Increased	Constant	Fluctuated	Did not purchase
United States	1	3	3	3	1
India	0	3	2	4	2
Nonsubject sources	0	0	5	3	2
Sources unknown	0	0	1	1	6

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

Five of 12 responding purchasers reported that they had changed suppliers since January 1, 2016. General reasons for changing suppliers were pricing, service, supply, and adding a second source of supply for some items. *** dropped Indian supplier *** because of a lack of sales, dropped Titan/Goodyear[21] because ***, and added Chinese supplier *** in 2019 because of more favorable conditions. *** reported adding ***.

Quality tiers, branding, and distribution[22]

The OTR tire market is generally divided informally into three categories (or "tiers") based on quality. Competition may occur both within tiers and between different tiers. Tier 1 is composed primarily of a small number of U.S. producers which have brand recognition and are known for high quality, durability, and technical service and support. Tier 2 producers tend to focus on availability and price, and are known for the best performance value, and Tier 3 producers have little brand recognition and are driven primarily by price. Suppliers falling under these tiers include U.S. producers in addition to Indian producers of OTR tires. In the original investigations, purchasers generally recognized Titan tires in all three tiers and Indian producers Alliance and BKT in Tiers 2 and 3. Other producers that were recognized by purchasers as Tier 1 suppliers were Michelin, BFNA, Goodyear, and Trelleborg.[23]

[21] Titan sells tires under both the Goodyear and Titan brand names. Hearing transcript, pp. 60-61 (Hogan).

[22] Firms' complete narrative responses to questions on categories and branding are shown in app. E.

[23] The information in this paragraph is from original publication, pp. II-2 and II-13.

Five of 6 U.S. producers, 8 of 17 importers, and 4 of 11 purchasers reported category changes since 2016. *** reported that Trelleborg has moved from Tier 2 to Tier 1 and Maxam from Tier 3 to Tier 2. It also reported new competitors in the Tier 3 market including GRI, Tiron, JK Tyre, and CEAT, and that these suppliers have gained market share in all channels of distribution. *** reported that since 2016, it has faced competition against up to 15 additional brands/manufacturers, which were mainly, if not all imports. *** reported new Tier 3 brands and that brand acquisitions have increased the size of the Tier 2 market. In addition, *** reported that Tier 1 and Tier 2 manufacturers have added secondary lower tier brands to compete with lower-cost tires. Examples cited were Bridgestone adding the Firestone OTR brand, Continental adding the General OTR brand, Michelin adding the Camso and Solideal brands, and Yokohama's merging with ATC to add lower tier Alliance/Galaxy/PrimeX brands and its recent acquisition of Trelleborg. *** reported new entrants from India and subject imports gaining market share, industry consolidation, and price fluctuations as ocean freight costs change. *** reported increased competition, more tiers and price points, and growth in the Tier 2 segment which has taken market share from Tier 1.

Importers reported that Titan is now considered more a Tier 1 tire and that some manufacturers have begun to produce lower-level offerings. Importer *** described the different tiers and the brands within each tier, and it estimates a 15 percent price difference between Tier 1 and Tier 2 tires and a 25 percent difference between Tier 2 and Tier 3 tires.[24] Among purchasers, *** reported that India has lower tier offerings than domestic producers, and *** reported better quality and more options available both from domestic producers and from India. *** reported that it continually seeks to add new brands because existing suppliers lack sufficient capacity.

Most U.S. producers (5 of 6), importers (15 of 17), and purchasers (9 of 11) reported no branding changes since 2016. Among the firms reporting changes, U.S. producer *** reported an increase in imported private label brands, importer *** reported that Titan sells some tires under the Goodyear brand and purchaser *** reported increased private label

[24] ***.

purchases. Two of four U.S. producers reported aftermarket distribution changes while most importers (12 of 17) reported no changes.

Purchase factor comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing OTR tires produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 17 factors (table II-10) for which they were asked to rate the importance.

Most purchasers reported that U.S. and Indian OTR tires were comparable on 9 of the 17 factors, including three factors that were rated as very important by most purchasers (product consistency, quality meets industry standards, and quality exceeds industry standards). Most purchasers reported that the U.S. product was superior to Indian product on three factors: aftermarket distribution/services, delivery terms, and delivery time, and for a fourth factor, tier or branding, half reported that the U.S. product was superior. For technical support/service firm responses were equally divided between U.S. product being superior or comparable to Indian product. For price (which was rated as very important by 7 of 11 purchasers), five firms reported that the Indian product was priced lower, and five reported that prices were comparable. Firms' responses were mixed regarding availability and reliability of supply (both rated as very important factors for 10 of 11 purchasers), although a plurality reported that the U.S. and Indian products were comparable. Most purchasers reported that subject and nonsubject sources were comparable for all 17 factors. A majority of responding purchasers reported that the U.S. and nonsubject sources were comparable for 9 of the 17 factors.

Table II-10
OTR tires: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Aftermarket distribution/services	U.S. v. India	6	3	0
Availability	U.S. v. India	3	4	3
Delivery terms	U.S. v. India	6	3	1
Delivery time	U.S. v. India	8	1	1
Discounts offered	U.S. v. India	0	8	2
Minimum quantity requirements	U.S. v. India	2	8	0
Packaging	U.S. v. India	2	8	0
Payment terms	U.S. v. India	3	7	0
Price	U.S. v. India	0	5	5
Product consistency	U.S. v. India	3	7	0
Product range	U.S. v. India	1	8	2
Quality meets industry standards	U.S. v. India	3	7	0
Quality exceeds industry standards	U.S. v. India	3	7	0
Reliability of supply	U.S. v. India	2	5	3
Technical support/service	U.S. v. India	5	5	0
Tier or branding	U.S. v. India	5	3	2
U.S. transportation costs	U.S. v. India	1	7	2

Table continued.

Table II-10 Continued
OTR tires: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Aftermarket distribution/services	U.S. v. Nonsubject	4	4	0
Availability	U.S. v. Nonsubject	4	4	1
Delivery terms	U.S. v. Nonsubject	5	3	1
Delivery time	U.S. v. Nonsubject	5	2	2
Discounts offered	U.S. v. Nonsubject	0	8	1
Minimum quantity requirements	U.S. v. Nonsubject	1	8	0
Packaging	U.S. v. Nonsubject	1	8	0
Payment terms	U.S. v. Nonsubject	2	7	0
Price	U.S. v. Nonsubject	1	5	3
Product consistency	U.S. v. Nonsubject	3	6	0
Product range	U.S. v. Nonsubject	1	7	1
Quality meets industry standards	U.S. v. Nonsubject	4	5	0
Quality exceeds industry standards	U.S. v. Nonsubject	4	3	2
Reliability of supply	U.S. v. Nonsubject	2	4	3
Technical support/service	U.S. v. Nonsubject	5	3	1
Tier or branding	U.S. v. Nonsubject	3	4	2
U.S. transportation costs	U.S. v. Nonsubject	1	6	1

Table continued.

Table II-10 Continued
OTR tires: Count of purchasers' responses comparing U.S.-produced and imported product, by factor and country pair

Factor	Country pair	Superior	Comparable	Inferior
Aftermarket distribution/services	India v. Nonsubject	1	7	1
Availability	India v. Nonsubject	2	7	0
Delivery terms	India v. Nonsubject	2	5	2
Delivery time	India v. Nonsubject	1	6	2
Discounts offered	India v. Nonsubject	0	9	0
Minimum quantity requirements	India v. Nonsubject	0	9	0
Packaging	India v. Nonsubject	1	8	0
Payment terms	India v. Nonsubject	0	9	0
Price	India v. Nonsubject	2	6	1
Product consistency	India v. Nonsubject	4	5	0
Product range	India v. Nonsubject	2	7	0
Quality meets industry standards	India v. Nonsubject	2	7	0
Quality exceeds industry standards	India v. Nonsubject	3	5	1
Reliability of supply	India v. Nonsubject	1	7	1
Technical support/service	India v. Nonsubject	2	5	2
Tier or branding	India v. Nonsubject	3	5	1
U.S. transportation costs	India v. Nonsubject	0	9	0

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

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.

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

In order to determine whether U.S.-produced OTR tires can generally be used in the same applications as imports from India, 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-11, most U.S. producers, importers, and purchasers reported that domestic product, subject imports, and nonsubject imports were at least frequently interchangeable.

Table II-11
OTR tires: Count of firms reporting the interchangeability between product produced in the United States and in other countries, by firm type and country pair

Firm Type	Country pair	Always	Frequently	Sometimes	Never
U.S. producers	United States vs. India	1	3	1	0
U.S. producers	United States vs. Other	1	3	1	0
U.S. producers	India vs. Other	1	0	1	0
Importers	United States vs. India	4	9	1	0
Importers	United States vs. Other	4	10	3	0
Importers	India vs. Other	4	6	1	0
Purchasers	United States vs. India	4	5	1	0
Purchasers	United States vs. Other	4	2	2	0
Purchasers	India vs. Other	4	3	1	0

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

Importer *** reported that each source was sometimes interchangeable depending on the tire type and warranty. Purchaser *** reported that U.S. and Indian products were frequently interchangeable, and that U.S. product was sometimes interchangeable with nonsubject countries, stating that “many factories in Asia produce inferior tires, but the product serves a purpose for minimal use cases.” Purchaser *** reported that U.S., Indian, and nonsubject OTR tires were sometimes interchangeable depending on the brand and specification.

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of OTR tires from the United States, subject, or nonsubject countries (table II-12). Four U.S. producers reported that factors other than price were frequently significant in their sales and one reported sometimes. A majority of importers (9 of 13) reported that factors other than price were always or frequently significant in their sales of OTR tires, and the remaining five reported "sometimes." Purchasers less frequently reported that differences in factors other than price between U.S. and Indian product were significant in their purchases of OTR tires with five firms reporting "sometimes," three "frequently," and two "always."

Table II-12
OTR tires: Count of firms reporting the significance of differences other than price between product produced in the United States and in other countries, by firm type and country pair

Firm Type	Country pair	Always	Frequently	Sometimes	Never
U.S. producers	United States vs. India	0	4	1	0
U.S. producers	United States vs. Other	0	4	1	0
U.S. producers	India vs. Other	0	1	1	0
Importers	United States vs. India	4	5	5	0
Importers	United States vs. Other	3	7	5	0
Importers	India vs. Other	4	2	4	0
Purchasers	United States vs. India	2	3	5	0
Purchasers	United States vs. Other	1	3	4	0
Purchasers	India vs. Other	1	3	4	0

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

Among U.S. producers, *** reported that factors such as quality, availability, transportation network, product range, and technical support are likely valued by customers, although it lacks data about the specific impact these factors have on OTR tire sales.

Among importers, *** reported that there is not enough U.S. capacity to meet U.S. demand. *** reported that Indian product has more availability and a broader product range than domestic product. *** cited quality control, recognition, and transportation network as differentiating factors. *** reported that U.S. producers have advantages over Indian product in delivery time (90-120 days from India compared to just-in-time delivery for domestic product) and technical support.

Purchaser *** reported that the main factors it considers are product quality, price, supply consistency, and any exclusivity agreements. Purchaser *** reported that Michelin tires made in France and Firestone tires made in the United States have superior technology and construction.

Elasticity estimates

This section discusses elasticity estimates. Parties did not comment on these estimates in their prehearing or posthearing briefs.

U.S. supply elasticity

The domestic supply elasticity for OTR tires measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of OTR 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 OTR 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 9 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for OTR tires measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of OTR 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 OTR tires in the production of any downstream products. Based on the available information, the aggregate demand for OTR tires is likely to be inelastic; a range of -0.25 to -0.75 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[25] 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 OTR tires and imported OTR tires is likely to be in the range of 4 to 6. Factors contributing to higher substitutability include similar quality and interchangeability between domestic and subject sources, similar lead times for OTR tires shipped from U.S. inventories, little preference for particular countries of origin, and similarities between domestically produced OTR tires and OTR tires imported from India across multiple purchase factors. Factors reducing substitutability include the reported limited availability of domestic tires, longer lead times for produced-to-order tires from India, and some reported differences in product range including quality tier differences.

[25] 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.

Part III: Condition of the U.S. industry

Overview

The information in this section of the report was compiled from responses to the Commission's questionnaires. Six firms, which accounted for the vast majority of U.S. production of OTR tires during 2021, supplied information on their operations in these reviews and other proceedings on OTR tires.[1]

Table III-1 presents events in the U.S. industry since January 1, 2016.

[1] The domestic interested party identified seven known and currently operating U.S. producers of OTR tires. The Commission received questionnaire responses from all seven. Information in this report is based on the questionnaire responses of six firms. A seventh firm, Michelin North America, Inc. indicated production of OTR tires but was unable to supply the Commission with a complete usable questionnaire response and is therefore not included in the dataset. In 2021, Michelin produced ***. Domestic interested party's response to the notice of institution, March 3, 2022, pp. 2-3; and Michelin's U.S. producer questionnaire response, section II-4.

Table III-1
OTR tires: Important industry events since 2016

Item	Firm	Event
Plant opening	Trelleborg	First Trelleborg Ag Tire plant in North America commenced commercial production in 2016 at Spartanburg, SC.
Expansion	American Tire Distributors	First-step Entry by ATD into Ag Tires by marketing its Hercules Brand Ag Tires requested by U.S. tire dealers.
Acquisition	Yokohama	$2.3 billion deal announced March 2022 under negotiation to purchase Trelleborg Wheel, to include ownership of two U.S. Trelleborg Ag tire plants in IA and SC.
Acquisition	Michelin	$1.5 billion deal announced Sept. 2018 to purchase Camso, a Quebec based off-the-road tire producer. To significantly strengthen presence in industry.
Other	Continental	Reentry, late-2016, into OTR tire business after 10-year absence. OTR tires of several types will be brought in from Continental plants abroad.
Net Farm Income	U.S. Farm Community	U.S. Net Farm Income has progressively increased from $79.2 billion in 2019 to an all-time record high of $160.5 billion in 2022, accompanied by buoyant Ag equipment and OTR tire demand growth.

Source: Tire Business, March 25, 2022: "Trelleborg to sell TWS business to Yokohama for $2.3 Billion." Tire Business, Sept. 28, 2018: "Camso positions Michelin as global leader in OTR tire market." RubberNews, Oct. 24, 2016: "Continental launches OTR business in Americas." TireBusiness, Sept. 6, 2017: "Conti's farm tire revival up and running." Modern Tire Dealer, March 9, 2022: "Hercules' Gillespie Discusses 'First-Step' into Ag Tires." TireBusiness, November 8, 2018: BKT pegs U.S. tire plant investment at $100 million. USDA ERS, "Highlights from the farm income forecast," December 2022. Tire Business, February 6, 2023: "Farmers expect to spend profits on tires, equipment."

Changes experienced by the industry

U.S. producers were asked to report any change in the character of their operations or organization relating to the production of OTR tires since 2016. Three of six producers indicated in their questionnaires that they had experienced such changes. Table III-2 presents the changes identified by these producers.

Table III-2
OTR tires: Reported changes in operations since January 1, 2016

Type of change	Firm name and narrative on changes in operations
Plant openings	***
Acquisitions	***
Consolidations	***
Prolonged shutdowns or curtailments	***
Other	***
Other	***

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

Anticipated changes in operations

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of OTR tires. *** indicated such changes (table III-3).

Table III-3
OTR tires: Anticipated changes in operations

Type of change	Firm name and narrative on anticipated changes in operations
Anticipated changes in operations	***

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

U.S. production, capacity, and capacity utilization

Table III-4 and figure III-1 present U.S. producers' capacity and production on the same equipment used to produce OTR tires. During, 2016-21, U.S. producers' installed overall capacity and practical overall capacity remained relatively stable. Except for *** U.S. producers produce out-of-scope products on the same equipment and machinery used to produce OTR tires. While a large portion of *** reported practical overall capacity is devoted to practical OTR tires capacity only a small portion of *** reported practical overall capacity is devoted to practical OTR tires capacity. Overall, during the period for which data were collected, practical overall capacity was about half of installed overall capacity. During 2016-21, practical OTR tires capacity fluctuated but overall increased by 26.1 percent. Installed overall capacity, practical overall capacity, and practical OTR tires capacity were all lower in interim 2022 compared to interim 2021 (by 3.3 percent, by 9.5 percent, and by 10.1 percent, respectively). Practical OTR tires capacity utilization was highest in 2016, then decreased by 5.1 percentage points in 2017 and remained stable during 2017-19 before decreasing 8.9 percentage points in 2020 and rebounding by 2.6 percentage points in 2021. Practical OTR tires capacity utilization was 8.2 percentage points higher in interim 2022 compared to interim 2021.

Table III-4
OTR tires: U.S. producers' capacity and production on the same equipment as in-scope production, by period

Quantity in 1,000 tires

Item	Measure	2016	2017	2018
Installed overall	Capacity	17,353	17,463	17,398
Installed overall	Production	7,461	7,261	7,353
Installed overall	Utilization	43.0	41.6	42.3
Practical overall	Capacity	9,143	9,418	9,122
Practical overall	Production	7,461	7,261	7,353
Practical overall	Utilization	81.6	77.1	80.6
Practical OTR tires	Capacity	3,300	3,913	3,885
Practical OTR tires	Production	2,421	2,671	2,706
Practical OTR tires	Utilization	73.4	68.2	69.7

Table continued.

Table III-4 Continued
OTR tires: U.S. producers' capacity and production on the same equipment as in-scope production, by period

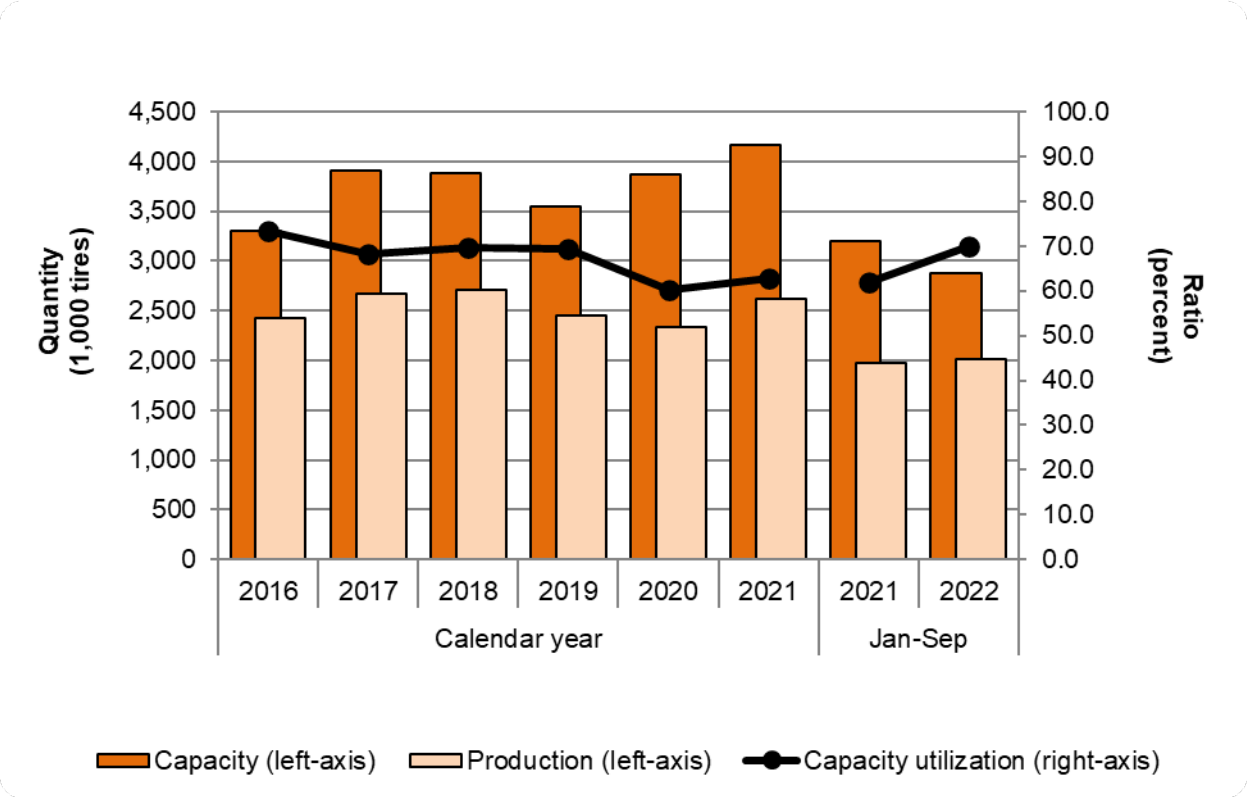
Quantity in 1,000 tires

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	17,063	17,264	17,511	13,189	12,759
Installed overall	Production	6,991	6,167	6,949	5,253	4,915
Installed overall	Utilization	41.0	35.7	39.7	39.8	38.5
Practical overall	Capacity	8,661	8,440	8,872	6,741	6,099
Practical overall	Production	6,991	6,167	6,949	5,253	4,915
Practical overall	Utilization	80.7	73.1	78.3	77.9	80.6
Practical OTR tires	Capacity	3,546	3,868	4,161	3,195	2,871
Practical OTR tires	Production	2,455	2,332	2,615	1,974	2,008
Practical OTR tires	Utilization	69.2	60.3	62.8	61.8	69.9

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

Note: ***.

Figure III-1
OTR tires: U.S. producers' production, capacity, and capacity utilization, by period



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

Table III-5 presents U.S. producers' production, capacity, and capacity utilization. During 2016-21, ***.[2] In addition, ***.[3] Overall, during 2016-21, ***.[4] ***.[5] Meanwhile, ***. In 2021, *** held the largest share of reported practical OTR tires capacity (*** percent), followed by *** (*** percent).

Production of OTR tires increased by 11.8 percent during 2016-18 then decreased by 13.8 percent from 2018-20 and then increased by 12.2 percent in 2021. Overall, during 2016-21 production increased by 8.0 percent and was highest in 2018. Production was about the same in interim 2022 compared to interim 2021. All six U.S. producers had faced OTR tires production declines during 2018-20 and except for ***, increases in the following year. ***. ***. ***.

U.S. producers' capacity utilization was highest in 2016 before dropping 5.1 percentage points in 2017 and remaining stable during 2017-19. Capacity utilization dropped by 8.9 percentage points from 2019 to 2020 then increased by 2.6 percentage points in 2021. Overall, during 2016-21, U.S. producers' capacity utilization decreased by 10.5 percentage points and was 8.2 percentage points higher in interim 2022 compared to interim 2021. Three of six U.S. producers (***) experienced a drop in capacity utilization in

[2] *** U.S. producer questionnaire response, section II-3c; and email from ***, January 23, 2023.

[3] Email from ***, January 23, 2023.

[4] ***. Email from ***, January 23, 2023.

[5] Email from ***, March 6, 2023; and U.S. producer questionnaires, section II-3; and *** U.S. producer questionnaire response, section II-3d.

2020. *** U.S. producers had higher capacity utilization rates when comparing 2021 to 2020. *** U.S. producers had higher capacity utilization rates and when comparing interim 2022 to interim 2021.

Table III-5
OTR tires: Firm-by-firm capacity, by period

Capacity

Quantity in 1,000 tires

Firm	2016	2017	2018
Bridgestone	***	***	***
Carlstar	***	***	***
Goodyear	***	***	***
Specialty	***	***	***
Titan	***	***	***
Trelleborg	***	***	***
All firms	3,300	3,913	3,885

Table continued.

Table III-5 Continued
OTR tires: Firm-by-firm capacity, by period

Capacity

Quantity in 1,000 tires

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***
Carlstar	***	***	***	***	***
Goodyear	***	***	***	***	***
Specialty	***	***	***	***	***
Titan	***	***	***	***	***
Trelleborg	***	***	***	***	***
All firms	3,546	3,868	4,161	3,195	2,871

Table continued.

Table III-5 Continued
OTR tires: Firm-by-firm production, by period

Production

Quantity in 1,000 tires

Firm	2016	2017	2018
Bridgestone	***	***	***
Carlstar	***	***	***
Goodyear	***	***	***
Specialty	***	***	***
Titan	***	***	***
Trelleborg	***	***	***
All firms	2,421	2,671	2,706

Table continued.

Table III-5 Continued
OTR tires: Firm-by-firm production, by period

Production

Quantity in 1,000 tires

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***
Carlstar	***	***	***	***	***
Goodyear	***	***	***	***	***
Specialty	***	***	***	***	***
Titan	***	***	***	***	***
Trelleborg	***	***	***	***	***
All firms	2,455	2,332	2,615	1,974	2,008

Table continued.

Table III-5 Continued
OTR tires: Firm-by-firm capacity utilization, by period

Capacity utilization

Ratios in percent

Firm	2016	2017	2018
Bridgestone	***	***	***
Carlstar	***	***	***
Goodyear	***	***	***
Specialty	***	***	***
Titan	***	***	***
Trelleborg	***	***	***
All firms	73.4	68.2	69.7

Table continued.

Note: Capacity utilization ratio represents the ratio of the U.S. producer's production to its production capacity.

Table III-5 Continued
OTR tires: Firm-by-firm capacity utilization, by period

Capacity utilization

Ratios in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***
Carlstar	***	***	***	***	***
Goodyear	***	***	***	***	***
Specialty	***	***	***	***	***
Titan	***	***	***	***	***
Trelleborg	***	***	***	***	***
All firms	69.2	60.3	62.8	61.8	69.9

Table continued.

Note: Capacity utilization ratio represents the ratio of the U.S. producer's production to its production capacity.

Table III-5 Continued
OTR tires: Firm-by-firm share of production, by period

Share of production

Share in percent

Firm	2016	2017	2018
Bridgestone	***	***	***
Carlstar	***	***	***
Goodyear	***	***	***
Specialty	***	***	***
Titan	***	***	***
Trelleborg	***	***	***
All firms	100.0	100.0	100.0

Table continued.

Table III-5 Continued
OTR tires: Firm-by-firm share of production, by period

Share of production

Share in percent

Firm	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***
Carlstar	***	***	***	***	***
Goodyear	***	***	***	***	***
Specialty	***	***	***	***	***
Titan	***	***	***	***	***
Trelleborg	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

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

Alternative products

As shown in table III-6, 37.6 percent of tires produced during 2021 by U.S. producers were OTR tires. *** firms reported producing out-of-scope tires on the same equipment and machinery used to produce OTR tires. *** on the same equipment and machinery used to produce OTR tires. Over *** percent of Bridgestone's and Titan's reported production on the same equipment and machinery was OTR tires whereas less than *** percent of Carlstar's and Specialty's and less than *** percent of Goodyear's reported production on the same equipment and machinery was OTR tires. During the period for which data were collected, OTR tires production accounted for between 32.4 percent and 40.9 percent of tires produced. Overall, out-of-scope tires declined as a share of production during 2016-21 and was lower in interim 2022 compared to interim 2021.

Table III-6
OTR tires: U.S. producers' overall capacity and production on the same equipment as subject production, by period

Quantity in 1,000 tires; share in percent

Production type	Measure	2016	2017	2018
OTR tires	Quantity	2,421	2,671	2,706
PVLT tires	Quantity	***	***	***
Truck and bus tires	Quantity	***	***	***
Other	Quantity	***	***	***
All out-of-scope production	Quantity	5,041	4,590	4,646
All production	Quantity	7,461	7,261	7,353
OTR tires	Share	32.4	36.8	36.8
PVLT tires	Share	***	***	***
Truck and bus tires	Share	***	***	***
Other	Share	***	***	***
All out-of-scope production	Share	67.6	63.2	63.2
All production	Share	100.0	100.0	100.0

Table continued.

Table III-6 Continued
OTR tires: U.S. producers' overall capacity and production on the same equipment as subject production, by period

Quantity in 1,000 tires; share in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
OTR tires	Quantity	2,455	2,332	2,615	1,974	2,008
PVLT tires	Quantity	***	***	***	***	***
Truck and bus tires	Quantity	***	***	***	***	***
Other	Quantity	***	***	***	***	***
All out-of-scope production	Quantity	4,536	3,835	4,333	3,279	2,907
All production	Quantity	6,991	6,167	6,949	5,253	4,915
OTR tires	Share	35.1	37.8	37.6	37.6	40.9
PVLT tires	Share	***	***	***	***	***
Truck and bus tires	Share	***	***	***	***	***
Other	Share	***	***	***	***	***
All out-of-scope production	Share	64.9	62.2	62.4	62.4	59.1
All production	Share	100.0	100.0	100.0	100.0	100.0

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

Constraints on capacity

All responding U.S. producers reported constraints in the manufacturing process. Table III-7 presents U.S. producers' narratives response on factors impacting U.S. producers' ability to switch between OTR tires and out-of-scope products.

Table III-7
OTR tires: U.S. producers' narratives regarding production constraints

Item	Firm name and narrative response on production constraints
Production bottlenecks	***
Existing labor force	***
Existing labor force	***
Supply of material inputs	***
Demand/orders	***
Supply of material inputs	***
Fuel or energy	***

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

U.S. producers' U.S. shipments and exports

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments accounted for over 88 percent of shipments, both in terms of quantity and in terms of value, during 2016-21 and both interim periods.[6] Overall, U.S. shipments' share of total shipments, both in terms of quantity and in terms of value, rose during 2016-20 with a slight decrease in 2021. During 2016-21, U.S. producers' U.S. shipments, in terms of quantity and in terms of value, fluctuated but overall increased by 16.3 percent and by 32.8 percent, respectively. U.S. producers' U.S. shipments, in terms of quantity, were 9.9 percent lower in interim 2022 compared to interim 2021, whereas U.S. producers' U.S. shipments, in terms of value, were 11.9 percent higher in interim 2022 compared to interim 2021.

During 2016-21, the unit value of U.S. producers' U.S. shipments fluctuated between $378 per tire in 2016 and $431 per tire in 2021. Overall, the unit value of U.S. producers' U.S. shipments increased by 14.2 percent ($54 per tire). The unit value of U.S. producers' U.S. shipments was 24.2 percent ($100 per tire) higher in interim 2022 compared to interim 2021. In each year during 2016-21 and in both interim periods commercial U.S. shipments accounted for over *** percent of U.S. shipments, both in terms of quantity and in terms of value.

[6] ***. *** U.S. producer questionnaire response, section II-4.

Table III-8
OTR tires: U.S. producers' shipments, by destination and period

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollars per tire; shares in percent

Item	Measure	2016	2017	2018
U.S. shipments	Quantity	2,153	2,352	2,470
Export shipments	Quantity	279	288	257
Total shipments	Quantity	2,433	2,640	2,727
U.S. shipments	Value	813,496	921,663	1,000,369
Export shipments	Value	116,859	127,624	111,960
Total shipments	Value	930,355	1,049,287	1,112,329
U.S. shipments	Unit value	378	392	405
Export shipments	Unit value	418	443	436
Total shipments	Unit value	382	397	408
U.S. shipments	Share of quantity	88.5	89.1	90.6
Export shipments	Share of quantity	11.5	10.9	9.4
Total shipments	Share of quantity	100.0	100.0	100.0
U.S. shipments	Share of value	87.4	87.8	89.9
Export shipments	Share of value	12.6	12.2	10.1
Total shipments	Share of value	100.0	100.0	100.0

Table continued.

Table III-8 Continued
OTR tires: U.S. producers' shipments, by destination and period

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollars per tire; shares in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. shipments	Quantity	2,376	2,256	2,505	1,952	1,759
Export shipments	Quantity	187	177	213	171	176
Total shipments	Quantity	2,563	2,433	2,718	2,123	1,935
U.S. shipments	Value	924,279	860,918	1,080,649	807,543	904,028
Export shipments	Value	94,884	73,219	98,673	75,644	87,170
Total shipments	Value	1,019,163	934,137	1,179,322	883,187	991,198
U.S. shipments	Unit value	389	382	431	414	514
Export shipments	Unit value	506	413	462	442	494
Total shipments	Unit value	398	384	434	416	512
U.S. shipments	Share of quantity	92.7	92.7	92.1	91.9	90.9
Export shipments	Share of quantity	7.3	7.3	7.9	8.1	9.1
Total shipments	Share of quantity	100.0	100.0	100.0	100.0	100.0
U.S. shipments	Share of value	90.7	92.2	91.6	91.4	91.2
Export shipments	Share of value	9.3	7.8	8.4	8.6	8.8
Total shipments	Share of value	100.0	100.0	100.0	100.0	100.0

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

U.S. producers' inventories

Table III-9 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. All six U.S. producers reported end-of-period inventories during the period for which data were collected. U.S. producers' end-of-period inventories decreased by 59.9 percent during 2016-21 and were 76.6 percent higher in interim 2022 compared to interim 2021. During 2016-21, U.S. producers' end-of-period inventories as a ratio to U.S. production, U.S. shipments, and total shipments declined each year and overall declined by 13.1 percentage points, by 15.4 percentage points, and by 13.3 percentage points, respectively. U.S. producers' end-of-period inventories as a ratio to U.S. production, U.S. shipments, and total shipments were higher in interim 2022 compared to interim 2021 (by 4.4 percentage points, by 5.8 percentage points, and by 5.2 percentage points, respectively).

Table III-9
OTR tires: U.S. producers' inventories and their ratio to select items, by period

Quantity in 1,000 tires; ratios are inventories to production and shipments

Item	Measure	2016	2017	2018
End-of-period inventory	Quantity	505	535	514
Inventory to U.S. production	Ratio	20.9	20.0	19.0
Inventory to U.S. shipments	Ratio	23.4	22.8	20.8
Inventory to total shipments	Ratio	20.8	20.3	18.9

Table continued.

Table III-9 Continued
OTR tires: U.S. producers' inventories and their ratio to select items, by period

Quantity in 1,000 tires; ratios are inventories to production and shipments

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
End-of-period inventory	Quantity	406	305	203	156	275
Inventory to U.S. production	Ratio	16.5	13.1	7.7	5.9	10.3
Inventory to U.S. shipments	Ratio	17.1	13.5	8.1	6.0	11.7
Inventory to total shipments	Ratio	15.8	12.5	7.5	5.5	10.7

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

U.S. producers' imports from subject sources

One U.S. producer, ***, reported imports of OTR tires from India (table III-10 and table III-11).[7]

Table III-10
OTR tires: *'s U.S. production, U.S. imports, and ratio of import to production**

Quantity in 1,000 tires; ratios in percent

Item	Measure	2016	2017	2018
U.S. production	Quantity	***	***	***
Imports from India	Quantity	***	***	***
Imports from India to U.S. production	Ratio	***	***	***

Table continued.

Table III-10 Continued
OTR tires: *'s U.S. production, U.S. imports, and ratio of import to production**

Quantity in 1,000 tires; ratios in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
U.S. production	Quantity	***	***	***	***	***
Imports from India	Quantity	***	***	***	***	***
Imports from India to U.S. production	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Table III-11
OTR tires: U.S. producers' reason(s) for imports, by firm

Item	Narrative response on reason(s) for importation
***'s reason for importing	***

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

[7] In addition, ***. U.S. producer questionnaire response, section II-11.

U.S. producers' purchases of imports from subject sources

One U.S. producer (***) reported purchases of imports from India. Data on this firm's production and purchases of subject imports are presented in table III 12.

Table III-12
OTR tires: * U.S. production and U.S. purchases of imports from India and associated related party analyses**

Quantity in number of tires; ratios in percent

Item	Line	Measure	2016	2017	2018
U.S. production reported by ***	A	Quantity	***	***	***
U.S. purchases of imports from India by *** (imported by ***)	B	Quantity	***	***	***
U.S. imports reported by ***	C	Quantity	***	***	***
Overall U.S. imports from India	D	Quantity	***	***	***
U.S. purchases of imports from India by *** relative to imports by ***	E	Ratio	***	***	***
U.S. purchases of imports from India by *** relative to overall imports from India	F	Ratio	***	***	***
U.S. purchases of imports from India by *** to its U.S. production	G	Ratio	***	***	***

Table continued.

Table III-12 Continued
OTR tires: * U.S. production and U.S. purchases of imports from India and associated related party analyses**

Quantity in number of tires; ratios in percent

Line	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
A	Quantity	***	***	***	***	***
B	Quantity	***	***	***	***	***
C	Quantity	***	***	***	***	***
D	Quantity	***	***	***	***	***
E	Ratio	***	***	***	***	***
F	Ratio	***	***	***	***	***
G	Ratio	***	***	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. items in lines A through G in table III-12 corresponds to lines A through G in table III-12 Continued. U.S. importer ***.

U.S. employment, wages, and productivity

Table III-13 shows U.S. producers' employment-related data. During 2016-18, the number of production related workers ("PRWs") remained somewhat constant then decreased by 11.1 percent (669 PRWs) in 2019 and then increased by 12.8 percent (689 PRWs) during 2019-21. Overall, during 2016-21, the number of PRWs increased by 0.6 percent (38 PRWs).[8] The number of PRWs was 5.0 percent lower in interim 2022 compared to interim 2021.

During 2016-21, productivity fluctuated but ended the period with an overall increase of 6.8 percent. Productivity increased by 12.3 percent from 2016 to 2019 then it decreased 4.9 percent during 2019-21. Productivity was 8.7 percent higher in interim 2022 compared to interim 2021. During 2016-18, hourly wages increased gradually by 4.1 percent then remained somewhat constant during 2019 and 2020 before increasing in 2021. Overall, during 2016-21 hourly wages increased by 7.9 percent. Hourly wages were 10.3 percent higher in interim 2022 compared to interim 2021. Unit labor costs decreased from 2016 to 2019 then increased to similar levels in 2021.[9] Unit labor costs were similar in interim 2022 compared to interim 2021.

[8] ***. *** U.S. producer questionnaire response, section II-7.

[9] ***. *** U.S. producer questionnaire response, section II-7.

Table III-13
OTR tires: U.S. producers' employment related information, by period

Item	2016	2017	2018
Production and related workers (PRWs) (number)	6,022	5,957	6,040
Total hours worked (1,000 hours)	12,966	13,064	13,043
Hours worked per PRW (hours)	2,153	2,193	2,159
Wages paid ($1,000)	224,925	231,104	235,645
Hourly wages (dollars per hour)	$17.35	$17.69	$18.07
Productivity (tires per 1,000 hours)	186.7	204.4	207.5
Unit labor costs (dollars per tire)	$93	$87	$87

Table continued.

Table III-13 Continued
OTR tires: U.S. producers' employment related information, by period

Item	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Production and related workers (PRWs) (number)	5,371	5,584	6,060	6,144	5,839
Total hours worked (1,000 hours)	11,708	11,771	13,117	10,007	9,362
Hours worked per PRW (hours)	2,180	2,108	2,165	1,629	1,603
Wages paid ($1,000)	209,975	212,160	245,481	181,578	187,324
Hourly wages (dollars per hour)	$17.93	$18.02	$18.71	$18.15	$20.01
Productivity (tires per 1,000 hours)	209.7	198.1	199.4	197.3	214.5
Unit labor costs (dollars per tire)	$86	$91	$94	$92	$93

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

Financial experience of U.S. producers

Background[10]

Six U.S. producers provided usable financial results on their OTR tire operations.[11] All of the U.S. producers reported their financial data on a calendar-year basis, and five reported on a GAAP basis.[12] OTR tire revenue primarily reflects commercial sales, however transfers to related firms were reported by *** and internal consumption was reported by ***. These transactions represented *** percent of total net sales quantity from January 1, 2016, through September 30, 2022, and are, thus, not presented separately in this section of the report.

Figure III-2 presents each responding firm's share of total reported net sales quantity in 2021. In the final phase of the original investigations (with a period of investigation of January 1, 2013 – September 30, 2016) financial results were also provided by six U.S. producers. The industry was, and still is, mostly concentrated among *** firms. In the final phase of the original investigations, the largest *** U.S. producers, ***, accounted for *** percent of the industry's net sales quantity in 2015.[13] In the current reviews, the largest ***, accounted for *** percent of the industry's net sales quantity in 2021.[14]

[10] The following abbreviations may be used in the tables and/or text of this section: generally accepted accounting principles ("GAAP"), fiscal year ("FY"), net sales ("NS"), cost of goods sold ("COGS"), selling, general, and administrative expenses ("SG&A expenses"), average unit values ("AUVs"), research and development ("R&D"), and return on assets ("ROA").

[11] ***.

[12] U.S. producers' questionnaires, sections III-2A and III-2B.4. ***. ***. Ibid.

[13] Calculated from original confidential report, table VI-2.

[14] ***. Investigation Nos. 731-TA-551-553 and 731-TA-1307-1308 (Preliminary): Certain New Pneumatic Off-the-Road-Tires from China, India, and Sri Lanka, Confidential Report, INV-OO-009, February 12, 2016, as revised in INV-OO-011, February 16, 2016 ("Preliminary confidential report").

Figure III-2
OTR tires: Share of net sales quantity in 2021, by firm

* * * * * * *

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

Operations on OTR tires

Table III-14 presents aggregated data on U.S. producers' operations in relation to OTR tires, while table III-15 presents corresponding changes in AUVs. Table III-16 presents selected company-specific financial data.

Table III-14
OTR tires: Results of operations of U.S. producers, by item and period

Quantity in 1,000 tires; value in 1,000 dollars; ratios in percent

Item	Measure	2016	2017	2018
Total net sales	Quantity	2,433	2,640	2,727
Total net sales	Value	930,356	1,049,288	1,112,329
COGS: Raw materials	Value	380,415	499,324	534,827
COGS: Direct labor	Value	191,510	198,136	201,383
COGS: Other factory	Value	187,445	184,222	177,160
COGS: Total	Value	759,370	881,682	913,370
Gross profit or (loss)	Value	170,986	167,606	198,959
SG&A expenses	Value	150,911	146,098	138,651
Operating income or (loss)	Value	20,075	21,508	60,308
All other expenses / income, net	Value	***	***	***
Net income or (loss)	Value	***	***	***
Depreciation/amortization	Value	49,303	52,745	58,585
Cash flow	Value	***	***	***
COGS: Raw materials	Ratio to NS	40.9	47.6	48.1
COGS: Direct labor	Ratio to NS	20.6	18.9	18.1
COGS: Other factory	Ratio to NS	20.1	17.6	15.9
COGS: Total	Ratio to NS	81.6	84.0	82.1
Gross profit	Ratio to NS	18.4	16.0	17.9
SG&A expense	Ratio to NS	16.2	13.9	12.5
Operating income or (loss)	Ratio to NS	2.2	2.0	5.4
Net income or (loss)	Ratio to NS	***	***	***

Table continued.

Table III-14 Continued
OTR tires: Results of operations of U.S. producers, by item and period

Quantity in 1,000 tires; value in 1,000 dollars; ratios in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Total net sales	Quantity	2,563	2,433	2,718	2,123	1,935
Total net sales	Value	1,019,164	934,137	1,179,321	883,188	991,200
COGS: Raw materials	Value	493,024	431,335	559,627	414,174	519,423
COGS: Direct labor	Value	176,166	180,532	206,507	156,215	156,206
COGS: Other factory	Value	166,268	174,436	198,027	145,662	132,654
COGS: Total	Value	835,458	786,303	964,161	716,051	808,283
Gross profit or (loss)	Value	183,706	147,834	215,160	167,137	182,917
SG&A expenses	Value	129,422	102,386	104,545	78,649	83,801
Operating income or (loss)	Value	54,284	45,448	110,615	88,488	99,116
All other expenses / income, net	Value	***	***	***	***	***
Net income or (loss)	Value	***	***	***	***	***
Depreciation/amortization	Value	45,505	43,883	42,107	32,027	20,788
Cash flow	Value	***	***	***	***	***
COGS: Raw materials	Ratio to NS	48.4	46.2	47.5	46.9	52.4
COGS: Direct labor	Ratio to NS	17.3	19.3	17.5	17.7	15.8
COGS: Other factory	Ratio to NS	16.3	18.7	16.8	16.5	13.4
COGS: Total	Ratio to NS	82.0	84.2	81.8	81.1	81.5
Gross profit	Ratio to NS	18.0	15.8	18.2	18.9	18.5
SG&A expense	Ratio to NS	12.7	11.0	8.9	8.9	8.5
Operating income or (loss)	Ratio to NS	5.3	4.9	9.4	10.0	10.0
Net income or (loss)	Ratio to NS	***	***	***	***	***

Table continued.

Table III-14 Continued
OTR tires: Results of operations of U.S. producers, by item and period

Shares in percent; unit values in dollars per tire; count in number of firms reporting

Item	Measure	2016	2017	2018
COGS: Raw materials	Share	50.1	56.6	58.6
COGS: Direct labor	Share	25.2	22.5	22.0
COGS: Other factory	Share	24.7	20.9	19.4
COGS: Total	Share	100.0	100.0	100.0
Total net sales	Unit value	382	397	408
COGS: Raw materials	Unit value	156	189	196
COGS: Direct labor	Unit value	79	75	74
COGS: Other factory	Unit value	77	70	65
COGS: Total	Unit value	312	334	335
Gross profit or (loss)	Unit value	70	63	73
SG&A expenses	Unit value	62	55	51
Operating income or (loss)	Unit value	8	8	22
Net income or (loss)	Unit value	***	***	***
Operating losses	Count	3	4	3
Net losses	Count	3	4	3
Data	Count	6	6	6

Table continued.

Table III-14 Continued
OTR tires: Results of operations of U.S. producers, by item and period

Shares in percent; unit values in dollars per tire; count in number of firms reporting

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
COGS: Raw materials	Share	59.0	54.9	58.0	57.8	64.3
COGS: Direct labor	Share	21.1	23.0	21.4	21.8	19.3
COGS: Other factory	Share	19.9	22.2	20.5	20.3	16.4
COGS: Total	Share	100.0	100.0	100.0	100.0	100.0
Total net sales	Unit value	398	384	434	416	512
COGS: Raw materials	Unit value	192	177	206	195	268
COGS: Direct labor	Unit value	69	74	76	74	81
COGS: Other factory	Unit value	65	72	73	69	69
COGS: Total	Unit value	326	323	355	337	418
Gross profit or (loss)	Unit value	72	61	79	79	95
SG&A expenses	Unit value	50	42	38	37	43
Operating income or (loss)	Unit value	21	19	41	42	51
Net income or (loss)	Unit value	***	***	***	***	***
Operating losses	Count	3	2	2	2	3
Net losses	Count	3	3	2	2	3
Data	Count	6	6	6	6	6

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

Note: Shares represent the share of COGS.

Table III-15
OTR tires: Changes in AUVs between comparison periods

Changes in percent

Item	2016-21	2016-17	2017-18	2018-19	2019-20	2020-21	Jan-Sep 2021-22
Total net sales	▲13.5	▲3.9	▲2.6	▼(2.5)	▼(3.4)	▲13.0	▲23.1
COGS: Raw materials	▲31.7	▲20.9	▲3.7	▼(1.9)	▼(7.8)	▲16.1	▲37.6
COGS: Direct labor	▼(3.5)	▼(4.7)	▼(1.6)	▼(6.9)	▲8.0	▲2.4	▲9.7
COGS: Other factory	▼(5.4)	▼(9.4)	▼(6.9)	▼(0.1)	▲10.5	▲1.6	▼(0.1)
COGS: Total	▲13.6	▲7.0	▲0.3	▼(2.7)	▼(0.8)	▲9.8	▲23.8

Table continued.

Table III-15 Continued
OTR tires: Changes in AUVs between comparison periods

Changes in dollars per tire

Item	2016-21	2016-17	2017-18	2018-19	2019-20	2020-21	Jan-Sep 2021-22
Total net sales	▲51	▲15	▲10	▼(10)	▼(14)	▲50	▲96
COGS: Raw materials	▲50	▲33	▲7	▼(4)	▼(15)	▲29	▲73
COGS: Direct labor	▼(3)	▼(4)	▼(1)	▼(5)	▲5	▲2	▲7
COGS: Other factory	▼(4)	▼(7)	▼(5)	▼(0)	▲7	▲1	▼(0)
COGS: Total	▲43	▲22	▲1	▼(9)	▼(3)	▲32	▲80
Gross profit or (loss)	▲9	▼(7)	▲9	▼(1)	▼(11)	▲18	▲16
SG&A expense	▼(24)	▼(7)	▼(5)	▼(0)	▼(8)	▼(4)	▲6
Operating income or (loss)	▲32	▼(0)	▲14	▼(1)	▼(2)	▲22	▲10
Net income or (loss)	***	***	***	***	***	***	***

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

Note: As is discussed further in the remainder of this section, there is a wide range of OTR tire sizes, styles, and prices. Since the unit values are examined on a per-tire basis, changes to the industry's product mix could result in changes to the net sales and cost/expense AUVs that do not necessarily correlate to changes in individual tire prices and/or the underlying costs.

Note: Changes in AUVs that are shown as ▲0 or ▼(0) represent an increase or decrease in the AUV, respectively, that is less than 0.5.

Table III-16
OTR tires: Firm-by-firm total net sales quantity, by period

Net sales quantity

Quantity in 1,000 tires

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	2,433	2,640	2,727	2,563	2,433	2,718	2,123	1,935

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm total net sales value, by period

Net sales value

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	930,356	1,049,288	1,112,329	1,019,164	934,137	1,179,321	883,188	991,200

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm cost of goods sold ("COGS"), by period

COGS

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	759,370	881,682	913,370	835,458	786,303	964,161	716,051	808,283

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm gross profit or (loss), by period

Gross profit or (loss)

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	170,986	167,606	198,959	183,706	147,834	215,160	167,137	182,917

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm selling, general, and administrative ("SG&A") expenses, by period

SG&A expenses

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	150,911	146,098	138,651	129,422	102,386	104,545	78,649	83,801

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm operating income or (loss), by period

Operating income or (loss)

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	20,075	21,508	60,308	54,284	45,448	110,615	88,488	99,116

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm net income or (loss), by period

Net income or (loss)

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	***	***	***	***	***	***	***	***

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm ratio of COGS to net sales value, by period

COGS to net sales ratio

Ratios in percent

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	81.6	84.0	82.1	82.0	84.2	81.8	81.1	81.5

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm ratio of gross profit or (loss) to net sales value, by period

Gross profit or (loss) to net sales ratio

Ratios in percent

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	18.4	16.0	17.9	18.0	15.8	18.2	18.9	18.5

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm ratio of SG&A expenses to net sales value, by period

SG&A expenses to net sales ratio

Ratios in percent

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	16.2	13.9	12.5	12.7	11.0	8.9	8.9	8.5

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm ratio of operating income or (loss) to net sales value, by period

Operating income or (loss) to net sales ratio

Ratios in percent

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	2.2	2.0	5.4	5.3	4.9	9.4	10.0	10.0

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm ratio of net income or (loss) to net sales value, by period

Net income or (loss) to net sales ratio

Ratios in percent

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	***	***	***	***	***	***	***	***

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit net sales value, by period

Unit net sales value

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	382	397	408	398	384	434	416	512

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit raw material costs, by period

Unit raw material

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	156	189	196	192	177	206	195	268

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit direct labor cost, by period

Unit direct labor

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	79	75	74	69	74	76	74	81

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit other factory costs, by period

Unit other factory costs

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	77	70	65	65	72	73	69	69

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit COGS, by period

Unit COGS

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	312	334	335	326	323	355	337	418

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit gross profit or (loss), by period

Unit gross profit or (loss)

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	70	63	73	72	61	79	79	95

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit SG&A expenses, by period

Unit SG&A expenses

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	62	55	51	50	42	38	37	43

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit operating income or (loss), by period

Unit operating income or (loss)

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	8	8	22	21	19	41	42	51

Table continued.

Table III-16 Continued
OTR tires: Firm-by-firm unit net income or (loss), by period

Unit net income or (loss)

Unit values in dollars per tire

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	***	***	***	***	***	***	***	***

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

Net sales

As shown in table III-14, the industry's net sales quantity fluctuated from 2016-21 but increased overall from 2.4 million tires in 2016 to 2.7 million tires in 2021. It was lower in January-September 2022 (1.9 million tires) than in January-September 2021 (2.1 million tires). The net sales value also increased overall, from $930.4 million in 2016 to $1.2 billion in 2021, but unlike the net sales quantity, the net sales value was higher in interim 2022 ($991.2 million) than in interim 2021 ($883.2 million).

The OTR tire net sales AUV fluctuated from 2016-21 but increased overall from $382 per tire in 2016 to $434 per tire in 2021 and was higher in interim 2022 ($512 per tire), than in interim 2021 ($416 per tire). On a company-specific basis, the directional trends of the net sales AUVs were mostly uniform. All companies reported an increase in their net sales AUVs from 2016 to 2021 and five of six firms reported higher net sales AUVs in interim 2022 than in interim 2021.

OTR tires come in a wide range of sizes, styles, and prices. For instance, Titan's agricultural OTR tires have rim diameters between 9 and 54 inches, with outside diameters ranging from approximately 1-7 feet.[1] An OTR tire with a seven-foot diameter would have a noticeably higher price and cost than a one-foot diameter tire. This is demonstrated by the relatively wide range of net sales unit values between companies. The lowest net sales AUV during the period examined was $ per tire in 2016, reported by ***, whereas the highest was $*** per tire in 2021, reported by ***.[2] [3]

[1] Titan's 2021 Form 10-K, p. 4 (as filed).

[2] This variation in the net sales AUVs is consistent with what was reported in the original investigations. During the preliminary phase, when ***, the lowest net sales unit value was reported by ***. During the final phase, the highest net sales AUV was reported by ***. Preliminary confidential report, table VI-2; original confidential report, table VI-3.

[3] As can be seen in table III-16, ***. Email from ***. ***.

Cost of goods sold and gross profit or loss

Raw material costs were the largest component of COGS in each full- and partial-year period, accounting for between 50.1 percent (in 2016) and 64.3 percent (in interim 2022) of total COGS. On a per-tire basis, raw material costs increased overall from 2016 to 2021 and were higher in interim 2022 than in interim 2021. The company-specific directional trends for raw material AUVs were somewhat uniform. All firms reported an overall increase in their per-tire raw material cost between 2016 and 2021 and five of six reported a higher raw material cost per tire in interim 2022 than in interim 2021.

Because of the very large range of OTR tire sizes, the per-tire cost of raw materials can be heavily influenced by product mix. However, the increase in the raw material cost AUV is generally consistent with available information that indicates the primary input costs increased over the period examined (*see* Part V).

Table III-17 presents raw materials, by type.[4] Natural and synthetic rubber were the largest raw material inputs, by cost. Combined, they accounted for a little over one-third of the total raw material costs in 2021. Within the "other material inputs" category, *** reported including chemical inputs and *** reported including fabric/cord. In addition, ***.[5]

[4] *** purchasing inputs used in OTR tires from related suppliers. ***. *** U.S. producers' questionnaires, sections III-7-8.

[5] ***. Email from *** and *** U.S. producers' questionnaire, section III-9c.

Table III-17
OTR tires: Raw material costs in the last full year of the period

Value in 1,000 dollars; unit values in dollars per tire; share of value in percent

Item	Value	Share of value	Unit value
Natural rubber	***	***	***
Synthetic rubber	***	***	***
Carbon black	***	***	***
Steel inputs	***	***	***
Textile inputs	***	***	***
Other material inputs	***	***	***
All raw materials	559,627	100.0	206

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

The second-largest component of COGS, direct labor, accounted for between 19.3 percent (interim 2022) and 25.2 percent (2016) of total COGS during the period examined. On a per-tire basis, direct labor fluctuated during the period examined but decreased overall from $79 in 2016 to $76 in 2021; it was higher in interim 2022 ($81 per tire) than in interim 2021 ($74 per tire).

Lastly, other factory costs, the smallest component of COGS in each full- and partial-year period, accounted for between 16.4 percent (interim 2022) and 24.7 percent (2016) of total COGS during the period examined. On a per-tire basis, other factory costs decreased overall from $77 in 2016 to $73 in 2021; they were $69 per tire in both interim periods. As with raw materials, trends in the per-tire cost of direct labor and other factory costs will be affected by any changes in product mix.

Total COGS increased irregularly from 2016 to 2021 and was higher in interim 2022 than in interim 2021. As a ratio to net sales, COGS fluctuated year-to-year, but increased overall from 81.6 percent in 2016 to 81.8 percent in 2021 and was higher in interim 2022 (81.5 percent) than during the same period in 2021 (81.1 percent).

As can be seen in table III-14, the OTR tire industry's gross profit fluctuated year-to-year from 2016-21 but increased overall from $171.0 million in 2016 to $215.2 million in 2021. It was higher in interim 2022 ($182.9 million) than in interim 2021 ($167.1 million). ***.

SG&A expenses and operating income or loss

The U.S. producers' SG&A expenses decreased overall between 2016 and 2021 (from $150.9 million to $104.5 million) but were higher in interim 2022 ($83.8 million) than in interim 2021 ($78.6 million). This decrease was mostly attributable to ***. In response to questions from staff, the company indicated the decrease was the result of ***.[6] The SG&A expense ratio (SG&A expenses/net sales revenue) decreased overall from 16.2 percent in 2016 to 8.9 percent in 2021 and was lower in interim 2022 (8.5 percent) than during interim 2021 (8.9 percent).

The industry's operating income increased overall from $20.1 million in 2016 to $110.6 million in 2021 and was higher in interim 2022 ($99.1 million) than during the same period in 2021 ($88.5 million). When compared with the 2016-21 increase in gross profit, the steeper increase in operating income during this time was due to the decrease in the industry's SG&A expenses.

[6] Email from ***.

All other expenses and net income or loss

Classified below the operating income level are interest expense, other expense, and other income, which are often allocated to the product line from high levels in the corporation. In table III-14 these amounts are aggregated, and only a combined amount is shown. Interest expense, reported by ***, fluctuated on a year-to-year basis, but increased overall between 2016 and 2021; it was lower in interim 2022 than in interim 2021. ***.[7] All other income was reported by ***.

The industry's directional trends for net income were similar to the directional trends in operating income. Net income increased overall from $*** in 2016 to $*** in 2021 and was higher in interim 2022 ($***) than in interim 2021 ($***).

The Commission requested for U.S. producers to describe any effects the COVID-19 pandemic had on their OTR tire financial performance. Five of the companies reported that their OTR tire financial performance was affected by the pandemic. Four of those companies provided narrative responses describing these effects, which are presented in table III-18.[8] [9]

[7] *** indicated that ***. Email from ***.

[8] ***. *** U.S. producers' questionnaire, section III-15.

[9] Due to the large variety of product mixes and cost structures among the reporting firms, a variance analysis would not be meaningful and is, therefore, not shown.

Table III-18
OTR tires: U.S. producers' narrative responses relating to COVID-19 pandemic effects on OTR tire financial performance, by firm

Firm	Narrative on effects of COVID-19 on financial performance
Carlstar	***
Goodyear	***
Titan	***
Trelleborg	***

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

Capital expenditures and research and development expenses

Table III-19 presents capital expenditures, by firm, and table III-21 presents R&D expenses, by firm. Tables III-20 and III-22 present the firms' narrative explanations of the nature, focus, and significance of their capital expenditures and R&D expenses, respectively. The industry's capital expenditures increased irregularly from 2016 to 2021 and were higher in interim 2022 than in interim 2021. The industry's R&D expenses increased irregularly from 2016 to 2021 and were higher in interim 2022 than in interim 2021. ***.[10]

Table III-19
OTR tires: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	11,009	14,004	14,391	16,740	12,572	16,561	7,871	11,930

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

[10] ***. Email from ***.

Table III-20
OTR tires: Narrative descriptions of U.S. producers' capital expenditures, by firm

Firm	Narrative on capital expenditures
Bridgestone	***
Carlstar	***
Goodyear	***
Specialty	***
Titan	***
Trelleborg	***

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

Table III-21
OTR tires: U.S. producers' R&D expenses, by firm and period

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Bridgestone	***	***	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***	***	***
Specialty	***	***	***	***	***	***	***	***
Titan	***	***	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***	***	***
All firms	4,947	6,166	6,196	5,850	5,390	6,052	4,547	4,819

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

Table III-22
OTR tires: Narrative descriptions of U.S. producers R&D expenses, by firm

Firm	Narrative on R&D expenses
Bridgestone	***
Carlstar	***
Goodyear	***
Specialty	***
Titan	***
Trelleborg	***

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

Assets and return on assets

Table III-23 presents data on the U.S. producers' total net assets and table III-24 presents their operating ROA.[11] Table III-25 presents the U.S. producers' narrative responses explaining their major asset categories and any significant changes in asset levels over time. Both the industry's total net assets and its operating ROA fluctuated year-to-year but increased overall from 2016 to 2021.[12]

[11] The operating ROA is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value on a product-specific basis.

[12] ***. Email from ***.

Table III-23
OTR tires: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2016	2017	2018	2019	2020	2021
Bridgestone	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***
Specialty	***	***	***	***	***	***
Titan	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***
All firms	553,930	579,806	657,523	611,881	624,967	678,970

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

Table III-24
OTR tires: U.S. producers' ROA, by firm and period

Ratio in percent

Firm	2016	2017	2018	2019	2020	2021
Bridgestone	***	***	***	***	***	***
Carlstar	***	***	***	***	***	***
Goodyear	***	***	***	***	***	***
Specialty	***	***	***	***	***	***
Titan	***	***	***	***	***	***
Trelleborg	***	***	***	***	***	***
All firms	3.6	3.7	9.2	8.9	7.3	16.3

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

Table III-25
OTR tires: Narrative descriptions of U.S. producers' total net assets, by firm

Firm	Narrative on assets
Bridgestone	***
Carlstar	***
Goodyear	***
Specialty	***
Titan	***
Trelleborg	***

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

Part IV: U.S. imports and the foreign industries

U.S. imports

Overview

The Commission issued questionnaires to 44 potential importers of OTR tires between 2016 to 2022. Twenty firms provided data and information in response[1] to the questionnaires, while three firms indicated that they had not imported OTR tires during the period for which data were collected. Based on official Commerce statistics for imports of OTR tires, importers' questionnaire data, in terms of value, accounted for a vast majority of U.S. imports from India and a lower share of U.S. imports from nonsubject sources[2] classified under HTS statistical reporting numbers 4011.20.1025, 4011.20.1035, 4011.20.5030, 4011.20.5050, 4011.70.0010, 4011.62.0000[3], 4011.80.1010, 4011.80.1020, 4011.90.1050, 4011.70.0050, 4011.80.2010, 4011.80.8010, 4011.80.2020, 4011.80.8020, 8431.49.9038, 8431.49.9090, 8709.90.0020, and 8716.90.1020.11. Tires meeting the scope description may also be reported under the following

[1] An additional firm, ***. *** importer response, section II-6a; and email from ***, January 12, 2023. ***.

[2] The ratio of questionnaire data to official U.S. imports statistics for U.S. imports from nonsubject sources, in terms of quantity and in terms of value, is 33.7 percent and 62.1 percent, respectively, in 2021. This ratio understates actual nonsubject import questionnaire coverage given that there are known out-of-scope products being imported from nonsubject sources in the official U.S. import statistics. In the final phase investigations importer questionnaire coverage was calculated based on a comparison of U.S. importers' questionnaire responses as a share of imports derived from *** records using HTS statistical reporting numbers 4011.20.1025, 4011.20.1035, 4011.20.5030, 4011.20.5050, 4011.61.0000, 4011.62.0000 4011.63.0000, 4011.69.0050, 4011.92.0000, 4011.93.4000, 4011.93.8000, 4011.94.4000, excluding: (1) entries of tires weighting more than 1,500 pounds per tire, (2) entries where the average unit value was less than $25 per tire, and (3) entries from firms that certified that they do not import OTR tires. In these reviews the Commission does not have the ability to make such adjustments. Value data for official import statistics may be more reliable than quantity data given the presence of out-of-scope low-value tires. In addition, questionnaire data followed trends similar to that of official import statistics by value, including an increase over both interim periods, but questionnaire quantity data does not track official statistics as closely. Investigation Nos. 701-TA-552-553 and 731-TA-1308 (Final): Certain New Pneumatic Off-the-Road Tires from India and Sri Lanka, Confidential Report, INV-PP-011, January 23, 2017, as revised in INV-PP-015, January 27, 2017, ("Original confidential report"), p. I-5.

[3] HTSUS Statistical reporting number 4011.62.0000 was replaced in 2017 by 4011.80.1010.

HTSUS statistical reporting numbers: 4011.90.2050, 4011.90.8050, 8424.90.9080, 8431.20.0000, 8431.39.0010, 8431.49.1090, 8431.49.9030, 8432.90.0020, 8432.90.0040, 8432.90.0050, 8432.90.0060, 8432.90.0081, 8433.90.5010, 8503.00.9560, 8708.70.0500, 8708.70.2500, 8708.70.4530, 8716.90.5035, 8716.90.5056 and 8716.90.5059[4], "basket" categories. In light of the HTS statistical reporting numbers containing products outside the scope of these reviews import data in this report are based on *questionnaire responses* for OTR tires.

Imports from subject and nonsubject countries

Table IV-1 and figure IV-1 present information on U.S. imports of OTR tires from India and all other sources over the period examined. U.S. imports of OTR tires from India increased, in terms of quantity and in terms of value, each year during 2016-19 then dropped slightly in 2020 before increasing to their highest amount in 2021. Overall, during 2016-21 U.S. imports from India, in terms of quantity, increased by *** percent (*** percent in terms of value). As a result, during 2016-21, the unit value of U.S. imports of OTR tires from India increased by $*** per tire to $*** per tire in 2021. U.S. imports of OTR tires from India were *** percent higher in terms of quantity and *** percent higher in terms of value in interim 2022 compared to interim 2021 and the unit value was $*** per tire higher in interim 2022 compared to interim 2021.

U.S. imports of OTR tires from nonsubject sources increased annually, in terms of quantity, and overall, during 2016-21, by *** percent. U.S. imports of OTR tires from nonsubject countries, in terms of value, increased during 2016-19 then decreased in 2020 and rebounded in 2021. During 2016-21 U.S. imports from nonsubject sources increased, in terms of value, by *** percent. As a result, during 2016-21, the unit value of U.S. imports of OTR tires from nonsubject sources decreased by $*** per tire to $*** per tire in 2021. U.S. imports of OTR tires from nonsubject countries, in terms of quantity, were about the same in both interim periods whereas U.S. imports of OTR tires from nonsubject countries, in terms of value, were *** percent higher in interim 2022 compared with interim 2021.

U.S. importers were asked to report sources for their nonsubject imports. Seven firms reported China as a nonsubject source and four firms reported Japan as a nonsubject source. During the period for which data were collected the majority share of imports, in terms of quantity, alternated between India and nonsubject sources whereas, in each year during 2016-

[4] Prior to January 1, 2017, tires meeting the scope description may also enter under the following HTSUS statistical reporting numbers which have been deleted or discontinued: 4011.99.4550, 4011.99.8550, 8432.90.0005, 8432.90.0015, 8432.90.0030, 8432.90.0080, and 8716.90.5055.

21 and both interim periods, U.S. imports of OTR tires from nonsubject sources, in terms of value, accounted for the majority share of U.S. imports.

Table IV-1
OTR tires: U.S. imports by source and period

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollars per 1,000 tires; ratio in percent

Source	Measure	2016	2017	2018
India	Quantity	***	***	***
Nonsubject sources	Quantity	***	***	***
All import sources	Quantity	1,719	2,196	2,518
India	Value	***	***	***
Nonsubject sources	Value	***	***	***
All import sources	Value	651,091	680,609	817,685
India	Unit value	***	***	***
Nonsubject sources	Unit value	***	***	***
All import sources	Unit value	379	310	325
India	Share of quantity	***	***	***
Nonsubject sources	Share of quantity	***	***	***
All import sources	Share of quantity	100.0	100.0	100.0
India	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	100.0	100.0	100.0
India	Ratio	***	***	***
Nonsubject sources	Ratio	***	***	***
All import sources	Ratio	71.0	82.2	93.1

Table continued.

Table IV-1 Continued
OTR tires: U.S. imports by source and period

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollars per tire; ratio in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
India	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	2,585	2,543	3,171	2,297	2,683
India	Value	***	***	***	***	***
Nonsubject sources	Value	***	***	***	***	***
All import sources	Value	882,672	754,799	963,675	659,419	944,719
India	Unit value	***	***	***	***	***
Nonsubject sources	Unit value	***	***	***	***	***
All import sources	Unit value	341	297	304	287	352
India	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***	***
All import sources	Share of quantity	100.0	100.0	100.0	100.0	100.0
India	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	100.0	100.0	100.0	100.0	100.0
India	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	105.3	109.1	121.3	116.4	133.6

Table continued.

Table IV-1 Continued
OTR tires: U.S. imports by source and period

%Δ in percent change

Source	Measure	2016-21	2016-17	2017-18	2018-19	2019-20	2020-21	Jan-Sep 2021-22
India	%Δ Quantity	▲***	▲***	▲***	▲***	▼***	▲***	▲***
Nonsubject sources	%Δ Quantity	▲***	▲***	▲***	▲***	▲***	▲***	▼***
All import sources	%Δ Quantity	▲84.5	▲27.8	▲14.7	▲2.6	▼(1.6)	▲24.7	▲16.8
India	%Δ Value	▲***	▲***	▲***	▼***	▼***	▲***	▲***
Nonsubject sources	%Δ Value	▲***	▲***	▲***	▲***	▼***	▲***	▲***
All import sources	%Δ Value	▲48.0	▲4.5	▲20.1	▲7.9	▼(14.5)	▲27.7	▲43.3
India	%Δ Unit value	▲***	▲***	▲***	▼***	▼***	▲***	▲***
Nonsubject sources	%Δ Unit value	▼***	▼***	▼***	▲***	▼***	▲***	▲***
All import sources	%Δ Unit value	▼(19.8)	▼(18.2)	▲4.8	▲5.2	▼(13.1)	▲2.4	▲22.7

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

Note: Importers reported Brazil, Canada, China, Czechia, Czech Republic, Finland, France, Germany, Israel, Italy, Japan, Luxembourg, Malaysia, Peru, Poland, Portugal, Romania, South Africa, Spain, Thailand, and Turkey as nonsubject sources. Ratios are to U.S. producers' production are found in table III-5.

Figure IV-1
OTR tires: U.S. imports by source and period

* * * * * *

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

Table IV-2 presents data on U.S. producers' imports. During the period for which data were collected *** U.S. producer imported OTR tires from India. *** reported modest imports of OTR tires from India in 2018, 2020-21, and both interim periods. *** U.S. producers reported imports of OTR tires from nonsubject sources. During 2016-21, U.S. producers' imports of OTR tires from nonsubject sources fluctuated and overall increased by *** percent. U.S. producers' imports of OTR tires from nonsubject sources were *** percent lower in interim 2022 compared to interim 2021. U.S. producers reported imports of OTR tires were ***.[5] *** reported the majority of nonsubject imports during the period for which data were collected.

Table IV-2
OTR tires: U.S. imports by U.S. producers and/or affiliated firms

Quantity in 1,000 tires; ratio in percent

Source	Measure	2016	2017	2018
India	Quantity	***	***	***
Nonsubject sources	Quantity	***	***	***
All import sources	Quantity	***	***	***
India	Ratio	***	***	***
Nonsubject sources	Ratio	***	***	***
All import sources	Ratio	***	***	***

Table continued.

Table IV-2 Continued
OTR tires: U.S. imports by U.S. producers and/or affiliated firms

Quantity in 1,000 tires; ratio in percent

Source	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
India	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***
India	Ratio	***	***	***	***	***
Nonsubject sources	Ratio	***	***	***	***	***
All import sources	Ratio	***	***	***	***	***

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

Note: Ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". The ratios represent the portion of imports from questionnaire data within the specified source that was imported by U.S. producers and/or their affiliates. These ratios are calculated using data shown in this table (numerators) and in table IV-1 (denominators). *** is not included.

[5] *** importers questionnaire responses, section II-4.

Table IV-3 presents U.S. producers', importers', and foreign producers' reported number of SKUs in 2021 and a narrative response describing changes in number of SKUs since 2016.[6] The number of SKUs for U.S. producers in 2021 ranged from *** SKUs to *** SKUs. The number of SKUs for importers in 2021 ranged from *** SKUs to *** SKUs. The number of SKUs for foreign producers in 2021 ranged from *** SKUs to *** SKUs. *** reported that the number of SKUs has remained stable since 2016; *** reported changes based on customer demand; *** reported a decrease in the number of SKUs since 2016; and *** reported an increase in the number of SKUs. Meanwhile, large subject importers, *** reported increasing their number of SKUs imported into the United States since 2016. A majority of foreign producers also reported increasing their number of SKUs since 2016.

[6] U.S. and foreign producers were asked to report on the number of SKUs they produced and importers were asked to report the number of SKUs they imported into the United States.

Table IV-3
OTR tires: U.S. producers', U.S. importers', and foreign producers' reported number of SKUs in 2021 and narrative explanation regarding changes since 2016, by firm

Quantity in number of SKUs

Firm	Firm type	Quantity	Narrative on changes to number of SKUs
***	U.S. producers	***	***
***	U.S. producers	***	***
***	U.S. producers	***	***
***	U.S. producers	***	***
***	U.S. producers	***	***
***	U.S. producers	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***
***	Importers: India	***	***

Table continued.

Table IV-3 Continued
OTR tires: U.S. producers', U.S. importers', and foreign producers' reported number of SKUs in 2021 and narrative explanation regarding changes since 2016, by firm

Quantity in number of SKUs

Firm	Firm type	Quantity	Narrative on changes to number of SKUs
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***
***	Importers: Nonsubject	***	***

Table continued.

Table IV-3 Continued
OTR tires: U.S. producers', U.S. importers', and foreign producers' reported number of SKUs in 2021 and narrative explanation regarding changes since 2016, by firm

Quantity in number of SKUs

Firm	Firm type	Quantity	Narrative on changes to number of SKUs
***	Importers: Nonsubject	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***
***	Foreign producers	***	***

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

Table IV-4, figure IV-2, figure IV-3, and figure IV-4 present data on U.S. producers' and U.S. importers' U.S. shipments by sector and channel in 2021. Further information on U.S. shipments by sector and channel are presented in appendix F.

Table IV-4
OTR tires: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments by sector and channel, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; share 1 is the share of quantity in percent of the sector and channel within the source's total; share 2 is the share of quantity in percent of the source within the sector and channel's total

Sector and channel	Source	Quantity	Value	Unit value	Share 1	Share 2
Agriculture: OEM	United States	***	***	***	***	***
Agriculture: Aftermarket	United States	***	***	***	***	***
Agriculture: All channels	United States	***	***	***	***	***
Construction: OEM	United States	***	***	***	***	***
Construction: Aftermarket	United States	***	***	***	***	***
Construction: All channels	United States	***	***	***	***	***
Mining: OEM	United States	***	***	***	***	***
Mining: Aftermarket	United States	***	***	***	***	***
Mining: All channels	United States	***	***	***	***	***
All other sectors: OEM	United States	***	***	***	***	***
All other sectors: Aftermarket	United States	***	***	***	***	***
All other sectors: All channels	United States	***	***	***	***	***
All sectors: OEM	United States	1,404	512,429	365	56.1	***
All sectors: Aftermarket	United States	1,100	568,218	516	43.9	***
All sectors: All channels	United States	2,505	1,080,647	431	100.0	***

Table continued.

Table IV-4 Continued
OTR tires: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments by sector and channel, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; share 1 is the share of quantity in percent of the sector and channel within the source's total; share 2 is the share of quantity in percent of the source within the sector and channel's total

Sector and channel	Source	Quantity	Value	Unit value	Share 1	Share 2
Agriculture: OEM	India	***	***	***	***	***
Agriculture: Aftermarket	India	***	***	***	***	***
Agriculture: All channels	India	***	***	***	***	***
Construction: OEM	India	***	***	***	***	***
Construction: Aftermarket	India	***	***	***	***	***
Construction: All channels	India	***	***	***	***	***
Mining: OEM	India	***	***	***	***	***
Mining: Aftermarket	India	***	***	***	***	***
Mining: All channels	India	***	***	***	***	***
All other sectors: OEM	India	***	***	***	***	***
All other sectors: Aftermarket	India	***	***	***	***	***
All other sectors: All channels	India	***	***	***	***	***
All sectors: OEM	India	***	***	***	***	***
All sectors: Aftermarket	India	***	***	***	***	***
All sectors: All channels	India	***	***	***	***	***

Table continued.

Table IV-4 Continued
OTR tires: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments by sector and channel, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; share 1 is the share of quantity in percent of the sector and channel within the source's total; share 2 is the share of quantity in percent of the source within the sector and channel's total

Sector and channel	Source	Quantity	Value	Unit value	Share 1	Share 2
Agriculture: OEM	Nonsubject sources	***	***	***	***	***
Agriculture: Aftermarket	Nonsubject sources	***	***	***	***	***
Agriculture: All channels	Nonsubject sources	***	***	***	***	***
Construction: OEM	Nonsubject sources	***	***	***	***	***
Construction: Aftermarket	Nonsubject sources	***	***	***	***	***
Construction: All channels	Nonsubject sources	***	***	***	***	***
Mining: OEM	Nonsubject sources	***	***	***	***	***
Mining: Aftermarket	Nonsubject sources	***	***	***	***	***
Mining: All channels	Nonsubject sources	***	***	***	***	***
All other sectors: OEM	Nonsubject sources	***	***	***	***	***
All other sectors: Aftermarket	Nonsubject sources	***	***	***	***	***
All other sectors: All channels	Nonsubject sources	***	***	***	***	***
All sectors: OEM	Nonsubject sources	***	***	***	***	***
All sectors: Aftermarket	Nonsubject sources	***	***	***	***	***
All sectors: All channels	Nonsubject sources	***	***	***	***	***

Table continued.

Table IV-4 Continued
OTR tires: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments by sector and channel, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; share 1 is the share of quantity in percent of the sector and channel within the source's total; share 2 is the share of quantity in percent of the source within the sector and channel's total

Sector and channel	Source	Quantity	Value	Unit value	Share 1	Share 2
Agriculture: OEM	All import sources	***	***	***	***	***
Agriculture: Aftermarket	All import sources	***	***	***	***	***
Agriculture: All channels	All import sources	***	***	***	***	***
Construction: OEM	All import sources	***	***	***	***	***
Construction: Aftermarket	All import sources	***	***	***	***	***
Construction: All channels	All import sources	***	***	***	***	***
Mining: OEM	All import sources	***	***	***	***	***
Mining: Aftermarket	All import sources	***	***	***	***	***
Mining: All channels	All import sources	***	***	***	***	***
All other sectors: OEM	All import sources	***	***	***	***	***
All other sectors: Aftermarket	All import sources	***	***	***	***	***
All other sectors: All channels	All import sources	***	***	***	***	***
All sectors: OEM	All import sources	***	***	***	***	***
All sectors: Aftermarket	All import sources	***	***	***	***	***
All sectors: All channels	All import sources	***	***	***	***	***

Table continued.

Table IV-4 Continued
OTR tires: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments by sector and channel, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; share 1 is the share of quantity in percent of the sector and channel within the source's total; share 2 is the share of quantity in percent of the source within the sector and channel's total

Sector and channel	Source	Quantity	Value	Unit value	Share 1	Share 2
Agriculture: OEM	All sources	***	***	***	***	100.0
Agriculture: Aftermarket	All sources	***	***	***	***	100.0
Agriculture: All channels	All sources	3,418	1,247,604	365	58.6	100.0
Construction: OEM	All sources	***	***	***	***	100.0
Construction: Aftermarket	All sources	***	***	***	***	100.0
Construction: All channels	All sources	1,831	826,125	451	31.4	100.0
Mining: OEM	All sources	***	***	***	***	100.0
Mining: Aftermarket	All sources	***	***	***	***	100.0
Mining: All channels	All sources	***	***	***	***	100.0
All other sectors: OEM	All sources	***	***	***	***	100.0
All other sectors: Aftermarket	All sources	***	***	***	***	100.0
All other sectors: All channels	All sources	***	***	***	***	100.0
All sectors: OEM	All sources	2,320	888,055	383	39.8	100.0
All sectors: Aftermarket	All sources	3,508	1,280,389	365	60.2	100.0
All sectors: All channels	All sources	5,829	2,168,444	372	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure IV-2
OTR tires: Share of sectors for U.S. producers' and U.S. importers' U.S. shipments within a source in 2021, by source

* * * * * *

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

Note: Shares in this figure represent the share within a source of supply (e.g., producers) supplied to each sector (e.g., agriculture, construction, et cetera). Additionally shares in this figure are based on quantity of U.S. shipments in 2021. These data correspond to the "Share 1" column data shown in the previous table.

Figure IV-3
OTR tires: Share of sources for U.S. producers' and U.S. importers' U.S. shipments within a sector in 2021, by sector

* * * * * * *

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

Note: Shares in this figure represent the share within each sector (e.g., agriculture) supplied by each source of supply (e.g., producers, importers India, et cetera). The calculations in this figure are market share calculations. Shares in this figure are based on quantity of U.S. shipments in 2021. These data correspond to the "Share 2" column data shown in the previous table.

Figure IV-4
OTR tires: U.S. shipments quantity for all sources combined, by sector and channel

* * * * * * *

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

Note: ***.

U.S. inventories of imported merchandise

Table IV-5 presents data for U.S. inventories of U.S. imports of OTR tires from India and all other sources held in the United States. Seven of the 20 responding firms reported inventories from India and 12 reported inventories from nonsubject sources. Inventories of subject imports fluctuated during 2016-21 but overall increased by *** percent. U.S. importers' inventories of OTR tires from nonsubject countries fluctuated but overall increased by *** percent during 2016-21. Reported inventories from India and nonsubject sources were highest in 2019 and 2018, respectively. U.S. importers' inventories of OTR tires from India were about *** comparing interim 2022 to interim 2021. U.S. importers' inventories of OTR tires from nonsubject sources were *** percent higher when comparing interim 2022 to interim 2021. During each data period, *** accounted for between *** percent and *** percent of inventories from India. During each data period, *** accounted for over *** percent of inventories from nonsubject sources. Overall, as a ratio to imports, U.S. shipments of imports, and total shipments of imports, U.S. importers' reported inventories of OTR tires from India and nonsubject sources decreased during 2016-21 and were higher in interim 2022 compared to interim 2021.

Table IV-5
OTR tires: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in 1,000 tires; ratio in percent

Measure	Source	2016	2017	2018
Inventories quantity	India	***	***	***
Ratio to imports	India	***	***	***
Ratio to U.S. shipments of imports	India	***	***	***
Ratio to total shipments of imports	India	***	***	***
Inventories quantity	Nonsubject	***	***	***
Ratio to imports	Nonsubject	***	***	***
Ratio to U.S. shipments of imports	Nonsubject	***	***	***
Ratio to total shipments of imports	Nonsubject	***	***	***
Inventories quantity	All	423	429	495
Ratio to imports	All	24.6	19.6	19.7
Ratio to U.S. shipments of imports	All	21.4	18.7	19.3
Ratio to total shipments of imports	All	21.3	18.6	19.2

Table continued.

Table IV-5 Continued
OTR tires: U.S. importers' inventories and their ratio to select items, by source and period

Quantity in 1,000 tires; ratio in percent

Measure	Source	2019	2020	2021	Jan-Sep 2019	Jan-Sep 2020
Inventories quantity	India	***	***	***	***	***
Ratio to imports	India	***	***	***	***	***
Ratio to U.S. shipments of imports	India	***	***	***	***	***
Ratio to total shipments of imports	India	***	***	***	***	***
Inventories quantity	Nonsubject	***	***	***	***	***
Ratio to imports	Nonsubject	***	***	***	***	***
Ratio to U.S. shipments of imports	Nonsubject	***	***	***	***	***
Ratio to total shipments of imports	Nonsubject	***	***	***	***	***
Inventories quantity	All	449	403	473	377	524
Ratio to imports	All	17.4	15.9	14.9	12.3	14.7
Ratio to U.S. shipments of imports	All	16.4	14.7	14.2	11.5	13.8
Ratio to total shipments of imports	All	16.4	14.6	14.2	11.5	13.7

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

U.S. importers' imports subsequent to September 30, 2022

The Commission requested importers to indicate whether they had imported or arranged for the importation of OTR tires from India for delivery after September 30, 2022. Fourteen of 20 responding firms indicated such imports. Their reported data is presented in table IV-6. Nine firms reported arranged imports from India and nine firms reported arranged imports from nonsubject sources. Arranged imports from India account for *** percent of all arranged imports from October 1, 2022 through August 31, 2023. Over *** percent of reported arranged imports from India were by *** and over *** percent of reported arranged imports from nonsubject sources were reported by ***.

Table IV-6
OTR tires: U.S. importers' arranged imports, by source and period

Quantity in 1,000 tires

Source	Oct-Dec 2022	Jan-Mar 2023	Apr-Jun 2023	Jul-Aug 2023	Total
India	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	691	238	92	77	1,098

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

The industry in India

Overview

During the final phase of the original investigations, the Commission received foreign producer/exporter questionnaires from 12 firms, which accounted for approximately *** percent of the quantity of U.S. imports of OTR tires from India during 2015.[7]

In their responses to the notice of institution for these reviews, four foreign producers of the subject merchandise, Apollo, ATC, Balkrishna, and JK Tyres, provided data regarding their capacity, production, and exports to the United States.[8] These firms reported they account for *** percent of all known capacity to produce OTR tires in India. In addition, the respondent interested parties indicated that Ceat Limited and Ceat Specialty Tyres Limited, Conserve HRP, Continental India Private Limited, Eastman Industries Limited, Goodyear India Limited, Goodyear South Asia Tyres Private Limited, Innovative Tyres and Tubes Limited, Alliance Tires, MRF Limited, and Tot Tyres Private Limited may also produce the subject merchandise.[9]

The domestic interested party provided a list of 14 firms, including the foreign producers that submitted a response to the notice of institution, that may currently produce and/or export OTR tires in India.[10] Of these firms, 11 provided responses to the Commission's questionnaire.[11] These firms estimate that they accounted for a vast majority of OTR tires production in India during 2021. Table IV-7 presents information on the OTR tires operations of the responding producers and exporters in India and table IV-8 presents information on the OTR tires operations of the responding reseller in India.

[7] Original confidential report, p. VII-3.

[8] These four firms supplied the Commission with foreign producer questionnaire responses in these current full five-year reviews.

[9] Apollo's and JK Tyres's responses to the notice of institution, March 3, 2022, Exhibit B.

[10] Domestic interested party's response to the notice of institution, March 3, 2022, Exhibit 2.

[11] Staffed issued 40 foreign producer questionnaires to firms identified by the domestic interested party, respondent interested parties, from the final investigations, and through additional research.

Table IV-7
OTR tires: Summary data for producers in India, 2021

Quantity in 1,000 tires

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)
Apollo Tyres	***	***	***	***	***	***
Asian Tire	***	***	***	***	***	***
ATC	***	***	***	***	***	***
Balkrishna	***	***	***	***	***	***
Goodyear India	***	***	***	***	***	***
JK	***	***	***	***	***	***
Mahansaria	***	***	***	***	***	***
MRF	***	***	***	***	***	***
MRL	***	***	***	***	***	***
Speedways	***	***	***	***	***	***
TVS	***	***	***	***	***	***
All firms	13,915	100.0	1,979	100.0	13,544	14.6

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Quantity shown as "0" represent values greater than zero, but less than 500 tires.

Table IV-8
OTR tires: Summary data on Resellers in India exporting to all export markets, 2021

Firm	Resales exported (1,000 tires)	Share of reported resales exported (percent)
ATC	***	***
All firms	***	100.0

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

Table IV-9 presents events in India's industry since January 1, 2016.

Table IV-9
OTR tires: Recent developments in the Indian industry

Item	Firm	Event
Plant opening	Yokohama - ATC	$336 million total investment in off-hwy-257 tons per day plant under construction in 2021, Visakhapatnam location. ATC is an operating division of Yokohama.
Plant opening	Mahansaria Tyres	New Greenfield plant in Gujarat state, annual capacity of 40,000 tons
Expansion	Balkrishna	Adding 50,000 metric tons of radial Agricultural tires capacity at Bhuj plant, March 2022.
Expansion	Balkrishna	Plan to add third warehouse somewhere in Midwest to serve growing customer base. Existing warehouses at Wando, SC, and Wilmington, CA.
Acquisition	Yokohama	ATC operations acquired by Yokohama effective July 1, 2016.

Source: The Economic Times, August 11, 2021: "Yokohama to invest additional $171 million to double capacity of upcoming Vizag plant." European Rubber Journal, September 28, 2020: "Startup Indian OTR tire maker MTPL starts production," OEM Off Highway, March 4, 2022, "BKT Significantly Expands Production in Bhuj." TireBusiness, February 22, 2019: "BKT to open Midwest distribution center." Tyrepress, March 29, 2016: "Yokohama acquiring Alliance Tire Group.

Changes in operations

Producers in India were asked to report any change in the character of their operations or organization relating to the production of OTR tires since 2016. All producers indicated in their questionnaires that they had experienced such changes. Table IV-10 presents the changes identified by these producers.

Table IV-10
OTR tires: Reported changes in operations in India, since January 1, 2016, by firm

Item	Firm name and narrative on changes in operations
Plant openings	***
Plant openings	***
Plant openings	***
Plant closings	***
Relocations	***
Expansions	***
Expansions	***
Expansions	***
Expansions	***
Expansions	***
Expansions	***
Acquisitions	***
Prolonged shutdowns or curtailments	***

Table continued.

Table IV-10 Continued
OTR tires: Reported changes in operations in India, since January 1, 2016, by firm

Item	Firm name and narrative on changes in operations
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Prolonged shutdowns or curtailments	***
Force majeure events	***
Force majeure events	***
Force majeure events	***
Force majeure events	***
Other	***
Other	***
Other	***
Other	***

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

Operations on OTR tires

Table IV-11 presents foreign producers' capacity and production on the same equipment and machinery used to produce OTR tires. During 2016-21, foreign producers' installed overall capacity and overall practical capacity increased by 11.8 percent and by 11.0 percent, respectively. Foreign producers' installed overall capacity and overall practical capacity were both higher in interim 2022 compared to interim 2021 (by 4.6 percent and by 3.3 percent, respectively). Practical OTR tire capacity increased each year during 2016-21 ending 35.3 percent higher in 2021. Practical OTR tire capacity was 7.0 percent higher in interim 2022 compared to interim 2021. Despite reported COVID-19 related shutdowns in 2020 many firms expanded their capacity to meet growing demand for OTR tires. Overall, all firms increased their practical OTR tires capacity during 2016-21.[12]

Foreign producers' production of OTR tires increased by 64.0 percent during 2016-21 but was 4.8 percent lower in interim 2022 compared to interim 2021. Foreign producers' OTR tires capacity utilization increased during 2016-18, decreased slightly during 2018-19, and then reached its highest level in 2021. OTR tires capacity utilization was 10.3 percentage points lower in interim 2022 compared to interim 2021.

Table IV-11
OTR tires: Foreign producers' capacity and production on the same equipment as subject production, by period

Quantity in 1,000 tires; utilization in percent

Item	Measure	2016	2017	2018
Installed overall	Capacity	33,951	34,476	35,408
Installed overall	Production	***	***	***
Installed overall	Utilization	***	***	***
Practical overall	Capacity	31,378	31,826	32,646
Practical overall	Production	***	***	***
Practical overall	Utilization	***	***	***
Practical OTR tires	Capacity	11,199	11,745	12,779
Practical OTR tires	Production	8,482	9,475	10,481
Practical OTR tires	Utilization	75.7	80.7	82.0

Table continued.

[12] Foreign producers' questionnaire responses, sections II-2a and II-2b.

Table IV-11 Continued
OTR tires: Foreign producers' capacity and production on the same equipment as subject production, by period

Quantity in 1,000 tires; utilization in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Installed overall	Capacity	36,099	36,170	37,966	28,296	29,609
Installed overall	Production	***	***	***	***	***
Installed overall	Utilization	***	***	***	***	***
Practical overall	Capacity	32,906	32,764	34,837	26,103	26,965
Practical overall	Production	***	***	***	***	***
Practical overall	Utilization	***	***	***	***	***
Practical OTR tires	Capacity	13,037	13,266	15,152	11,438	12,238
Practical OTR tires	Production	10,052	10,347	13,915	10,697	10,186
Practical OTR tires	Utilization	77.1	78.0	91.8	93.5	83.2

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

Table IV-12 presents information on the OTR tires operations of the responding producers in India. During 2016-21, foreign producers' commercial home market shipments increased, both in terms of quantity and in terms of value, by 52.0 percent and by 68.8 percent, respectively. Commercial home market shipments were, both in terms of quantity and in terms of value, lower in interim 2022 compared to interim 2021 (by 12.5 percent and by 4.1 percent, respectively). During the period for which data were collected foreign producers did not report any internal consumption or company transfers. Export shipments comprised the majority of foreign producers' reported shipments accounting for over 56.0 percent of all shipments. Foreign producers' export shipments held the highest share of all shipments in 2021, at 62.4 percent. During 2016-21, foreign producers' export shipments increased, both in terms of quantity and in terms of value, by 66.3 percent and by 107.4 percent, respectively. Export shipments were, both in terms of quantity and in terms of value, higher in interim 2022 compared to interim 2021 (by 4.1 percent and by 24.8 percent, respectively). Foreign producers' inventory ratios to production and to total shipments remained below 10.0 percent during the period for which data were collected. Information on the Indian producers without Balkrishna and on shipments by market are in Appendix H.

Table IV-12
OTR tires: Data on industry in India, by period

Quantity in 1,000 tires; value in 1,000 dollars

Item	Measure	2016	2017	2018
Capacity	Quantity	11,199	11,745	12,779
Production	Quantity	8,482	9,475	10,481
End-of-period inventories	Quantity	745	708	710
Internal consumption and transfers	Quantity	---	---	---
Commercial home market shipments	Quantity	3,350	3,781	4,529
Home market shipments	Quantity	3,350	3,781	4,529
Export shipments	Quantity	5,082	5,721	5,944
Total shipments	Quantity	8,432	9,502	10,473
Internal consumption and transfers	Value	---	---	---
Commercial home market shipments	Value	378,089	463,375	537,611
Home market shipments	Value	378,089	463,375	537,611
Export shipments	Value	803,628	978,149	1,117,148
Total shipments	Value	1,181,717	1,441,524	1,654,759

Table continued.

Table IV-12 Continued
OTR tires: Data on industry in India, by period

Quantity in 1,000 tires; value in 1,000 dollars

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Capacity	Quantity	13,037	13,266	15,152	11,438	12,238
Production	Quantity	10,052	10,347	13,915	10,697	10,186
End-of-period inventories	Quantity	714	679	1,043	1,027	1,131
Internal consumption and transfers	Quantity	---	---	---	---	---
Commercial home market shipments	Quantity	4,146	4,561	5,093	4,075	3,566
Home market shipments	Quantity	4,146	4,561	5,093	4,075	3,566
Export shipments	Quantity	5,907	5,814	8,451	6,269	6,525
Total shipments	Quantity	10,054	10,375	13,544	10,344	10,091
Internal consumption and transfers	Value	---	---	---	---	---
Commercial home market shipments	Value	496,149	504,445	638,104	503,481	483,051
Home market shipments	Value	496,149	504,445	638,104	503,481	483,051
Export shipments	Value	1,070,572	1,072,243	1,666,534	1,204,406	1,502,982
Total shipments	Value	1,566,721	1,576,688	2,304,638	1,707,887	1,986,033

Table continued.

Table IV-12 Continued
OTR tires: Data on industry in India, by period

Unit value in dollars per tire; ratio and share in percent

Item	Measure	2016	2017	2018
Internal consumption and transfers	Unit value	---	---	---
Commercial home market shipments	Unit value	113	123	119
Home market shipments	Unit value	113	123	119
Export shipments	Unit value	160	172	193
Total shipments	Unit value	140	152	158
Capacity utilization ratio	Ratio	75.7	80.7	82.0
Inventory ratio to production	Ratio	8.8	7.5	6.8
Inventory ratio to total shipments	Ratio	8.8	7.4	6.8
Internal consumption and transfers	Share	---	---	---
Commercial home market shipments	Share	39.7	39.8	43.2
Home market shipments	Share	39.7	39.8	43.2
Export shipments	Share	60.3	60.2	56.8
Total shipments	Share	100.0	100.0	100.0

Table continued.

Table IV-12 Continued
OTR tires: Data on industry in India, by period

Unit value in dollars per tire; ratio and share in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Internal consumption and transfers	Unit value	---	---	---	---	---
Commercial home market shipments	Unit value	120	111	125	124	135
Home market shipments	Unit value	120	111	125	124	135
Export shipments	Unit value	181	184	200	194	225
Total shipments	Unit value	156	152	170	165	197
Capacity utilization ratio	Ratio	77.1	78.0	91.8	93.5	83.2
Inventory ratio to production	Ratio	7.1	6.6	7.5	7.2	8.3
Inventory ratio to total shipments	Ratio	7.1	6.5	7.7	7.4	8.4
Internal consumption and transfers	Share	---	---	---	---	---
Commercial home market shipments	Share	41.2	44.0	37.6	39.4	35.3
Home market shipments	Share	41.2	44.0	37.6	39.4	35.3
Export shipments	Share	58.8	56.0	62.4	60.6	64.7
Total shipments	Share	100.0	100.0	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Balkrishna is not subject to the countervailing duty investigation. In 2021, Balkrishna accounted for *** percent of practical OTR tires capacity and *** percent of OTR tires production.

Table IV-13 presents foreign producers' and resellers' exports from India by destination market. During the period for which data were collected, the European Union was the top export market for foreign producers' exports of OTR tires, accounting for over half of all exports. The United States accounted for around one-fourth of exports during this period. Expect for interim 2022, the United States had the lowest unit value of exports compared to other destination markets during each period examined.

Table IV-13
OTR tires: Producers' and resellers' exports from India, by destination market and period

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; shares and ratios in percent

Destination market	Measure	2016	2017	2018
United States	Quantity	1,144	1,251	1,419
European Union	Quantity	2,719	3,066	3,031
Asia	Quantity	491	578	534
All other destination markets	Quantity	732	828	960
Non-U.S. destination markets	Quantity	3,941	4,472	4,526
All destination markets	Quantity	5,086	5,722	5,945
United States	Value	163,491	196,290	245,160
European Union	Value	434,794	526,855	584,077
Asia	Value	83,501	101,139	98,713
All other destination markets	Value	122,935	154,388	189,276
Non-U.S. destination markets	Value	641,230	782,382	872,066
All destination markets	Value	804,721	978,672	1,117,226
United States	Unit value	143	157	173
European Union	Unit value	160	172	193
Asia	Unit value	170	175	185
All other destination markets	Unit value	168	186	197
Non-U.S. destination markets	Unit value	163	175	193
All destination markets	Unit value	158	171	188
United States	Share of quantity	22.5	21.9	23.9
European Union	Share of quantity	53.5	53.6	51.0
Asia	Share of quantity	9.6	10.1	9.0
All other destination markets	Share of quantity	14.4	14.5	16.2
Non-U.S. destination markets	Share of quantity	77.5	78.1	76.1
All destination markets	Share of quantity	100.0	100.0	100.0
United States	Ratio	13.6	13.2	13.6
European Union	Ratio	32.2	32.3	28.9
Asia	Ratio	5.8	6.1	5.1
All other destination markets	Ratio	8.7	8.7	9.2
Non-U.S. destination markets	Ratio	46.7	47.1	43.2
All destination markets	Ratio	60.3	60.2	56.8

Table continued.

Table IV-13 Continued
OTR tires: Producers' and resellers' exports from India, by destination market and period

Quantity in 1,000 tires; value in 1,000 dollars; unit values in dollars per tire; shares in percent

Destination market	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
United States	Quantity	1,429	1,230	1,979	1,379	1,763
European Union	Quantity	3,035	3,250	4,449	3,374	3,277
Asia	Quantity	508	449	616	465	425
All other destination markets	Quantity	936	885	1,409	1,050	1,061
Non-U.S. destination markets	Quantity	4,479	4,584	6,473	4,890	4,763
All destination markets	Quantity	5,908	5,814	8,452	6,269	6,527
United States	Value	246,715	218,752	364,052	248,796	405,403
European Union	Value	548,424	597,746	889,251	655,409	738,674
Asia	Value	96,257	85,641	121,589	89,185	92,286
All other destination markets	Value	179,231	170,282	292,037	211,137	268,052
Non-U.S. destination markets	Value	823,912	853,669	1,302,877	955,731	1,099,012
All destination markets	Value	1,070,627	1,072,421	1,666,929	1,204,527	1,504,415
United States	Unit value	173	178	184	180	230
European Union	Unit value	181	184	200	194	225
Asia	Unit value	190	191	197	192	217
All other destination markets	Unit value	191	192	207	201	253
Non-U.S. destination markets	Unit value	184	186	201	195	231
All destination markets	Unit value	181	184	197	192	231
United States	Share of quantity	24.2	21.1	23.4	22.0	27.0
European Union	Share of quantity	51.4	55.9	52.6	53.8	50.2
Asia	Share of quantity	8.6	7.7	7.3	7.4	6.5
All other destination markets	Share of quantity	15.8	15.2	16.7	16.7	16.3
Non-U.S. destination markets	Share of quantity	75.8	78.9	76.6	78.0	73.0
All destination markets	Share of quantity	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-13 Continued
OTR tires: Producers' and resellers' exports from India, by destination market and period

Ratios in percent

Destination market	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
United States	Ratio	14.2	11.9	14.6	13.3	17.5
European Union	Ratio	30.2	31.3	32.8	32.6	32.5
Asia	Ratio	5.1	4.3	4.5	4.5	4.2
All other destination markets	Ratio	9.3	8.5	10.4	10.2	10.5
Non-U.S. destination markets	Ratio	44.5	44.2	47.8	47.3	47.2
All destination markets	Ratio	58.8	56.0	62.4	60.6	64.7

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Ratios represent the portion of the producers' total shipments that are exported by producers and resellers.

Constraints on capacity

Table IV-14 presents foreign producers' narratives responses on factors impacting their ability to switch between OTR tires and out-of-scope products.

Table IV-14
OTR tires: Producers in India narratives regarding production constraints

Item	Firm name and narrative response on production constraints
Production bottlenecks	***
Production bottlenecks	***
Production bottlenecks	***
Production bottlenecks	***
Existing labor force	***
Demand/orders	***
Demand/orders	***
Other constraints	***
Other constraints	***
Other constraints	***
Other constraints	***
Other constraints	***
Other constraints	***

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

Alternative products

As shown in table IV-15, *** percent of the product produced during 2021 by foreign producers was OTR tires. *** of eleven firms reported producing out-of-scope tires on the same equipment and machinery used to produce OTR tires. Out-of-scope products include: ***. For foreign producers who produced other tires on the same equipment and machinery used to produce OTR tires, OTR tires make up between *** percent and *** percent of their overall production. Only two firms, *** reported producing more than *** of out-of-scope products on the same equipment and machinery used to produce OTR tires during each year and both interim periods during the period for which data were collected.

Table IV-15
OTR tires: Producers in India production on the same equipment as subject production, by period

Quantity in 1,000 tires; share and ratio in percent

Production type	Measure	2016	2017	2018
OTR tires	Quantity	***	***	***
PVLT tires	Quantity	***	***	***
Truck and bus tires	Quantity	***	***	***
Other	Quantity	***	***	***
All out-of-scope production	Quantity	***	***	***
All production	Quantity	***	***	***
OTR tires	Share	***	***	***
PVLT tires	Share	***	***	***
Truck and bus tires	Share	***	***	***
Other	Share	***	***	***
All out-of-scope production	Share	***	***	***
All production	Share	100.0	100.0	100.0

Table continued on next page.

Table IV-15 Continued
OTR tires: Producers' in India production on the same equipment as subject production, by period

Quantity in 1,000 tires; share and ratio in percent

Production type	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
OTR tires	Quantity	***	***	***	***	***
PVLT tires	Quantity	***	***	***	***	***
Truck and bus tires	Quantity	***	***	***	***	***
Other	Quantity	***	***	***	***	***
All out-of-scope production	Quantity	***	***	***	***	***
All production	Quantity	***	***	***	***	***
OTR tires	Share	***	***	***	***	***
PVLT tires	Share	***	***	***	***	***
Truck and bus tires	Share	***	***	***	***	***
Other	Share	***	***	***	***	***
All out-of-scope production	Share	***	***	***	***	***
All production	Share	100.0	100.0	100.0	100.0	100.0

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

Exports

According to GTA, the leading export markets for new pneumatic tires of rubber, a category that includes OTR tires and out-of-scope products, from India are the United States, Germany, and the United Kingdom (table IV-16). During 2021, the United States was the top export market for these tires from India, accounting for 21.2 percent, followed by Germany, accounting for 9.9 percent.

Table IV-16
New pneumatic tires of rubber: Exports from India, by destination market and by period

Value in 1,000 dollars, share in percent

Destination market	Measure	2016	2017	2018	2019	2020	2021
United States	Value	149,961	165,407	232,146	237,353	219,602	349,548
Germany	Value	81,657	94,333	108,781	105,504	114,637	162,511
France	Value	47,471	53,906	62,691	63,796	74,675	96,905
Italy	Value	39,538	44,674	51,991	49,010	55,458	84,304
United Kingdom	Value	43,169	44,388	51,681	48,303	53,969	73,558
Netherlands	Value	27,681	33,091	37,393	34,824	36,517	63,943
Brazil	Value	5,433	13,926	15,159	18,998	16,590	47,240
Canada	Value	16,682	22,470	31,792	28,251	27,158	46,181
Australia	Value	20,217	23,239	30,033	23,546	25,773	39,663
All other destination markets	Value	326,941	375,898	440,490	447,125	458,710	681,544
Non-U.S. destination markets	Value	608,791	705,925	830,011	819,356	863,487	1,295,849
All destination markets	Value	758,752	871,332	1,062,157	1,056,710	1,083,089	1,645,397
United States	Share of value	19.8	19.0	21.9	22.5	20.3	21.2
Germany	Share of value	10.8	10.8	10.2	10.0	10.6	9.9
France	Share of value	6.3	6.2	5.9	6.0	6.9	5.9
Italy	Share of value	5.2	5.1	4.9	4.6	5.1	5.1
United Kingdom	Share of value	5.7	5.1	4.9	4.6	5.0	4.5
Netherlands	Share of value	3.6	3.8	3.5	3.3	3.4	3.9
Brazil	Share of value	0.7	1.6	1.4	1.8	1.5	2.9
Canada	Share of value	2.2	2.6	3.0	2.7	2.5	2.8
Australia	Share of value	2.7	2.7	2.8	2.2	2.4	2.4
All other destination markets	Share of value	43.1	43.1	41.5	42.3	42.4	41.4
Non-U.S. destination markets	Share of value	80.2	81.0	78.1	77.5	79.7	78.8
All destination markets	Share of value	100.0	100.0	100.0	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 4011.61, 4011.62, 4011.63, 4011.70, 4011.80, 4011.92, 4011.93, and 4011.94 as reported by India's Ministry of Commerce in the Global Trade Atlas database, accessed January 25, 2023.

Note: United States is shown at the top. All remaining top export destinations are shown in descending order of 2021 data. Data reported under HS subheadings 4011.61, 4011.62, 4011.63, 4011.70, 4011.80, 4011.92, 4011.93, and 4011.94 include some merchandise outside of the scope of these reviews.

Third-country trade actions

Based on publicly available information, OTR tires from India have not been subject to other antidumping or countervailing duty investigations outside the United States.[13] All 11 responding foreign producers/exporters reported that their OTR tire exports were not subject to any antidumping/countervailing duty/safeguard findings, remedies, or proceedings.[14]

Global market

Table IV-17 presents global export data for new pneumatic tires of rubber, a category that includes OTR tires and out-of-scope products, (by source in descending order of value for 2021).

Japan, India, the United States, and China in order accounted for an aggregate 54.4 percent of the global value total in 2016 and 59.1 percent in 2021, representing an increase of 4.7 percentage points during the period. Japan experienced a decline of 2.2 percentage points, India an increase of 5.3 percentage points, the United States 1.0 percentage points, and China, 0.6 percentage points.

[13] Reviews of several reputable publication sources, including Modern Tire Dealer, Rubber News, Rubber World, Tire Business, Tire Review, European Rubber Journal, and tire industry websites.

[14] Foreign producer questionnaire responses, section II-7.

Table IV-17
New pneumatic tires of rubber: Global exports by exporter and period

Value in 1,000 dollars; share in percent

Exporting country	Measure	2016	2017	2018	2019	2020	2021
United States	Value	832,207	976,231	1,208,842	1,315,671	1,181,910	1,305,972
Japan	Value	1,454,280	1,631,744	1,881,751	1,965,665	1,557,067	1,891,997
India	Value	758,752	871,332	1,062,157	1,056,710	1,083,089	1,645,397
China	Value	781,261	854,284	962,729	965,650	856,310	1,200,393
Spain	Value	413,569	470,402	548,692	469,656	417,922	511,463
France	Value	388,304	444,633	517,485	468,168	386,342	494,217
Czech Republic	Value	255,563	292,508	308,081	283,590	263,441	318,138
Turkey	Value	131,661	160,049	189,481	175,349	172,130	250,834
Thailand	Value	64,357	85,579	113,473	100,345	135,784	236,584
Poland	Value	204,104	217,185	222,985	200,818	196,264	227,705
Italy	Value	130,140	154,721	188,147	165,531	173,109	200,239
Brazil	Value	182,188	222,890	220,711	215,641	177,239	187,895
All other exporters	Value	1,433,966	1,552,488	1,661,145	1,566,183	1,490,964	1,759,193
All reporting exporters	Value	7,030,352	7,934,046	9,085,679	8,948,978	8,091,572	10,230,026
United States	Share of value	11.8	12.3	13.3	14.7	14.6	12.8
Japan	Share of value	20.7	20.6	20.7	22.0	19.2	18.5
India	Share of value	10.8	11.0	11.7	11.8	13.4	16.1
China	Share of value	11.1	10.8	10.6	10.8	10.6	11.7
Spain	Share of value	5.9	5.9	6.0	5.2	5.2	5.0
France	Share of value	5.5	5.6	5.7	5.2	4.8	4.8
Czech Republic	Share of value	3.6	3.7	3.4	3.2	3.3	3.1
Turkey	Share of value	1.9	2.0	2.1	2.0	2.1	2.5
Thailand	Share of value	0.9	1.1	1.2	1.1	1.7	2.3
Poland	Share of value	2.9	2.7	2.5	2.2	2.4	2.2
Italy	Share of value	1.9	2.0	2.1	1.8	2.1	2.0
Brazil	Share of value	2.6	2.8	2.4	2.4	2.2	1.8
All other exporters	Share of value	20.4	19.6	18.3	17.5	18.4	17.2
All reporting exporters	Share of value	100.0	100.0	100.0	100.0	100.0	100.0

Source: Official exports statistics under HS subheadings 4011.61, 4011.62, 4011.63, 4011.70, 4011.80, 4011.92, 4011.93, and 4011.94 as reported by India's Ministry of Commerce in the Global Trade Atlas database, accessed January 25, 2023.

Note: The United States is shown at the top, all remaining top export destinations shown in descending order of 2021 data. Data reported under HS subheadings 4011.61, 4011.62, 4011.63, 4011.70, 4011.80, 4011.92, 4011.93, and 4011.94 include some merchandise outside of the scope of these reviews.

Part V: Pricing data

Factors affecting prices

Raw material costs

Raw materials for OTR tires include natural rubber, synthetic rubber, carbon black, and various chemicals, textiles, and steel. Raw material prices are transparent in the OTR tire market. Contracts are based on publicly available indexes, and these indexes usually effect price adjustments within three to six months, depending on the specific contract. Purchasers in the aftermarket also use raw material price information in price negotiations.[1]

Natural rubber and synthetic rubber comprised the largest shares of U.S. producers' raw material costs in 2021, *** percent and *** percent, respectively. Carbon black made up *** percent, textile inputs *** percent, steel inputs *** percent, and other material inputs *** percent (see table III-14). Prices of natural rubber and synthetic rubber fluctuated over the review period but increased overall by *** percent and *** percent, respectively, during January 2016-September 2022 (figure V-1). Prices of carbon black, other fabricated wire, and other basic organic chemicals increased overall by 154.5 percent, 52.1 percent, and 43.3 percent, respectively, during January 2016-September 2022 (figure V-2).

All responding U.S. producers reported increased raw material prices since 2016 and most (5 of 6) expect future increases.[2] Most importers (13 of 18) also reported increased raw material prices since 2016 and most expect future increases (9 firms) or fluctuations (7 firms).[3] Many U.S. producers and importers reported that OTR tire prices have increased in response to raw material price increases and firms also noted inflationary pressures in 2021 and 2022. Importer *** reported that in the latter part of 2022, prices of some raw materials have leveled off or declined while others continue to increase, and *** similarly reported recent decreases in raw material costs from their highest levels. Importer *** reported that its larger customers track raw material prices and that it adjusts its prices for raw material price changes, with a brief lag.

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[1] The information in this paragraph is from the original publication, pp. V-1 and V-2.

[2] One U.S. producer reported that it expects raw material prices to fluctuate in the future and one reported both increase and fluctuate.

[3] One importer reported no change since 2016, and one importer each reported no change and decrease for future raw material price trends.

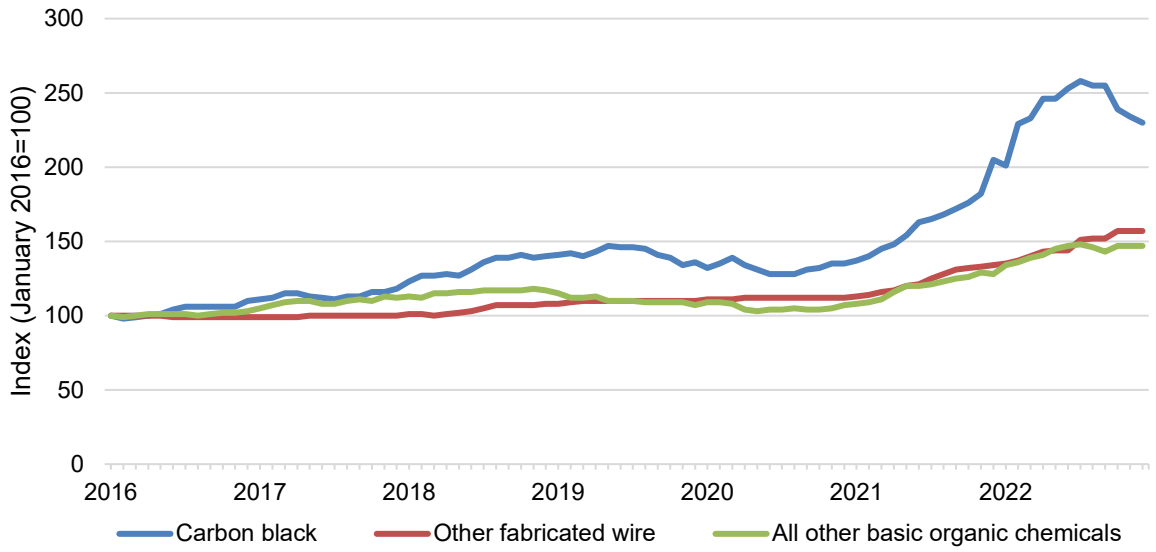
Figure V-1
Raw material prices: Natural rubber SGX TSR20 futures, and synthetic rubber SBR USA, January 2016-October 2022

* * * * * * *

Source: ***.

Note: Data contained in appendix G, table G-1.

Figure V-2
Raw material prices: Producer price indices for other selected raw materials, monthly, January 2016-December 2022



Source: Bureau of Labor Statistics, Producer Price Index, retrieved January 19, 2023.

Note: Data contained in appendix G, table G-2.

Eight of 12 purchasers reported they were familiar with raw material costs for OTR tires, and four of these firms reported that information on raw material prices affected their negotiations or contracts to purchase OTR tires. *** reported that there has been a recent spike in raw material prices which has resulted in higher negotiated OTR tire prices.

Transportation costs to the U.S. market

Transportation costs for OTR tires shipped from India to the United States averaged 10.8 percent during 2021. These estimates were derived from official import data and represent the transportation and other charges on imports.[4]

U.S. inland transportation costs

All responding U.S. producers and 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 to 4 percent while most importers reported costs of 4 to 15 percent.[5]

Pricing practices

Pricing methods

U.S. producers and importers reported setting prices using transaction-by-transaction negotiations, contracts, and set price lists (table V-1). *** reported that it may use any of these methods depending on the customer. Importer *** reported that in addition to set price lists, it also offers discounts based on payment terms and purchase quantity.

[4] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2021 and then dividing by the customs value based on the HTS statistical reporting numbers 4011.20.1025, 4011.20.1035, 4011.20.5030, 4011.20.5050, 4011.70.0010, 4011.62.0000, 4011.80.1010, 4011.80.1020, 4011.90.1050, 4011.70.0050, 4011.80.2010, 4011.80.8010, 4011.80.2020, 4011.80.8020, 8431.49.9038, 8431.49.9090, 8709.90.0020, and 8716.90.1020.11.

[5] ***.

Table V-1
OTR tires: Count of U.S. producers' and importers' reported price setting methods

Method	U.S. producers	Importers
Transaction-by-transaction	3	7
Contract	4	5
Set price list	6	15
Other	2	3
Responding firms	6	18

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

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.

U.S. producers reported that about half of their sales were on a spot basis and the remainder were on an annual or long-term contract basis (table V-2), but the shares differed markedly for OEM sales compared to aftermarket sales. Nearly all of U.S. producers' aftermarket sales were on a spot basis (96 percent) whereas most of their OEM sales were on a long-term (64 percent) or annual (22 percent) contract basis. Subject importers reported selling mostly in the spot market (*** percent) with most of the remainder under long-term contracts. Unlike U.S. producers, subject importers reported a higher share of OEM sales on a spot basis (*** percent) compared to their aftermarket sales (*** percent spot and *** percent long-term contracts).

Table V-2
OTR tires: U.S. producers' and importers' shares of commercial U.S. shipments by type of sale, 2021

Share in percent

Item	U.S. producers: OEM	Subject U.S. importers: OEM	U.S. producers: Aftermarket	Subject U.S. importers: Aftermarket	U.S. producers: All markets	Subject U.S. importers: All markets
Long-term contracts	63.8	***	3.9	***	36.4	***
Annual contract	21.5	***	0.3	***	11.8	***
Short-term contracts	---	***	---	***	---	***
Spot sales	14.8	***	95.7	***	51.8	***
Total	100.0	100.0	100.0	100.0	100.0	100.0

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

Note: Because of rounding, figures may not add to the totals shown.

Foreign producers reported that *** percent of their 2021 sales were on a spot or short-term contract basis and *** percent were on a long-term contract basis.

U.S. producers reported that their long-term contracts average 3 to 4 years.[6] Four of five U.S. producers reported that long-term contract prices can be renegotiated during the contract term. Four U.S. producers reported that their long-term contract prices are indexed to various published prices for raw materials, including SGX natural rubber prices and BLS published prices for synthetic rubber, carbon black, wire, and organic chemicals. ***.

Two purchasers reported that they purchase product daily, seven purchase weekly, and four purchase monthly. Most purchasers reported contacting 1 to 3 suppliers before making a purchase, although some contact a higher number, including ***, which reported contacting 1 to 10 suppliers.

[6] ***.

Sales terms and discounts

Most U.S. producers (5 of 7) and most responding importers (8 of 11) reported that they typically quote prices on a delivered basis. Most responding U.S. producers (5 of 6) and importers (13 of 18) reported offering quantity and/or total volume discounts. U.S. producers *** reported various discounts based on purchase quantities and market conditions. Importer *** reported customer specific discounts. *** reported basing discounts on order size, delivery terms, product, and volume for a particular period. ***. *** reported discounts for full trailer loads and for direct orders (since warehouse orders require more handling), and seasonal sales programs (***). *** reported that it started offering volume discounts in 2022.

Price leadership

Eight of 12 purchasers listed one or more price leaders in the U.S. OTR tires market. Firms listed a number of suppliers including BKT, Bridgestone, Camso, Firestone, Goodyear, Michelin, and Titan.[7] Purchasers indicating the presence of price leaders indicated that these price leaders led by being first to announce price increases, raising prices without sales, reacting to pandemic issues with price changes and fuel surcharges, being the major brands that others follow, and using their limited capacity and offerings to request price increases.

[7] *** listed distribution firms as price leaders and noted that there are both national distributors that are price leaders as well as price leaders in particular regions.

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 OTR tires products shipped to unrelated U.S. customers during January 2016-September 2022.

Product 1.-- Skid steer tire, size 12-16.5, ply rating of 10, weight from 50 to 90 lbs., rim width 9.75 inches, unmounted, tire only.

Product 2.-- Radial drive farm tire, metric size 380/85R24 (standard size 14.9R24), load index of 131, weight from 136 to 170 lbs., rim width 12 inches, unmounted, tire only.

Product 3.-- Backhoe loader tire, size 19.5L-24, ply rating of 12, weight from 175 to 230 lbs., rim width 15 inches, unmounted, tire only.

Product 4.--Radial farm implement tire, metric size 320/70R15, load index 142 to 145, weight from 65-75 lbs., rim width 10 inches, unmounted, tire only.

Product 5.--Radial rear farm tire, metric size 480/80R46 (standard size 18.4R46), load index of 158, weight from 350 to 450 lbs., rim width 15 inches, unmounted, tire only.

Firms were requested to provide data for the OEM market for products 1-4 and for the aftermarket for products 1-5. Six U.S. producers and eight importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[8] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of OTR tires and *** percent of U.S. shipments of subject imports from India in 2021.[9] Price data are presented in tables V-3 to V-11 and figures V-3 to V-12.

[8] 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.

[9] Pricing coverage is based on U.S. shipments reported in questionnaires.

Table V-3
OTR tires: OEM sales, weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 1: Skid steer tire, size 12-16.5, ply rating of 10, weight from 50 to 90 lbs., rim width 9.75 inches, unmounted, tire only.

Table V-4
OTR tires: OEM sales, Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 2: Radial drive farm tire, metric size 380/85R24 (standard size 14.9R24), load index of 131, weight from 136 to 170 lbs., rim width 12 inches, unmounted, tire only.

Table V-5
OTR tires: OEM sales, weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 3: Backhoe loader tire, size 19.5L-24, ply rating of 12, weight from 175 to 230 lbs., rim width 15 inches, unmounted, tire only.

Table V-6
OTR tires: OEM sales, weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 4: Radial farm implement tire, metric size 320/70R15, load index 142 to 145, weight from 65-75 lbs., rim width 10 inches, unmounted, tire only.

Figure V-3
OTR tires: OEM sales, weighted-average prices and quantities of domestic and imported product 1, by source and quarter

Price of product 1

* * * * * * *

Volume of product 1

* * * * * * *

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

Note: Product 1: Skid steer tire, size 12-16.5, ply rating of 10, weight from 50 to 90 lbs., rim width 9.75 inches, unmounted, tire only.

Figure V-4
OTR tires: OEM sales, weighted-average prices and quantities of domestic and imported product 2, by source and quarter

Price of product 2

* * * * * * *

Volume of product 2

* * * * * * *

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

Note: Product 2: Radial drive farm tire, metric size 380/85R24 (standard size 14.9R24), load index of 131, weight from 136 to 170 lbs., rim width 12 inches, unmounted, tire only.

Figure V-5
OTR tires: OEM sales, weighted-average prices and quantities of domestic and imported product 3, by source and quarter

Price of product 3

* * * * * * *

Volume of product 3

* * * * * * *

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

Note: Product 3: Backhoe loader tire, size 19.5L-24, ply rating of 12, weight from 175 to 230 lbs., rim width 15 inches, unmounted, tire only.

Figure V-6
OTR tires: OEM sales, weighted-average prices and quantities of domestic and imported product 4, by source and quarter

Price of product 4

* * * * * * *

Volume of product 4

* * * * * * *

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

Note: Product 4: Radial farm implement tire, metric size 320/70R15, load index 142 to 145, weight from 65-75 lbs., rim width 10 inches, unmounted, tire only.

Table V-7
OTR tires: Aftermarket sales, weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 1: Skid steer tire, size 12-16.5, ply rating of 10, weight from 50 to 90 lbs., rim width 9.75 inches, unmounted, tire only.

Table V-8
OTR tires: Aftermarket sales, Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 2: Radial drive farm tire, metric size 380/85R24 (standard size 14.9R24), load index of 131, weight from 136 to 170 lbs., rim width 12 inches, unmounted, tire only.

Table V-9
OTR tires: Aftermarket sales, weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 3: Backhoe loader tire, size 19.5L-24, ply rating of 12, weight from 175 to 230 lbs., rim width 15 inches, unmounted, tire only.

Table V-10
OTR tires: Aftermarket sales, weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 4: Radial farm implement tire, metric size 320/70R15, load index 142 to 145, weight from 65-75 lbs., rim width 10 inches, unmounted, tire only.

Table V-11
OTR tires: Aftermarket sales, weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by source and quarter

Price in dollars per tire, quantity in tires, margin in percent.

Period	US price	US quantity	India price	India quantity	India margin
2016 Q1	***	***	***	***	***
2016 Q2	***	***	***	***	***
2016 Q3	***	***	***	***	***
2016 Q4	***	***	***	***	***
2017 Q1	***	***	***	***	***
2017 Q2	***	***	***	***	***
2017 Q3	***	***	***	***	***
2017 Q4	***	***	***	***	***
2018 Q1	***	***	***	***	***
2018 Q2	***	***	***	***	***
2018 Q3	***	***	***	***	***
2018 Q4	***	***	***	***	***
2019 Q1	***	***	***	***	***
2019 Q2	***	***	***	***	***
2019 Q3	***	***	***	***	***
2019 Q4	***	***	***	***	***
2020 Q1	***	***	***	***	***
2020 Q2	***	***	***	***	***
2020 Q3	***	***	***	***	***
2020 Q4	***	***	***	***	***
2021 Q1	***	***	***	***	***
2021 Q2	***	***	***	***	***
2021 Q3	***	***	***	***	***
2021 Q4	***	***	***	***	***
2022 Q1	***	***	***	***	***
2022 Q2	***	***	***	***	***
2022 Q3	***	***	***	***	***

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

Note: Product 5: Radial rear farm tire, metric size 480/80R46 (standard size 18.4R46), load index of 158, weight from 350 to 450 lbs., rim width 15 inches, unmounted, tire only.

Figure V-7
OTR tires: Aftermarket sales, weighted-average prices and quantities of domestic and imported product 1, by source and quarter

Price of product 1

* * * * * * *

Volume of product 1

* * * * * * *

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

Note: Product 1: Skid steer tire, size 12-16.5, ply rating of 10, weight from 50 to 90 lbs., rim width 9.75 inches, unmounted, tire only.

Figure V-8
OTR tires: Aftermarket sales, weighted-average prices and quantities of domestic and imported product 2, by source and quarter

Price of product 2

* * * * * * *

Volume of product 2

* * * * * * *

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

Note: Product 2: Radial drive farm tire, metric size 380/85R24 (standard size 14.9R24), load index of 131, weight from 136 to 170 lbs., rim width 12 inches, unmounted, tire only.

Figure V-9
OTR tires: Aftermarket sales, weighted-average prices and quantities of domestic and imported product 3, by source and quarter

Price of product 3

* * * * * * *

Volume of product 3

* * * * * * *

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

Note: Product 3: Backhoe loader tire, size 19.5L-24, ply rating of 12, weight from 175 to 230 lbs., rim width 15 inches, unmounted, tire only.

Figure V-10
OTR tires: Aftermarket sales, weighted-average prices and quantities of domestic and imported product 4, by source and quarter

Price of product 4

* * * * * * *

Volume of product 4

* * * * * * *

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

Note: Product 4: Radial farm implement tire, metric size 320/70R15, load index 142 to 145, weight from 65-75 lbs., rim width 10 inches, unmounted, tire only.

Figure V-11
OTR tires: Aftermarket sales, weighted-average prices and quantities of domestic and imported product 5, by source and quarter

Price of product 5

* * * * * * *

Volume of product 5

* * * * * * *

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

Note: Product 5: Radial rear farm tire, metric size 480/80R46 (standard size 18.4R46), load index of 158, weight from 350 to 450 lbs., rim width 15 inches, unmounted, tire only.

Price trends

In general, prices increased during January 2016-September 2022. Table V-12 summarizes the price trends, by country, by product, and by channel. As shown in the table, most domestic prices increased, ranging from *** to *** percent, during January 2016-September 2022. U.S. producer prices of products 2 and 3 sold to the aftermarket decreased by *** and *** percent, respectively. Subject import price increases ranged from *** to *** percent. Indexed prices for OEM and aftermarket sales are shown in figures V-12 and V-13 and tables V-13 and V-14.

Table V-12
OTR tires: Summary of price data, by product and source, January 2016-September 2022

Quantity in tires, price in dollars per tire

Channel and product number	Source	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Percent change in price over period
OEM 1	United States	27	***	***	***	***	***	***
OEM 1	India	27	***	***	***	***	***	***
OEM 2	United States	26	***	***	***	***	***	***
OEM 2	India	14	***	***	***	***	***	***
OEM 3	United States	27	***	***	***	***	***	***
OEM 3	India	27	***	***	***	***	***	***
OEM 4	United States	27	***	***	***	***	***	***
OEM 4	India	15	***	***	***	***	***	***
Aftermarket 1	United States	27	***	***	***	***	***	***
Aftermarket 1	India	27	***	***	***	***	***	***
Aftermarket 2	United States	27	***	***	***	***	***	***
Aftermarket 2	India	27	***	***	***	***	***	***
Aftermarket 3	United States	27	***	***	***	***	***	***
Aftermarket 3	India	27	***	***	***	***	***	***
Aftermarket 4	United States	27	***	***	***	***	***	***
Aftermarket 4	India	20	***	***	***	***	***	***
Aftermarket 5	United States	27	***	***	***	***	***	***
Aftermarket 5	India	27	***	***	***	***	***	***

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

Note: Percent change column is percentage change from the first quarter in 2016 to the third quarter in 2022.

Figure V-12
OTR tires: Indexed U.S. producer and importer prices for OEM products, January 2016 through September 2022

U.S. producer OEM prices

* * * * * * *

Subject import OEM prices

* * * * * * *

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

Note: U.S. producer product 2 prices are indexed to the second quarter of 2016 since no data were reported in the first quarter. India product 4 is not shown since no data were reported in 2016.

Figure V-13
OTR tires: Indexed U.S. producer and importer aftermarket prices, January 2016 through September 2022

U.S. producer aftermarket prices

* * * * * * *

Subject import aftermarket prices

* * * * * * *

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

Note: India product 4 is not shown since no data were reported in 2016.

Table V-13
OTR tires: Indexed U.S. producer and importer OEM prices, January 2016 through September 2022

Period	U.S. Product 1	U.S. Product 2	U.S. Product 3	U.S. Product 4	India Product 1	India Product 2	India Product 3
2016 Q1	***	***	***	***	***	***	***
2016 Q2	***	***	***	***	***	***	***
2016 Q3	***	***	***	***	***	***	***
2016 Q4	***	***	***	***	***	***	***
2017 Q1	***	***	***	***	***	***	***
2017 Q2	***	***	***	***	***	***	***
2017 Q3	***	***	***	***	***	***	***
2017 Q4	***	***	***	***	***	***	***
2018 Q1	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***

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

Note: U.S. producer product 2 prices are indexed to the second quarter of 2016 since no data were reported in the first quarter. India product 4 is not shown since no data were reported in 2016.

Table V-14
OTR tires: Indexed U.S. producer and importer aftermarket prices, January 2016 through September 2022

Period	U.S. Product 1	U.S. Product 2	U.S. Product 3	U.S. Product 4	U.S. Product 5	India Product 1	India Product 2	India Product 3	India Product 5
2016 Q1	***	***	***	***	***	***	***	***	***
2016 Q2	***	***	***	***	***	***	***	***	***
2016 Q3	***	***	***	***	***	***	***	***	***
2016 Q4	***	***	***	***	***	***	***	***	***
2017 Q1	***	***	***	***	***	***	***	***	***
2017 Q2	***	***	***	***	***	***	***	***	***
2017 Q3	***	***	***	***	***	***	***	***	***
2017 Q4	***	***	***	***	***	***	***	***	***
2018 Q1	***	***	***	***	***	***	***	***	***
2018 Q2	***	***	***	***	***	***	***	***	***
2018 Q3	***	***	***	***	***	***	***	***	***
2018 Q4	***	***	***	***	***	***	***	***	***
2019 Q1	***	***	***	***	***	***	***	***	***
2019 Q2	***	***	***	***	***	***	***	***	***
2019 Q3	***	***	***	***	***	***	***	***	***
2019 Q4	***	***	***	***	***	***	***	***	***
2020 Q1	***	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***	***

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

Note: India product 4 is not shown since no data were reported in 2016.

Price comparisons[10]

As shown in table V-15, prices for OTR tires imported from India were below those for U.S.-produced product in 169 of 210 instances; margins of underselling ranged from 0.2 to 68.6 percent. Nearly half of the underselling quarters were for sales to OEMs. In the remaining 41 instances, prices for OTR tires from India were between 0.1 and 43.3 percent above prices for the domestic product.

For OEM sales, subject imports were priced lower than domestic product in 80 of 82 comparisons, with underselling margins ranging from 0.3 to 68.6 percent. For aftermarket sales, subject imports were priced lower than domestic product in 89 of 128 comparisons, with underselling margins ranging from 0.2 to 54.3 percent.

[10] In the original investigations, for OEM sales, subject imports from India were priced lower than domestic product in all 105 comparisons, with underselling margins ranging from *** to *** percent. For aftermarket sales, subject imports from India were priced lower than domestic product in 37 of 39 comparisons, with underselling margins ranging from *** to *** percent. Original confidential report, tables V-15 and V-16.

Table V-15
OTR tires: Instances of underselling and overselling and the range and average of margins, by product and channel

Quantity in tires; margin in percent

Product and channel	Type	Number of quarters	Quantity	Average margin	Min margin	Max margin
Product 1: OEM	Underselling	27	***	***	***	***
Product 2: OEM	Underselling	11	***	***	***	***
Product 3: OEM	Underselling	27	***	***	***	***
Product 4: OEM	Underselling	15	***	***	***	***
All OEM products	Underselling	80	186,146	27.9	0.3	68.6
Product 1: Aftermarket	Underselling	4	***	***	***	***
Product 2: Aftermarket	Underselling	27	***	***	***	***
Product 3: Aftermarket	Underselling	25	***	***	***	***
Product 4: Aftermarket	Underselling	11	***	***	***	***
Product 5: Aftermarket	Underselling	22	***	***	***	***
All aftermarket products	Underselling	89	200,168	17.9	0.2	54.3
All products	Underselling	169	386,314	22.6	0.2	68.6
Product 1: OEM	Overselling	---	***	***	***	***
Product 2: OEM	Overselling	2	***	***	***	***
Product 3: OEM	Overselling	---	***	***	***	***
Product 4: OEM	Overselling	---	***	***	***	***
All OEM products	Overselling	2	13	(3.8)	(1.2)	(6.4)
Product 1: Aftermarket	Overselling	23	***	***	***	***
Product 2: Aftermarket	Overselling	---	***	***	***	***
Product 3: Aftermarket	Overselling	2	***	***	***	***
Product 4: Aftermarket	Overselling	9	***	***	***	***
Product 5: Aftermarket	Overselling	5	***	***	***	***
All aftermarket products	Overselling	39	250,424	(9.6)	(0.1)	(43.3)
All products	Overselling	41	250,437	(9.3)	(0.1)	(43.3)

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

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.

Prices in the U.S. market compared to non-U.S. markets

Three of four U.S. producers and 7 of 17 importers reported that they were aware of prices of OTR tires in non-U.S. markets. Among U.S. producers, *** reported that foreign competitor prices in non-U.S. markets have made it difficult for it compete in those markets. *** reported that prices in the United States are generally higher than in other markets but that it can vary depending on where each market is in the business cycle, and *** reported that prices in Canada tend to follow U.S. prices. Importer *** reported that prices in other markets are 7 to 10 percent lower than U.S. market prices. Importer *** reported that different currencies and exchange rates make it difficult to compare but that it attempts to keep prices within a certain range for all markets. Importers *** reported that prices can vary by country and type of OTR tire.

Foreign producers were asked to compare market prices of OTR tires in their home market, the United States, and third-country markets. Firms reported that prices vary between SKUs and in various regions. *** reported that prices to end customers are generally lower in the Indian home market than the U.S. market and that prices in Europe are similar to U.S. market prices for comparable tires. *** reported generally no price differences between the home market, United States, and third-country markets, although prices can vary if there are additional duties or taxes in a particular country. *** reported that in some cases prices in the United States may be higher than in India, but this is partly because the U.S. requires larger, more expensive OTR tires and because of the freight costs to ship to the United States.

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
87 FR 5467, February 1, 2022	*Initiation of Five-Year (Sunset) Reviews*	https://www.govinfo.gov/content/pkg/FR-2022-02-01/pdf/2022-02026.pdf
87 FR 5505, February 1, 2022	*New Pneumatic Off-the-Road Tires From India; Institution of Five-Year Reviews*	https://www.govinfo.gov/content/pkg/FR-2022-02-01/pdf/2022-01898.pdf
87 FR 31860, May 25, 2022	*Certain New Pneumatic Off-the-Road Tires from India*	https://www.govinfo.gov/content/pkg/FR-2022-05-25/pdf/2022-11212.pdf
87 FR 33209, June 1, 2022	*Certain New Pneumatic Off-the-Road Tires From India; Notice of Commission Determination To Conduct Full Five-Year Reviews*	https://www.govinfo.gov/content/pkg/FR-2022-06-01/pdf/2022-11642.pdf
87 FR 34654, June 7, 2022	*Certain New Pneumatic Off-the-Road Tires from India*	https://www.govinfo.gov/content/pkg/FR-2022-06-07/pdf/2022-12251.pdf
87 FR 64110, October 21, 2022	*Pneumatic Off-the-Road Tires from India*	https://www.govinfo.gov/content/pkg/FR-2022-10-21/pdf/2022-22953.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared in the United States International Trade Commission's hearing:

Subject: Pneumatic Off-the-Road (OTR) Tires from India

Inv. Nos.: 701-TA-552 and 731-TA-1308 (Review)

Date and Time: March 2, 2023 - 9:30 a.m.

OPENING REMARKS:

In Support of Continuation (**Adam H. Gordon**, The Bristol Group PLLC)
In Opposition to Continuation (**Eric C. Emerson**, Steptoe & Johnson, LLP)

In Support of the Continuation of the Antidumping and the Countervailing Duty Orders:

The Bristol Group PLLC
Washington, DC
on behalf of

Titan Tire Corporation ("Titan")

Paul G. Reitz, President and Chief Executive Officer, Titan International, Inc.

Paul Hawkins, Senior Vice President, Aftermarket Sales & Marketing
Titan International, Inc.

Tom Beck, Vice President, OEM Sales / NA Wheel Commercial Director,
Titan International, Inc.

Greg Schoessler, Senior Controller, Titan International, Inc.

Andrew Hogan, Director of Pricing & Strategy, Product & Business Development,
Titan International, Inc.

Lester Brewer, Vice President, NA Operations, Titan Tire Corporation

David Mickelson, President, Graham Tire

Michael R. Millsap, Director, District 7 United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC

Ted Tatos, Economic Consultant, Econ One Research, Inc.

In Support of the Continuation of the
Antidumping and the Countervailing Duty Orders (continued):

Michael G. Troyanovich, Secretary and General Counsel of Titan International

Adam H. Gordon)
Jennifer M. Smith) – OF COUNSEL
Lauren Fraid)

In Opposition to the Continuation of the
Antidumping and the Countervailing Duty Orders:

Steptoe & Johnson, LLP
Washington, DC
on behalf of

ATC Tires Private Limited ("ATC")
Yokohama Off-Highway Tires America, Inc. ("YOHTA")

Domenic Mazzola, Vice President of Original Equipment Sales, YOHTA

Trent Wallin, Vice President of Sales, YOHTA

Mary O'Toole, Vice President, Legal and Compliance, YOHTA

Jim Dougan, Partner, ION Economics, LLC

Cara Groden, Senior Economic Consultant, ION Economics, LLC

Eric C. Emerson)
Zhu (Judy) Wang) – OF COUNSEL
Katherine Shin)

ArentFox Schiff LLP
Washington, DC
on behalf of

Balkrishna Industries Limited ("BKT")

Ravi Joshi, Senior Deputy General Manager, BKT

Doug Kershaw, President, BKT USA, Inc. & BKT Tires, Inc.

John M. Gurley)
Jessica R. DiPietro) – OF COUNSEL
Mario A. Torrico)

In Opposition to the Continuation of the
Antidumping and the Countervailing Duty Orders (continued):

Craven Trade Law LLC
Chicago, IL
on behalf of

Automotive Tyres Manufacturers' Association ("ATMA")
Asian Tire Factory Limited ("ATFL")
(collectively "ATA")

Aastha Gupta (remote witness), Joint Partner, TPM Consultants

David J. Craven) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

In Support of Continuation (**Jennifer M. Smith**, The Bristol Group PLLC)
In Opposition to Continuation (**John M. Gurley**, ArentFox Schiff LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
OTR tires: Summary data concerning the U.S. market, by item and period
Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted

Item	Reported data							
	Calendar year						Jan-Sep	
	2016	2017	2018	2019	2020	2021	2021	2022
U.S. consumption quantity:								
Amount	4,127	4,646	5,041	5,106	4,996	5,829	4,400	4,611
Producers' share (fn1)	52.2	50.6	49.0	46.5	45.1	43.0	44.4	38.1
Importers' share (fn1):								
India	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***
All import sources	47.8	49.4	51.0	53.5	54.9	57.0	55.6	61.9
U.S. consumption value:								
Amount	1,492,933	1,646,874	1,835,663	1,834,806	1,679,049	2,165,099	1,589,219	1,900,245
Producers' share (fn1)	54.5	56.0	54.5	50.4	51.3	49.9	50.8	47.6
Importers' share (fn1):								
India	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***
All import sources	45.5	44.0	45.5	49.6	48.7	50.1	49.2	52.4
U.S. importers' U.S. shipments of imports from:								
India:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Nonsubject sources:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
All import sources:								
Quantity	1,974	2,294	2,571	2,730	2,740	3,324	2,448	2,852
Value	679,437	725,211	835,294	910,527	818,131	1,084,450	781,676	996,217
Unit value	$344	$316	$325	$334	$299	$326	$319	$349
Ending inventory quantity	423	429	495	449	403	473	377	524
U.S. producers':								
Average capacity quantity	3,300	3,913	3,885	3,546	3,868	4,161	3,195	2,871
Production quantity	2,421	2,671	2,706	2,455	2,332	2,615	1,974	2,008
Capacity utilization (fn1)	73.4	68.2	69.7	69.2	60.3	62.8	61.8	69.9
U.S. shipments:								
Quantity	2,153	2,352	2,470	2,376	2,256	2,505	1,952	1,759
Value	813,496	921,663	1,000,369	924,279	860,918	1,080,649	807,543	904,028
Unit value	$378	$392	$405	$389	$382	$431	$414	$514
Export shipments:								
Quantity	279	288	257	187	177	213	171	176
Value	116,859	127,624	111,960	94,884	73,219	98,673	75,644	87,170
Unit value	$418	$443	$436	$506	$413	$462	$442	$494
Ending inventory quantity	505	535	514	406	305	203	156	275
Inventories/total shipments (fn1)	20.8	20.3	18.9	15.8	12.5	7.5	5.5	10.7
Production workers	6,022	5,957	6,040	5,371	5,584	6,060	6,144	5,839
Hours worked (1,000s)	12,966	13,064	13,043	11,708	11,771	13,117	10,007	9,362
Wages paid ($1,000)	224,925	231,104	235,645	209,975	212,160	245,481	181,578	187,324
Hourly wages (dollars per hour)	$17.35	$17.69	$18.07	$17.93	$18.02	$18.71	$18.15	$20.01
Productivity (tires per 1,000 hours)	186.7	204.4	207.5	209.7	198.1	199.4	197.3	214.5
Unit labor costs	$93	$87	$87	$86	$91	$94	$92	$93

Table continued.

Table C-1 Continued
OTR tires: Summary data concerning the U.S. market, by item and period
Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted

	Period changes						
		Comparison years					Jan-Sep
Item	2016-21	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
U.S. consumption quantity:							
Amount	▲41.2	▲12.6	▲8.5	▲1.3	▼(2.2)	▲16.7	▲4.8
Producers' share (fn1)	▼(9.2)	▼(1.5)	▼(1.6)	▼(2.5)	▼(1.4)	▼(2.2)	▼(6.2)
Importers' share (fn1):							
India	▲***	▼***	▲***	▲***	▼***	▲***	▲***
Nonsubject sources	▲***	▲***	▲***	▲***	▲***	▼***	▼***
All import sources	▲9.2	▲1.5	▲1.6	▲2.5	▲1.4	▲2.2	▲6.2
U.S. consumption value:							
Amount	▲45.0	▲10.3	▲11.5	▼(0.0)	▼(8.5)	▲28.9	▲19.6
Producers' share (fn1)	▼(4.6)	▲1.5	▼(1.5)	▼(4.1)	▲0.9	▼(1.4)	▼(3.2)
Importers' share (fn1):							
India	▲***	▲***	▲***	▲***	▼***	▲***	▲***
Nonsubject sources	▼***	▼***	▼***	▲***	▼***	▼***	▼***
All import sources	▲4.6	▼(1.5)	▲1.5	▲4.1	▼(0.9)	▲1.4	▲3.2
U.S. importers' U.S. shipments of imports from:							
India:							
Quantity	▲***	▲***	▲***	▲***	▼***	▲***	▲***
Value	▲***	▲***	▲***	▲***	▼***	▲***	▲***
Unit value	▲***	▲***	▲***	▲***	▼***	▲***	▲***
Ending inventory quantity	▲***	▼***	▲***	▲***	▼***	▲***	▲***
Nonsubject sources:							
Quantity	▲***	▲***	▲***	▲***	▲***	▲***	▼***
Value	▲***	▲***	▲***	▲***	▼***	▲***	▼***
Unit value	▼***	▼***	▲***	▼***	▼***	▲***	▼***
Ending inventory quantity	▲***	▲***	▲***	▼***	▲***	▲***	▲***
All import sources:							
Quantity	▲68.4	▲16.2	▲12.1	▲6.2	▲0.4	▲21.3	▲16.5
Value	▲59.6	▲6.7	▲15.2	▲9.0	▼(10.1)	▲32.6	▲27.4
Unit value	▼(5.2)	▼(8.2)	▲2.8	▲2.7	▼(10.5)	▲9.3	▲9.4
Ending inventory quantity	▲11.9	▲1.5	▲15.4	▼(9.4)	▼(10.2)	▲17.4	▲39.1
U.S. producers':							
Average capacity quantity	▲26.1	▲18.6	▼(0.7)	▼(8.7)	▲9.1	▲7.6	▼(10.1)
Production quantity	▲8.0	▲10.3	▲1.3	▼(9.3)	▼(5.0)	▲12.2	▲1.7
Capacity utilization (fn1)	▼(10.5)	▼(5.1)	▲1.4	▼(0.4)	▼(8.9)	▲2.6	▲8.2
U.S. shipments:							
Quantity	▲16.3	▲9.2	▲5.0	▼(3.8)	▼(5.1)	▲11.0	▼(9.9)
Value	▲32.8	▲13.3	▲8.5	▼(7.6)	▼(6.9)	▲25.5	▲11.9
Unit value	▲14.2	▲3.7	▲3.3	▼(3.9)	▼(1.9)	▲13.0	▲24.2
Export shipments:							
Quantity	▼(23.6)	▲3.1	▼(10.7)	▼(27.1)	▼(5.4)	▲20.4	▲3.1
Value	▼(15.6)	▲9.2	▼(12.3)	▼(15.3)	▼(22.8)	▲34.8	▲15.2
Unit value	▲10.5	▲6.0	▼(1.7)	▲16.3	▼(18.4)	▲11.9	▲11.8
Ending inventory quantity	▼(59.9)	▲6.0	▼(3.9)	▼(21.0)	▼(24.8)	▼(33.6)	▲76.6
Inventories/total shipments (fn1)	▼(13.3)	▼(0.5)	▼(1.4)	▼(3.0)	▼(3.3)	▼(5.1)	▲5.2
Production workers	▲0.6	▼(1.1)	▲1.4	▼(11.1)	▲4.0	▲8.5	▼(5.0)
Hours worked (1,000s)	▲1.2	▲0.8	▼(0.2)	▼(10.2)	▲0.5	▲11.4	▼(6.4)
Wages paid ($1,000)	▲9.1	▲2.7	▲2.0	▼(10.9)	▲1.0	▲15.7	▲3.2
Hourly wages (dollars per hour)	▲7.9	▲2.0	▲2.1	▼(0.7)	▲0.5	▲3.8	▲10.3
Productivity (tires per 1,000 hours)	▲6.8	▲9.5	▲1.5	▲1.1	▼(5.5)	▲0.6	▲8.7
Unit labor costs	▲1.0	▼(6.9)	▲0.6	▼(1.8)	▲6.4	▲3.2	▲1.4

Table continued.

Table C-1 Continued

OTR tires: Summary data concerning the U.S. market, by item and period

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							
	Calendar year						Jan-Sep	
Item	2016	2017	2018	2019	2020	2021	2021	2022
U.S. producers' Continued:								
Net sales:								
Quantity	2,433	2,640	2,727	2,563	2,433	2,718	2,123	1,935
Value	930,356	1,049,288	1,112,329	1,019,164	934,137	1,179,321	883,188	991,200
Unit value	$382	$397	$408	$398	$384	$434	$416	$512
Cost of goods sold (COGS)	759,370	881,682	913,370	835,458	786,303	964,161	716,051	808,283
Gross profit or (loss) (fn2)	170,986	167,606	198,959	183,706	147,834	215,160	167,137	182,917
SG&A expenses	150,911	146,098	138,651	129,422	102,386	104,545	78,649	83,801
Operating income or (loss) (fn2)	20,075	21,508	60,308	54,284	45,448	110,615	88,488	99,116
Net income or (loss) (fn2)	***	***	***	***	***	***	***	***
Unit COGS	$312	$334	$335	$326	$323	$355	$337	$418
Unit SG&A expenses	$62	$55	$51	$50	$42	$38	$37	$43
Unit operating income or (loss) (fn2)	$8	$8	$22	$21	$19	$41	$42	$51
Unit net income or (loss) (fn2)	***	***	***	***	***	***	***	***
COGS/sales (fn1)	81.6	84.0	82.1	82.0	84.2	81.8	81.1	81.5
Operating income or (loss)/sales (fn1)	2.2	2.0	5.4	5.3	4.9	9.4	10.0	10.0
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***
Capital expenditures	11,009	14,004	14,391	16,740	12,572	16,561	7,871	11,930
Research and development expenses	4,947	6,166	6,196	5,850	5,390	6,052	4,547	4,819
Net assets	553,930	579,806	657,523	611,881	624,967	678,970	***	***

Table continued.

Table C-1 Continued
OTR tires: Summary data concerning the U.S. market, by item and period
Quantity=1,000 tires; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per tire; Period changes=percent--exceptions noted

	Period changes						
		Comparison years					Jan-Sep
Item	2016-21	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
U.S. producers' Continued:							
Net sales:							
Quantity	▲11.7	▲8.5	▲3.3	▼(6.0)	▼(5.1)	▲11.7	▼(8.9)
Value	▲26.8	▲12.8	▲6.0	▼(8.4)	▼(8.3)	▲26.2	▲12.2
Unit value	▲13.5	▲3.9	▲2.6	▼(2.5)	▼(3.4)	▲13.0	▲23.1
Cost of goods sold (COGS)	▲27.0	▲16.1	▲3.6	▼(8.5)	▼(5.9)	▲22.6	▲12.9
Gross profit or (loss) (fn2)	▲25.8	▼(2.0)	▲18.7	▼(7.7)	▼(19.5)	▲45.5	▲9.4
SG&A expenses	▼(30.7)	▼(3.2)	▼(5.1)	▼(6.7)	▼(20.9)	▲2.1	▲6.6
Operating income or (loss) (fn2)	▲451.0	▲7.1	▲180.4	▼(10.0)	▼(16.3)	▲143.4	▲12.0
Net income or (loss) (fn2)	▲***	▲***	▲***	▼***	▼***	▲***	▲***
Unit COGS	▲13.6	▲7.0	▲0.3	▼(2.7)	▼(0.8)	▲9.8	▲23.8
Unit SG&A expenses	▼(38.0)	▼(10.8)	▼(8.1)	▼(0.7)	▼(16.7)	▼(8.6)	▲16.9
Unit operating income or (loss) (fn2)	▲393.2	▼(1.3)	▲171.4	▼(4.2)	▼(11.8)	▲117.9	▲22.9
Unit net income or (loss) (fn2)	▲***	▲***	▲***	▼***	▼***	▲***	▲***
COGS/sales (fn1)	▲0.1	▲2.4	▼(1.9)	▼(0.1)	▲2.2	▼(2.4)	▲0.5
Operating income or (loss)/sales (fn1)	▲7.2	▼(0.1)	▲3.4	▼(0.1)	▼(0.5)	▲4.5	▼(0.0)
Net income or (loss)/sales (fn1)	▲***	▲***	▲***	▼***	▼***	▲***	▲***
Capital expenditures	▲50.4	▲27.2	▲2.8	▲16.3	▼(24.9)	▲31.7	▲51.6
Research and development expenses	▲22.3	▲24.6	▲0.5	▼(5.6)	▼(7.9)	▲12.3	▲6.0
Net assets	▲22.6	▲4.7	▲13.4	▼(6.9)	▲2.1	▲8.6	***

Source: Compiled from data submitted in response to Commission questionnaires for U.S. shipments of imports. 508-compliant tables containing these data are contained in parts I, III, and IV of this report.

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.

HISTORIC

SUMMARY DATA

Table C-1
OTR tires: Summary data concerning the U.S. market, 2013-15, January to September 2015, and January to September 2016
(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			January to September		Calendar year			Jan-Sept
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
India	***	***	***	***	***	***	***	***	***
Sri Lanka	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
India	***	***	***	***	***	***	***	***	***
Sri Lanka	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All sources	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from:									
India:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Sri Lanka:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	1,007	1,163	1,298	1,005	990	28.9	15.4	11.6	(1.5)
Value	241,490	268,992	279,796	218,843	203,089	15.9	11.4	4.0	(7.2)
Unit value	$239.72	$231.29	$215.53	$217.76	$205.11	(10.1)	(3.5)	(6.8)	(5.8)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other source:									
Quantity	1,429	1,479	1,413	1,092	1,119	(1.2)	3.4	(4.4)	2.5
Value	826,850	920,582	797,082	615,408	573,153	(3.6)	11.3	(13.4)	(6.9)
Unit value	$578.42	$622.60	$564.13	$563.81	$512.04	(2.5)	7.6	(9.4)	(9.2)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All sources:									
Quantity	2,437	2,642	2,711	2,097	2,109	11.3	8.4	2.6	0.6
Value	1,068,340	1,189,574	1,076,878	834,251	776,242	0.8	11.3	(9.5)	(7.0)
Unit value	$438.40	$450.32	$397.21	$397.93	$367.98	(9.4)	2.7	(11.8)	(7.5)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
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)	***	***	***	***	***	***	***	***	***
Productivity (tires per 1,000 hours)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

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

Table C-2
OTR tires: Summary data concerning the U.S. market excluding one U.S. producer, 2013-15, January to September 2015, and January to September 2016
(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			January to September		Calendar year			Jan-Sept
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1):									
Included producers	***	***	***	***	***	***	***	***	***
Excluded producers	***	***	***	***	***	***	***	***	***
All U.S. producers	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
India	***	***	***	***	***	***	***	***	***
Sri Lanka	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1):									
Included producers	***	***	***	***	***	***	***	***	***
Excluded producers	***	***	***	***	***	***	***	***	***
All U.S. producers	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
India	***	***	***	***	***	***	***	***	***
Sri Lanka	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All sources	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from:									
India:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Sri Lanka:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	1,007	1,163	1,298	1,005	990	28.9	15.4	11.6	(1.5)
Value	241,490	268,992	279,796	218,843	203,089	15.9	11.4	4.0	(7.2)
Unit value	$239.72	$231.29	$215.53	$217.76	$205.11	(10.1)	(3.5)	(6.8)	(5.8)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other source:									
Quantity	1,429	1,479	1,413	1,092	1,119	(1.2)	3.4	(4.4)	2.5
Value	826,850	920,582	797,082	615,408	573,153	(3.6)	11.3	(13.4)	(6.9)
Unit value	$578.42	$622.60	$564.13	$563.81	$512.04	(2.5)	7.6	(9.4)	(9.2)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All sources:									
Quantity	2,437	2,642	2,711	2,097	2,109	11.3	8.4	2.6	0.6
Value	1,068,340	1,189,574	1,076,878	834,251	776,242	0.8	11.3	(9.5)	(7.0)
Unit value	$438.40	$450.32	$397.21	$397.93	$367.98	(9.4)	2.7	(11.8)	(7.5)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
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)	***	***	***	***	***	***	***	***	***
Productivity (tires per 1,000 hours)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

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

APPENDIX D

FIRMS' NARRATIVES ON THE IMPACT OF THE ORDER(S) AND THE LIKELY IMPACT OF REVOCATION

Table D-1
OTR tires: Firms' narratives on the impact of the order(s) and the likely impact of revocation

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Effect of order	U.S. producers	***
Likely impact of revocation	U.S. producers	***
Likely impact of revocation	U.S. producers	***
Likely impact of revocation	U.S. producers	***
Likely impact of revocation	U.S. producers	***
Likely impact of revocation	U.S. producers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Effect of order	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***
Likely impact of revocation	Importers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Likely impact of revocation	Importers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Effect of order(s)	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Likely impact of revocation	Purchasers	***
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***
Effect of order	Foreign producers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Effect of order	Foreign producers	***
Likely impact of revocation	Foreign producers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Likely impact of revocation	Foreign producers	***
Likely impact of revocation	Foreign producers	***
Likely impact of revocation	Foreign producers	***
Likely impact of revocation	Foreign producers	***

Response type	Firm type	Firm name and narrative on impact or likely impact
Likely impact of revocation	Foreign producers	***
Likely impact of revocation	Foreign producers	***
Likely impact of revocation	Foreign producers	***

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

APPENDIX E

NARRATIVE RESPONSES REGARDING CATEGORY AND BRANDING CHANGES

Table E-1
OTR tires: Firms' narrative responses regarding changes in categories or tiers in the U.S. market since January 1, 2016

Firm	Firm type	Narrative on category or tier changes
***	***	***
***	***	***
***	***	***
***	***	***.
***	***	***
***	***	***

Firm	Firm type	Narrative on category or tier changes
***	***	***
***	***	***
***	***	***
***	***	***

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

Note: ***.

Table E-2
OTR tires: Firms' narrative responses regarding changes in the role of branded vs. private label tires in the U.S. market since January 1, 2016

Firm	Firm type	Narrative on branded vs private label changes
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

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

Note: ***.

APPENDIX F

SHIPMENTS BY MARKET SEGMENT

Table F-1
OTR tires: U.S. producers' and U.S. importers' U.S. shipments to agricultural OEM market, by product type and source, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollar per tire; shares in percent

Product type	Measure	U.S. producers	India	Nonsubject sources	All import sources	All sources
Radial	Quantity	***	***	***	***	602
Bias	Quantity	***	***	***	***	752
Low sidewall	Quantity	***	***	***	***	21
All product types	Quantity	941	***	***	433	1,375
Radial	Value	***	***	***	***	472,641
Bias	Value	***	***	***	***	115,763
Low sidewall	Value	***	***	***	***	24,014
All product types	Value	375,064	***	***	237,354	612,418
Radial	Unit value	***	***	***	***	785
Bias	Unit value	***	***	***	***	154
Low sidewall	Unit value	***	***	***	***	1,152
All product types	Unit value	398	***	***	548	446
Radial	Share of quantity	***	***	***	***	43.8
Bias	Share of quantity	***	***	***	***	54.7
Low sidewall	Share of quantity	***	***	***	***	1.5
All product types	Share of quantity	100.0	100.0	100.0	100.0	100.0
Radial	Share of value	***	***	***	***	77.2
Bias	Share of value	***	***	***	***	18.9
Low sidewall	Share of value	***	***	***	***	3.9
All product types	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent.

Table F-2
OTR tires: U.S. producers' and U.S. importers' U.S. shipments to agricultural aftermarket, by product type and source, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollar per tire; shares in percent

Product types	Measure	U.S. producers	India	Nonsubject sources	All import sources	All sources
Radial	Quantity	***	***	***	***	589
Bias	Quantity	***	***	***	***	1,396
Low sidewall	Quantity	***	***	***	***	58
All product types	Quantity	885	***	***	1,158	2,043
Radial	Value	***	***	***	***	425,495
Bias	Value	***	***	***	***	195,721
Low sidewall	Value	***	***	***	***	13,970
All product types	Value	369,531	***	***	265,655	635,186
Radial	Unit value	***	***	***	***	722
Bias	Unit value	***	***	***	***	140
Low sidewall	Unit value	***	***	***	***	243
All product types	Unit value	417	***	***	229	311
Radial	Share of quantity	***	***	***	***	28.8
Bias	Share of quantity	***	***	***	***	68.3
Low sidewall	Share of quantity	***	***	***	***	2.8
All product types	Share of quantity	100.0	100.0	100.0	100.0	100.0
Radial	Share of value	***	***	***	***	67.0
Bias	Share of value	***	***	***	***	30.8
Low sidewall	Share of value	***	***	***	***	2.2
All product types	Share of value	100.0	100.0	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent.

Table F-3
OTR tires: U.S. producers' and U.S. importers' U.S. shipments to construction OEM market, by rim size and source, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollar per tire; shares in percent

Rim size	Measure	U.S. producers	India	Nonsubject sources	All import sources	All sources
Greater than 24" rim	Quantity	***	***	***	***	742
Less than or equal to 24" rim	Quantity	***	***	***	***	61
All rim sizes	Quantity	***	***	***	***	803
Greater than 24" rim	Value	***	***	***	***	177,311
Less than or equal to 24" rim	Value	***	***	***	***	93,830
All rim sizes	Value	***	***	***	***	271,141
Greater than 24" rim	Unit value	***	***	***	***	239
Less than or equal to 24" rim	Unit value	***	***	***	***	1,536
All rim sizes	Unit value	***	***	***	***	338
Greater than 24" rim	Share of quantity	***	***	***	***	92.4
Less than or equal to 24" rim	Share of quantity	***	***	***	***	7.6
All rim sizes	Share of quantity	100.0	100.0	100.0	100.0	100.0
Greater than 24" rim	Share of value	***	***	***	***	65.4
Less than or equal to 24" rim	Share of value	***	***	***	***	34.6
All rim sizes	Share of value	100.0	100.0	100.0	100.0	100.0

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

Table F-4
OTR tires: U.S. producers' and U.S. importers' U.S. shipments to construction aftermarket, by rim size and source, 2021

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollar per tire; shares in percent

Rim size	Measure	U.S. producers	India	Nonsubject sources	All import sources	All sources
Greater than 24" rim	Quantity	***	***	***	***	862
Less than or equal to 24" rim	Quantity	***	***	***	***	167
All rim sizes	Quantity	***	***	***	***	1,029
Greater than 24" rim	Value	***	***	***	***	309,793
Less than or equal to 24" rim	Value	***	***	***	***	245,191
All rim sizes	Value	***	***	***	***	554,984
Greater than 24" rim	Unit value	***	***	***	***	359
Less than or equal to 24" rim	Unit value	***	***	***	***	1,472
All rim sizes	Unit value	***	***	***	***	539
Greater than 24" rim	Share of quantity	***	***	***	***	83.8
Less than or equal to 24" rim	Share of quantity	***	***	***	***	16.2
All rim sizes	Share of quantity	100.0	100.0	100.0	100.0	100.0
Greater than 24" rim	Share of value	***	***	***	***	55.8
Less than or equal to 24" rim	Share of value	***	***	***	***	44.2
All rim sizes	Share of value	100.0	100.0	100.0	100.0	100.0

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

APPENDIX G

DATA ACCOMPANYING FIGURES RELATED TO RAW MATERIALS

Table G-1
Raw material prices: Natural rubber SGX TSR20 futures, and synthetic rubber SBR USA, monthly, January 2016-October 2022

Prices in dollars per metric ton

Period	Natural rubber, SGX TSR20 futures	Synthetic rubber, SBR USA
2016 M1	***	***
2016 M2	***	***
2016 M3	***	***
2016 M4	***	***
2016 M5	***	***
2016 M6	***	***
2016 M7	***	***
2016 M8	***	***
2016 M9	***	***
2016 M10	***	***
2016 M11	***	***
2016 M12	***	***
2017 M1	***	***
2017 M2	***	***
2017 M3	***	***
2017 M4	***	***
2017 M5	***	***
2017 M6	***	***
2017 M7	***	***
2017 M8	***	***
2017 M9	***	***
2017 M10	***	***
2017 M11	***	***
2017 M12	***	***
2018 M1	***	***
2018 M2	***	***
2018 M3	***	***
2018 M4	***	***
2018 M5	***	***
2018 M6	***	***
2018 M7	***	***
2018 M8	***	***
2018 M9	***	***
2018 M10	***	***
2018 M11	***	***
2018 M12	***	***

Table continued.

Table G-1 Continued
Raw material prices: Natural rubber SGX TSR20 futures, and synthetic rubber SBR USA, monthly, January 2016-October 2022

Prices in dollars per metric ton

Period	Natural rubber, SGX TSR20 futures	Synthetic rubber, SBR USA
2019 M1	***	***
2019 M2	***	***
2019 M3	***	***
2019 M4	***	***
2019 M5	***	***
2019 M6	***	***
2019 M7	***	***
2019 M8	***	***
2019 M9	***	***
2019 M10	***	***
2019 M11	***	***
2019 M12	***	***
2020 M1	***	***
2020 M2	***	***
2020 M3	***	***
2020 M4	***	***
2020 M5	***	***
2020 M6	***	***
2020 M7	***	***
2020 M8	***	***
2020 M9	***	***
2020 M10	***	***
2020 M11	***	***
2020 M12	***	***
2021 M1	***	***
2021 M2	***	***
2021 M3	***	***
2021 M4	***	***
2021 M5	***	***
2021 M6	***	***
2021 M7	***	***
2021 M8	***	***
2021 M9	***	***
2021 M10	***	***
2021 M11	***	***
2021 M12	***	***

Table continued.

Table G-1 Continued
Raw material prices: Natural rubber SGX TSR20 futures, and synthetic rubber SBR USA, monthly, January 2016-October 2022

Prices in dollars per metric ton

Period	Natural rubber, SGX TSR20 futures	Synthetic rubber, SBR USA
2022 M1	***	***
2022 M2	***	***
2022 M3	***	***
2022 M4	***	***
2022 M5	***	***
2022 M6	***	***
2022 M7	***	***
2022 M8	***	***
2022 M9	***	***
2022 M10	***	***

Source: ***.

Table G-2
Raw material prices: Producer price indices for other selected raw materials, monthly, January 2016-December 2022

Indexed prices in percent

Period	Carbon black	Other fabricated wire	All other basic organic chemicals
2016 M1	100	100	100
2016 M2	98	100	99
2016 M3	99	100	100
2016 M4	100	100	101
2016 M5	101	100	101
2016 M6	104	99	101
2016 M7	106	99	101
2016 M8	106	99	100
2016 M9	106	99	101
2016 M10	106	99	102
2016 M11	106	99	102
2016 M12	110	99	103
2017 M1	111	99	105
2017 M2	112	99	107
2017 M3	115	99	109
2017 M4	115	99	110
2017 M5	113	100	110
2017 M6	112	100	108
2017 M7	111	100	108
2017 M8	113	100	110
2017 M9	113	100	111
2017 M10	116	100	110
2017 M11	116	100	113
2017 M12	118	100	112
2018 M1	123	101	113
2018 M2	127	101	112
2018 M3	127	100	115
2018 M4	128	101	115
2018 M5	127	102	116
2018 M6	131	103	116
2018 M7	136	105	117
2018 M8	139	107	117
2018 M9	139	107	117
2018 M10	141	107	117
2018 M11	139	107	118
2018 M12	140	108	117

Table continued.

Table G-2 Continued
Raw material prices: Producer price indices for other selected raw materials, monthly, January 2016-December 2022

Indexed prices in percent

Period	Carbon black	Other fabricated wire	All other basic organic chemicals
2019 M1	141	108	115
2019 M2	142	109	112
2019 M3	140	110	112
2019 M4	143	110	113
2019 M5	147	110	110
2019 M6	146	110	110
2019 M7	146	110	110
2019 M8	145	110	109
2019 M9	141	110	109
2019 M10	139	110	109
2019 M11	134	110	109
2019 M12	136	110	107
2020 M1	132	111	109
2020 M2	135	111	109
2020 M3	139	111	108
2020 M4	134	112	104
2020 M5	131	112	103
2020 M6	128	112	104
2020 M7	128	112	104
2020 M8	128	112	105
2020 M9	131	112	104
2020 M10	132	112	104
2020 M11	135	112	105
2020 M12	135	112	107
2021 M1	137	113	108
2021 M2	140	114	109
2021 M3	145	116	111
2021 M4	148	117	116
2021 M5	154	120	120
2021 M6	163	121	120
2021 M7	165	125	121
2021 M8	168	128	123
2021 M9	172	131	125
2021 M10	176	132	126
2021 M11	182	133	129
2021 M12	205	134	128

Table continued.

Table G-2 Continued
Raw material prices: Producer price indices for other selected raw materials, monthly, January 2016-December 2022

Indexed prices in percent

Period	Carbon black	Other fabricated wire	All other basic organic chemicals
2022 M1	201	135	134
2022 M2	229	137	136
2022 M3	233	140	139
2022 M4	246	143	141
2022 M5	246	144	145
2022 M6	253	144	147
2022 M7	258	151	148
2022 M8	255	152	146
2022 M9	255	152	143
2022 M10	239	157	147
2022 M11	234	157	147
2022 M12	230	157	147

Source: Bureau of Labor Statistics, Producer Price Index, retrieved January 19, 2023.

APPENDIX H

ADDITIONAL CUMULATION MATERIALS

Table H-1
OTR tires: Data on industry in India excluding Balkrishna, by item and period

Quantity in 1,000 tires; value in 1,000 dollars

Item	Measure	2016	2017	2018
Practical OTR tires capacity	Quantity	***	***	***
Production	Quantity	***	***	***
End-of-period inventories	Quantity	***	***	***
Internal consumption and transfers	Quantity	***	***	***
Commercial home market shipments	Quantity	***	***	***
Home market shipments	Quantity	***	***	***
Export shipments	Quantity	***	***	***
Total shipments	Quantity	***	***	***
Internal consumption and transfers	Value	***	***	***
Commercial home market shipments	Value	***	***	***
Home market shipments	Value	***	***	***
Export shipments	Value	***	***	***
Total shipments	Value	***	***	***

Table continued.

Table H-1 Continued
OTR tires: Data on industry in India excluding Balkrishna, by item and period

Quantity in 1,000 tires; value in 1,000 dollars

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Practical OTR tires capacity	Quantity	***	***	***	***	***
Production	Quantity	***	***	***	***	***
End-of-period inventories	Quantity	***	***	***	***	***
Internal consumption and transfers	Quantity	***	***	***	***	***
Commercial home market shipments	Quantity	***	***	***	***	***
Home market shipments	Quantity	***	***	***	***	***
Export shipments	Quantity	***	***	***	***	***
Total shipments	Quantity	***	***	***	***	***
Internal consumption and transfers	Value	***	***	***	***	***
Commercial home market shipments	Value	***	***	***	***	***
Home market shipments	Value	***	***	***	***	***
Export shipments	Value	***	***	***	***	***
Total shipments	Value	***	***	***	***	***

Table continued.

Table H-1 Continued
OTR tires: Data on industry in India excluding Balkrishna, by item and period

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollars per 1,000 tires ratios and shares in percent

Item	Measure	2016	2017	2018
Internal consumption and transfers	Unit value	***	***	***
Commercial home market shipments	Unit value	***	***	***
Home market shipments	Unit value	***	***	***
Export shipments	Unit value	***	***	***
Total shipments	Unit value	***	***	***
Capacity utilization ratio	Ratio	***	***	***
Inventory ratio to production	Ratio	***	***	***
Inventory ratio to total shipments	Ratio	***	***	***
Internal consumption and transfers	Share	***	***	***
Commercial home market shipments	Share	***	***	***
Home market shipments	Share	***	***	***
Export shipments	Share	***	***	***
Total shipments	Share	100.0	100.0	100.0

Table continued.

Table H-1 Continued
OTR tires: Data on industry in India excluding Balkrishna, by item and period

Quantity in 1,000 tires; value in 1,000 dollars; unit value in dollars per 1,000 tires; ratios and shares in percent

Item	Measure	2019	2020	2021	Jan-Sep 2021	Jan-Sep 2022
Internal consumption and transfers	Unit value	***	***	***	***	***
Commercial home market shipments	Unit value	***	***	***	***	***
Home market shipments	Unit value	***	***	***	***	***
Export shipments	Unit value	***	***	***	***	***
Total shipments	Unit value	***	***	***	***	***
Capacity utilization ratio	Ratio	***	***	***	***	***
Inventory ratio to production	Ratio	***	***	***	***	***
Inventory ratio to total shipments	Ratio	***	***	***	***	***
Internal consumption and transfers	Share	***	***	***	***	***
Commercial home market shipments	Share	***	***	***	***	***
Home market shipments	Share	***	***	***	***	***
Export shipments	Share	***	***	***	***	***
Total shipments	Share	100.0	100.0	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as “---“. Quantity 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.

Table H-2
OTR tires: Foreign producers' total shipments by market, by product type, rim size, and source, 2021

Quantity in 1,000 tires

Sector and channel	Measure	Balkrishna	All other producers in India	All producers in India
Agriculture: OEM: Radial	Quantity	***	***	***
Agriculture: OEM: Bias	Quantity	***	***	***
Agriculture: OEM: Low sidewall	Quantity	***	***	***
Agriculture: Aftermarket: Radial	Quantity	***	***	***
Total ship: Ag Aftermarket: Bias	Quantity	***	***	***
Agriculture: Aftermarket: Low sidewall	Quantity	***	***	***
Construction: OEM: Less than or equal to 24" rim	Quantity	***	***	***
Construction: OEM: Greater than 24" rim	Quantity	***	***	***
Construction: Aftermarket: Less than or equal to 24" rim	Quantity	***	***	***
Construction: Aftermarket: Greater than 24" rim	Quantity	***	***	***
Total ship: Mining OEM	Quantity	***	***	***
Total ship: Mining Aftermarket	Quantity	***	***	***
All other sectors: OEM	Quantity	***	***	***
All other sectors: Aftermarket	Quantity	***	***	***
All sectors: Agriculture	Quantity	***	***	***
All sectors: Construction	Quantity	***	***	***
All sectors: Mining	Quantity	***	***	***
All sectors: Other sectors	Quantity	***	***	***
All sectors: OEM	Quantity	***	***	3,986
All sectors: Aftermarket	Quantity	***	***	9,559
All sectors: All segments, channels, and types	Quantity	***	***	13,545

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as “---“. Quantity 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.

Table H-3
OTR tires: Foreign producers' total shipments by market, by product type, rim size, and source, 2021

Shares in percent

Sector and channel	Measure	Balkrishna	All other producers in India	All producers in India
Agriculture: OEM: Radial	Share of quantity	***	***	***
Agriculture: OEM: Bias	Share of quantity	***	***	***
Agriculture: OEM: Low sidewall	Share of quantity	***	***	***
Agriculture: Aftermarket: Radial	Share of quantity	***	***	***
Total ship: Ag Aftermarket: Bias	Share of quantity	***	***	***
Agriculture: Aftermarket: Low sidewall	Share of quantity	***	***	***
Construction: OEM: Less than or equal to 24" rim	Share of quantity	***	***	***
Construction: OEM: Greater than 24" rim	Share of quantity	***	***	***
Construction: Aftermarket: Less than or equal to 24" rim	Share of quantity	***	***	***
Construction: Aftermarket: Greater than 24" rim	Share of quantity	***	***	***
Total ship: Mining OEM	Share of quantity	***	***	***
Total ship: Mining Aftermarket	Share of quantity	***	***	***
All other sectors: OEM	Share of quantity	***	***	***
All other sectors: Aftermarket	Share of quantity	***	***	***
All sectors: Agriculture	Share of quantity	***	***	***
All sectors: Construction	Share of quantity	***	***	***
All sectors: Mining	Share of quantity	***	***	***
All sectors: Other sectors	Share of quantity	***	***	***
All sectors: OEM	Share of quantity	***	***	***
All sectors: Aftermarket	Share of quantity	***	***	***
All sectors: All segments, channels, and types	Share of quantity	100.0	100.0	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as "---". Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent.