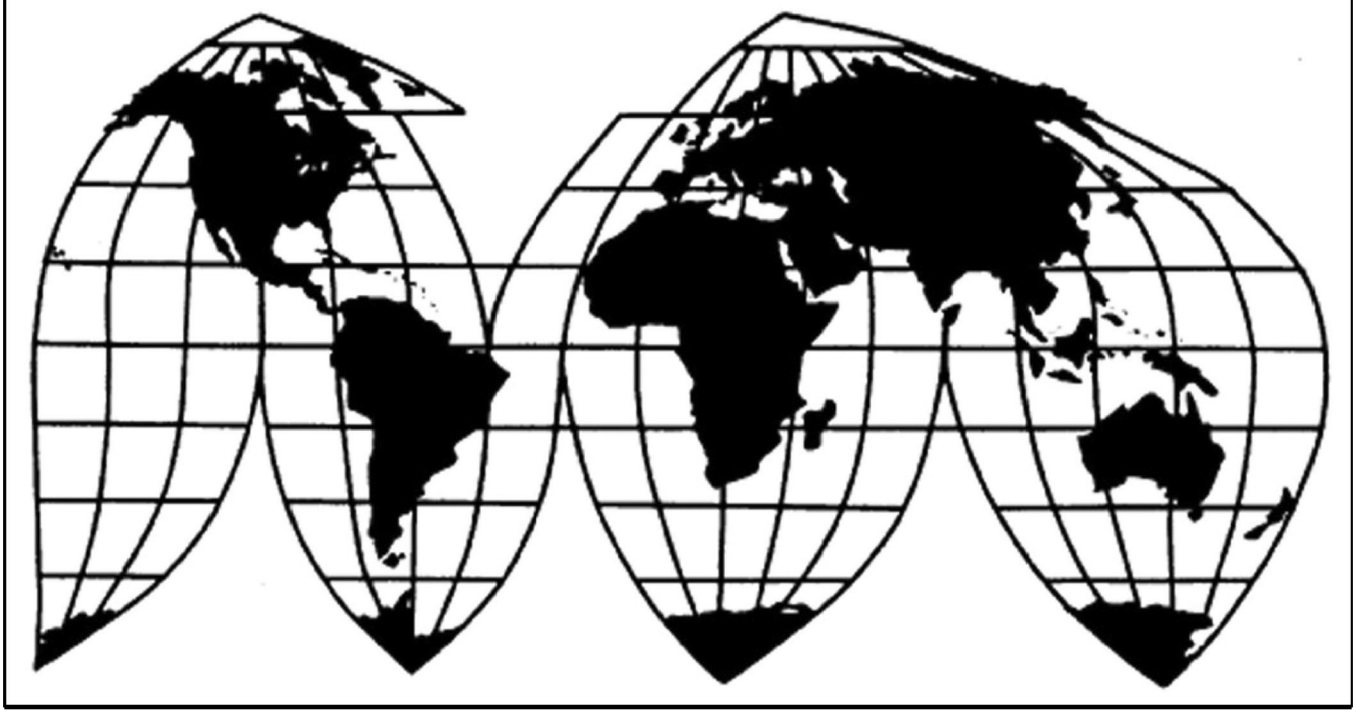
Chassis and Subassemblies from China

Investigation No. 701-TA-657 (Final)

Publication 5187 **May 2021**

U.S. International Trade Commission



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Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 701-TA-657 (Final)

Chassis and Subassemblies from China

DETERMINATION

On the basis of the record[1] developed in the subject investigation, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is materially injured by reason of imports of chassis and subassemblies ("chassis") from China, provided for in subheadings 8716.39.00 and 8716.90.50 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce ("Commerce") to be subsidized by the government of China.[2]

BACKGROUND

The Commission instituted this investigation effective July 30, 2020, following receipt of petitions filed with the Commission and Commerce by the Coalition of American Chassis Manufacturers, consisting of Cheetah Chassis Corporation, Fairless Hills, Pennsylvania, Hercules Enterprises, LLC, Hillsborough, New Jersey, Pitts Enterprises, Inc., Pittsview, Alabama, Pratt Industries, Inc., Bridgman, Michigan, and Stoughton Trailers, LLC, Stoughton, Wisconsin. The Commission scheduled the final phase of the investigation following notification of a preliminary determination by Commerce that imports of chassis from China were being subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)). Notice of the scheduling of the final phase of the Commission's investigation 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* of January 14, 2021 (86 FR 3193). In light of the restrictions on access to

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

[2] 86 FR 15186 (March 22, 2021).

the Commission building due to the COVID–19 pandemic, the Commission conducted its hearing through written testimony and video conference on March 16, 2021. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the final phase of this investigation, we determine that an industry in the United States is materially injured by reason of imports of chassis and subassemblies from China found by the U.S. Department of Commerce ("Commerce") to be subsidized by the government of China.

I. Background

Parties to the Investigation. The Coalition of American Chassis Manufacturers ("Petitioner"), whose members are five U.S. producers of chassis: Cheetah Chassis Corporation ("Cheetah"), Hercules Enterprises, LLC ("Hercules"), Pitts Enterprises, Inc. ("Pitts"), Pratt Industries, Inc. ("Pratt"), and Stoughton Trailers, LLC ("Stoughton"), filed petitions on July 30, 2020, seeking imposition of antidumping and countervailing duties on imports of chassis and subassemblies from China. The investigation schedules became staggered when Commerce did not align its countervailing duty investigation with its antidumping duty investigation.[1] As a result, the Commission must make an earlier determination in the countervailing duty investigation than in the antidumping duty investigation. Pursuant to the statutory provision on staggered investigations, the record for each of these investigations will be the same except that prior to the Commission's determination in the antidumping duty investigation, the

[1] *See Certain Chassis and Subassemblies Thereof from the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination*, 86 Fed. Reg. 56 (Jan. 4, 2021). Commerce will align antidumping and countervailing duty investigations filed on the same day and for the same product where the petitioner requests such an alignment. *See* 19 U.S.C. § 1671d (a)(1); *see also* 19 C.F.R. § 351.210(b)(4)(i). Petitioner did not request an alignment of the investigations on chassis and subassemblies from China.

Commission shall include in the record the final Commerce dumping determination and the parties' final comments concerning that determination.[2]

Representatives for Petitioner appeared at the hearing accompanied by counsel.[3] Petitioner also submitted prehearing[4] and posthearing briefs[5] and final comments.[6]

Respondent interested parties CIMC Vehicles (Group) Co., Ltd. ("CV") and CIMC Intermodal Equipment, LLC ("CIE") (collectively "CIMC"), importers and a U.S. assembler of subject merchandise, also participated in this investigation. Representatives for CIMC appeared at the hearing accompanied by counsel and submitted prehearing[7] and posthearing briefs[8] and final comments.[9]

Several other entities opposed to the imposition of duties participated in this investigation. Representatives for Direct ChassisLink, Inc. ("DCLI"), Flexi-Van Leasing, LLC

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[2] *See* 19 U.S.C. § 1677(7)(G)(iii). Commerce is currently scheduled to issue its final antidumping duty determination no later than May 11, 2021. *See Certain Chassis and Subassemblies Thereof from the People's Republic of China: Preliminary Affirmative Determination of Sales at Less Than Fair Value*, 86 Fed. Reg. 12616 (Mar. 4, 2021).

[3] In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted the hearing in these investigations by written witness testimony and video conference on March 16, 2021, as set forth in procedures provided to the parties.

[4] *See* Letter from Robert E. DeFrancesco, III, Wiley Rein LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Prehearing Brief* (Mar. 10, 2021) ("Petitioner's Prehearing Brief").

[5] *See* Letter from Robert E. DeFrancesco, III, Wiley Rein LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Post-Hearing Brief* (Mar. 23, 2021) ("Petitioner's Posthearing Brief").

[6] *See* Letter from Robert E. DeFrancesco, III, Wiley Rein LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Final Comments* (Apr. 9, 2021) ("Petitioner's Final Comments").

[7] *See* Letter from Jay C. Campbell, White & Case LLP, to the Honorable Lisa R. Barton, *Re: Certain Chassis and Subassemblies from the People's Republic of China Investigation Nos. 701-TA-657 and 731-TA-1537 (Final): Pre-Hearing Brief* (Mar. 10, 2021) ("CIMC's Prehearing Brief").

[8] *See* Letter from Jay C. Campbell, White & Case LLP, to the Honorable Lisa R. Barton, *Re: Certain Chassis and Subassemblies from the People's Republic of China Investigation Nos. 701-TA-657 and 731-TA-1537 (Final): Post-Hearing Brief* (Mar. 23, 2021) ("CIMC's Posthearing Brief").

[9] *See* Letter from Jay C. Campbell, White & Case LLP, to the Honorable Lisa R. Barton, *Re: Certain Chassis and Subassemblies from the People's Republic of China Investigation Nos. 701-TA-657 and 731-TA-1537 (Final): Final Comments* (Apr. 9, 2021) ("CIMC's Final Comments").

("Flexi-Van"), TAL International Container Corp. ("TAL"), and Interpool, Inc., d/b/a TRAC Intermodal ("TRAC"), purchasers and lessors of chassis, and the Institute of International Container Lessors, Ltd. ("IICL"), a trade association of lessors of chassis (collectively "IICL Respondents"), appeared at the hearing accompanied by counsel and submitted prehearing[10] and posthearing nonparty statements.[11] Representatives for J.B. Hunt Transport, Inc. ("J.B. Hunt"), a purchaser and end user of chassis, appeared at the hearing accompanied by counsel and submitted a posthearing nonparty statement[12] and final comments.[13] The American Trucking Associations ("ATA"), a trade association of purchasers and lessors/lessees of chassis, did not appear at the hearing but submitted a nonparty statement.[14]

Data Coverage. U.S. industry data for the January 1, 2018 to December 31, 2020 period of investigation ("POI") are based on questionnaire responses from five firms that accounted for over 95 percent of U.S. production of chassis and chassis subassemblies in 2020.[15] U.S.

[10] *See* Letter from Duane W. Layton, Mayer Brown LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Pre-Hearing Brief* (Mar. 10, 2021) ("IICL's Prehearing Nonparty Statement").

[11] *See* Letter from Duane W. Layton, Mayer Brown LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Post-Hearing Brief* (Mar. 23, 2021) ("IICL's Posthearing Nonparty Statement").

[12] *See* Letter from Douglas J. Heffner, Faegre Drinker Biddle & Reath LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Post-Hearing Answers to Commissioners' Questions on Behalf of J.B. Hunt Transport, Inc.* (Mar. 23, 2021) ("J.B. Hunt's Posthearing Nonparty Statement").

[13] *See* Letter from Douglas J. Heffner, Faegre Drinker Biddle & Reath LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Final Comments of J.B. Hunt Transport, Inc.* (Apr. 9, 2021) ("J.B. Hunt's Final Comments").

[14] *See* Letter from Bob Costello, American Trucking Associations, to the Honorable Lisa R. Barton, *Re: Certain Chassis and Subassemblies from the People's Republic of China Investigation No. 701-TA-657 and 731-TA-1537 (Final): Comments from the American Trucking Associations* (Mar. 23, 2021).

[15] *See* Confidential Report, Memorandum INV-TT-051 (Apr. 2, 2021), as revised by Memorandum INV-TT-056 (Apr. 12, 2021) ("CR") and Public Report ("PR"), *Chassis and Subassemblies from China,* Inv. No. 701-TA-657 (Final), USITC Pub. 5187 (April 2021) at I-5, III-1. The five firms providing usable U.S. producer questionnaire responses were the five petitioning firms: Cheetah, Hercules, Pitts, Pratt, and

import data are based on the questionnaire responses from three U.S. importers believed to account for nearly all imports of chassis and chassis subassemblies from subject and nonsubject sources.[16] Foreign industry data and related information are based on the questionnaire responses of eight firms, all affiliated with CIMC, which are estimated to account for *** U.S. imports of chassis and subassemblies from China in 2020,[17] and, according to estimates requested of the responding Chinese producers, approximately *** percent of overall production of chassis in China and *** percent of total exports to the United States of chassis produced in China.[18]

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the "domestic like product" and the "industry."[19] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[20] In turn, the Tariff Act defines "domestic like product" as "a product which is

Stoughton. CIE also provided a U.S. producer questionnaire response but, as discussed in Section III.B. below, we find that CIE's operations during the POI did not constitute sufficient production-related activities for CIE to be considered a domestic producer.

[16] CR/PR at I-5, IV-1 & nn.1-2 (explaining why import data is based on questionnaire responses rather than official import statistics and how data from CIMC-affiliated importers were consolidated).

[17] CR/PR at VII-3.

[18] CR/PR at I-5 to I-6, VII-3.

[19] 19 U.S.C. § 1677(4)(A).

[20] 19 U.S.C. § 1677(4)(A).

like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[21]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by Commerce.[22] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is "necessarily the starting point of the Commission's like product analysis."[23] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[24] The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[25] No single factor is dispositive, and the Commission may

[21] 19 U.S.C. § 1677(10).

[22] 19 U.S.C. § 1677(10). The Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value. *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[23] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, 949 F.3d 710, 717 (Fed. Cir. 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

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

[25] *See*, *e.g.*, *Cleo*, 501 F.3d at 1299; *NEC Corp. v. Dep't of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington*, 747 F. Supp. at 749 n.3, *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6)

consider other factors it deems relevant based on the facts of a particular investigation.[26] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[27]

B. Product Description

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

> *The merchandise covered by these investigations consists of chassis and subassemblies thereof, whether finished or unfinished, whether assembled or unassembled, whether coated or uncoated, regardless of the number of axles, for carriage of containers, or other payloads (including self-supporting payloads) for road, marine roll-on/roll-off (RORO) and/or rail transport. Chassis are typically, but are not limited to, rectangular framed trailers with a suspension and axle system, wheels and tires, brakes, a lighting and electrical system, a coupling for towing behind a truck tractor, and a locking system or systems to secure the shipping container or containers to the chassis using twistlocks, slide pins or similar attachment devices to engage the corner fittings on the container or other payload.*
>
> *Subject merchandise includes, but is not limited to, the following subassemblies:*

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price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

In a semifinished products analysis, the Commission examines the following: (1) the significance and extent of the processes used to transform the upstream into the downstream articles; (2) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) whether there are perceived to be separate markets for the upstream and downstream articles; and (5) differences in the costs or value of the vertically differentiated articles. *See*, *e.g.*, *Glycine from India*, *Japan*, *and Korea*, Inv. Nos. 731-TA-1111-1113 (Preliminary), USITC Pub. No. 3921 at 7 (May 2007); *Artists' Canvas from China*, Inv. No. 731-TA-1091 (Final), USITC Pub. No. 3853 at 6 (May 2006); *Live Swine from Canada*, Inv. No. 731-TA-1076 (Final), USITC Pub. 3766 at 8 n.40 (Apr. 2005); *Certain Frozen Fish Fillets from Vietnam*, Inv. No. 731-TA-1012 (Preliminary), USITC Pub. No. 3533 at 7 (Aug. 2002).

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

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

• Chassis frames, or sections of chassis frames, including kingpin assemblies, bolsters consisting of transverse beams with locking or support mechanisms, goosenecks, drop assemblies, extension mechanisms and/or rear impact guards;

• Running gear assemblies or axle assemblies for connection to the chassis frame, whether fixed in nature or capable of sliding fore and aft or lifting up and lowering down, which may or may not include suspension(s) (mechanical or pneumatic), wheel end components, slack adjusters, axles, brake chambers, locking pins, and tires and wheels;

• Landing gear assemblies, for connection to the chassis frame, capable of supporting the chassis when it is not engaged to a tractor; and

• Assemblies that connect to the chassis frame or a section of the chassis frame, such as, but not limited to, pintle hooks or B-trains (which include a fifth wheel), which are capable of connecting a chassis to a converter dolly or another chassis.

Importation of any of these subassemblies, whether assembled or unassembled, constitutes an unfinished chassis for purposes of this investigation.

Subject merchandise also includes chassis, whether finished or unfinished, entered with or for further assembly with components such as, but not limited to: Hub and drum assemblies, brake assemblies (either drum or disc), axles, brake chambers, suspensions and suspension components, wheel end components, landing gear legs, spoke or disc wheels, tires, brake control systems, electrical harnesses and lighting systems.

Processing of finished and unfinished chassis and components such as trimming, cutting, grinding, notching, punching, drilling, painting, coating, staining, finishing, assembly, or any other processing either in the country of manufacture of the in-scope product or in a third country does not remove the product from the scope. Inclusion of other components not identified as comprising the finished or unfinished chassis does not remove the product from the scope.

Individual components entered and sold by themselves are not subject to the investigation, but components entered with or for further assembly with finished or unfinished chassis are subject merchandise. A finished chassis is ultimately comprised of several different types of subassemblies. Within each subassembly there are numerous components that comprise a given subassembly.

This scope excludes dry van trailers, refrigerated van trailers and flatbed trailers. Dry van trailers are trailers with a wholly enclosed cargo space comprised of fixed sides, nose, floor and roof, with articulated panels (doors) across the rear and occasionally at selected places on the sides, with the cargo space being

permanently incorporated in the trailer itself. Refrigerated van trailers are trailers with a wholly enclosed cargo space comprised of fixed sides, nose, floor and roof, with articulated panels (doors) across the rear and occasionally at selected places on the sides, with the cargo space being permanently incorporated in the trailer and being insulated, possessing specific thermal properties intended for use with self-contained refrigeration systems. Flatbed (or platform) trailers consist of load-carrying main frames and a solid, flat or stepped loading deck or floor permanently incorporated with and supported by frame rails and cross members.

The finished and unfinished chassis subject to this investigation are typically classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheadings: 8716.39.0090 and 8716.90.5060. Imports of finished and unfinished chassis may also enter under HTSUS subheading 8716.90.5010. While the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.[28]

Chassis are skeletal rectangular-framed trailers used to transport shipping containers.[29] The rectangular frame is made up of steel with a suspension and axle system, wheels and tires, brakes, a lighting and electrical system, a coupling for towing behind a truck tractor, and a locking system or systems to secure the shipping container or containers attached to the chassis.[30] Chassis are designed to carry containers of various sizes, usually ranging from 20 feet to 53 feet in the United States.[31] The majority of chassis in the United States are 40-foot ("marine") chassis (approximately 65 percent of the market); 53-foot ("domestic") chassis account for the next largest share in the United States (approximately 15 to 20 percent of the

[28] *See Certain Chassis and Subassemblies Thereof from the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 86 Fed. Reg. 15186, 15187-88 (Mar. 22, 2021) ("Commerce Final CVD Determination").

[29] CR/PR at I-10.

[30] CR/PR at I-10.

[31] CR/PR at I-10.

market).[32] Chassis subassemblies (chassis frames, running gear assemblies, landing gear assemblies, and assemblies that connect to the chassis frame) are also included in the scope.[33]

C. Arguments of the Parties

Petitioner's *Arguments*. Petitioner requests that the Commission define a single domestic like product, coextensive with the scope definition.[34] It claims that, under a semifinished product analysis, subassemblies and components are part of the same domestic like product as fully assembled chassis.[35]

Respondents' *Arguments*. CIMC requests that the Commission find that complete chassis constitute a separate domestic like product from subassemblies and components.[36] Under a semifinished product analysis, CIMC argues that: (1) subassemblies and components are not dedicated exclusively to the production of complete chassis, but are widely used as component parts for the manufacture of non-chassis trailer products; (2) subassemblies and components are sold in streams of commerce that complete chassis are not; (3) subassemblies and components have different inherent physical characteristics and functions, as it is impossible for any single subassembly or component to have the same physical characteristics and functions of complete chassis, which are composed of multiple subassemblies; (4) complete chassis are significantly costlier than any type of subassembly or component; and (5) transforming subassemblies into a complete chassis is a significant process.[37]

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[32] CR/PR at I-10, II-1.

[33] CR/PR at I-10.

[34] Petitioner's Prehearing Brief at 5; Petitioner's Posthearing Brief at 2, Exhibit 1 at 93-102.

[35] Petitioner's Prehearing Brief at 5-6, 8-19.

[36] *See* CIMC's Prehearing Brief at 10 at Attachment A at 3, 11; CIMC's Posthearing Brief at Exhibit 1 at 58-60.

[37] *See* CIMC's Prehearing Brief at Attachment A at 11-16.

D. Domestic Like Product Analysis

In our preliminary determinations, we applied a semifinished product analysis and defined a single domestic like product consisting of all chassis and subassemblies thereof.[38] We found that the physical characteristics of the four major subassemblies do not appear to change significantly when assembled together to form a completed chassis and that subassemblies have no functions other than being attached to a chassis or other type of trailer.[39] Furthermore, we found that there are very few commercial sales of subassemblies, and that most of the cost of goods sold ("COGS") of fully assembled chassis reflects the cost of the running gear subassembly and steel components.[40] In light of these considerations, and in the absence of any contrary argument in the preliminary phase, we found that subassemblies are not a distinct domestic like product from a completed chassis.[41]

With additional information obtained in the final phase of this investigation, we again analyze whether we should define subassemblies and components as a separate domestic like product from fully assembled chassis. Based on our analysis of the semifinished domestic like product factors, we define a single domestic like product consisting of all chassis and subassemblies thereof, coextensive with the scope of investigation.

Extent of Processes Used to Transform Upstream Product into Downstream Product. The four major subassemblies for a chassis are the frame, the running gear subassembly, the

[38] *See Chassis and Subassemblies from China*, Inv. Nos. 701-TA-657 and 731-TA-1537 (Preliminary), USITC Pub. No. 5120 (Sept. 2020) at 9-11 ("Preliminary Determinations").

[39] Preliminary Determinations, USITC Pub. No. 5120 at 11.

[40] Preliminary Determinations, USITC Pub. No. 5120 at 11.

[41] Preliminary Determinations, USITC Pub. No. 5120 at 11.

landing gear subassembly, and lighting and electrical systems.[42] The running gear subassembly and air brake and lighting and electrical systems are made up of components that are produced by third parties, assembled into subassemblies, and installed on the chassis to produce a finished product.[43] The running gear subassembly is made up of tires, hub and drum assemblies, axles and suspensions, brake chambers, and other components.[44] The frame consists of welded steel parts in three basic segments: front, or forward beam and front crossmember assembly; middle assembly; and rear, or rear crossmember, including the rear impact guard assembly.[45]

To begin the manufacturing process, steel I-beams, box beams, channels, and angles are cut and welded together in the shape of the frame, and the gooseneck is next welded onto the frame.[46] After the steel parts are welded together and coated, the air brake system and electrical components are added.[47] Final assembly of the chassis is a seven-stage process, involving attaching the landing and running gear subassemblies and final inspection.[48] In their

[42] CR/PR at I-14, Fig. I-5. The scope definition expressly references, but is not limited to, four types of subassemblies: (1) chassis frames, or sections of chassis frames, (2) running gear assemblies or axle assemblies for connection to the chassis frame, (3) landing gear assemblies for connection to the chassis frame, and (4) assemblies that connect to the chassis frame or a section of the chassis frame, which are capable of connecting a chassis to a converter dolly or another chassis. *See* Commerce Final CVD Determination, 86 Fed. Reg. at 15187.

[43] CR/PR at I-14.

[44] CR/PR at I-14.

[45] CR/PR at I-15.

[46] CR/PR at I-15, Figs. I-6 to I-8.

[47] CR/PR at I-16.

[48] CR/PR at I-16 to I-21, Figs. I-9 to I-13. CIMC describes CIE's process to transform subassemblies and components into complete chassis as involving at least *** and five production stations for (1) preparing axle assemblies, (2) installing running gear and landing legs onto the frame, (3) installing electrical harnesses and glad-hand airlines and aligning the axels, and (4) and (5) installing the lights, VIN plate, decals, and mud flaps, painting the bolster ends, and final-touch up and inspection. CIMC's Prehearing Brief at Attachment A at 15-16, Exhibit 38.

final phase questionnaire responses, all five petitioning U.S. producers and two of three importers indicated that they do not perceive the process to transform subassemblies into fully assembled chassis to be intensive.[49]

Dedication for Use. As noted above, the scope of this investigation covers chassis and subassemblies thereof, as well as components that are "entered with or for further assembly with finished or unfinished chassis." After the Commission's preliminary determinations and partly in response to CIMC's comments, Commerce amended the scope definition to clarify that individual components, such as landing gear legs, that enter separately are not covered by the scope.[50] In its final scope determination, Commerce explained that, "{f}rom this description, it is clear what constitutes a component versus a subassembly. For example, hub and drum assemblies, brake assemblies, axles, brake chambers, and other products that do not enter with, or for further assembly with, a finished or unfinished chassis would be considered individual components and, therefore, would not be covered by the scope of these investigations."[51] Thus, only subassemblies and components to be used in chassis, as well as finished chassis themselves, are within the scope.

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[49] CR/PR at Table I-3. *** was the only market participant to report that it perceives the process to transform subassemblies into fully assembled chassis to be intensive. *Id.*

[50] *See* Memorandum from Mary Kolberg, International Trade Analyst, to James Maeder, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, *Certain Chassis and Subassemblies Thereof from the People's Republic of China: Scope Comments Preliminary Decision Memorandum* (Feb. 9, 2021), EDIS Doc. #738594, at 11.

The language added to the scope is: "Individual components entered and sold by themselves are not subject to the investigation, but components entered with or for further assembly with finished or unfinished chassis are subject merchandise. A finished chassis is ultimately comprised of several different types of subassemblies. Within each subassembly there are numerous components that comprise a given subassembly." Commerce Final CVD Determination, 86 Fed. Reg. at 15187-88.

[51] Memorandum from Alex Villanueva, Senior Director, to James Maeder, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, *Antidumping Duty and Countervailing Duty Investigations of Certain Chassis and Subassemblies Thereof from the People's Republic of China:*

The domestically produced upstream subassemblies and components that correspond to the scope are thus dedicated for use in finished chassis.[52] Domestic producers reported minimal U.S. shipments of subassemblies during the POI, and explained that these were generally sold as repair parts for existing chassis.[53] *** was the only market participant to report that there are uses for chassis subassemblies other than for the production of finished chassis.[54]

Differences in Physical Characteristics and Functions of the Upstream and Downstream Articles. All but one market participant reported that there are no differences in physical characteristics and functions for subassemblies and fully assembled chassis. *** was the sole exception.[55]

Separate Markets. As noted above, the record indicates that the five petitioning U.S. producers had *** commercial U.S. shipments of domestically produced subassemblies and

Scope Comments Decision Memorandum for the Final Determinations (Mar. 15, 2021), EDIS Doc. #738594, at 5.

[52] Although many of the individual components used in chassis (*e.g.*, landing gear legs, air brakes, axles, suspension) could be used in other types of trailers, as explained above, these components are only in the scope if they are with or for further assembly with a finished or unfinished chassis, and thus domestically produced components corresponding to the scope would also not include those used in other types of trailers. CR/PR at I-10.

[53] *See* CR/PR at Tables E-1 and F-6; Conf. Tr. at 92-93 (Whalin), (Gill), (Katz), (Musick).

[54] CR/PR at Table I-3.

[55] CR/PR at Table I-3.

that the *** of their commercial sales were fully assembled chassis.[56] [57] *** was the only market participant to report that there is a market for chassis subassemblies distinct from the market for fully assembled chassis.[58]

Differences in Value. The average unit values ("AUVs") of the five petitioning U.S. producers' U.S. shipments of complete chassis ranged from $*** to $*** on an annual basis from 2018 to 2020, while those reported for individual subassemblies were much lower, ranging from $*** for landing gear subassemblies to $*** for running gear subassemblies.[59] The record, however, does not contain data concerning the AUVs of each U.S.-produced subassembly used in a typical finished chassis, notably U.S.-produced frame subassemblies.[60] In terms of raw material costs for fully assembled chassis, running gear accounted for the largest share of the five petitioning domestic producers' raw material costs (ranging from *** percent to *** percent), followed by steel for fabrication (ranging from *** percent to *** percent),

[56] The five petitioning U.S. producers' U.S. shipments of complete chassis ranged from *** to *** chassis on an annual basis from 2018 to 2020, while their shipments of all subassemblies combined ranged from *** to *** subassemblies on an annual basis. CR/PR at Tables E-1 and F-5. Domestic industry witnesses testified in the preliminary phase of these investigations that, while domestic producers have aftermarket sales of chassis parts and components, these sales are not "for someone else to incorporate {them} into their finished product," but instead are "primarily more related towards damage and repair." Conf. Tr. at 92-93 (Whalin), (Gill), (Katz), (Musick).

[57] The Commission issued U.S. producer questionnaires to ten companies that CIMC identified as potential U.S. producers of subassemblies and components corresponding to the scope. CR/PR at III-1 n.2. Three such companies submitted certified responses stating that they do not produce subassemblies or components within Commerce's scope definition and no responses were received from the other firms. *Id.*

[58] CR/PR at Table I-3. We note that CIMC's U.S. shipments of subassemblies throughout the POI were imported subassemblies, *i.e.*, not domestically produced subassemblies. *See* CIMC's U.S. Importer Questionnaire Response at II-5d. Furthermore, based on the fact that CIE reported greater than *** times more domestic purchases than any other purchaser, CIE appears to be the only purchaser who reported purchasing domestically produced subassemblies during the POI. *See* CR/PR at Table V-13.

[59] CR/PR at Tables E-1 and F-5.

[60] CIMC states that a whole frame subassembly ranges in value from *** inclusive of materials and labors. CIMC's Prehearing Brief at Attachment A at 11.

fabricated steel components (ranging from *** percent to *** percent), landing gear (ranging from *** percent to *** percent), and electrical components (ranging from *** percent to *** percent).[61] Other material inputs ranged from *** percent to *** percent.[62] Raw material costs for the production of full chassis, which primarily represent the cost of running gear and fabricated steel, accounted for the majority of the five petitioning domestic producers' COGS, ranging from *** to *** percent from 2018 to 2020.[63] *** was the only market participant to report that there is a significant difference in the cost or value between the group of subassemblies that comprise a full chassis and fully assembled chassis.[64]

Conclusion. CIMC's like product arguments are based largely on the premise that the scope is not limited to components and subassemblies for use in chassis, but also includes several types of individual components that could be incorporated either into chassis or out-of-scope merchandise. CIMC's premise cannot be reconciled with the revised scope language, which includes only those components (and subassemblies comprised of those components) "with or for further assembly with finished or unfinished chassis."[65] This renders several of CIMC's arguments concerning distinct uses and separate markets moot.

Although CIMC is correct in asserting that no individual subassembly or component has the same physical characteristics and functions as a complete chassis or other types of subassemblies or components, the record indicates that the physical characteristics and functions of the four major subassemblies (and the components of which they are comprised)

[61] *Derived from* CR/PR at VI-11, CIE's U.S. Producer Questionnaire Response at III-9c.
[62] *Derived from* CR/PR at VI-11, CIE's U.S. Producer Questionnaire Response at III-9c.
[63] CR/PR at Table G-1.
[64] CR/PR at Table I-3.
[65] Commerce Final CVD Determination, 86 Fed. Reg. at 15187-88.

do not appear to change significantly when welded and assembled together to form a completed chassis. The record also indicates that there is no distinct market for domestically produced subassemblies and components, in light of the *** commercial sales by domestic producers of such items for repair or replacement of parts.[66] Moreover, the record shows that most of the COGS of fully assembled chassis reflects the combined cost of subassemblies and components. Finally, the process to transform components into subassemblies appears to be more significant than the process to assemble subassemblies (and the components of which they are comprised) into full chassis.[67] In light of these considerations, we find that subassemblies and components are not a distinct domestic like product from completed chassis.

Therefore, we define a single domestic like product coextensive with the scope of investigation, consisting of all domestically produced chassis and subassemblies thereof.

[66] *See* Table E-1. Further, CIMC, in its briefs, has not supplemented the record with evidence indicating that aftermarket sales for domestically produced subassemblies and components are otherwise a significant feature of the market. *See* CIMC's Prehearing Brief at Attachment A at 12-13. Moreover, as previously discussed, only subassemblies and components to be used in chassis are within the scope. Thus, CIMC's arguments with respect to there being a separate market for domestically produced subassemblies and components that are used to produce non-chassis trailer products are moot. *See id.*

[67] *Compare* CR/PR at I-15 to I-16, Figs. I-6 to I-8 (describing welding of the frame subassembly) *with* I-16 to I-21, Figs. I-9 to I-13 (describing the seven-stage final assembly process, including final inspection); *see also* Petitioner's Prehearing Brief at 8 ("The predominant portion of the production process is related to the production of subassemblies themselves, including fabricating and manufacturing the chassis frame"). We observe that CIMC argued that subassemblies and components should be defined as a separate domestic like product from complete chassis, and not that subassemblies and components should each be separate like products. *See* CIMC's Prehearing Brief at 10 at Attachment A at 3, 11; CIMC's Posthearing Brief, Exhibit 1, at 58-60. Thus, the relevant analysis is of the significance and extent of the processes used to transform the upstream subassemblies (and the components of which they are comprised) into the downstream complete chassis, not the significance and extent of the processes used to transform components into subassemblies.

III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[68] 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.

This investigation raises the issue of whether the subassembly and final assembly operations of CIMC's U.S.-based affiliate, CIE, are sufficient domestic production-related activities to constitute domestic production. In deciding whether a firm qualifies as a domestic producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities, although production-related activity at minimum levels could be insufficient to constitute domestic production.[69]

A. Arguments of the Parties

Petitioner's Arguments. Petitioner argues that the Commission should define the domestic industry as all U.S. manufacturers of chassis defined in the scope, and should not

[68] 19 U.S.C. § 1677(4)(A).

[69] The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *Crystalline Silicon Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 12-13 (Nov. 2012), *aff'd, Changzhou Trina Solar Energy Co., Ltd. v. U.S. Int'l Trade Comm'n*, 879 F.3d 1377 (Fed. Cir. 2018).

include CIE in the domestic industry.[70] It maintains that assemblers of subassemblies into complete chassis, such as CIE, do not perform sufficient production-related activities in the United States to be included in the domestic industry.[71]

Respondents' Arguments. CIMC argues that CIE engages in sufficient production-related activities to be considered a domestic producer.[72] It contends that: (1) CIE made a $5 million capital investment to expand chassis and subassembly production capabilities at its South Gate, California and Emporia, Virginia facilities; (2) CIE hired technical workers, engineers, and warehousing and sourcing experts to oversee and improve its new production capabilities; (3) the value added by CIE consists of everything but the chassis frame imported from China, which it estimates as *** percent of the total value of a chassis; (4) the *** employees in 2020 that CIE reported in its U.S. producer questionnaire exceed the level reported by most petitioning firms for the same year; and (5) CIE sources approximately *** percent of the value of the chassis in the United States.[73]

B. Sufficient Production-Related Activities Analysis

In 2018 and 2019, CIE's domestic production operations consisted primarily of bolt-on assembly of 53-foot chassis from China, called "complete knock down" ("CKD") assembly.[74]

[70] *See* Petitioner's Prehearing Brief at 19.

[71] *See* Petitioner's Prehearing Brief at 19-29.

[72] *See* CIMC's Posthearing Brief at Exhibit 1 at 53. CIMC does not argue that CIE should be included in the domestic industry for purposes of the Commission's present injury analysis. *Id.* Rather, even if the Commission were to find that CIE engages in sufficient production-related activities to be included as a domestic producer, CIMC admits that the Commission could find CIE to be a related party and therefore subject to exclusion under the related parties provision. *Id.*; CIMC's Prehearing Brief at 6.

[73] *See* CIMC's Posthearing Brief at Exhibit 1 at 54-55.

[74] *See* CR/PR at III-6*;* CIMC's Prehearing Brief at 40.

***, CIE assembled complete chassis from subassemblies and components that it both imported and procured domestically.[75]

In our preliminary determinations, we found that CIE's assembly operations during the preliminary phase period of investigation (January 2017 to March 2020) were not sufficient to constitute domestic production.[76] We found that these operations encompassed a modest capital investment, particularly compared with production of completed chassis, and were not technically complex.[77] We also found that these operations neither added substantial value to the product nor employed substantial workers.[78] Moreover, we found that CIE imported many of the components used in its assembly operations from its affiliates in China.[79] Nevertheless, we noted that, in the final phase of these investigations, we intended to issue CIE a U.S. producers' questionnaire and would further consider CIE's status as a domestic producer with respect to any evolution in its subassembly and final assembly operations.[80]

Because there is no new information or argument in the record of the final phase of this investigation concerning CIE's CKD assembly operations, we adopt our analysis in the preliminary determinations that these operations are not sufficient to constitute domestic production. We consider below the information in the final phase record pertaining to CIE's

[75] *See* CR/PR at III-6; CIMC's Prehearing Brief at 40-41; CIMC's Posthearing Brief at Exhibit 1 at 52-53 (CIE "began manufacturing complete chassis in the United States using frames imported from China and subassemblies and components manufactured in the United States and third countries").

[76] *See* Preliminary Determinations, USITC Pub. No. 5120 at 14. Based on its finding that CIE was not a domestic producer, the Commission found that there were no related party issues in the preliminary phase. *Id.* at 14 n.58. Hence, the Commission defined the domestic industry to encompass all domestic producers of completed chassis (or those subassemblies listed in the scope), but not CIE. *Id.* at 14.

[77] Preliminary Determinations, USITC Pub. No. 5120 at 14.

[78] Preliminary Determinations, USITC Pub. No. 5120 at 14.

[79] Preliminary Determinations, USITC Pub. No. 5120 at 14.

[80] Preliminary Determinations, USITC Pub. No. 5120 at 14 n.57.

operations assembling completed chassis from subassemblies. We find that these operations during the POI did not constitute sufficient production-related activities for CIE to be considered a domestic producer.

Source and Extent of Capital Investment. From a greenfield investment standpoint, the five petitioning U.S. producers reported capital investment costs needed to produce complete chassis in the United States ranging from $*** to $***.[81] By contrast, CIE reported that, in 2020, it invested $*** in its South Gate, CA and Emporia, VA facilities ***.[82]

Technical Expertise Involved. Asked to evaluate the complexity of assembly of in-scope subassemblies not manufactured by their firm into complete chassis, *** petitioning U.S. producers rated it as one out of five ("minimally" complex, intense, and important), while CIE rated it as ***.[83] The five petitioning U.S. producers reported annual research and development ("R&D") expenses ranging from *** from 2018 to 2020,[84] while CIE reported ***.[85] CIE, however, stated that, ***.[86]

CIE has *** at its South Gate, California facility and *** at its Emporia, Virginia facility.[87] CIMC depicts CIE's process to transform subassemblies and components into complete chassis as involving at least *** and five production stations for (1) preparing axle assemblies, (2) installing running gear and landing legs onto the frame, (3) installing electrical harnesses and

[81] *See* Cheetah, Hercules, Pitts, Pratt, and Stoughton's U.S. Producer Questionnaire Responses at II-6.

[82] CR/PR at Table III-6.

[83] CR/PR at Table III-3. *** asserts that ***. *Id.*

[84] *See* Cheetah, Hercules, Pitts, Pratt, and Stoughton's U.S. Producer Questionnaire Responses at III-13a.

[85] CR/PR at Table III-4.

[86] CR/PR at Table III-4 n.2; *see also* CR/PR at Table III-5 (CIE reported ***).

[87] CIMC's Prehearing Brief at 45.

glad-hand airlines and aligning the axels, and (4) and (5) installing the lights, VIN plate, decals, and mud flaps, painting the bolster ends and final-touch up and inspection.[88]

Value Added. On an annual basis, value added (direct labor and other factory costs as a percentage of total COGS) for the five petitioning firms' operations ranged between *** percent and *** percent from 2018 to 2020.[89] Value added for CIE's subassembly assembly operations was *** percent of total COGS in 2020, its first full year of assembly operations.[90]

Employment Levels. On an annual basis, the five petitioning U.S. producers individually reported production and related workers ("PRWs") ranging from *** to *** from 2018 to 2020,[91] while CIE reported *** PRWs in 2020 for its subassembly assembly operations.[92]

Quantity and Parts Sourced in the United States. On an annual basis, the five petitioning U.S. producers sourced raw materials from domestic sources for their operations at values ranging from $*** to $*** from 2018 to 2020, while CIE sourced raw materials from domestic sources for its subassembly assembly operations estimated to be valued at $*** in 2020.[93] CIMC reported that, ***.[94]

Other Costs and Activities in the United States. In addition to its subassembly assembly operations, during the POI, CIE (1) made sales of chassis from China; (2) performed servicing

[88] CIMC's Prehearing Brief at Attachment A at 15-16, Exhibit 38.

[89] *Derived from* Cheetah, Hercules, Pitts, Pratt, and Stoughton's U.S. Producer Questionnaire Responses at III-9a.

[90] CR/PR at Table III-4.

[91] *See* Cheetah, Hercules, Pitts, Pratt, and Stoughton's U.S. Producer Questionnaire Responses at II-13.

[92] CR/PR at Table III-4.

[93] CR/PR at Table III-4. Raw materials for CIE were adjusted to remove the estimated value of imported subassemblies. *Id.* n.5.

[94] CR/PR at Table III-5.

(*i.e.,* unloading and positioning) for marine chassis arriving at U.S. ports; (3) performed warranty repairs; and (4) performed CKD assembly for 53-foot domestic chassis.[95]

Conclusion. We find that CIE's operations assembling subassemblies into complete chassis were insufficient to constitute domestic production of chassis. We acknowledge that these activities increased during the latter part of the POI: in 2019, CIE assembled *** complete chassis from subassemblies and had *** commercial sale, while in full-year 2020 it assembled *** complete chassis and had *** commercial sales of chassis.[96] CIE's reported employment levels[97] and quantity and parts sourced in the United States[98] also rose in 2020. Nevertheless, the record shows that CIE's subassembly assembly operations encompassed a modest capital investment when compared with the five petitioning firms' capital investments to produce complete chassis in the United States. The record also indicates that CIE's subassembly assembly operations do not add substantial value to the finished product. Moreover, CIMC reported in its importers' questionnaire response that, in 2020, CIE imported running gear subassemblies from its affiliates in China for internal consumption.[99] CIMC also reported that CIE still imports frame subassemblies from its affiliates in China, which it estimates accounts for approximately *** percent) of the total value of the chassis.[100] In light

[95] CIMC's Prehearing Brief at 40.

[96] CR/PR at Tables III-7 and VI-3.

[97] In the preliminary phase, CIE did not report employment levels for its assembly operations, but explained ***. Preliminary Determinations, Confidential Views, EDIS Doc. #720214, at 18.

[98] In its U.S. purchaser questionnaire response, CIE reported decreasing imports of chassis and subassemblies from China each year from 2018 to 2020. *See* *** U.S. Purchaser Questionnaire Response at II-1. Also, since the beginning of the POI, *** reported *** purchases of subassemblies and components from the United States and *** purchases from China, claiming that ***. *See* *** U.S. Purchaser Questionnaire Response at II-2.

[99] Worksheet accompanying CIMC's U.S. Importer Questionnaire Response (Mar. 17, 2021), EDIS Doc. #737387.

[100] *See* *** U.S. Purchaser Questionnaire Response at II-2; CIMC's Prehearing Brief at 41.

of these considerations, we find that CIE's subassembly assembly operations during the POI are insufficient to constitute domestic production.

Based on our finding that CIE is not a domestic producer, there are no related party issues in these investigations.[101] We consequently define the domestic industry to encompass all domestic producers of chassis and subassemblies thereof, but not to include CIE's assembly operations.

IV. Material Injury by Reason of Subject Imports[102]

Based on the record in the final phase of this investigation, we find that an industry in the United States is materially injured by reason of imports of chassis and subassemblies from China found by Commerce to be subsidized by the government of China.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[103] In making this determination, the Commission must consider the volume of subject imports, their effect on

[101] None of the petitioning U.S. producers are related to exporters or importers of subject merchandise. *See* CR/PR at Table III-2. None of the petitioning U.S. producers reported imports of chassis from any subject source during the POI. *See* CR/PR at Table III-13.

[102] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall generally be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The exceptions to this general rule are not applicable here.

Based on questionnaire data, subject imports from China subject to the countervailing duty investigation accounted for *** percent of total U.S. imports of chassis and subassembly units in the 12-month period (July 2019 to June 2020) preceding the filing of the petitions. CR/PR at Table IV-3. Thus, we find that subject imports from China are not negligible.

[103] 19 U.S.C. §§ 1671d(b), 1673d(b).

prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[104] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[105] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[106] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[107]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[108] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[109] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports

[104] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[105] 19 U.S.C. § 1677(7)(A).

[106] 19 U.S.C. § 1677(7)(C)(iii).

[107] 19 U.S.C. § 1677(7)(C)(iii).

[108] 19 U.S.C. §§ 1671d(b), 1673d(b).

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

are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[110]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[111] In performing its examination, however, the Commission need not isolate

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

[111] Uruguay Round Agreements Act Statement of Administrative Action (SAA), H.R. Rep. 103-316, vol. I. at 851-52 (1994) ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

the injury caused by other factors from injury caused by unfairly traded imports.[112] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[113] It is clear that the existence of injury caused by other factors does not compel a negative determination.[114]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports."[115] The Commission ensures that it has "evidence in the record" to "show that the

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

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

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

[115] *Mittal Steel*, 542 F.3d at 876, 878; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology."), *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its

harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other sources to the subject imports."[116] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[117]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[118] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[119]

B. Conditions of Competition and the Business Cycle

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

1. Demand Considerations

U.S. demand for chassis is related to shipping trends, including freight movement for products imported into the United States and exported from the United States, and freight movement within the United States.[120] U.S. merchandise trade (defined as U.S. imports plus

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decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

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

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

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

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

[120] CR/PR at II-15.

U.S. exports), an indicator of the volume of goods being transported around the United States, increased by 6.0 percent from January 2018 to December 2020.[121] The increases were concentrated at the beginning of the POI, as U.S. merchandise trade peaked in October 2018, when it was 26.4 percent higher than in January 2017.[122] U.S. merchandise trade was generally lower in 2019 than in 2018, then fell substantially during the spring of 2020 at the start of the COVID-19 pandemic, but has since recovered.[123] On an aggregated annual basis, U.S. merchandise trade increased by 8.1 percent from 2017 to 2018, decreased by 1.5 percent from 2018 to 2019, and decreased by 9.0 percent from 2019 to 2020.[124]

While demand for chassis is related to shipping trends, there is not a one-to-one correspondence between shipping trends and chassis purchases, as freight carriers and intermodal pool operators maintain existing fleets of chassis. Turnover in those fleets also affects demand for chassis.[125] Purchasers estimated that their chassis have a lifespan of 12 to 30 years, with a majority (nine of 16) of responding firms reporting a lifespan of 20 years.[126] The average age of the chassis fleets in operation reported by purchasers was eight years, and nine responding purchasers reported replacing between one and 15 percent of their fleet

[121] CR/PR at II-16, Fig. II-1.

[122] *Derived from* CR/PR at Fig. II-1 and source data available at https://www.census.gov/foreign-trade/balance/c0015.html (last accessed February 19, 2021).

[123] CR/PR at II-16.

[124] *Derived from* CR/PR at Fig. II-1 and source data available at https://www.census.gov/foreign-trade/balance/c0015.html (last accessed February 19, 2021).

[125] CR/PR at II-18. Demand for chassis was also reported to be affected by short-term demand surges that can occur at ports as well as inland hubs which cause increased chassis dwell times (the time a chassis is on rent to customer). The imbalances could affect demand on a more regional level without occurring nationwide. CR/PR at II-13. However, U.S. producers and importers both reported selling chassis to all regions in the United States. *Id.* at II-7, Table II-3; *see also* Petitioner's Prehearing Brief at 51.

[126] CR/PR at II-18.

during the POI.[127] The majority (12 of 23) of responding purchasers indicated that the average age of their fleets had not changed since 2018, and none of the 22 responding purchasers indicated changes in their pattern of maintenance or repairs since 2018.[128]

Most (four of five) of the petitioning U.S. producers and *** reported fluctuating U.S. demand for chassis since January 1, 2018, while a majority (14 of 23) of responding purchasers and *** reported U.S. demand for chassis had increased since January 1, 2018.[129] Only two of the 30 reporting industry participants (both purchasers) reported that demand declined.[130] Notwithstanding these perceptions and the relatively moderate fluctuations in the U.S. merchandise trade during the POI, the apparent U.S. consumption data compiled through questionnaires show substantial declines in consumption of chassis and subassemblies from 2018 to 2020, particularly from 2018 to 2019, as discussed further in Section IV.D below.

In this investigation, we collected data based on chassis and subassemblies combined (by value, units, and short tons) as well as on completed chassis and various types of subassemblies (by value, units, and short tons).[131] As explained below, we rely on the data collected both for chassis and subassemblies combined by value and for completed chassis by unit to measure apparent U.S. consumption. The record indicates that there are wide discrepancies in unit value among the different types of subassemblies and between complete

[127] CR/PR at II-18. Two of the largest purchasers, ***, reported replacing three to six and 5.4 percent of their fleets during the POI, respectively. *Id.* at n.67.

[128] CR/PR at II-18.

[129] CR/PR at Table II-5.

[130] CR/PR at Table II-5.

[131] CR/PR at Tables C-2, E-1 to E-3.

chassis and subassemblies.[132] In light of this, we rely on value data to measure apparent U.S. consumption of chassis and subassemblies combined. Apparent U.S. consumption of chassis and subassemblies combined decreased from $*** in 2018 to $*** in 2019, or by *** percent, and decreased to $*** in 2020, or by *** percent from 2019 to 2020; it decreased overall by *** percent from 2018 to 2020.[133] [134]

We have also relied on unit data for complete chassis, which is where head-to-head competition between subject imports and the domestic like product is most evident, and where unit values are more comparable.[135] Apparent U.S. consumption of complete chassis decreased from *** units in 2018 to *** units in 2019, or by *** percent, and decreased to *** units in

[132] The unit values of U.S. importers' U.S. shipments of complete chassis from China ranged from $*** per unit to $*** per unit during 2018 to 2020, while the unit values of U.S. shipments of subassemblies from China ranged from $*** per unit for "other subassemblies" to $*** per unit for running gear subassemblies. CR/PR at Table E-2. For U.S. producers, the unit values of U.S. shipments of complete chassis ranged from $*** per unit to $*** per unit, while the unit values of U.S. shipments of subassemblies ranged from $*** per unit for landing gear subassemblies to $*** per unit for running gear subassemblies. CR/PR at Tables E-1, F-5.

[133] CR/PR at Table C-2. While we previously found that CIE's domestic subassembly assembly operations do not constitute domestic production, we find its commercial U.S. shipment of *** complete chassis in 2019, valued at $***, and its commercial U.S. shipments of *** complete chassis in 2020, valued at $***, to be a relevant condition of competition. *See* CR/PR at Table F-5. In the absence of argument to the contrary, we have included these units of complete chassis, and their value, in our calculations of total apparent U.S. consumption. We have not, however, attributed these units and their value to U.S. producers or U.S. importers of subject merchandise.

[134] Parties agree that the impending imposition of duties under section 301 of the Trade Act of 1974 ("section 301 duties") in 2018 contributed to the high volume of subject imports in 2018 relative to 2019 and 2020, but disagree as to whether this reflects an effort by U.S. importers and purchasers of chassis to avoid section 301 duties and bring more imported chassis into the U.S. market than were required by purchasers to satisfy downstream demand. *E.g.*, Petitioner's Prehearing Br. at 38-43; CIMC's Posthearing Br. at 2-4, Exhibit 1 at 10-16.

[135] As previously noted, the five petitioning U.S. producers' U.S. shipments of complete chassis ranged from *** chassis to *** chassis, on an annual basis during 2018 to 2020, while their U.S. shipments of all subassemblies combined ranged from *** to *** subassemblies, which were "primarily more related towards damage and repair." CR/PR at Tables F-5 and F-6; Conf. Tr. at 92-93 (Whalin), (Gill), (Katz), (Musick).

2020, or by *** percent from 2019 to 2020; it decreased overall by *** percent from 2018 to 2020.[136]

2. Supply Considerations

Subject imports were the largest source of supply in the U.S. market. Subject imports were imported either as fully assembled chassis or as subassemblies.[137] Notably, subject imports' share of apparent U.S. consumption of chassis and subassemblies combined, by value, was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[138] Their share of apparent U.S. consumption of complete chassis units was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[139]

The domestic industry was the second largest source of supply in the U.S. market. It consisted of the five petitioning firms, which reported total production capacity in 2020 of *** units.[140] The domestic industry's share of apparent U.S. consumption of chassis and

[136] *Derived from* CR/PR at Table F-5. We note that apparent U.S. consumption decreased from 2018 to 2019 by more than U.S. merchandise trade would appear to indicate. There was a *** percent decrease in the value of apparent U.S. consumption of chassis and subassemblies combined and a *** percent decrease in apparent U.S. consumption of complete chassis units from 2018 to 2019, but only a 1.5 percent decrease in U.S. merchandise trade on an aggregated annual basis from 2018 to 2019. *See* CR/PR at Table F-5, Fig. II-1 and source data available at https://www.census.gov/foreign-trade/balance/c0015.html (last accessed February 19, 2021).

[137] CR/PR at II-2. CIMC-affiliated companies were the only exporters of subject merchandise from China to the United States during the POI. CR/PR at VII-3 n.4. Further, nearly all imports from China were by CIMC-affiliated companies. CR/PR at VII-3 n.3.

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

[139] CR/PR at Table F-5.

[140] CR/PR at Tables III-7 and F-2. Although the domestic industry reported total production capacity exceeding total apparent U.S. consumption of complete chassis units for two of the three years in the POI, more than two thirds (18 of 26) of purchasers reported facing supply constraints since 2018, with the majority of purchasers reporting constraints indicating that U.S. producers' capacity was limited. CR/PR at II-11. Moreover, just over half (13 of 25) of responding purchasers reported that U.S. producers had been unable to bid or supply their orders of chassis due to order size. CR/PR at II-12. See below in Section **Error! Reference source not found.** for further discussion of these reported supply constraints in the market.

subassemblies combined, by value, was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[141] Its share of apparent U.S. consumption of complete chassis units was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[142]

Nonsubject imports were the smallest source of supply in the U.S. market. Hyundai, located in Tijuana, Mexico, was reportedly the primary source of nonsubject imports in the U.S. market.[143] Nonsubject imports' share of apparent U.S. consumption of chassis and subassemblies combined, by value, was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[144] Their share of apparent U.S. consumption of complete chassis units was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[145]

3. Substitutability and Other Conditions

All five petitioning U.S. producers, importer ***, and a majority (11 of 20) of responding purchasers indicated that U.S.-produced chassis and chassis imported from China are "always" interchangeable.[146] A majority (14 of 23) of responding purchasers reported that U.S.-produced chassis "usually" met minimum quality specifications, and a majority (14 of 20) reported that chassis imported from China "always" met minimum quality specifications.[147] Furthermore, at least a majority of responding purchasers reported that U.S. chassis and chassis imported from China were "comparable" on all but four purchasing factors (for which a majority reported that U.S. chassis were "inferior"): availability to supply large orders, reliability of supply, delivery

[141] CR/PR at Table C-2.
[142] CR/PR at Table F-5.
[143] CR/PR at II-11.
[144] CR/PR at Table C-2.
[145] CR/PR at Table F-5.
[146] CR/PR at Table II-12. Importer *** reported that U.S.-produced chassis and imports from China are "sometimes" interchangeable. CR/PR at II-26 n.77.
[147] CR/PR at Table II-13.

time, and price.[148] Purchasers reported that differences between domestically produced chassis and subject imports with respect to availability, quality, and flexibility in lead times and deliveries serve to affect the degree of substitutability.[149] In light of this evidence, we find that there is a moderate-to-high degree of substitutability between domestically produced chassis and chassis imported from China.[150]

We find that price is an important factor in purchasing decisions, although availability/capacity/delivery time and quality/specifications are also important factors. Purchasers most often cited as among the top three purchasing factors availability/capacity/delivery time (cited 25 times), quality/specifications (cited 23 times), and price/cost (cited 17 times).[151] Moreover, price is among the purchasing factors that at least three-quarters of responding purchasers rated as "very important."[152] The overwhelming majority of purchasers (22 of 25) reported that they "usually" or "sometimes" purchase the lowest-priced product.[153]

[148] CR/PR at Table II-11. An equal number (11 of 23) of purchasers reported that U.S. chassis were "comparable" and were "inferior" to chassis imported from China with respect to coating. *Id.*

[149] CR/PR at II-20.

[150] *See* CR/PR at II-20.

[151] CR/PR at Table II-8. Quality/specifications was the most frequently cited first-most important factor (cited 16 times), followed by availability/capacity/delivery time (cited six times), and price (cited three times). *Id.* Availability/capacity/delivery time was the most frequently cited second-most important factor (cited 15 times), followed by price (cited five times), and quality/specifications (cited four times). *Id.* Price was the most frequently cited third-most important factor (cited nine times). *Id.*

[152] *See* CR/PR at Table II-9. The purchasing factors that at least three-quarters of responding purchasers rated as "very important" are quality meets industry standards (all 27 purchasers), reliability of supply (26 purchasers), delivery time (25 purchasers), delivery terms and product consistency and uniformity (23 purchasers each), price (22 purchasers), and availability to supply large orders (21 purchasers). *Id.*

[153] CR/PR at II-22.

Industry participants provided disparate responses to the significance of non-price differences in the sales of chassis in the United States. All five petitioning U.S. producers and importer *** reported that there are "never" any factors other than price that are important, whereas importer *** and a majority (12 of 22) of responding purchasers indicated that there are "always" factors other than price that are important.[154]

The primary raw material inputs for chassis and subassemblies are steel and steel components.[155] The price of hot-rolled steel bar increased by 22.8 percent between January 2018 and January 2019, but decreased by nearly the same amount through September 2020, and was 6.0 percent higher in December 2020 than in January 2018.[156] Stainless and non-stainless alloy steel imports became subject to a 25 percent *ad valorem* duty under section 232 of the Trade Expansion Act of 1962 ("section 232 duties") in March 2018.[157] Most (12 of 18) responding purchasers indicated that chassis prices increased due to these tariffs.[158] Raw

[154] CR/PR at Table II-14. Non-price differences cited by purchasers included higher production capability/possible order size for Chinese producers (eight purchasers), higher quality with respect to chassis from China (six purchasers), greater ability of subject imports to deliver to any port easily (five purchasers), and differences in warranty (two purchasers). One purchaser stated, however, that U.S.-produced chassis have faster delivery by four to six weeks over chassis imported from China. CR/PR at II-28.

[155] CR/PR at V-1. Other raw materials and components used in the production of chassis include tires and wheels, landing gear assemblies, paint, air brake systems, and electrical systems. *Id.*

[156] CR/PR at V-1, Fig. V-1.

[157] *See* 19 U.S.C. § 1862, *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9705 (Mar. 8, 2018), 83 Fed. Reg. 11625 (Mar. 15, 2018). In-scope chassis and subassemblies are not, however, subject to section 232 duties.

[158] CR/PR at V-3. Four of the five U.S. producers and importer *** described section 232 duties on imported steel products as having caused raw material prices for chassis to fluctuate, while the other U.S. producer and importer *** described them as having caused raw material prices to increase. *Id.* at V-2.

materials as a share of the domestic producers' COGS was steady, though decreased somewhat over the POI from *** percent in 2018 to *** percent in 2019 and *** percent in 2020.[159]

The five U.S. producers and importer *** reported selling chassis to all regions in the United States.[160] For the U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 500 miles, *** percent were between 501 and 1,000 miles, and *** percent were over 1,000 miles.[161] Importer *** shipments were more concentrated: *** percent were sold within 100 miles of their U.S. point of shipment, *** percent between 101 and 500 miles, *** percent were between 501 and 1,000 miles, and *** percent were over 1,000 miles.[162] Two of the five U.S. producers and importer *** reported that they typically arrange transportation to their customers, with ***.[163]

All five U.S. producers reported selling chassis using transaction-by-transaction negotiations, while importer *** reported using transaction-by-transaction negotiations as well as contracts.[164] The U.S. producers reported selling the majority of their chassis (*** percent of U.S. shipments) on the spot market, while importer *** reported selling *** of its chassis through short-term contracts averaging 150 days.[165]

Chassis are primarily produced to order.[166] The five U.S. producers reported that *** percent of their commercial shipments were produced to order with lead times averaging ***

[159] CR/PR at Table G-1.
[160] CR/PR at Table II-3.
[161] *Derived from* CR/PR at II-7, CIE's U.S. Producer Questionnaire Response at IV-9.
[162] *** U.S. Importer Questionnaire Response at III-9.
[163] CR/PR at V-3.
[164] CR/PR at Table V-1; *** U.S. Importer Questionnaire Response at III-3. Three U.S. producers reported also selling by set price lists and two reported also selling by contracts. CR/PR at Table V-1.
[165] *Derived from* CR/PR at Table V-2, CIE's U.S. Producer Response at IV-6; *** U.S. Importer Questionnaire Response at III-7.
[166] CR/PR at II-20.

days.[167] The remaining *** percent of their commercial shipments came from inventories, with lead times averaging *** days.[168] Importer *** reported that *** percent of its commercial shipments were produced to order, with lead times averaging *** days.[169]

Chassis and chassis parts subject to this investigation have been subject to section 301 duties beginning in September 2018 at 10 percent *ad valorem* and increasing to 25 percent *ad valorem* in May 2019.[170] A majority (seven of 11) of purchasers indicated that the tariffs had no impact on the U.S. supply of chassis, but that the supply of chassis imported from China had decreased in response to the tariffs.[171] Furthermore, while most (four of five) of the petitioning U.S. producers reported that prices for chassis had not changed as a result of the tariffs, importer *** and all (11 of 11) responding purchasers reported price increases.[172] A plurality (five of 11) of purchasers reported that the tariffs had no impact on overall demand for chassis or on their purchasing patterns.[173]

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[167] *Derived from* CR/PR at II-20; CIE's U.S. Producer Questionnaire Response at IV-8.

[168] *Derived from* CR/PR at II-20; CIE's U.S. Producer Questionnaire Response at IV-8. Only U.S. producer *** reported producing for inventory. *Id.*

[169] *** U.S. Importer Questionnaire Response at III-8. Importer *** nonetheless reported maintaining U.S. inventories of chassis throughout the POI. CR/PR at Table VII-8.

[170] *See* 19 U.S.C. § 2411, CR/PR at I-10. Effective August 2020, some exclusions have been granted for components that may be considered in-scope. CR/PR at I-10.

[171] CR/PR at Table II-1. Importer *** reported increasing imports from China, noting that ***. CR/PR at II-4 n.26.

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

[173] CR/PR at Table II-1. As noted above, parties agree that the impending imposition of section 301 duties in 2018 contributed to the high volume of subject imports in 2018 relative to 2019 and 2020 but disagree as to whether this reflects an effort by U.S. importers and purchasers of chassis to avoid section 301 duties and bring more imported chassis into the U.S. market than were required by purchasers to satisfy downstream demand. *E.g.*, Petitioner's Prehearing Br. at 38-43; CIMC's Posthearing Br. at 2-4, Answers to Questions at 10-16.

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[174]

The value of subject imports of chassis and subassemblies combined was $*** in 2018, $*** in 2019, and $*** in 2020.[175] Subject imports' share of the value of apparent U.S. consumption of chassis and subassemblies combined was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[176] This constituted a predominant portion of the value of apparent U.S. consumption throughout the POI.

The quantity of U.S. shipments of subject imports of complete chassis was *** units in 2018, *** units in 2019, and *** units in 2020.[177] Subject imports' share of apparent U.S. consumption of complete chassis units was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[178] Thus, subject imports also constituted a predominant portion of the quantity of apparent U.S. consumption of complete chassis throughout the POI. The ratio of

[174] 19 U.S.C. § 1677(7)(C)(i).

[175] CR/PR at Table IV-2. The quantity of subject imports of chassis and subassemblies combined was *** units in 2018, *** units in 2019, and *** units in 2020. *Id.* In the preliminary phase of these investigations, the quantity of subject imports of chassis and subassemblies combined increased from *** units in 2017 to *** units in 2018, or by *** percent, and decreased to *** units in 2019. The difference in reporting of units of subject imports between the preliminary phase and the final phase is primarily due to ***. CR/PR at IV-2 n.7. ***. *See id.*

[176] CR/PR at Table C-2. The value of U.S. importers' U.S. shipments of chassis and subassemblies combined was *** million in 2018, *** million in 2019, and *** million in 2020. CR/PR at Table C-2.

[177] CR/PR at Table F-5. In the preliminary phase, the absolute volume of U.S. shipments of complete chassis from China increased from *** units in 2017 to *** units in 2018, or by *** percent, and decreased to *** units in 2019, or by *** percent, for an overall decrease of *** percent from 2017 to 2019. *See* Confidential Report, Memorandum INV-SS-109 (Sept. 4, 2020), EDIS Doc. #718949, at Table IV-5.

[178] CR/PR at Table F-5.

U.S. shipments of complete chassis from China to U.S. production was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[179]

In light of the foregoing, we find that the volume of subject imports is significant in absolute terms and relative to U.S. consumption and production.[180]

D. Price Effects of the Subject Imports

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

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[181]

As we previously found, the record indicates that there is a moderate-to-high degree of substitutability between domestically produced chassis and subject imports and that price is an important factor in purchasing decisions.[182]

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[179] *Derived from* Tables F-2 and F-5.

[180] CIMC argues that the volume of subject imports in absolute terms in 2018 was not significant insofar as the increase resulted from increased demand and subject imports did not displace a significant volume of U.S. producers' U.S. shipments. *See* CIMC's Posthearing Brief at 7-9. Irrespective of the volume of subject imports in 2018 compared to other years or whether subject imports displaced U.S. producers' U.S. shipments, based on the aforementioned data, the volume of subject imports during the investigation period is significant in absolute terms and relative to U.S. consumption and production. *See also* Petitioner's Prehearing Brief at 61-71 (describing subject import volume as spiking in 2018); Petitioner's Posthearing Brief at 8; Petitioner's Final Comments at 1.

[181] 19 U.S.C. § 1677(7)(C)(ii).

[182] *See* Section IV.B.3 above. CIMC argues that our pricing data should be given limited weight because of the importance of non-price purchasing factors in the U.S. chassis market. *See* CIMC's Prehearing Brief at 48-59, 68-72; CIMC's Posthearing Brief at 9-10; CIMC's Final Comments at 1; *see also* IICL's Posthearing Nonparty Statement at 8-12. As we explained in our discussion above of conditions of competition, however, while purchasers indicated that several non-price factors are important to purchasing decisions, they also identified price as an important purchasing factor.

In the final phase of this investigation, the Commission collected pricing data on eight different products.[183] The five U.S. producers and one importer, ***, provided usable pricing data accounting for approximately 49.4 percent of U.S. producers' U.S. shipments of complete chassis and 73.0 percent of U.S. importers' U.S. shipments of complete chassis from China in 2020.[184]

The pricing data show that there was pervasive underselling by subject imports throughout the POI.[185] Subject imports consisting of 44,679 chassis undersold the domestic like

[183] The pricing products were defined as follows:

Product 1.--Tandem axle gooseneck chassis for carriage of 53' domestic containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 2.--Tandem axle gooseneck chassis for carriage of 40' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 3.--Extendable Tandem axle chassis for carriage of 20' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 4.--Triaxle chassis capable of extension for carriage of heavy 20' up to 40' containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 5.--Specialty chassis for carriage of 20' storage tanks, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 6.--Tandem axle gooseneck chassis for carriage of 40' ISO containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 7.--Tandem axle gooseneck chassis for carriage of 53' domestic containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 8.--Triaxle chassis capable of extension for carriage of heavy 20' up to 40' containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension. CR/PR at V-6.

[184] CR/PR at V-7.

[185] *See* CR/PR at Table V-12. There were instances of underselling by subject imports in every quarterly comparison for pricing products 1, 2, 3, 4, 5, and 8 throughout the POI. CR/PR at Tables V-3 to V-7 and V-10. For pricing product 6, there were instances of underselling in *** quarterly comparisons. *Id.* at Table V-8. For pricing product 7, there was ***. *Id.* at Table V-9.

CIMC argues that underselling margins are overstated, as subject imports and domestically produced chassis are concentrated in different markets and are sold in different volumes, and because U.S. producers concentrate their sales in higher-value specialty chassis. *See* CIMC's Posthearing Brief at 9-10.

To the extent that CIMC is arguing that the pricing product definitions are overly broad and allow for comparisons of both specialty and non-specialty chassis in the same pricing product definition, we note that CIMC did not raise this issue in its comments on the draft questionnaires. In fact, in response to comments from CIMC, the Commission added pricing product 5, a specialty chassis for

product in 58 of 61 (or 95.0 percent of) quarterly comparisons, at margins ranging from 4.3 to 55.4 percent.[186] Subject imports consisting of 451 chassis oversold the domestic like product in the remaining three quarterly comparisons, at margins ranging from 0.6 to 17.7 percent.[187]

Information collected in the purchaser questionnaires further supports a finding that subject imports were often priced lower than the domestic like product. Of the 27 responding purchasers, 17 reported that, since 2018, they had purchased subject imports instead of the domestic like product.[188] Twelve of these 17 purchasers reported that subject imports were lower priced than the domestic like product.[189] Four of these 12 purchasers (***) reported that price was a primary reason for their decision to purchase subject imports rather than the domestic like product.[190] These four purchasers estimated a total quantity of *** lower-priced

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carriage of 20' storage tanks, as well as added pricing products to allow for comparisons of chassis with and without special features, *i.e.*, PSI tire inflation system, steel wheels, and mechanic suspension. *See* Letter from Jay C. Campbell, White & Case LLP, to the Honorable Lisa R. Barton, *Re: Chassis and Subassemblies from China: Inv. Nos. 701-TA-657 and 731-TA-1537 (Final): Comments on Draft Questionnaires* (Dec. 3, 2020) at 6-7.

Moreover, the Commission collected pricing data for eight different pricing products, involving five different models of chassis, including specialty chassis, with varying quantities sold each quarter by domestic producers and importers. *See* CR/PR at V-6, Tables V-3 to V-10. Pricing product 5 specifically covers specialty chassis, and subject imports undersold the domestic producers' price in every possible comparison for this product. *See* CR/PR at Table V-7. The record also shows that U.S. producers and importers both reported selling chassis to all regions in the United States, including multiple U.S. producers reporting sales in the Pacific Coast region throughout the POI. CR/PR at II-7, Table II-3. Thus, we disagree with the contentions underlying CIMC's argument.

Further, we note that our finding that underselling was prevalent throughout the POI is corroborated by other information in the record, including the lost sales data described below and questionnaire responses indicating that a majority (12 of 21) of purchasers reported that U.S. chassis were "inferior" with respect to price (*i.e.*, higher priced) as compared with chassis from China. CR/PR at Table II-11.

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

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

[188] CR/PR at Table V-14.

[189] CR/PR at Table V-14.

[190] *See* ***, ***, ***, and *** U.S. Purchaser Questionnaire Responses, EDIS Doc. #735148, #735161, #735165, and #735172, at III-32(c). We note in this respect that we have corrected two tabulation errors in Table V-14 of the Commission's Report. First, since *** completed the portion of

chassis that they purchased from China instead of domestic like product, with price a primary reason for their purchase.[191] The total quantity of lost sales exceeded the domestic industry's total full-year shipments of complete chassis in each year of the POI and are equivalent to *** percent of total domestic production and *** percent of the domestic industry's total U.S. shipments of chassis during the POI.[192] [193]

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question III-32(c) asking for tabulation of quantities purchased instead of domestic product due to price in the event of an affirmative response, we deem its response to that question to be "yes," although it did not check the "yes" box. *** U.S. Purchaser Questionnaire Response, EDIS Doc. #735161, at III-32(c). Second, we have excluded *** from the lost sales tabulation because it did not indicate that the imports it purchased were lower priced than the domestic product. *** U.S. Purchasers Questionnaire Response, EDIS Doc. #735168, at 22.

[191] *Derived from* ***, ***, ***, and *** U.S. Purchaser Questionnaire Responses, EDIS Doc. #735148, #735161, #735165, and #735172, at III-32(c).

[192] *Derived from* CR/PR at Tables V-14, C-2, and F-5.

[193] CIMC argues that the purchasers' responses fail to demonstrate sales actually lost by the domestic industry because, irrespective of price, the purchasers would still have chosen subject imports based on their availability for large-volume orders, reliable supply, and more timely delivery. *See* CIMC's Prehearing Brief at 74-76; CIMC's Posthearing Brief at 11-12; CIMC's Final Comments at 1-2, 5; *see also* IICL's Posthearing Nonparty Statement at 10-11.

We acknowledge that non-price differences played a role in some of these purchasers' purchasing decisions. After receiving their responses, and following the hearing, Commission staff corresponded with *** and asked them whether they would still have purchased chassis from China if their prices were equal to those of the domestic like product. CR/PR at V-30. One of the purchasers (***) reported that it would not have done so, indicating a general preference for purchasing domestically produced products. *Id*. The others stated that they still would have purchased chassis from China if their prices were equivalent to domestic products. *Id.*

Nevertheless, the record does not show that price was irrelevant to these purchasers' purchasing decisions, nor that they would not consider purchasing the domestic product. Indeed, as previously stated, *** indicated a preference for purchasing domestic product if it were priced equivalently to subject imports. Additionally, *** reported that a U.S. producer reduced its prices by *** percent in order to compete with lower-priced subject imports. *See* *** U.S. Purchaser Questionnaire Response at III-15, III-33. Moreover, Petitioner has placed on the record contemporaneous emails from another purchaser (***) to two U.S. producers, which appear to confirm that price was, indeed, a primary consideration at the time that this purchaser decided not to accept the U.S. producers' bids. *Compare* Petitioner's Posthearing Brief at Exhibit 3 (Email dated September 13, 2019 from *** rejecting U.S. producers' bids with the only stated reason being that ***) *with* Email from ***, Corporate Counsel for ***, to Commission Staff (Mar. 15, 2021), EDIS Doc. # 737334 (purportedly clarifying that ***).

Moreover, the four purchasers that stated that price was a primary reason for purchasing lower priced subject imports instead of the domestic like product each provided information in their questionnaire responses indicating the importance of price in purchasing decisions. Each purchaser

In light of the record, indicating that a significant volume of subject imports was pervasively priced lower than the domestic like product, and that there is a moderate-to-high degree of substitutability between subject imports, and price is an important purchasing factor, we find that the underselling by subject imports was significant.[194] The underselling by subject imports caused the domestic industry to lose sales to subject imports.

We have examined price trends for the domestic like product and subject imports. We observe that prices for seven of the eight domestically produced pricing products increased from the first quarter for which data were reported until the last, with price increases ranging

(***, ***, ***, and ***) ranked price as a top three purchasing factor, each ranked price as a "very important" purchasing factor, and each indicated that it "usually" purchased the chassis that is offered at the lower price. *See* ***, ***, *** and *** U.S. Purchaser Questionnaire Response at III-26, III-27, and III-30.

In conclusion, based on the record as a whole, we cannot discredit the responses of these purchasers in which they reported that price was a primary reason for the decision to purchase lower priced subject imports instead of the domestic like product. Even relying only on *** reported quantity of *** chassis as a confirmed lost sale due to price, however, the volume of this lost sale is large. CR/PR at Table V-14. *** lost sale accounted for *** percent of the lost sales identified on this record, and the loss alone of this sale due to low subject import prices is equivalent to *** percent of total domestic production and *** percent of the domestic industry's total U.S. shipments of chassis during the POI. *Derived from* CR/PR at Tables V-14, C-2, and F-5.

[194] We find CIMC's reliance on *Geo Specialty Chemicals, Inc. v. United States* to be inapposite. *See* CIMC's Prehearing Brief at 71; CIMC's Posthearing Brief at 10, *citing Geo Specialty Chemicals v. United States*, 33 CIT 125, 129-130 (2009); *see also* IICL's Posthearing Nonparty Statement at 9-10. As reviewing courts have held, each Commission injury investigation "is *sui generis*, involving a unique combination and interaction of many economic variables." *See, e.g., Hitachi Metals*, 949 F.3d at 718. Insofar as CIMC considers the Commission's decision in that case persuasive on the ground that the domestic industry experienced challenges in reliably fulfilling orders, as discussed in section IV.E below, we disagree and find on this record that the domestic industry was willing and able to supply more of the market than it did during the POI due to low-priced subject imports.

from *** to *** percent.[195] Subject import prices increased for all eight products, with price increases ranging from *** to *** percent.[196]

We have also considered whether the domestic industry was unable to obtain price increases, which otherwise would have occurred, due to the subject imports. The domestic industry had an incentive to raise prices at the outset of the POI, due to its already high COGS-to-net-sales ratio, which was *** percent in 2018.[197] From 2018 to 2019, the U.S. producers' unit COGS increased, providing an even stronger incentive to raise prices, but unit net sales AUVs did not increase as much as unit COGS.[198] From 2019 to 2020, the U.S. producers' unit net sales AUVs declined by a greater amount than unit COGS.[199] Consequently, the industry's COGS-to-net-sales ratio deteriorated over the POI. From an already high 2018 level of *** percent, it increased to *** percent in 2019 and *** percent in 2020.[200]

CIMC argues that given the decline in subject import volumes over the POI, subject imports are not responsible for the domestic industry's deteriorating COGS-to-net sales ratio; instead, they argue that the domestic industry's COGS-to-nets sales ratio followed declines in

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[195] CR/PR at Table V-11. The price of domestically produced pricing product 8 decreased by *** percent from the third quarter of 2018 to the third quarter of 2020. CR/PR at Table V-10. Pricing product 8 was the *** volume product of the eight pricing products for both domestic producers and importers. CR/PR at V-24. We also note that, of 14 responding purchasers, two reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China and 13 reported that they did not know. The reported estimated price reduction ranged from *** to *** percent. CR/PR at V-31 & n.21.

[196] CR/PR at Table V-11.

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

[198] CR/PR at Table C-2. From 2018 to 2019, the domestic industry's unit COGS increased from $*** per unit to $*** per unit, or by *** percent, while its net sales AUV increased from $*** per unit to $*** per unit, or by *** percent. *Id.*

[199] CR/PR at Table C-2. From 2019 to 2020, the domestic industry's unit COGS decreased from $*** per unit to $*** per unit, or by *** percent, while its net sales AUV decreased from $*** per unit to $*** per unit, or by *** percent. *Id.*

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

apparent U.S. consumption.[201] We disagree. First, even after declining from 2018 to 2019, subject imports remained the dominant source of supply in the U.S. market, comprising no less than *** percent of apparent U.S. consumption, by value, of combined chassis and subassemblies and no less than *** percent of apparent U.S. consumption of completed chassis units at any time during the POI.[202] We find that their presence in the market was sufficiently large that subject imports could continue to exert price pressure on the domestic like product, despite any declines in absolute volume or market share.

Second, while CIMC focuses on the decline in apparent U.S. consumption over the POI, we evaluate demand trends in this investigation based on the record as a whole. In this respect, we first observe that at least one trade publication described U.S. shipments of chassis during 2018 as a "spike," and that Petitioner estimated that more typical levels of chassis demanded in the U.S. market each year are 25,000 to 35,000 chassis based on industry data,[203] which are *** to U.S. shipment levels of complete chassis in 2019 and 2020.[204] Considering this record evidence, it appears that apparent U.S. consumption began the POI at an abnormally high level, and that declines in apparent U.S. consumption during the POI primarily stemmed from starting off at this abnormally high level. U.S. shipments reported in 2018, particularly of subject imports, were dramatically higher than in any other year of the POI.[205] While apparent

[201] *See* CIMC's Prehearing Brief at 73-74; CIMC's Posthearing Brief at 12-13.

[202] CR/PR at Tables C-2 and F-5.

[203] CR/PR at II-13. While CIMC reported 50,000 chassis are required in the U.S. market each year, this quantity greatly exceeds other record evidence on chassis units required in the U.S. market as summarized above. *Id*.

[204] *See* CR/PR at Table F-5.

[205] Apparent U.S. consumption of combined chassis and subassemblies, by value, was *** percent lower in 2019 than in 2018 and apparent U.S. consumption by units of complete chassis was *** percent lower in 2019 than in 2018. CR/PR at Tables C-2 and F-5. Furthermore, as discussed in the preliminary determinations, a dramatic increase in 2018 was also true relative to 2017. *See* CR/PR at IV-

U.S. consumption was lower in 2019 and 2020, the record supports that shipments in these years represented more typical levels of consumption rather than a sharp decline in U.S. demand. Moreover, the record also shows that, as previously discussed, the decline in apparent U.S. consumption from 2018 to 2019 far outpaced any decline in U.S. merchandise trade, one of several demand indicators.[206] It also shows that market participants, including a majority of purchasers, perceived that demand for chassis increased, not decreased, over the POI.[207] Consistent with market participants' perceptions of demand, prices for seven of the eight domestically produced pricing products increased overall during the POI, although, in aggregate, prices did not rise enough to sufficiently cover the domestic industry's costs.[208] In view of the aforementioned, we find that the observed declines in apparent U.S. consumption data collected by the Commission do not explain why the domestic industry was unable to raise its prices to sufficiently cover its costs, which resulted in the domestic industry's deteriorating COGS-to-net-sales ratio.

Given the significant volume of lower-priced subject imports, and our finding that there is a moderate-to-high degree of substitutability between subject imports and the domestic like product, and that price is an important purchasing factor, we find that subject imports

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2 n.7 (the quantity of subject imports of chassis and subassemblies combined increased by *** percent from 2017 to 2018).

[206] *See* Section IV.B.1 above.

[207] Of 30 responding firms, only two purchasers reported that U.S. demand for chassis decreased over the POI. *See* CR/PR at Table II-5. In contrast, 14 of 23 responding purchasers reported that U.S. demand for chassis increased over the POI. *Id*.

[208] CR/PR at Table V-11. We also observe that all responding purchasers reported that there are no substitutes for chassis, suggesting that purchaser demand for chassis is less sensitive to increases in price. *See* CR/PR at II-19; *see also* CR/PR at II-28 (the aggregate demand for chassis is likely to be highly inelastic).

prevented U.S. producers' from being able to raise prices to sufficiently cover their costs during the POI.[209]

In light of the foregoing, we find that subject imports undersold the domestic like product to a significant degree, which resulted in lost sales. Additionally, subject imports prevented U.S. price increases which otherwise would have occurred to a significant degree. We consequently conclude that the subject imports had significant effects on prices for the domestic like product.

E. Impact of the Subject Imports

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[210] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[211]

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[209] As discussed further below, nonsubject imports had a far smaller presence in the U.S. market than did subject imports. We also observe that prices for domestic pricing product 2 increased by only *** percent but were undersold by subject imports in every quarter of the POI; pricing product 2 was the *** volume product for subject imports. *See* CR/PR at Table V-11. Furthermore, the domestic pricing product with the largest price increase was the *** product for subject imports. *See id.*

[210] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[211] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act ("TPEA") of 2015, Pub. L. 114-27.

The domestic industry's trade-related indicators generally declined throughout the POI. The domestic industry's capacity increased by *** percent from 2018 to 2019, and remained the same from 2019 to 2020.[212] Its production decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for a *** percent overall decline during the POI.[213] Its capacity utilization decreased by *** percentage points from 2018 to 2019 and by *** percentage points from 2019 to 2020, for an *** percentage point overall decline.[214] Its U.S. shipments by units decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020 for a *** percent overall decline.[215] The domestic industry's share of apparent U.S. consumption, as measured by either the value of chassis and subassemblies combined or units of complete chassis, fluctuated. Its share of the value of apparent U.S. consumption of chassis and subassemblies combined increased by *** percentage points from 2018 to 2019 then decreased by *** percentage points from 2019 to 2020.[216] Its share of apparent U.S. consumption of complete chassis units increased by *** percentage points from 2018 to 2019 then decreased by *** percentage points from 2019 to 2020.[217] The domestic industry's

[212] CR/PR at Table C-2. Capacity increased from *** units in 2018 to *** units in 2019 and remained at *** units in 2020. CR/PR at Table F-2.

[213] CR/PR at Table C-2. Production decreased from *** units in 2018 to *** units in 2019 and to *** units in 2020. CR/PR at Table F-2.

[214] CR/PR at Table C-2. Capacity utilization decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. CR/PR at Table F-2.

[215] CR/PR at Table C-2. U.S. shipments decreased from *** units in 2018 to *** units in 2019 and to *** units in 2020. CR/PR at Table F-3.

[216] CR/PR at Table C-2. The domestic industry's share of the value of apparent U.S. consumption of chassis and subassemblies combined increased from *** percent in 2018 to *** percent in 2019 and decreased to *** percent in 2020. *Id.*

[217] CR/PR at Table F-5. The domestic industry's share of apparent U.S. consumption of complete chassis units increased from *** percent in 2018 to *** percent in 2019 and decreased to *** percent in 2020. *Id.*

inventories fluctuated. Inventories increased by *** percent from 2018 to 2019, then decreased by *** percent from 2019 to 2020 for a *** percent overall decrease.[218]

The domestic industry's employment indicators generally declined throughout the POI. Its number of PRWs decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for a *** percent overall decline.[219] Its total hours worked decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for a *** percent overall decline.[220] The domestic industry's hours worked per PRW decreased by *** percent from 2018 to 2019 and increased by *** percent from 2019 to 2020, declining by *** percent from 2018 to 2020.[221] Its wages paid decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for an overall decline of *** percent.[222] The domestic industry's hourly wages increased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, an *** percent overall increase.[223] Its productivity decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for a *** percent overall decline.[224]

The domestic industry's gross profits, operating income, and net income all decreased each year of the POI, and operating income and net income went from ***. Its gross profits

[218] CR/PR at Table C-2. Inventories increased from *** units in 2018 to *** units in 2019 and decreased to *** units in 2020. *Id.*

[219] CR/PR at Table C-2. PRWs decreased from *** in 2018 to *** in 2019 and to *** in 2020. CR/PR at Table F-4.

[220] CR/PR at Table C-2. Total hours worked decreased from *** hours in 2018 to *** hours in 2019 and to *** hours in 2020. CR/PR at Table F-4.

[221] CR/PR at Table F-4. Hours worked per PRW decreased from *** hours in 2018 to *** hours in 2019 and increased to *** hours in 2020. *Id.*

[222] CR/PR at Table C-2. Wages paid decreased from $*** in 2018 to $*** in 2019 and to $*** in 2020. CR/PR at Table F-4.

[223] CR/PR at Table C-2. Hourly wages increased from $*** per hour in 2018 to $*** per hour in 2019 and to $*** per hour in 2020. CR/PR at Table F-4.

[224] CR/PR at Table C-2. Productivity per thousand hours decreased from *** units in 2018 to *** units in 2019 and to *** units in 2020. CR/PR at Table F-4.

decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for an overall decline of *** percent.[225] The domestic industry's operating income and net income went from *** to *** from 2018 to 2019 and further decreased in 2020.[226] Its operating income-to-net-sales ratio decreased by *** percentage points from 2018 to 2019 and by *** percentage points from 2019 to 2020, decreasing by *** percentage points overall.[227] The domestic industry's capital expenditures decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020 for a *** percent overall decline.[228] Its R&D expenses decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, an overall decline of *** percent.[229] The domestic industry's net assets decreased by *** percent from 2018 to 2019 and by *** percent from 2019 to 2020, for a *** percent overall decline.[230] Its return on assets decreased from 2018 to 2019, going from ***, and further decreased from 2019 to 2020.[231]

[225] CR/PR at Table C-2. Gross profits decreased from $*** in 2018 to $*** in 2019 and to $*** in 2020. CR/PR at Table G-1.

[226] CR/PR at Table C-2. Operating income decreased from $*** in 2018 to *** in 2019 and to *** in 2020. CR/PR at Table G-1. Net income decreased from $*** in 2018 to *** in 2019 and to *** in 2020. *Id.*

[227] CR/PR at Table C-2. The domestic industry's operating income-to-net-sales ratio decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. CR/PR at Table G-1. Its net income-to-net-sales ratio decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. *Id*.

[228] CR/PR at Table C-2. Capital expenditures decreased from $*** in 2018 to $*** in 2019 and to $*** in 2020. *Id.*

[229] CR/PR at Table C-2. R&D expenses decreased from $*** in 2018 to $*** in 2019 and to $*** in 2020. *Id.*

[230] CR/PR at Table C-2. Net assets decreased from $*** in 2018 to $*** in 2019 and to $*** in 2020. *Id.*

[231] CR/PR at Table VI-6.

All five domestic producers reported actual negative effects on investment, growth, and development due to the subject imports.[232] Three producers reported postponing or cancelling capital improvement projects; one reported a reduction in the size of capital investments; and four reported that the returns on specific investments were negatively impacted.[233]#

As explained above, a significant volume of subject imports dominated the U.S. market throughout the POI, accounting for a large majority of apparent U.S. consumption every year whether measured by value of all products or by quantity of complete units. These imports further undersold the domestic like product to a significant degree throughout the POI, causing the domestic industry to lose sales to subject imports that equate to a substantial portion of the domestic industry's production and U.S. shipment volume during the POI. Thus, we find that subject imports dominated the U.S. market and took sales from the domestic industry, leading to shipments and revenues for the domestic industry that were lower than they would have been otherwise. Furthermore, the significant price-suppressing effects of the subject imports also caused domestic industry revenues to be lower than they would have been otherwise. The industry lost output and revenues while measures of its financial performance fell and it experienced *** operating income and net income in 2019 and 2020. Subject imports also had adverse effects on the domestic industry's ability to invest further, which indicates that the subject imports impaired the domestic industry's ability to modernize and

[232] CR/PR at Table VI-7.
[233] CR/PR at Tables VI-7 and VI-8.

increase its productivity.[234] In light of these considerations, we find that subject imports had a significant impact on the domestic industry.

We have also considered the role of factors other than subject imports to ensure that we are not attributing injury from other factors to subject imports. The declines in apparent U.S. consumption, as measured by either the value of chassis and subassemblies combined or units of complete chassis, do not explain the significant underselling or lost sales attributable to subject imports. Also, as explained above, we find that the declines in apparent U.S. consumption do not explain the industry's deteriorating COGS-to-net-sales ratio. As noted above, the decline in apparent U.S. consumption between 2018 and 2020 primarily stems from the abnormally high levels of U.S. shipments in 2018 (particularly of subject imports), and market participants generally did not perceive demand to be declining during the POI.

Nonsubject imports also do not explain the domestic industry's performance during the POI. They do not explain any lost sales that purchasers specifically attributed to subject imports. Furthermore, their share of apparent U.S. consumption was small relative to subject imports' share. Nonsubject imports' share of apparent U.S. consumption of chassis and subassemblies combined, by value, was *** percent in 2018, *** percent in 2019, and ***

[234] *See, e.g.*, Hearing Tr. at 133 (Wahlin) ("So, look, with the threat that our industry has of being put out of business in the matter of months, who's going to sign up for that investment until we know a little bit more about what our future holds? But we are ready to make those investments, and we need a positive determination to give us the confidence that the business is going to be here to stay."); *id.* at 134 (Katz) ("{R}ather than saying that the lack of investment is a cause of injury, I would actually say the lack of investment is a result of the injury."); *id.* at 135 (Gill) ("There are people including our President and owner of our company that's willing to make major investment . . . . But he cannot do that, nor can I as a fiduciary and responsible person ask him to make those investments if I'm not sure I can even sell the product it produces because we'll never be able to match the pricing of the subsidized dumped chassis that come in.").

percent in 2020.[235] Their share of apparent U.S. consumption of complete chassis units was *** percent in 2018, *** percent in 2019, and *** percent in 2020.[236] Thus, they cannot explain the significant price suppressing effects that subject imports had due to their relative size compared to the dominant presence of subject imports in the U.S. market.

CIMC argues that declines in the domestic industry's condition throughout the POI did not correlate with declines in subject import volume and market share.[237] We first observe that, despite declines in volume and fluctuations in market share, subject imports maintained a dominant position in the market throughout the POI. As measured by the value of apparent U.S. consumption of chassis and subassemblies combined, subject imports' market share was at least *** percent throughout the POI and, as measured by apparent U.S. consumption of complete chassis units, subject imports maintained at least *** percent, of the market throughout the POI.[238] The record shows also that, although U.S. shipments of subject imports of complete chassis decreased from 2019 to 2020 on both a value and unit basis, the value of U.S. shipments of subject imports of subassemblies increased by more than ***.[239] Most of this increase consisted of frame and running gear assemblies that appear to have been *** by CIE

[235] CR/PR at Table C-2. By contrast, subject imports' share of apparent U.S. consumption of chassis and subassemblies combined, by value, was *** percent in 2018, *** percent in 2019, and *** percent in 2020. *Id.*

[236] CR/PR at Table F-5. By contrast, subject imports' share of apparent U.S. consumption of complete chassis units was *** percent in 2018, *** percent in 2019, and *** percent in 2020. CR/PR at Tables C-2, F-5.

[237] *See* CIMC's Prehearing Brief at 77-78; CIMC's Final Comments at 12.

[238] CR/PR at Tables C-2 and F-5. If CIE's U.S. shipments of complete chassis were not included in apparent U.S. consumption of complete chassis units, subject imports' market share would have actually increased from 2019 to 2020 at the expense of the domestic industry. *See* CR/PR at Table F-5.

[239] CR/PR at Table E-2.

for assembly into complete chassis in the United States.[240] This suggests that the CIMC-affiliated companies were not, in fact, retreating from the U.S. market, but simply were shifting their presence in the market to subassemblies as well as complete chassis.

We are also not persuaded by CIMC's arguments that the petitioning firms lack the capacity to service purchaser demand for large volume orders with short lead times, and that their failure to invest in the production capability needed to meet this market demand is an alternative cause of their injury.[241] We acknowledge that a number of purchasers reported facing supply constraints with respect to U.S. producers' capacity and that U.S. producers had been unable to bid or supply their orders of chassis due to order size.[242] Nevertheless, this cannot explain the substantial sales that we have found the domestic industry lost due to lower subject import prices.[243] Moreover, domestic producers had substantial excess capacity[244] and

[240] *Compare* CR/PR at Table E-2 (showing that CIMC-affiliated companies shipped approximately $*** worth of frame and running gear subassemblies in 2020) *with* Worksheet accompanying CIMC's U.S. Importer Questionnaire Response (Mar. 17, 2021), EDIS Doc. #737387 (showing CIE *** approximately $*** worth of frame and running gear subassemblies in 2020).

[241] *See* CIMC's Prehearing Brief at 24-39, 79-84; CIMC's Posthearing Brief at 4-7, 13-14; CIMC's Final Comments at 7-14; *see also* IICL's Posthearing Nonparty Statement at 6-7; J.B. Hunt's Posthearing Nonparty Statement at 1-12; J.B. Hunt's Final Comments at 1-3.

[242] CR/PR at II-11 to II-12.

[243] CIMC's argument that domestic producers are "barely an option" in the West Coast due to transportation and logistical costs and have a minimal presence in the region also cannot explain the lost sales that we have found the domestic industry lost to lower subject import prices. *See* CIMC's Posthearing Brief at 4, 13; *see also* IICL's Prehearing Nonparty Statement 5-8. Furthermore, CIMC's argument overlooks the fact that at least *** U.S. producers reported selling chassis to the Pacific Coast region in every year of the POI. *See* CR/PR at Table II-3.

[244] The domestic industry's capacity utilization decreased from *** percent in 2018 to *** percent in 2019 and to *** percent in 2020. CR/PR at Table F-2. CIMC argues that the petitioning firms failed to report capacity in accordance with the Commission's instructions and overstated their capacity figures. *See* CIMC's Final Comments at 7-12. We disagree. Although Petitioner argued that U.S. producers accurately reported their production capacity based on the level of production that their establishments could reasonably have been expected to attain during the specified periods assuming normal operating conditions, Petitioner nevertheless provided adjusted capacity figures ***, elements of which Commission staff verified. *See* Petitioner's Posthearing Brief at Exhibit 1 at 21-29; CR/PR at III-

Petitioner has submitted declarations, contemporaneous emails, and other documentation describing multiple instances during the POI when U.S. producers bid unsuccessfully on purchase orders for a variety of quantities and types of chassis, and with a variety of delivery timeframes.[245]

We also observe that *** reported that ***, after the filing of the petitions, it received a purchase order for *** chassis from ***.[246] *** submits that this order has *** and that it will ***.[247] It also submits that it has ***.[248]

This evidence (showing that U.S. producers bid unsuccessfully on purchase orders for a variety of quantities and types of chassis, and with a variety of delivery timeframes during the POI and that, after the filing of the petition, U.S. producers were beginning to receive larger volume orders) indicates that domestic producers have the capacity and desire to supply large orders, and that instances that CIMC cites as evidence to the contrary are rather an indicator of the harmful effect of subject imports.[249] Finally, as stated above, we have found that

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11 n.5; Verification Report (Mar. 5, 2021), EDIS Doc. #738592, at 6-7. Petitioner's adjusted figures show substantial excess capacity. *See* CR/PR at III-11 n.5.

[245] *See* Petitioner's Posthearing Brief at Exhibit 1 at 3-14, Exhibits 4-7. We note, in particular, that Exhibit 5 contains an overview and contemporaneous emails and other documentation of *** bids for chassis sales to multiple purchasers during the POI for a variety of types of chassis, with quantities ranging in size from *** units to *** units, and under a variety of delivery schedules. *See id.* at Exhibit 5; *see also* Hearing Tr. (Katz) at 61, 151-152; Hearing Tr. (Gill) at 63-64. CIMC argues that the U.S. producers' bids were turned down for non-price reasons. *See* CIMC's Final Comments at 2-7. CIMC's argument, however, does not refute the information in the record that U.S. producers bid on and demonstrated an intention to satisfy purchaser requirements on order size and delivery time. This documentation also undermines CIMC's contention that the market primarily demands large orders (of 1,000 units or more) on short turnaround times. *See* CIMC Posthearing Brief, Exhibit 1 at 46-50.

[246] *** U.S. Producer Questionnaire Response at II-2a.

[247] *** U.S. Producer Questionnaire Response at II-2a.

[248] *** U.S. Producer Questionnaire Response at II-2a.

[249] *E.g.*, Hearing Tr. (Wahlin) at 59-60 ("{W}e can build up our workforce and get the product built, but when there's a short surge, we can't – we're not able to produce that. . . . {W}e have to have

competition from subject imports itself limited the ability of the domestic industry to invest further and modernize its production capabilities, as domestic producers reported that ***.[250] Thus, on this record, domestic producers' difficulties in supplying more of the U.S. market are part of the injury caused by subject imports, not an alternative cause of the injury.

V. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of chassis and subassemblies from China that are subsidized by the government of China.

something on the other side of it. We can't just build for one order for a couple hundred chassis or a few hundred chassis and then lay people off again.").

[250] *See* CR/PR at Tables III-9, VI-7, and VI-8.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the Coalition of American Chassis Manufacturers ("CACM"),[1] on July 30, 2020, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of certain chassis and subassemblies thereof ("chassis")[2] from China. The following tabulation provides information relating to the background of these investigations.[3] [4]

[1] CACM is comprised of Cheetah Chassis Corporation, Fairless Hills, Pennsylvania ("Cheetah"); Hercules Enterprises, LLC, Hillsborough, New Jersey ("Hercules"); Pitts Enterprises, Inc., Pittsview, Alabama ("Pitts"); Pratt Industries, Inc., Bridgman, Michigan ("Pratt"); and Stoughton Trailers, LLC, Stoughton, Wisconsin ("Stoughton").

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

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

[4] Appendix B is reserved for the witnesses appearing at the Commission's hearing for this proceeding.

Effective date	Action
July 30, 2020	Petitions filed with Commerce and the Commission; institution of Commission investigations (85 FR 47400, August 5, 2020)
August 19, 2020	Commerce's notices of initiation (countervailing duty: 85 FR 52549, August 26, 2020; antidumping duty: 85 FR 52552, August 26, 2020))
September 14, 2020	Commission's preliminary determinations (85 FR 58386, September 18, 2020)
January 4, 2021	Commerce's preliminary countervailing duty determination (86 FR 56, January 4, 2021); scheduling of final phase of Commission investigations (86 FR 3193, January 14, 2021)
March 4, 2021	Commerce's preliminary affirmative determination of sales at less than fair value (86 FR 12616, March 4, 2021)
March 16, 2021	Commission's hearing
March 22, 2021; May 11, 2021	Commerce's final countervailing duty determination (86 FR 15186); scheduled date of Commerce's antidumping duty determination
April 13, 2021	Scheduled date for the Commission's vote
April 27, 2021	Scheduled date for the Commission's views

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[5]

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any*

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

increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[6]

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

Organization of report

Part I of this report presents information on the subject merchandise, subsidy/dumping margins, and domestic like product. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Parts IV and V present the volume of subject imports and pricing of domestic and imported products, respectively. Part VI presents information on the financial experience of

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

U.S. producers. Part VII presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

Market summary

Chassis are skeletal rectangular-framed trailers used to transport intermodal cargo containers. The leading U.S. producers of chassis are Cheetah, Hercules, and Pratt, while the leading producer of chassis outside the United States is CIMC Vehicles (Group) Co., Ltd. ("CIMC" or "CV") of China. This firm and its affiliates are also the leading U.S. importers of chassis and subassemblies from China.[7] The leading importer of product from nonsubject sources (primarily Mexico) is Hyundai Translead ("Hyundai"). U.S. purchasers of chassis and subassemblies include leasing companies, dealers, or major trucking fleets. Leading purchasers include ***.[8]

Apparent U.S. consumption of chassis totaled approximately *** units ($***) in 2020. Currently, six firms are known to produce chassis in the United States. U.S. producers' U.S. shipments of chassis totaled *** units ($***) in 2020, and accounted for *** percent of apparent U.S. consumption by quantity,[9] *** percent by short tons, and *** percent by value. U.S. importers' U.S. shipments of chassis from China (inclusive of commercial shipments and internal consumption, but exclusive of transfers to related firms) totaled *** units ($***) in 2020 and accounted for *** percent of apparent U.S. consumption by quantity, *** percent by short tons, and *** percent by value. U.S. imports from nonsubject sources totaled *** units ($***) in 2020 and

[7] The vast majority of subject imports reported in importers' questionnaire responses are attributed to CIMC-affiliated companies. These affiliates include wholly owned Chinese subsidiaries Dongguan CIMC Vehicle Co., Ltd, ("DCVC") and Shenzhen CIMC Vehicle Co., Ltd. ("SCVC"), which were foreign producers, exporters to the United States, and importers of subject merchandise during the POI. CV is also the parent company of wholly owned US subsidiary CIMC Intermodal Equipment, LLC ("CIE"), which was an assembler of chassis subassemblies and importer of subject merchandise during the POI. Organizational charts of CIMC's corporate structure are provided in CIMC's postconference brief, exh. 23.

[8] ***.

[9] Unless otherwise specified, the term "quantity" refers to units.

accounted for *** percent of apparent U.S. consumption by quantity, *** percent by short tons, and *** percent by value.[10]

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, tables C-1 and C-2. Except as noted, U.S. industry data are based on questionnaire responses of six firms that accounted for over 95 percent of U.S. production of chassis and chassis subassemblies during 2020.[11] U.S. imports are based on questionnaire responses of three firms and are believed to account for nearly all imports of chassis and chassis subassemblies from subject and nonsubject sources.[12] [13] [14] Foreign industry data and related information are based on the questionnaire responses of eight firms, all affiliated with CIMC, which account for, according to estimates requested of the responding Chinese producers, approximately *** percent of

[10] Apparent U.S. consumption is inclusive of full chassis and subassemblies. Apparent consumption of full chassis totaled *** units. U.S. producers' U.S. shipments of full chassis totaled *** units ($***) in 2020, and accounted for *** percent of the quantity of apparent consumption of full chassis units in 2020. U.S. importers' U.S. shipments of full chassis from China totaled *** units ($***) in 2020, and accounted for *** percent of the quantity of apparent consumption of full chassis units in 2020.

[11] Based on estimates provided by the petitioner. Petition, p. 3.

[12] Though chassis could potentially be entered under statistical reporting number 8716.39.0090, as well as under statistical reporting number 8716.90.5060, such numbers are "basket" categories that may contain nonsubject merchandise. Therefore, U.S. import data are based on the questionnaire responses of CIMC, Pitts, and Hyundai, which are believed to account for nearly all imports of chassis from both subject and nonsubject sources. In the preliminary phase of these investigations, CIMC reported that it is the only exporter of subject merchandise from China to the United States, and further noted that it agreed with the petitioner that Hyundai's imports from Mexico represent the only notable source of nonsubject imports of chassis. CIMC's postconference brief, pp. 16-18.

[13] Nearly all importer questionnaire responses reporting imports from China and foreign producer responses are from CIMC-affiliated companies. In the preliminary phase of these investigations, the CIMC-affiliated Chinese producers did not account for a higher share of U.S. imports of chassis and chassis subassemblies from China because the foreign producer primary data responses included only exports of complete chassis, and not subassemblies, arguing that it would be "distortive" to report both complete chassis and subassemblies. For the final phase of these investigations, staff directed CIMC and all related companies to report exports of complete chassis and subassemblies. ***.

[14] The prehearing report indicated that U.S. imports were based on the responses of six firms, ***. For this final staff report CIMC submitted a single questionnaire response combining the data and responses of the CIMC-affiliated companies. Additional information can be found in Part IV.

overall production of chassis in China and *** percent of total exports to the United States of chassis produced in China during 2020.

Previous and related investigations

Chassis have not been the subject of any prior countervailing or antidumping duty investigations in the United States.[15]

Nature and extent of subsidies and sales at LTFV

Subsidies

On March 22, 2021, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of product from China.[16] Table I-1 presents Commerce's findings of subsidization of chassis in China.

Table I-1
Chassis: Commerce's final subsidy determination with respect to imports of chassis and subassemblies from China

Entity	Final countervailable subsidy rate (percent)
Qingdao CIMC Special Vehicles Co., Ltd. and Dongguan CIMC Vehicle Co., Ltd.	39.14
All others	39.14

Source: 86 FR 15186, March 22, 2021.

[15] On June 1, 2015, the Commission determined that the establishment of an industry in the United States was not materially retarded by reason of imports of 53-foot domestic dry containers from China. *53-Foot Domestic Dry Containers from China, Investigation Nos. 701-TA-514 and 731-TA-1250 (Final)*, USITC Publication 4537, June 2015, p. 1. Though chassis was not the subject merchandise in those investigations, such containers are a common product carried by chassis. Conference transcript, pp. 29-30 (Wahlin).

[16] 86 FR 15186, March 22, 2021.

Sales at LTFV

On March 4, 2021, Commerce published a notice in the *Federal Register* of its preliminary determination of sales at LTFV with respect to imports from China.[17] The scheduled date for Commerce's final determination of sales at LTFV with respect to imports from China is May 11, 2021. Table I-2 presents Commerce's dumping margins with respect to imports of chassis and subassemblies from China.

Table I-2
Chassis: Commerce's preliminary weighted-average LTFV margins with respect to imports from China

Producer/Exporter	Preliminary dumping margin (percent)
China-Wide Entity	188.05

Source: 86 FR 12616, March 4, 2021.

[17] 86 FR 12616, March 4, 2021.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[18]

The merchandise covered by this investigation is chassis and subassemblies thereof, whether finished or unfinished, whether assembled or unassembled, whether coated or uncoated, regardless of the number of axles, for carriage of containers, or other payloads (including self-supporting payloads) for road, marine roll-on/roll-off (RORO) and/or rail transport. Chassis are typically, but are not limited to, rectangular framed trailers with a suspension and axle system, wheels and tires, brakes, a lighting and electrical system, a coupling for towing behind a truck tractor, and a locking system or systems to secure the shipping container or containers to the chassis using twistlocks, slide pins or similar attachment devices to engage the corner fittings on the container or other payload.
Subject merchandise includes, but is not limited to, the following subassemblies:

- *Chassis frames, or sections of chassis frames, including kingpin assemblies, bolsters consisting of transverse beams with locking or support mechanisms, goosenecks, drop assemblies, extension mechanisms and/or rear impact guards;*

- *Running gear assemblies or axle assemblies for connection to the chassis frame, whether fixed in nature or capable of sliding fore and aft or lifting up and lowering down, which may or may not include suspension(s) (mechanical or pneumatic), wheel end components, slack adjusters, axles, brake chambers, locking pins, and tires and wheels;*

- *Landing gear assemblies, for connection to the chassis frame, capable of supporting the chassis when it is not engaged to a tractor; and*

- *Assemblies that connect to the chassis frame or a section of the chassis frame, such as, but not limited to, pintle hooks or B-trains (which include a fifth wheel), which are capable of connecting a chassis to a converter dolly or another chassis.*

[18] 86 FR 15186, March 22, 2021.

Importation of any of these subassemblies, whether assembled or unassembled, constitutes an unfinished chassis for purposes of this investigation.

Subject merchandise also includes chassis, whether finished or unfinished, entered with or for further assembly with components such as, but not limited to: Hub and drum assemblies, brake assemblies (either drum or disc), axles, brake chambers, suspensions and suspension components, wheel end components, landing gear legs, spoke or disc wheels, tires, brake control systems, electrical harnesses and lighting systems.

Processing of finished and unfinished chassis and components such as trimming, cutting, grinding, notching, punching, drilling, painting, coating, staining, finishing, assembly, or any other processing either in the country of manufacture of the in-scope product or in a third country does not remove the product from the scope. Inclusion of other components not identified as comprising the finished or unfinished chassis does not remove the product from the scope.

Individual components entered and sold by themselves are not subject to the investigation, but components entered with or for further assembly with a finished or unfinished chassis are subject merchandise. A finished chassis is ultimately comprised of several different types of subassemblies. Within each subassembly there are numerous components that comprise a given subassembly.

This scope excludes dry van trailers, refrigerated van trailers and flatbed trailers. Dry van trailers are trailers with a wholly enclosed cargo space comprised of fixed sides, nose, floor and roof, with articulated panels (doors) across the rear and occasionally at selected places on the sides, with the cargo space being permanently incorporated in the trailer itself. Refrigerated van trailers are trailers with a wholly enclosed cargo space comprised of fixed sides, nose, floor and roof, with articulated panels (doors) across the rear and occasionally at selected places on the sides, with the cargo space being permanently incorporated in the trailer and being insulated, possessing specific thermal properties intended for use with self-contained refrigeration systems. Flatbed (or platform) trailers consist of load-carrying main frames and a solid, flat or stepped loading deck or floor permanently incorporated with and supported by frame rails and cross members.

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following provisions of the Harmonized Tariff Schedule of the United States ("HTS"): 8716.39.0090 and 8716.90.5060. The 2021 general rate of duty is free for HTS subheading 8716.39.00 and 3.1

percent *ad valorem* for HTS subheading 8716.90.50. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Chassis and chassis parts provided for in HTS subheading 8716.39.00 or 8716.90.50 and imported under statistical reporting number 8716.39.0090 or 8716.90.5060 were included in the USTR's third enumeration ("Tranche 3") of products originating in China that became subject to an additional 10 percent ad valorem Section 301 duties, effective September 24, 2018. The duties were increased to 25 percent ad valorem, effective May 10, 2019, and remain in effect at this rate at this time.[19] Effective August 12, 2020, some exclusions have been granted for components that may be used in chassis.[20]

The product

Description and applications

Chassis are skeletal rectangular-framed trailers used to transport shipping containers (figure I-1). The rectangular frame is made up of steel with a suspension and axle system, wheels and tires, brakes, a lighting and electrical system, a coupling for towing behind a truck tractor, and a locking system to secure the shipping container or containers attached to the chassis. Chassis are designed to carry containers of various sizes (usually ranging from 20-foot to 53-foot in the United States). The majority (approximately 65 percent) of chassis in the United States are 40-foot.[21] The next largest category is 53-foot chassis, which make up 15 to 20 percent of the market.[22] Some chassis are built with a sliding or adjustable suspension to accommodate different container sizes.

The subassemblies (chassis frames, running gear assemblies, landing gear assemblies, and assemblies that connect to the chassis frame) are also included in the scope. The chassis frame is only used in chassis production,[23] while many of the other components (e.g., landing gear legs, air brakes, axles, suspension, etc.) could be used in other types of trailers.[24]

[19] 83 FR 47974, September 21, 2018 and 84 FR 20459, May 9, 2019. See also U.S. notes 20(e) and 20(f), subchapter III of chapter 99 of the HTSUS.

[20] See U.S. note 20(f) to subchapter III of HTS chapter 99. *HTSUS (2021) Preliminary Revision 3, USITC Publication 5095*, July 2020, p. 99-III-46; Petitioner's postconference brief, exh. 1, pp. 20-24.

[21] CIE Manufacturing, "Chassis 101," (retrieved August 7, 2020).

[22] CIMC's postconference brief, p. 3.

[23] Petitioner's prehearing brief, p. 6.

[24] Hearing transcript pp. 283 (Kao).

Figure I-1
Completed chassis

Source: Petition, p. 6.

The "kingpin" is located at the front of the chassis and is used to connect the chassis to a road tractor. A few feet behind the kingpin is the "landing gear", designed to support the front of the chassis when the kingpin is not attached to a road tractor. Containers are secured to the chassis using a twistlock in a corner casting (figures I-2 and I-3). The twistlock is inserted into the corner casting of a container, then the end is twisted so it cannot be withdrawn again.[25]

[25] A video showing how a twistlock works is located: *How Double Ended Twist Locks for Shipping Containers Work,* https:***www.youtube.com/watch?v=Sz8smq6ddok, retrieved August 27, 2020.

Figure I-2
Corner casting (empty)

Source: Petitioner Response to Commerce's Supplemental Questions on General Issues Volume I of the Petition, p. 2.

Figure I-3
Twistlock that has been inserted into a corner casting

Source: Petitioner Response to Commerce's Supplemental Questions on General Issues Volume I of the Petition, p. 2.

Chassis have an air-brake system, which uses compressed air to transmit pressure from the driver control to service brakes and emergency brakes.[26] An interlocking hose coupling, or "glad hands" connector, connects air brake hoses from the chassis to the road tractor (figure I-4). The system is tested in accordance with the Truck Trailer Manufacturer's Association Recommended Practice RP12. The brakes must comply with Federal Motor Vehicle Safety Standards (FMVSS) 121.[27]

Figure I-4
Glad hands hose assembly (10 ft)

Source: *Zoro webpage*, https:***www.zoro.com/velvac-gladhand-hose-assy-10-ft-145110/i/G9488491/

The rear of the chassis features an axle with wheels and tires, as well as brake lights, running lights, and a rear bumper. Chassis usually have eight to twelve wheels, two to three rows of "dualies" (where there are two wheels next to each other) on each side of the axle. The rear bumper must comply with FMVSS 223 and 224.[28]

The petitioner and CIMC highlighted several differences between the subject chassis and domestically manufactured chassis. CIMC's 53-foot chassis frames are often imported in

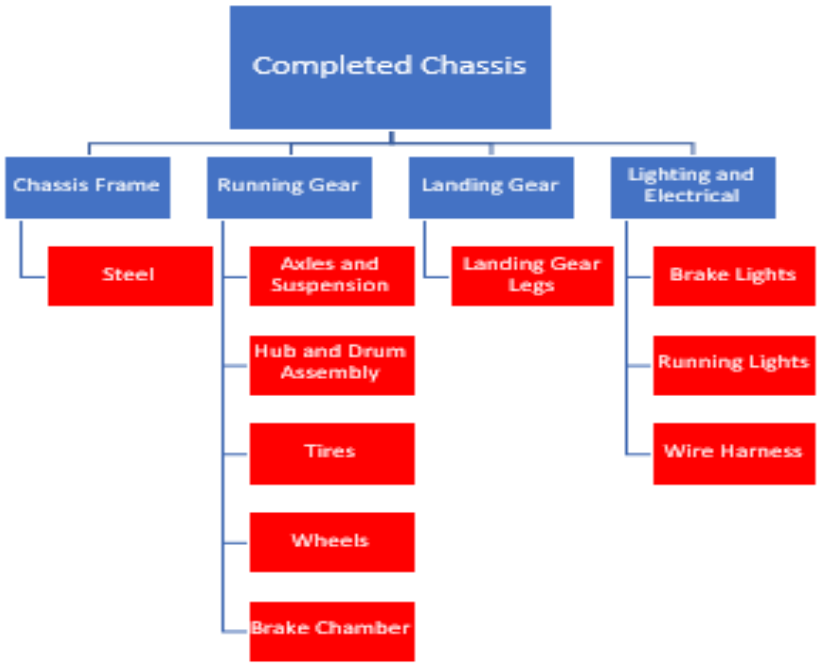
[26] Petition, exh. I-5, Certification of Container Chassis, 70.
[27] Petition, exh. I-4, AAR Manual of Standards and Recommended Practices Intermodal Equipment Manual, p. 22.
[28] Exhibit I-4 of Petition, AAR Manual of Standards and Recommended Practices Intermodal Equipment Manual, p. 20.

two pieces: one 40-foot piece, and one 13-foot gooseneck. The two parts are then bolted together after import. Domestically manufactured 53-foot chassis tend to have a frame where all of the joints are welded together.[29] CIMC's chassis frames are also painted using an e-coating process called KTL that reportedly provides greater protection against corrosion, and are reportedly 400 pounds lighter.[30]

Manufacturing processes

The four major subassemblies for the chassis are the frame, the running gear assembly, landing gear, and lighting and electrical system (figure I-5). The running gear, air brake system, and lighting and electrical system are made up of components that are produced by third parties, assembled into subassemblies, and installed on the chassis frame to produce a finished product. The running gear assembly is made up of tires, hub and drum assemblies, axles and suspensions, brake chambers, and other components.

Figure I-5
Chassis, subassembly, and components



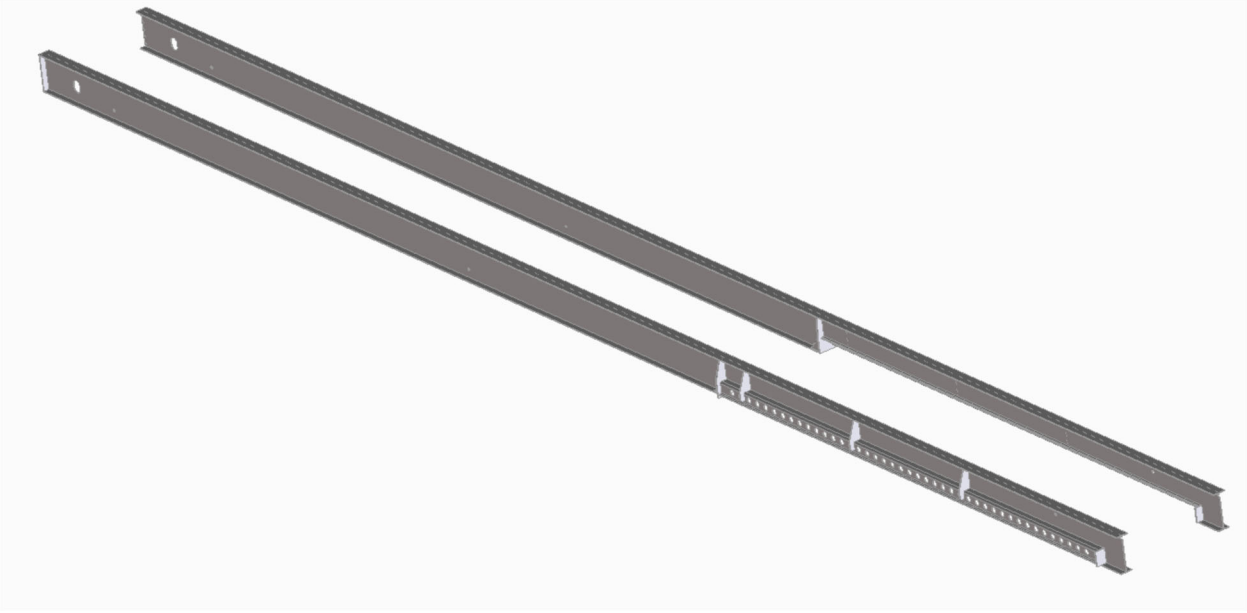
Source: Staff constructed based on information in the Petition and testimony.

[29] Respondent Attachment C, p. 20.
[30] Respondent Attachment C, p. 14. Conference transcript, pp. 164 (Sonzala), 180 (Awad), and 190 (Vandeloo); Respondent post-conference brief, pp. 36-37.

Note: Blue items tend to be assembled at the chassis production plant using components, while red items are produced by outside suppliers.

The chassis frame consists of welded steel parts in three basic segments: front, or forward beam and front crossmember assembly; middle assembly; and rear, or rear crossmember including the Rear Impact Guard assembly. Steel I-beams (the long external beams in the figure below), box beams (a hollow beam made up of four solid beams), channels (a beam in what appears to be a c-shape), and angles (beam that forms more of an L-shape) are cut and welded together in the shape of the frame (figures I-6 and I-7). The gooseneck is welded on next (figure I-8). U.S. manufacturers tend to use manual welding, while CIMC uses robotic welding.[31] At least one domestic manufacturer plans to incorporate robotic welding in 2021.[32]

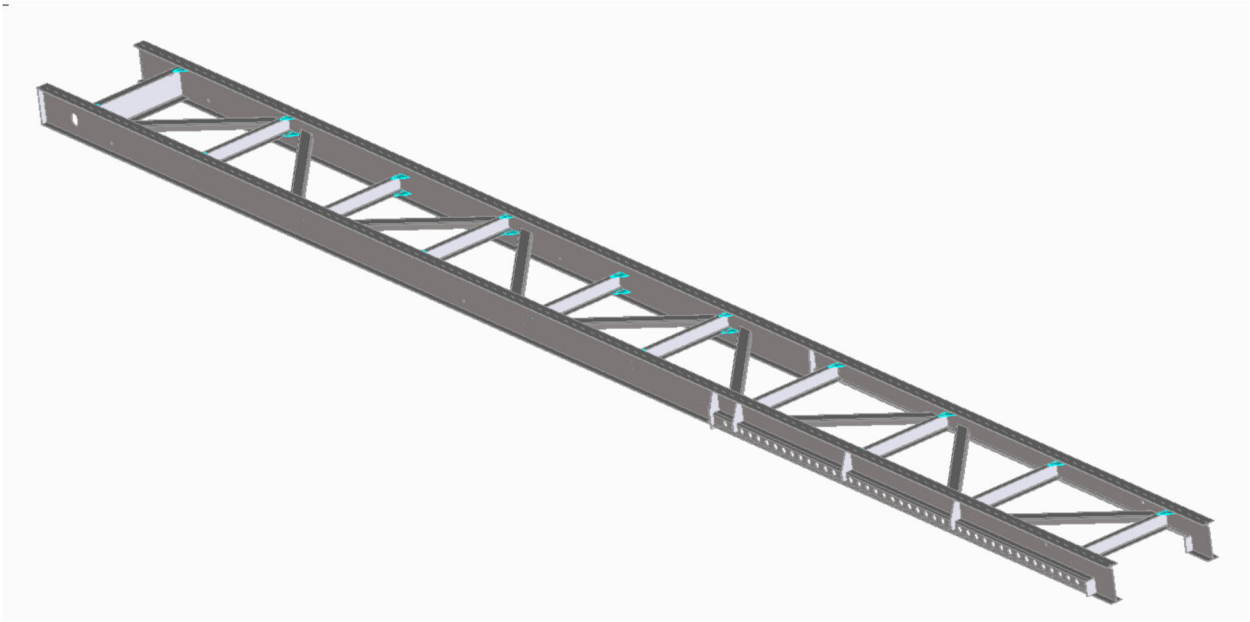
Figure I-6
Chassis main frame subassembly with main beams



Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 3.

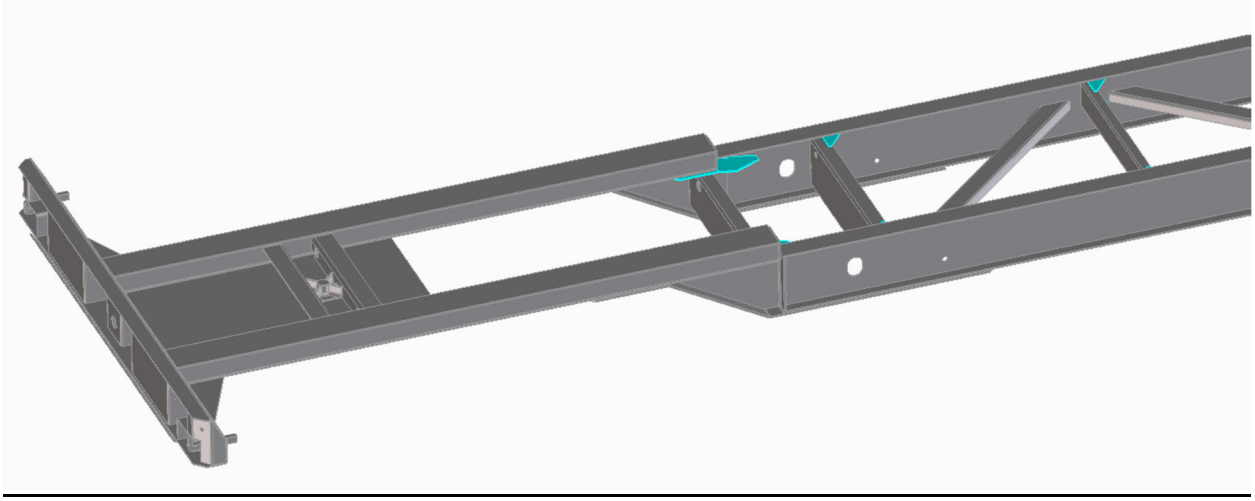
[31] Petition p. 10; Respondent prehearing brief, p.46; Respondent Attachment C, p. 13.
[32] Staff site visit ***.

Figure I-7
Chassis main frame subassembly with crossmembers diagonals and slide rails



Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 4.

Figure I-8
Gooseneck combined with main frame

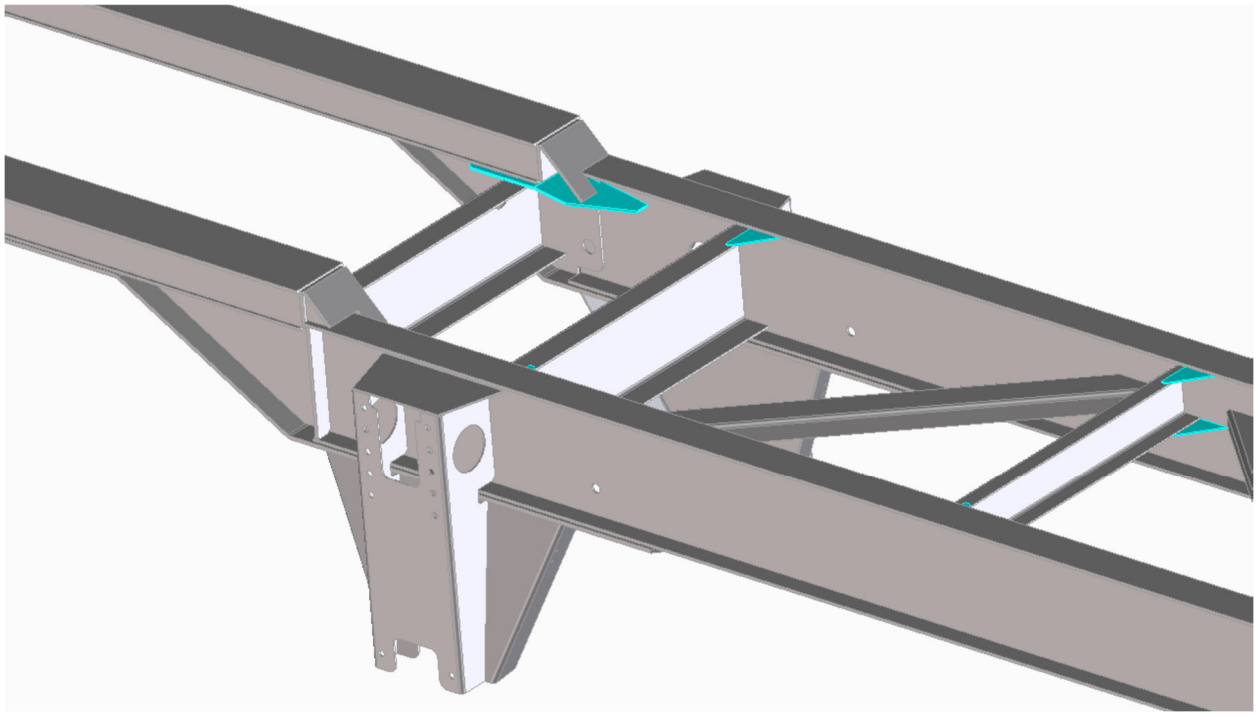


Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 11.

After the steel parts are welded together and coated, the air brake system and electrical components are added. Final assembly of the chassis is a seven-stage process:

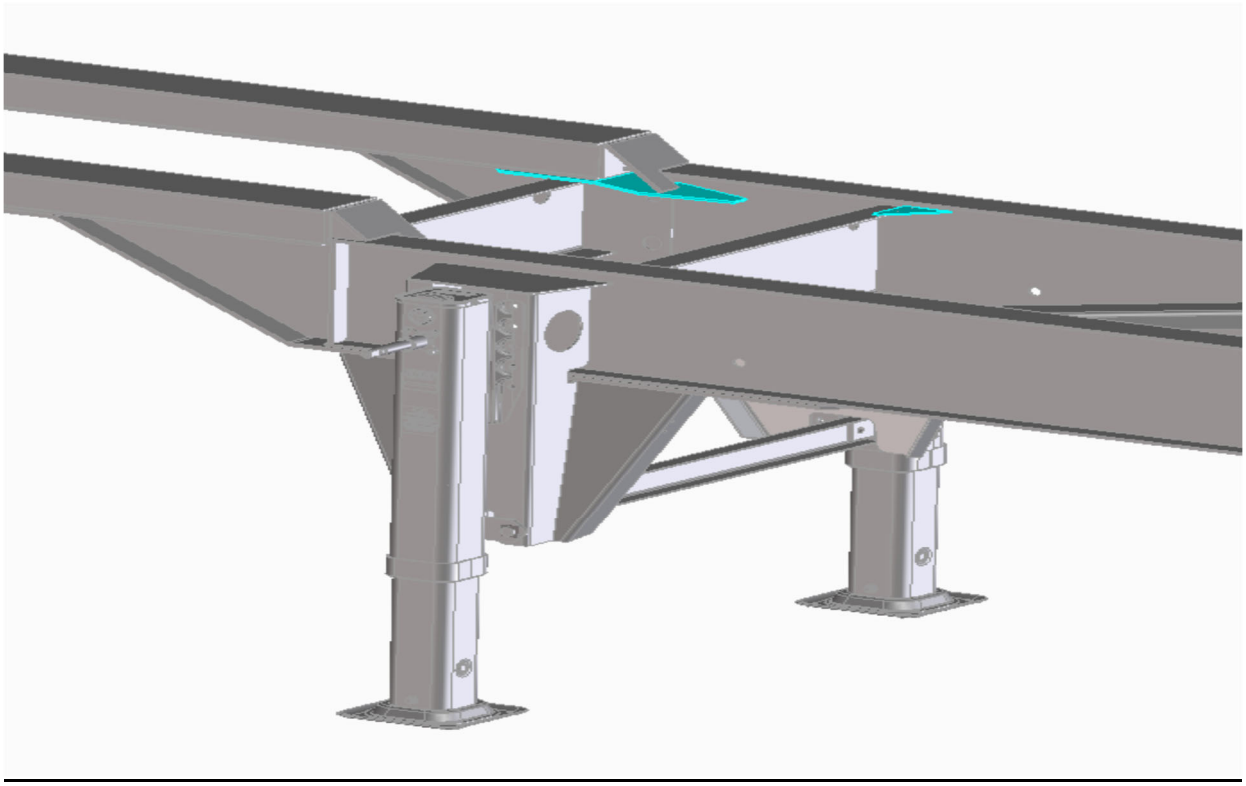
1. The front assembly is oriented with king pin (the part that attaches to a road tractor for towing) facing upward so the landing gear and cross-brace can be attached (figures I-9 and I-10).

Figure I-9
Landing gear mounting attached to frame



Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 16.

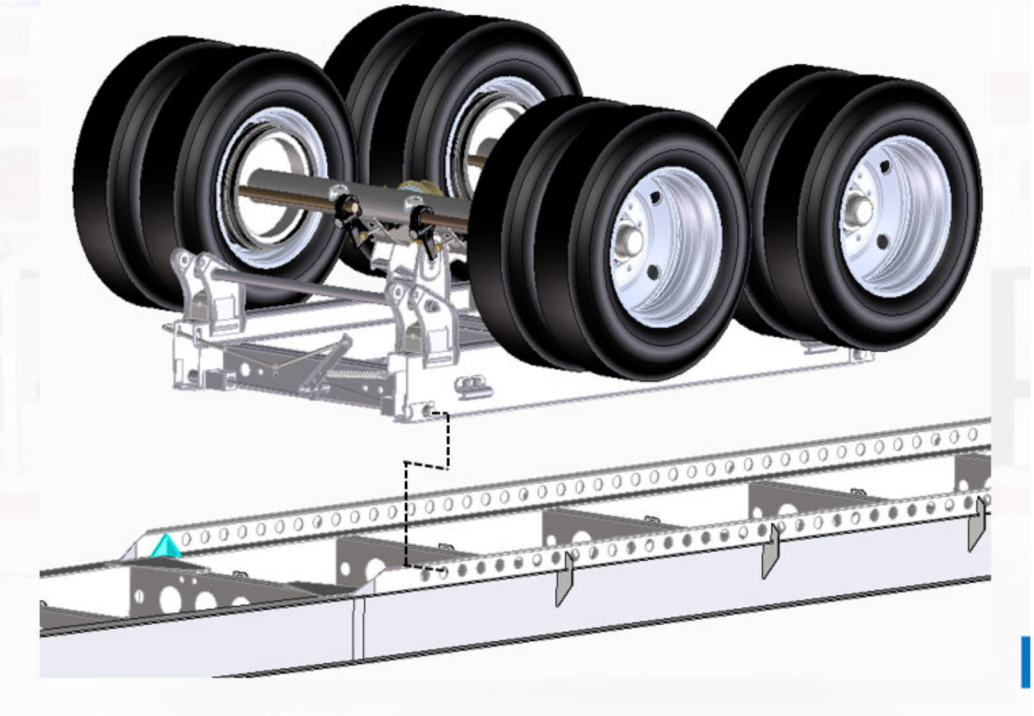
Figure I-10
Landing Gear and Crossbrace Installed



Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 17.

2. The mainframe is inverted for the installation of the axle/wheel/tire portion of the suspension (i.e., running gear) (figure I-11).

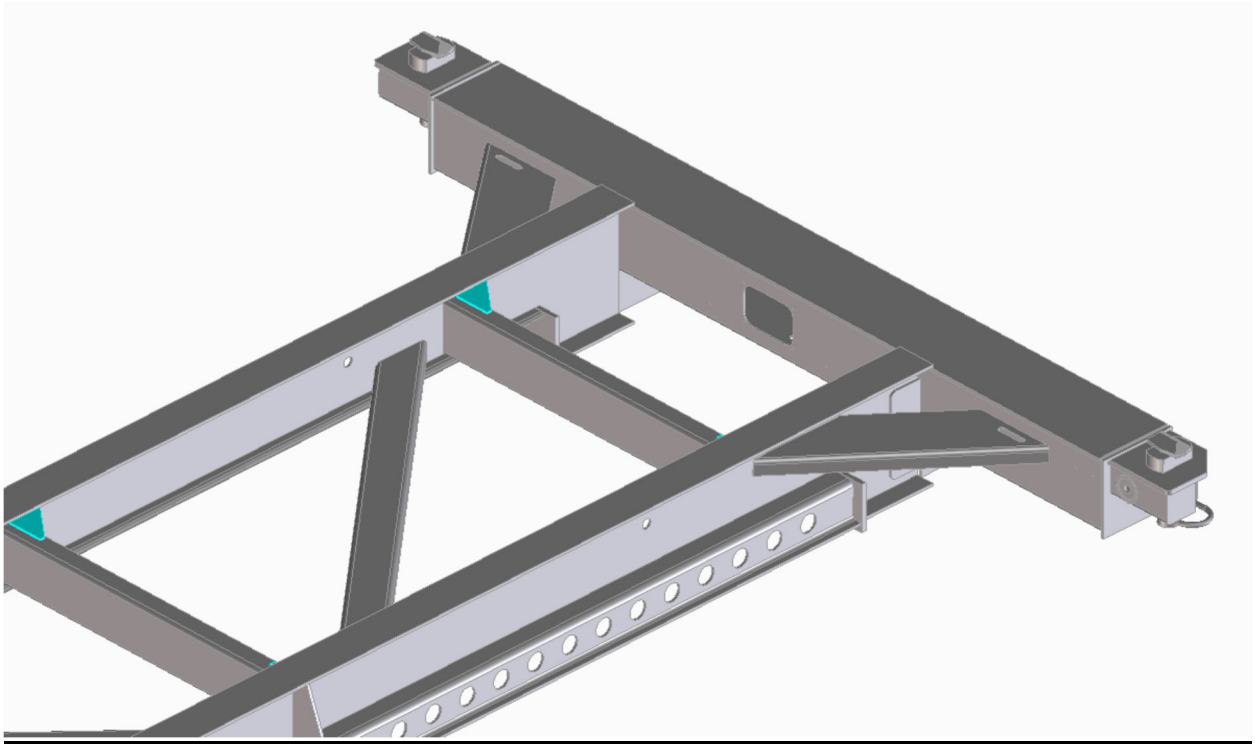
Figure I-11
Running Gear Assembly



Source: Petition, p. 9.

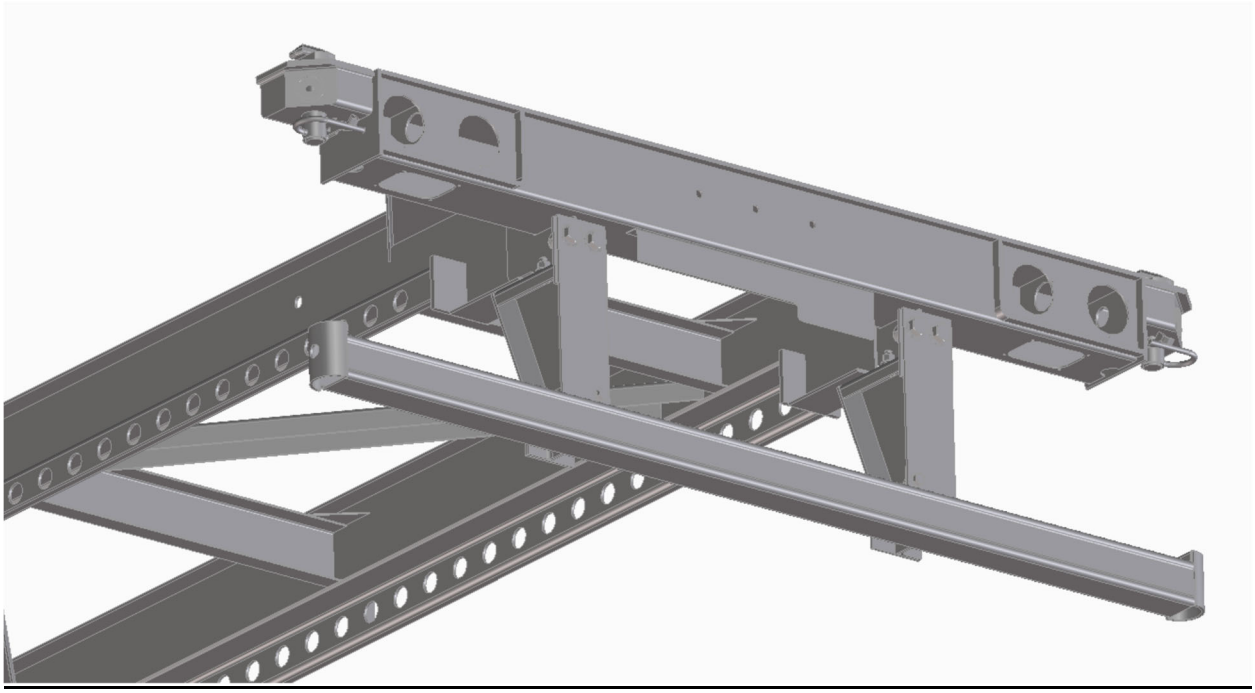
3. The front and mainframe are oriented in an upright position and the connection just behind the landing gear is completed.
4. The rear section is attached to the rear portion of the main beam behind the suspension (figures I-12 and I-13). CACM firms tend to weld the bumper to the frame, while the respondents tend to bolt it.

Figure I-12
Rear bolster attached to main frame



Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 13.

Figure I-13
Rear Impact Guard Attached to Main Frame



Source: Petitioner Conference Testimony, General Sequence of Assembly of 53ft Chassis, p. 14.

5. Axle alignment procedure is performed.
6. Air and electrical connections are completed from section to section using glad hands connectors for the air brakes and a plug and socket for the electrical connection.
7. The final inspection, including light check, air brake timing tests, and Federal Highway Administration ("FHWA") inspection is accomplished.

Though the manufacturing processes in the United States and China have much in common, there are some differences according to petitioning firms and CIMC. CACM firms (i.e., the petitioning firms) fabricate the steel beams and weld them together on the same site as the assembly plant, while, for larger chassis, CIMC constructs the chassis frame in China, then sends the frame (and other subassemblies) to a facility in the United States for assembly.[33] Also, CIMC uses robotic welders to construct the steel frame in China while CACM firms tend to use manual or semi-automated processes. Many items that are welded together by CACM firms are often bolted by CIMC. For example, the rear impact guard (bumper) is bolted on by CIMC, but it is welded on by CACM firms.[34] Both CACM firms and CIMC use components that are made by third parties as inputs into subassemblies outside of the chassis frame. For axles, CACM firms purchase "undressed" axles and add bearings, lubricant, and attach the bolsters that the wheel will be attached to. CIMC purchases "dressed" axles that were packed by the supplier and are ready for the wheel to be attached.[35]

[33] Smaller chassis are assembled in China. Petitioner's prehearing brief, pp. 24-25; and CIMC's postconference brief exh. 1, 4-5.

[34] Conference transcript, p. 257 (Anderson).

[35] Site visits ***.

Domestic like product issues

The petitioner proposes that the Commission should define a single domestic like product, co-extensive with the scope of the investigations, and in particular that the Commission should define finished chassis and chassis subassemblies to comprise a single like product.[36] The petitioner argues that all chassis as defined in the scope should be included in the domestic like product, and further contends that as a semi-finished product, subassemblies are part of the same domestic like product.[37] The petitioner argues that the processes used to transform subassemblies into chassis are not complex, that subassemblies are dedicated to the production of full chassis and cannot be used for any other product, that there are few differences in the physical characteristics of full chassis and subassemblies, that subassemblies and full chassis do not have separate markets, and that subassemblies account for a majority of total cost of goods sold for full chassis.[38]

Respondent CIMC argues that full chassis and subassemblies constitute separate like products.[39] CIMC contends that there is a clear dividing line between full chassis and subassemblies, arguing that subassemblies and full chassis have different physical characteristics, different sets of producers, manufacturing facilities, production processes, and employees, that full chassis and subassemblies are not interchangeable, have different producer and customer perceptions, are sold in different channels of distribution, and have different production costs and prices.[40] Additionally, CIMC contends that full chassis and subassemblies constitute a separate like product with respect to any semifinished like product analysis, arguing that upstream subassemblies are not dedicated exclusively to the production of complete chassis, that subassemblies are sold in different markets in which full chassis are not, that subassemblies and full chassis have different inherent physical characteristics and functions, that complete chassis are costlier than any type of subassembly, and that the processes used to transform subassemblies into chassis are complex.[41]

U.S. producers and importers were asked to assess any differences between complete chassis and in-scope subassemblies of chassis based on factors the Commission typically considers in a semi-finished products analysis, including: (1) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (2) whether

[36] Petitioner's prehearing brief, p. 5.
[37] Petitioner's prehearing brief, pp. 6-7, and posthearing brief at exh. 1, p. 96.
[38] Petitioner's prehearing brief, pp. 8-18, and posthearing brief at exh. 1, p. 97-102.
[39] CIMC's prehearing brief, p.10.
[40] CIMC's prehearing brief, Attachment A, pp. 3-11, and posthearing brief at exh. 1, pp. 58-59.
[41] CIMC's prehearing brief, Attachment A, pp. 11-15, and posthearing brief at exh. 1, pp. 59-60.

there are perceived to be separate markets for the upstream and downstream articles; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) differences in the costs or value of the vertically differentiated articles; and (5) the significance and extent of the processes used to transform the upstream into the downstream articles. Responses provided by firms are summarized in table I-3 below (where a 'no' response generally corresponds to indicating no differences or distinctions between complete chassis and in-scope subassemblies of chassis). Additional narratives on finished and unfinished merchandise can be found in Appendix D.

Table I-3
Chassis: U.S. producers' and importers' response to semi-finished product analysis questions

Item	U.S. producers		U.S. importers	
	No	Yes	No	Yes
	Number of firms responding			
Semi-finished.-- Other uses	5	1	2	1
Separate market	5	1	2	1
Differences in characteristics	5	1	2	1
Differences in cost	5	1	2	1
Transformation intensive	5	1	2	1

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

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

U.S. market characteristics

Chassis are used for transporting cargo containers of various container sizes, typically 20 feet, 40 feet, 45 feet, or 53 feet long.[1] Fifty-three foot chassis ("domestic chassis") are typically used to transport domestic containers, while 40-foot chassis ("marine chassis") are typically used for international shipping containers.[2] The American Association of Railroads and the American Bureau of Shipping maintain specifications and standards specific to certain types of chassis. Not all chassis meet each of these standards or specifications.[3] Chassis must be registered before they can be used on public roadways.[4] Some chassis are made for specific containers and applications such as tank transport.[5] The average lifespan of a container chassis is 20 years.[6] Respondents estimate that the average age of the U.S. marine chassis fleet is between 19 and 26.5 years.[7]

Marine chassis are the most common type of chassis in the U.S. market by volume, representing approximately 80 percent of the U.S. chassis market, and are used primarily by leasing companies or chassis pools.[8] Domestic chassis are the second most common type of chassis, representing 15 to 20 percent of the U.S. market. Domestic chassis are purchased by trucking fleets, leasing pools, and railroads.[9] Specialty chassis reportedly account for approximately 5 percent or less of the chassis market.[10] Respondents stated that marine and

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[1] Chassis can also be built to carry more than one container. Containers carried on chassis include marine containers, containers transported only over land, tank containers for liquids or sand, containers without sides (flat racks), generators, and waste containers. Petition, pp. 5-6.

[2] Conference transcript, pp. 66-67 (Katz).

[3] Petition, p. 7. The Federal Motor Carrier Safety Administration (FMCSA) implemented roadability regulations in June 2009 that required intermodal equipment providers to establish recordkeeping and audit programs. These requirements were perceived as burdensome, thus causing various ocean carriers to divest their chassis fleets. CIMC's postconference brief, pp. 5-6.

[4] Petition, exh. I-3; Conference transcript, pp. 61-62 (Katz).

[5] For example, an ISO tank chassis has a drop in the middle of the chassis to maintain a lower center of gravity for the ISO container. Conference transcript, pp. 102-105 (Katz, Gill, Musick).

[6] Conference transcript, p. 162 (Sonzala).

[7] CIMC's postconference brief, p. 8.

[8] Leasing companies took the place of ocean carriers after their exit from the chassis market. Leasing companies own chassis fleets and lease them to operators, such as trucking lines, and established chassis pools to facilitate different carriers' usage of chassis. CIMC's postconference brief, pp. 3, 6-8.

[9] Conference transcript, p. 174 (Ash).

[10] CIMC's postconference brief, p. 4.

domestic chassis are sold in high volume orders, while specialty chassis are produced and ordered in lower volumes.[11]

Chassis can be imported either fully assembled or as multiple subassemblies to be assembled into a finished chassis in the United States, either with or without additional parts sourced domestically.[12] U.S. producers fabricate and weld together subassemblies, particularly the chassis frame, or they may purchase some welded steel parts such as shadow box assemblies used in the running gear. In contrast, imported chassis frames are bolted together.[13]

The U.S. chassis market is supplied by U.S. producers, Chinese imports, and imports from nonsubject countries such as Mexico.[14] The Chinese CIMC group[15] is the largest manufacturer of chassis in the world, and began production of full chassis in late 2020 in South Gate, California, and Emporia, Virginia.[16] Chinese chassis are subject to section 301 tariffs[17] and some chassis raw materials are subject to section 232 tariffs.[18]

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[11] CIMC's postconference brief, pp. 3-4.

[12] Petition, p. 7; CIMC's postconference brief, exh. 24, att. B; Staff trip notes to CIE, p. 4. ***. Ibid.

[13] Conference transcript, p. 224 (Anderson).

[14] U.S.-produced chassis and subassemblies accounted for *** percent of the U.S. market while Chinese chassis and subassemblies accounted for *** percent in 2020 on a quantity basis. The remaining *** percent of the U.S. market was supplied by nonsubject imports. On a value basis, U.S.-produced chassis and subassemblies accounted for *** percent of the market in 2020, an increase from *** percent in 2018, and chassis and subassemblies imported from China accounted for *** percent of the market in 2020, a decrease from *** percent in 2018. In terms of finished chassis on a quantity basis, the shares were *** for domestic chassis, *** for China, and *** for nonsubject sources.

[15] The CIMC Group provided an ***, and a producer and purchaser response from CIE.

[16] CIE reported in 2020 that it would move its chassis production to the United States due to "the trade war" between China and the United States and the high cost of operating in China due to tariffs. "Chassis Maker CIMC Intermodal Equipment to Change Name to CIE Manufacturing," Transport Topics, January 13, 2020, https://www.ttnews.com/articles/chassis-maker-cimc-intermodal-equipment-change-name-cie-manufacturing, retrieved August 18, 2020.

[17] See below for a discussion of the impact of the section 301 tariffs.

[18] See Part V for a discussion of the impact of the section 232 tariffs.

Apparent U.S. consumption of chassis decreased during January 2018-December 2020, falling by *** percent between 2018 and 2019 before increasing by *** percent in 2020 on a quantity basis. Overall, apparent U.S. consumption was *** percent lower in 2020 than in 2018 on a quantity basis, and *** percent lower on a value basis.

U.S. purchasers

Chassis purchasers include leasing companies, dealers, or major trucking fleets.[19] Big box stores, which have begun to integrate their logistics and shipping, have started purchasing chassis as well.[20] Some purchasers prefer single-sourcing chassis for consistency and maintenance purposes.[21]

The Commission received 27 usable questionnaire responses from firms that had purchased chassis during January 2018-December 2020.[22] [23] Twelve responding purchasers are leasing firms, eight are distributors/dealers, seven are end users/trucking companies, and two are other (one of these is a *** and one is a ***). In general, responding U.S. purchasers were located in all regions of the United States. The number of chassis that each firm purchases varies from year to year. Large purchasers of chassis include

[19] Petition at 17; CIMC's postconference brief at 6-7.
[20] Conference transcript, pp. 96-97 (Wahlin, Katz), and pp.175-177 (Ash).
[21] Conference transcript, pp. 260-263 (VandeLoo, Awad).
[22] The following firms provided purchaser questionnaire responses: ***.
[23] Of the 24 responding purchasers, 18 purchased the domestic chassis, 18 purchased imports of the subject merchandise from China, and 7 purchased imports of chassis from other sources.

***.[24] Three of the firms that maintain the largest fleets in the United States – DCLI, which is the largest provider of intermodal chassis in the United States, J.B. Hunt, which has the largest company-owned 53-foot domestic container fleet in the United States, and TRAC Intermodal, which owns the largest marine chassis fleet in the United States – presented testimony at the Commission's hearing.

Impact of Section 301 tariffs

As discussed in Part I, chassis subject to these investigations have been subject to section 301 tariffs of 10 percent *ad valorem* beginning in September 2018, which were increased to 25 percent in May 2019.[25] As shown in table II-1, U.S. producers, importers, and purchasers had mixed responses regarding the impact of the 301 tariffs. The majority of U.S. producers and purchasers reported that the tariffs had no impact on the U.S. supply of chassis, whereas *** reported that the U.S. supply of chassis ***. Whereas the majority of purchasers indicated that the supply of chassis imported from China had decreased in response to the section 301 tariffs, five of six U.S. producers stated that the section 301 tariffs had increased the supply of chassis imported from China.[26] A plurality of responding firms reported that section 301 tariffs had not caused the supply of chassis from countries other than China to change, although an equal number of purchasers reported an increase. While most U.S. producers reported that prices for chassis did not change as a result of the section 301 tariffs, *** and all purchasers reported prices increased.[27]

[24] The majority of ***.

[25] *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 48,000, September 21, 2018; *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 20,459, May 9, 2019.

[26] Among importers, *** reported that supply of imports from China decreased and *** reported increasing imports from China, noting that "***". ***.

[27] ***.

Table II-1
Chassis: U.S. producers, U.S. importers, and purchaser firms' responses regrading impact of 301 tariffs

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Impact on U.S. supply of chassis:				
U.S. producers	---	5	---	1
Importers	***	***	***	***
Purchasers	2	7	---	2
Impact on China's supply of chassis:				
U.S. producers	5	---	1	---
Importers	***	***	***	***
Purchasers	1	3	7	---
Impact on supply from sources other than China:				
U.S. producers	---	4	1	1
Importers	***	***	***	***
Purchasers	4	4	---	1
Impact on prices:				
U.S. producers	1	4	---	1
Importers	***	***	***	***
Purchasers	11	---	---	---
Impact on overall demand for chassis:				
U.S. producers	1	2	---	3
Importers	***	***	***	***
Purchasers	4	5	1	1
Impact on chassis raw materials:				
U.S. producers	2	2	---	2
Importers	***	***	***	***
Purchasers	9	1	---	---
Impact on firm's own purchases:				
Purchasers	1	5	4	1

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

Half of responding U.S. producers *** reported that demand for chassis had fluctuated as a result of section 301 tariffs, while a plurality of purchasers reported that they had no impact on the demand for chassis. U.S. producers' responses on the impact of section 301 tariffs on raw material prices were mixed, while *** importers reported that they caused raw material prices to fluctuate and nearly all purchasers reported the raw material prices had increased. A plurality of purchasers reported that section 301 tariffs had no impact on their purchasing patterns.

The petitioner alleged that imports of Chinese chassis "rushed a massive amount of chassis into the United States in an attempt to beat the imposition of Section 301 duties, as

CIMC imported at least two years' worth of chassis in a single year."[28] The petitioner added that the large volume of chassis imported in 2018 due to the section 301 tariffs were stored as inventory, leading to an inventory overhang in the market based on ***.[29] Respondents argue that the increased imports in 2018 were because of increased demand from their customers due to an "ongoing chassis shortage" and that increased imports from China were market driven.[30] They further argue that this increase in demand stemmed from the perceived market need to be able to transport an anticipated increase in the number of containers shipped ahead of section 301 duty imposition and rate increases for retail and other goods.[31] For more information regarding inventories of imports from China, see Parts IV and VII.

Channels of distribution

U.S. producers and importers sold mainly to trucking companies/end users, as shown in table II-2.[32] A greater proportion of sales were made to distributors/dealers of U.S.-produced chassis than those produced in China or in nonsubject countries. The proportion shipped to end users was greater than *** percent in each year for chassis imported from China and greater than *** percent in each year for chassis imported from nonsubject countries.

[28] Petitioner's prehearing brief, p. 1.

[29] Petitioner's prehearing brief, pp. 64-67.

[30] CIMC's postconference brief, pp. 10-11.

[31] Hearing transcript, pp. 252 and 267 (LaBar). As further noted at the hearing, dwell times, or the time chassis spend awaiting loading or unloading, increased to three times what it had been prior to the section 301 duties. Chassis were increasingly used to store goods rather than transport them, causing an increase in demand. Ibid.

[32] A table of U.S. producers, excluding ***, and importers U.S. shipments by sources and channels of distribution is available in Appendix F.

Table II-2
Chassis: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, January 2018-December 2020

Item	Period		
	Calendar year		
	2018	2019	2020
	Share of reported shipments (percent)		
U.S. producers:			
to End users / Trucking	***	***	***
to Distributors / Dealers	***	***	***
U.S. importers: China			
to End users / Trucking	***	***	***
to Distributors / Dealers	***	***	***
U.S. importers: Nonsubject			
to End users / Trucking	***	***	***
to Distributors / Dealers	***	***	***
U.S. importers: All sources:			
to End users / Trucking	***	***	***
to Distributors / Dealers	***	***	***

Note: ***.
Note: ***.

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

Geographic distribution

U.S. producers and importers reported selling chassis to all regions in the United States during 2018, 2019, and 2020 (table II-3). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 500 miles, *** percent were 501 miles to 1,000 miles, and *** percent were over 1,000 miles. Importers' shipments were more concentrated: *** percent were sold within 100 miles of their U.S. point of shipment, *** percent between 101 and 500 miles, *** percent were between 501 and 1,000 miles, and *** percent over 1,000 miles.

Table II-3
Chassis: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers			Importers of chassis from China		
	2018	2019	2020	2018	2019	2020
Northeast	3	5	5	***	***	***
Midwest	4	4	2	***	***	***
Southeast	4	4	4	***	***	***
Central Southwest	2	3	2	***	***	***
Mountain	2	3	3	***	***	***
Pacific Coast	2	4	3	***	***	***
Other	1	1	1	***	***	***
All regions (except Other)	2	2	2	***	***	***
Reporting firms	4	6	5	***	***	***

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

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

Supply and demand considerations

U.S. supply

Table II-4 provides a summary of the supply factors regarding chassis from U.S. producers and from China. Multiple subassemblies are required for the production of a complete chassis, and due to the variable nature of subassemblies, which components are considered to be part of a subassembly and how many components are in each subassembly were not defined in the scope of the product.[33] Subassemblies may vary greatly in price as well as number of components and sophistication.[34] As a result, supply data contain data for chassis and subassemblies. Nearly all domestic supply data is provided in terms of full chassis. Subject import data are more heterogeneous: ***. See Parts III, IV, VI, and VII for more information.

[33] Subassemblies were delineated into types (chassis frames, running gear assemblies, landing gear assemblies, and assemblies and/or components that connect to the chassis frame or a section of a chassis frame), but some subassembly types contained further assemblies, components, and parts. Individual components entered and sold by themselves are not, however, subject to the scope, but components entered with or for further assembly with a finished or unfinished chassis are subject.

[34] Whereas full chassis unit values were typically greater than $10,000 per unit, average subassembly unit values were often less than $100 per unit. Imports likely include components as well as subassembly.

Table II-4
Chassis: Supply factors that affect the ability to increase shipments to the U.S. market

Country	Capacity (chassis)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2020 (percent)		Able to shift to alternate products
	2018	2020	2018	2020	2018	2020	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	***	***	***	***	***	***	***	***	2 of 6
China	***	***	***	***	***	***	***	***	8 of 8

Note: Responding U.S. producers accounted for nearly all U.S. production of chassis in 2020. Responding foreign producer/exporter firms accounted for nearly all U.S. imports of chassis from China during 2020. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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

Domestic production

Based on reported information, U.S. producers of chassis have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced chassis to the U.S. market. The main contributing factors to this degree of responsiveness of supply is the extremely high amount of available capacity in the United States production facilities and some available domestic inventories, although most chassis are produced-to-order. Factors mitigating responsiveness of supply include limited ability to shift shipments from alternate markets, and a limited ability to shift production from alternate products.

Domestic production capacity increased by *** percent during 2018-20 as ***, and CIE opened operations in California and Virginia which began production in late 2020.[35] Some subassembly components used by CIE are manufactured domestically and assembled by CIE into subassemblies, while other subassemblies are imported from China. Capacity utilization was already low at *** percent in 2018, but decreased to *** percent in 2020. Other products that producers reportedly can produce on the same equipment as chassis are log, lowboy, knuckleboom, and flatbed trailers. *** reported that it can only build a small number of alternative products (up to *** percent of its capacity) because those products are generally too heavy and/or tall and therefore *** generally operates very close to this *** percent limit.

[35] "CIE Manufacturing completes production of first chassis series," Fleetowner, Nov. 2, 2020, https://www.fleetowner.com/equipment/press-release/21146483/cie-manufacturing-completes-production-of-first-chassis-series, retrieved February 26, 2021.

Despite extremely low reported domestic capacity utilization, a substantial number of purchasers reported an inability of domestic producers to maintain sufficient capacity to accept large orders.[36] For example, ***. A representative for producer Stoughton stated at the hearing that it recently started trying to build up its workforce and train the staff and has started producing chassis again, but it will take time to do so.[37] Domestic producers reported that they do not want to hire people only to have to lay them off again, and that in order to sustain their business they need "long run orders" in order to add staff.[38] Purchasers present at the hearing stated, however, that they need to be able to respond to their customers' needs in 2 to 3 months with large shipments, rather than an extended delivery timeline that domestic firms have offered.[39]

Subject imports from China

Based on available information, producers of chassis from China have the ability to respond to changes in demand with moderate changes in the quantity of shipments of chassis to the U.S. market. The main contributing factors to this degree of responsiveness of supply are somewhat limited availability of unused capacity and inventories, and a limited ability to shift shipments from alternate markets. Factors increasing the responsiveness of supply include the ability to shift production to or from alternate products.

Chassis production capacity in China decreased slightly (*** percent) during 2018-20 and production decreased by *** percentage points. Capacity is allocated between chassis and other products made on the same machinery. Other products that responding foreign producers reportedly can produce on the same equipment as chassis are trailers that are specifically excluded from this investigation and car carriers, dumper trailers, flatbeds, specialty containers, stake trailers, and tank trailers. Capacity allocated to chassis production decreased by *** percent in 2019 from 2018 but increased to slightly under 2018 levels in 2020.

[36] Respondents DCLI, TAL, TRAC, and IICL's prehearing brief, pp. 3-5.
[37] Hearing transcript, p. 70 (Wahlin).
[38] Hearing transcript, p. 35 and 152-153 (Wahlin), and pp. 82 and 144 (Kaplan).
[39] Hearing transcript, p. 282-283 (Awad) and Campbell (284).

While more than *** percent of their production was shipped within China in 2020, approximately *** percent were exported to third-country markets. In 2018 and 2019, however, the home-market shipments were *** percent, while exports to third-country markets remained under *** percent. Southeast Asian and African countries were most frequently noted by most foreign producers, but *** reported that Australia, Europe, and Japan were its major export markets. Factors affecting foreign producers' ability to shift production include the characteristics of the alternative products, and the availability of skilled labor (welders in particular).

Imports from nonsubject sources

Nonsubject imports accounted for 11.7 percent of total U.S. imports in 2020. According to importers, the main sources of nonsubject imports during January 2018-December 2020 were Mexico (noted by ***), as well as Canada, Thailand, and Vietnam, which were each noted by one importer. Combined, these countries accounted for 87.8 percent of nonsubject imports in 2020. Hyundai located in Tijuana, Mexico is reportedly the primary source of nonsubject imports in the U.S. market.[40]

Supply constraints

More than two-thirds (18 of 26) of purchasers reported facing supply constraints since 2018, but most producers (5 of 6) and *** importers reported no supply constraints. [41] The majority of purchasers indicating constraints reported that U.S. producers' capacity was limited. This may affect purchasers' sourcing decisions as purchaser *** noted, "We maintain a large chassis fleet, and having an established relationship with the supplier is important. Working with the same supplier providing the same product allows us to stock the same parts and allows our technicians to become familiar with the product." *** reported a chassis shortage in the third and fourth quarters of 2020. Industry publications have also noted a shortage of chassis that has persisted into early 2021.[42]

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[40] Hearing transcript, p. 340 (Campbell).

[41] Producer *** and importer *** noted supply constraints.

[42] "Chassis shortage in LA-LB likely to persist into 2021," Joc.com, October 22, 2020, https://www.joc.com/port-news/terminal-operators/chassis-shortage-la%E2%80%93lb-likely-persist-2021_20201022.htm, retrieved February 22, 2021, and "Chassis shortages in Chicago worsen amid record volumes," Joc.com, January 21, 2021, https://www.joc.com/rail-intermodal/class-i-railroads/union-pacific-railroad/chassis-shortages-chicago-worsen-amid-record-volumes_20210111.html, retrieved February 22, 2021.

Petitioner noted that there was not a shortage of chassis in the U.S. market, but rather "chassis imbalances" as chassis get stuck in the wrong port or train location.[43] One representative noted that freight trends are increasing about 2 percent per year and that purchasers just want low-priced chassis "tomorrow."[44] Respondents contend that the lack of availability has caused them to increase repair/refurbishment of older chassis, and have found lead times stretching into 2022, even for smaller orders of 50 chassis.[45]

Purchasers were asked whether U.S. producers had been unable to bid on or supply their orders of chassis due to order size. A majority (13 of 25) reported that they had experienced such issues.[46] Purchasers *** had to reduce order requirements, purchaser *** reported some U.S. producers did not bid when invited while others had lead times exceeding six months, and purchaser *** noted an inability to make desired delivery dates and facing allocated capacity monthly. Purchaser *** stated that a domestic producer won the bid but did not have the capacity to supply the full order and had to split the order among other vendors as well. ***. Of the twelve purchasers that reported no issues, *** had not been refused an order because of size but had experienced lead times of 6-8 months within the last three years.

New suppliers

Twelve of 26 responding purchasers indicated that new suppliers entered the U.S. market since January 1, 2018. Five purchasers cited Dorsey and five cited Thaco (two of those purchasers – *** – reported both, explaining that Thaco (based in Vietnam) is

[43] Hearing transcript, p. 99 (Katz).
[44] Ibid.
[45] Hearing transcript, p. 238 (Duncan), p. 276 (LaBar), and p. 284 (Campbell).
[46] A thirteenth purchaser, ***, which responded "no," noted that it "not been refused an order because of size, but {has} had lead times of 6-8 months within the last 3 years."

marketing chassis imported into the U.S. through the U.S. producer Dorsey), and two reported Intermodal Products of America.[47]

U.S. demand

Based on available information, the overall demand for chassis is likely to experience very small-to-small changes in response to changes in price. The main contributing factors are the lack of substitute products, the necessity of chassis in intermodal transportation, and the small cost share of chassis in most of their end-use services. The ability to refurbish chassis allows for some temporal shifting in demand, however.

An industry group witness reported that chassis demand is affected by long-term trends based on the need to replace aging chassis, as well as international and domestic cargo growth trends. It is also affected by changes in the way chassis are used; there has been "a trend toward intermediate container staging between marine terminals and the importers and exporters, and that staging uses chassis for storage and increases demand."[48] Demand for chassis is also reported to be affected by short-term demand surges that can occur at ports as well as inland hubs which cause increased chassis dwell times.[49] These imbalances could affect demand on a more regional level without occurring nationwide.

Sources vary with respect to the number of chassis required/sold in each year. Petitioners estimated that 25,000 to 35,000 chassis are required each year and cited one industry source that reported approximate chassis sales of 39,810 units in 2015, 32,286 in 2016, 33,194 in 2017. This source noted a "spike" to 51,000 units in 2018, 43,000 of which were estimated to be imported from China.[50] Respondent CIMC estimated that at least 50,000 chassis are needed per year to meet necessary replacement and growth goals.[51]

End uses and cost share

Chassis are a final good that account for a small share of the cost of the end-use services in which it is used. Used as part of an intermodal transport service, importer *** reported

[47] Other new sources reported by one purchaser each were Kwik Equipment, CIMC (***), Stoughton Trailers (which expanded production to produce marine trailers), and Hyundai (producing in Mexico).

[48] Hearing transcript, pp. 207-208 (Smith) and "Marine and Domestic Container Chassis: U.S. Demand and Supply," The Tioga Group, submitted as Respondent CIMC's prehearing brief, att. B.

[49] Ibid.

[50] Petitioners' prehearing brief, pp. 41-42.

[51] Respondent CIMC's prehearing brief, att. B.

that chassis represented 5.0 percent of the total cost of the service. Petitioner also noted that chassis are a "very, very small part of the cost" of the final transport service.

Purchasers were asked to report the cost shares of chassis in the products they provided. A number of the purchasers were leasing companies or dealerships. Many of these purchasers reported that chassis accounted for 100 or nearly 100 percent of the cost of the services they provide for their leasing services. Other purchasers reported cost shares for end uses in which chassis are used:

- Intermodal transportation services: four firms reported the cost of the chassis was between 2 and 8 percent and one each reported 20 percent, 90 percent, and 98 percent.
- Transportation services: 1 percent
- Mobile medical unit: 15 percent
- International transport: 20 percent
- Lift trucks: 45 percent
- Chassis manufacturing: 60 percent
- Refuse trucks: 63 percent, and
- "After-sales services": 70 percent.

Business cycles

Three of 6 U.S. producers,[52] *** importers, and 14 of 26 purchasers indicated that the market was subject to business cycles or distinctive conditions of competition. With respect to business cycles, at least one purchaser each noted that demand for chassis increases in the second and third quarters of the year to supply Christmas deliveries, that demand is seasonal and shifts between the east and west coasts, that energy and chemical cycles affect chassis demand, that cyclical competition of truck load freight rates affect chassis demand. One importer (Hyundai) reported that low fuel prices decrease rail demand services to highway transportation services, causing decreasing demand for chassis used in rail transportation.

[52] *** reported that demand for chassis is subject to business cycles and dependent on "economic vitality."

A distinct condition of competition noted by one purchaser (***) was that the type of intermodal transportation firms providing chassis has changed from ship lines to the truckers and logistics companies, which has caused increased demand for chassis.[53] It also stated that it has become difficult for smaller firms to acquire their own chassis since the start of this investigation. A second purchaser (***) noted high demand for containerized goods keeps chassis demand at or near all-time highs. As a result, another purchaser (***) noted that consumer dwell times (the time a chassis is on rent to a customer) has increased, creating chassis availability problems.

Demand trends

Chassis are used in the transportation of intermodal cargo containers, including marine containers.[54] U.S. demand for chassis depends both on shipping trends, including freight movement for products imported into the United States and exported from the United States, and the total amount of freight being moved within the United States.[55]

Most producers and *** importers reported demand for chassis had fluctuated in the U.S. market since January 1, 2018 (table II-5). In contrast, most responding purchasers reported U.S. demand for chassis had increased since January 1, 2018. Demand for purchasers' end-use products was most frequently reported to be increasing (reported by 12 purchasers) or fluctuating (7 purchasers). In its June 2020 announcement regarding partnering with Vietnamese producer Thaco in order to "offer U.S. customers a much needed supply of quality built chassis available for high volume orders," U.S. producer Pitts noted that there is "significant pent-up demand in the current marketplace."[56]

[53] A representative of purchaser DCLI said the firm was created in the wake of this change: it was spun off from Maersk, a large international shipping company, in 2012, as part of "an industry-wide trend where chassis ownership transitioned from foreign-owned ocean carriers to U.S.-owned companies that specialize in providing intermodal chassis to a variety of customers through daily rental or lease arrangements." Hearing transcript, pp. 220-221 (O'Malley).

[54] Petition, pp. 5-6.

[55] Conference transcript, pp. 74-75; Petitioner's postconference brief p. 5; Email from ***, August 12, 2020.

[56] Respondent CIMC's prehearing brief, exh. 11.

Table II-5
Chassis: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	1	---	---	5
Importers	***	***	***	***
Purchasers	14	5	2	2
Demand outside the United States				
U.S. producers	---	---	---	4
Importers	***	***	***	***
Purchasers	1	3	---	2
Demand for end use product(s):				
Purchasers	12	3	2	7

Note: ***.

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

As shown in figure II-1, U.S. merchandise trade,[57] an indicator of the volume of goods being transported around the United States, increased by 6.0 percent from January 2018 until December 2020.[58] Overall merchandise trade was generally lower in 2019 than 2018 and fell substantially during the spring of 2020 at the start of the COVID-19 pandemic and lockdowns, but has since recovered.[59] Petitioner also reported that *** from 2017 to 2019.[60] Ports such as Long Beach, California have been extremely busy, setting record-setting monthly cargo flows in September and October 2020, and a November that was 30.6 percent higher in 2020 than in 2019.[61]

[57] Defined as U.S. imports plus U.S. exports.

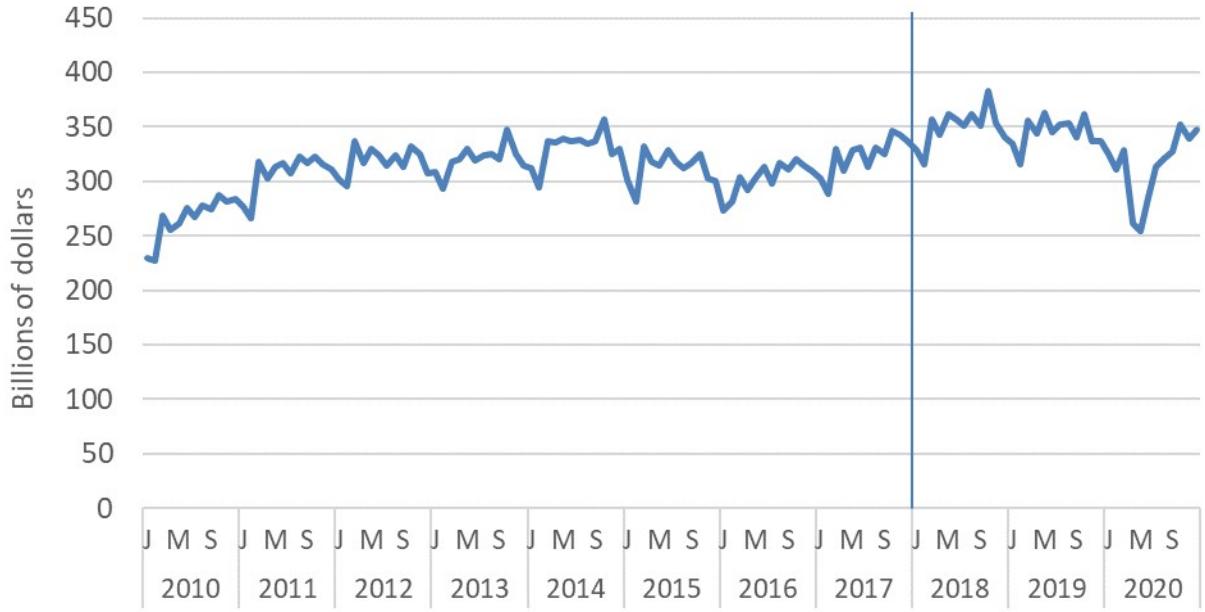
[58] This increase is on a non-seasonally adjusted basis. There has been a decrease in January merchandise trade levels from the December levels in every year since 2012-13. On a seasonally adjusted basis, U.S. merchandise trade decreased 3.2 percent between January 2018 and December 2020.

[59] The COVID-19 Rail Freight Recovery Index provided by FTR shows that North American intermodal freight declined substantially from February through April and has since recovered to pre-shutdown phase levels. The data are not available for U.S. intermodal freight. Petitioner's postconference brief, exh. 23.

[60] ***. Petitioner's postconference brief, pp. 5-6.

[61] Freightwaves, "US-based CIE Manufacturing takes aim at chassis shortage," https://www.freightwaves.com/news/us-based-cie-manufacturing-takes-aim-at-chassis-shortage , retrieved February 26, 2020.

Figure II-1
U.S. merchandise trade volume, January 2010-December 2020, not seasonally adjusted



Source: Census Bureau, https://www.census.gov/foreign-trade/balance/c0015.html. Accessed February 19, 2021.

Petitioners have characterized demand as being "stable" and that container shipping demand has been increasing in 2018, 2019, and the second half of 2020.[62] Purchaser DCLI stated that "It is critical to note that demand for intermodal chassis reached all-time highs last year as consumer demand grew in response to the COVID pandemic and the related increase in spending on goods instead of services. That demand has remained at or near all-time highs since August…"[63] According to Tioga group, U.S. container trade increased at a rate of 3.1 percent per year on average in 2010-2019. It decreased for the first time in that period in 2018, from 52.3 million TEUs in 2017 to 48.4 million TEUs in 2018 before increasing to 55.5 million TEUs in 2019.[64] Domestic container loadings have increased at a 2.1 percent compound annual growth rate ("CAGR") in 2015-2020, and 3.5 percent in 2020.[65]

[62] Hearing transcript, pp. 42-43 (Conti), p. 106 (DeFrancesco) and p. 189 (Katz).
[63] Hearing transcript, p. 221 (O'Malley).
[64] "TEU" refers to a twenty-foot equivalent unit, referring to the amount of cargo that can fit in a standard 20 foot long, 8 foot wide, and 8 foot high cargo container, and is a standard measurement of cargo capacity in shipping.
[65] Respondent CIMC's prehearing brief, att. B.

Chassis lifecycle

There is not a one-to-one correspondence between freight activity and chassis purchases, as freight carriers and intermodal pool operators maintain existing fleets of chassis. Turnover in those fleets also affects total chassis demand, and the average life cycle of a domestic chassis is substantially greater than marine chassis. Purchasers estimated that their chassis have a lifespan of 12 to 30 years, with 9 of the 16 responding firms reporting a lifespan of 20 years. Some purchasers noted that older chassis that are in good condition can be refurbished. Firms reporting refurbishing chassis reported life spans of 18 to 30 years.[66]

A number of purchasers have recently undergone a replacement of their chassis fleet. The average age of the chassis fleets in operation reported by purchasers was 8 years, but ranged from 1 to 16 years. Eight purchasers' fleets had an average age of 5 years or less, eight between 6 and 10 years, and four at 15 years or more. The nine responding purchasers reported replacing between 1 and 15 percent of their fleet during 2018-20.[67] The majority (12 of 23) of responding purchasers indicated that the average age of their fleets had not changed since 2018.

Chassis must be maintained to Department of Transportation standards to be used. When asked whether they always replace or sometimes refurbish chassis, 20 of 21 responding purchasers indicated that they sometimes repair their existing fleet. Purchaser *** stated that "Chassis are most often repaired rather than replaced, sometimes including major structural components and/or a full refurbishment." Purchaser *** reported that it repairs air leaks, alignments, brakes, lights, tires, and sometimes bent frames. Multiple purchasers noted that the decision depends on the severity of the repair. As noted by purchasers ***, repair costs are compared to a metric such as depreciated or net book value to determine whether to repair or replace. Warranties can reduce the costs of repairs or refurbishment for the purchasers. None of the 22 responding purchasers noted changes in their pattern of maintenance or repairs since January 2018. Ten of 19 purchasers reported 100 percent of their fleets are currently in use, six reported between 90 and 98 percent are in use, and three reported using 83 to 86 percent, and one reported 70-80 percent of its fleet. Purchaser *** stated that its utilization rate of *** percent is higher than previously due to fewer bad orders or unavailable equipment counts.

[66] The one purchaser that reported it did not repair, reported that chassis had a life span of 15 years and stated that repairs cost more than replacement.

[67] Two of the largest purchasers, ***, reported replacing 3-6 and 5.4 percent of their fleet, respectively.

The number of chassis owned and registered increased from 760,906 in 2018 to 773,199 in 2020 (table II-6). Approximately 66 percent are marine chassis, 33 percent are domestic chassis, and 1 percent other (mostly tank chassis). Less than 0.5 percent were reported to be unregistered chassis in each year. According to one 2019 industry publication, the total U.S. marine chassis fleet is roughly *** units.[68]

Table II-6
Chassis: Quantity of registered and unregistered chassis, by type, 2018-20

Item	2018	2019	2020
Registered:			
Marine	504,358	505,828	510,284
Domestic	249,538	256,632	256,678
All other	7,010	6,887	6,237
All types	760,906	769,347	773,199
Unregistered:			
Marine	1,405	1,374	752
Domestic	392	174	116
All other	605	592	326
All types	2,402	2,140	1,194
Total:			
Marine	505,763	507,202	511,036
Domestic	249,930	256,806	256,794
All other	7,615	7,479	6,563
All types	763,308	771,487	774,393

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

Substitute products

Substitutes for chassis are limited. Most U.S. producers,[69] *** importers, and all responding purchasers reported that there were no substitutes for chassis. U.S. producers *** reported flatbed trailers can sometimes be used as substitutes, but are more expensive and rarely used. Other domestic producers stated that flatbed trailers cannot be used as substitutes due to height and weight restrictions, however.[70]

[68] Respondent CIMC's prehearing brief, att. B., p. 1.
[69] *** reported no substitutes.
[70] Conference transcript, pp. 105-107 (Fenton, Katz, Gill, Musick).

Substitutability issues

The degree of substitution between domestic and imported chassis depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., capacity available for order size, price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced chassis and chassis imported from China. Availability, quality, and flexibility in lead times and deliveries somewhat limit substitutability between domestic and subject import chassis.

Lead times

Chassis are primarily produced-to-order. U.S. producers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. The remaining *** percent of their commercial shipments came from inventories, with lead times averaging *** days. Importers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days.[71] Only U.S. producer Cheetah reported producing for inventory,[72] and most firms produce-to-order.[73]

[71] However, importers also reported inventories of *** chassis in 2020 (Table VII-8).

[72] Cheetah stated that it had hoped to fill more orders for chassis following the section 301 tariffs. Conference transcript, p. 124 (Katz).

[73] Conference transcript, p. 124-125 (Katz, Wahlin, Gill, Musick).

Knowledge of country sources

All purchasers except *** indicated they had marketing/pricing knowledge of domestic product, 21 had knowledge of chassis imported from China, and 11 of chassis from nonsubject countries (10 from Mexico, 3 from Vietnam, and 1 from Canada).

As shown in table II-7, a plurality of purchasers and their customers "never" make purchasing decisions based on the producer or country of origin. Seven purchasers reported "always" basing their decisions on producer and five on country of origin. One of these noted it is ***, one noted CIE chassis were the only ones available in a few months, and one reported it purchases American-manufactured chassis.[74] Responses from other purchasers that at least "sometimes" base decisions on country of origin reflected availability, capacity, features, payment terms, quality, and parts standardization across a fleet as key factors.

Table II-7
Chassis: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	7	4	6	10
Purchaser's customers make decision based on producer	1	2	6	8
Purchaser makes decision based on country	5	---	2	21
Purchaser's customers make decision based on country	---	1	5	11

Note: ***.

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

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for chassis were availability/capacity/delivery time (all 25 responding firms),[75] quality/ specifications (23 firms), and price/cost (17 firms), as shown in table II-8. Quality (and adherence to specifications) was the most frequently cited first-most important factor (cited by 16 firms), followed by availability/capacity/delivery time (6 firms); availability/capacity/delivery time was the most frequently reported second-most important factor (15 firms); and price was the most frequently reported third-most important factor (9 firms).

[74] Two reported always purchasing based on the producer because of quality, price, and other factors.

[75] Several of the 22 responding purchasers reported more than one of these elements; 12 purchasers specified production capability or capacity as the factor, 11 noted availability, and 8 noted lead/delivery time/supply reliability.

Table II-8
Chassis: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Quality/specifications	16	4	3	23
Availability/capacity/delivery time	6	15	5	25
Price (including total cost of ownership)	3	5	9	17
Warranty	1	0	4	5
Product range	0	1	3	4
Delivery location	0	1	1	2
Traditional supplier	0	1	0	1
Aftermarket/technical support	0	0	3	3

Note: Other factors noted by purchasers include credit/payment terms, inland transportation costs, customer preference, design specifications, and "distribution capabilities to the entire U.S. market."
Note: One purchaser (***) reported plant capacity/availability as its second factor and timeline for delivery as its third factor. It is only counted once in the total column for availability/capacity/delivery time.
Note: ***.

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

The majority of purchasers (22 of 25) reported that they "usually" or "sometimes" (10 each) purchase the lowest-priced product. No purchaser reported always buying the lowest-priced chassis, while three "never" do.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 24 factors in their purchasing decisions (table II-9). The factors rated as very important by more than three-quarters of responding purchasers were quality meets industry standards (all 27 purchasers), reliability of supply (26), delivery time (25), delivery terms and product consistency and uniformity (23 each), price (22), and availability to supply large orders (21).

Table II-9
Chassis: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Quality meets industry standards	27	---	---
Reliability of supply	26	---	1
Delivery time	25	1	1
Product consistency and uniformity	23	4	---
Delivery terms	23	3	1
Price	22	5	---
Availability to supply large orders	21	4	2
Warranty terms	19	7	2
Technical support/service	18	8	1
Quality exceeds industry standards	17	8	2
Delivery to location of choice	16	6	4
Availability to supply small orders	16	3	8
Coating	15	11	1
Discounts offered	14	10	3
Innovation (develop new features)	13	11	3
U.S. transportation costs	13	10	4
Fleet uniformity	12	8	7
Payment terms	11	10	6
Product range	10	14	3
Brand of suspension	9	11	6
Brand of axles	7	12	8
Minimum quantity requirements	6	11	10
Flat-rack system	2	6	19
Packaging	1	13	13

Note: ***.

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

Supplier certification

Fifteen of 25 responding purchasers require their suppliers to become certified or qualified to sell chassis to their firm. Purchasers reported that the time to qualify a new supplier ranged from 5 days to 1 year, depending on the extent of the qualification process. Three purchasers noted that the time can vary. Factors affecting certification include those related to the equipment itself, audits of the manufacturing facility (including capacity), review of chassis designs and components, customer support performance, and warranty. Twenty-three of 24 responding purchasers reported that no domestic or foreign suppliers had failed in its attempt to qualify chassis, or had lost its approved status since 2018. The one purchaser reporting that a supplier had failed in its attempt to qualify chassis, or had lost its approved status, provided no information about this firm.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since January 1, 2018 (table II-10). The most frequently reported reasons cited for changes in sourcing was tariffs on imported chassis, which led to decreased purchases from China. Eight of 26 responding purchasers reported that they had changed suppliers since January 1, 2018. Specifically, two firms dropped or reduced purchases from CIE, with one stating it was because of uncertainties surrounding these investigations and the other (***) noting an ***. Firms added or increased purchases from domestic producers Hercules (2), Pratt (2), and Cheetah (1), as well as nonsubject supplier Hyundai (3). Purchasers noted that Cheetah was added due to specialized requirements and design, Pratt was added to diversify supplier base, and Hyundai was added to diversify supply base and because of availability and price competitiveness. Purchaser *** stated that it ***, and purchaser *** has "sought additional capacity from other U.S. and third-country producers, but found it difficult to obtain needed capacity on {its} customers' desired timeframes."

Table II-10
Chassis: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Increased	Constant	Decreased	Fluctuated	Did not purchase
United States	9	5	6	1	7
China	3	6	9	3	5
Other	4	1	2	1	10
Sources unknown	0	1	0	1	15

Note: ***.

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

Importance of purchasing domestic product

Eighteen of 21 responding purchasers reported that all of their purchases did not require purchasing U.S.-produced product. One reported that domestic product was required by law (for 25 percent of its purchases), two reported it was required by their customers (for 10 to 20 percent of their purchases).

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing chassis produced in the United States, China, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 24 factors (table II-11) for which they were asked to rate the importance.

Table II-11
Chassis: Purchasers' comparisons between U.S.-produced and imported product

	U.S. vs. China			U.S. vs. nonsubject countries			China vs. nonsubject countries		
Factor	S	C	I	S	C	I	S	C	I
Availability to supply large orders	1	3	18	0	9	6	10	5	0
Availability to supply small orders	3	16	3	2	13	0	3	10	2
Brand of axles	0	23	0	0	16	0	0	16	0
Brand of suspension	0	23	0	0	15	0	0	16	0
Coating	1	11	11	0	15	1	8	8	0
Delivery terms	3	13	7	2	11	3	4	12	0
Delivery time	3	7	13	3	8	5	7	8	1
Delivery to location of choice	1	13	8	2	12	2	6	10	0
Discounts offered	0	15	5	0	12	2	2	13	0
Flat-rack system	1	12	2	1	9	0	2	10	1
Fleet uniformity	1	18	3	1	14	0	3	12	0
Innovation (develop new features)	1	12	8	1	12	1	6	8	1
Minimum quantity requirements	1	16	2	0	12	0	2	11	0
Packaging	2	18	0	0	13	0	1	12	0
Payment terms	1	16	3	0	13	1	2	14	0
Price	0	9	12	1	10	4	7	7	1
Product consistency and uniformity	3	15	4	2	11	1	3	13	0
Product range	1	19	4	1	14	2	5	11	0
Quality exceeds industry standards	3	14	6	0	15	0	6	10	0
Quality meets industry standards	3	18	2	0	15	0	3	13	0
Reliability of supply	1	6	15	2	8	4	8	8	0
Technical support/service	2	14	7	1	13	0	4	12	0
U.S. transportation costs	3	12	7	1	9	4	5	9	0
Warranty terms	3	14	6	0	15	0	6	10	0

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

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

Most purchasers reported that U.S. and chassis imported from China were comparable on all but four factors (all of which were among the top seven most important factors), for which they found the U.S. to be inferior: availability to supply large orders, reliability of supply, delivery time, and price.[76] Purchasers comparing chassis imported from nonsubject countries with those from the United States and China reported they were comparable on all factors except China was reported to be superior to nonsubject countries on the ability to supply large orders.

Comparison of U.S.-produced and imported chassis

In order to determine whether U.S.-produced chassis can generally be used in the same applications as imports from China and nonsubject countries, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-12, a majority of U.S. producers and purchasers indicated they are always interchangeable.[77]

Table II-12
Chassis: Interchangeability between chassis produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	5	---	1	---	***	***	***	***	11	7	2	---
Nonsubject countries comparisons:												
U.S. vs. nonsubject	5	---	---	---	***	***	***	***	10	7	2	---
China vs. nonsubject	5	---	---	---	***	***	***	***	9	7	1	---

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

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

As can be seen from table II-13, most responding purchasers reported that domestically produced product "usually" met minimum quality specifications, whereas a majority of purchasers indicated that imports from China "always" met minimum quality specifications.

[76] ***.

[77] ***.

Most responding purchasers reported nonsubject imports "usually" met minimum quality specifications.

Table II-13
Chassis: Ability to meet minimum quality specifications, by source

Source	Always	Usually	Sometimes	Rarely or never
United States	7	14	2	---
China	14	6	---	---
Nonsubject sources	4	6	---	---

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

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

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of chassis from the United States, subject, or nonsubject countries. As seen in table II-14, most U.S. producers indicated that there are "never" any factors other than price that are important, whereas a plurality or majority of purchasers indicated there are "always" factors other than price that are important for all comparisons between the United States, China, and nonsubject countries. For importers, ***.

Table II-14
Chassis: Significance of differences other than price between chassis produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	1	---	---	5	***	***	***	***	12	6	3	1
Nonsubject countries comparisons:												
U.S. vs. nonsubject	---	---	---	5	***	***	***	***	8	3	5	1
China vs. nonsubject	---	---	---	5	***	***	***	***	7	3	2	1

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

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

Purchasers reported a number of ways in which chassis from different sources varied other than price. Several factors were reported by multiple purchasers: eight purchasers noted the higher production capability/possible order size of China in manufacturing chassis, six noted higher quality when comparing China to the United States (with three noting the KTL coating specifically and two noting robotic welds),[78] five noted a greater ability of China to deliver to any port easily, and two noted differences in warranty. One purchaser, ***, stated that the United States has faster delivery by four to six weeks over chassis imported from China.

Elasticity estimates

This section discusses elasticity estimates; parties were encouraged to comment on these estimates. No comments suggesting changes were received.

U.S. supply elasticity

The domestic supply elasticity for chassis measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of chassis. 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 chassis. Despite the large amount of excess capacity reported by U.S. producers, the lack of sufficient capacity for large orders reported by responding purchasers reflects an impediment to producers to increase production. Analysis of supply factors indicates that the U.S. industry has the ability to moderately increase or decrease shipments to the U.S. market; an estimate in the range of 3 to 6 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for chassis measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of chassis. 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 chassis in the production of any downstream products. Based on the available information, the aggregate demand for chassis is likely to be highly inelastic; a range of -0.25 to -0.5 is suggested.

[78] Two purchasers, *** stated that higher quality chassis means a lower total cost of ownership over the product's lifetime. *** reported that China has a higher quality product than the U.S., and *** stated that the quality of Mexico's chassis is higher than that of the United States or China.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[79] Product differentiation, in turn, depends upon such factors as quality (e.g., product design, coating, appearance, etc.) and conditions of sale (e.g., availability, production, capacity, delivery location availability, fleet replacement part interchangeability, warranty, etc.). Based on available information, the elasticity of substitution between U.S.-produced chassis and imported chassis is likely to be in the range of 2.5 to 5. For larger orders, elasticity will be somewhat lower due to reported capacity constraints noted by larger purchasers, but higher for smaller orders.

[79] 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: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in Part I of this report and information on the volume and pricing of imports of the subject merchandise is presented in Part IV and Part V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of six firms that accounted for nearly all U.S. production of chassis and subassemblies during 2020.

U.S. producers

The Commission issued a U.S. producer questionnaire to seven firms based on information contained in the petition. Six firms provided usable data on their operations.[1] Staff believes that these responses represent nearly all U.S. production of chassis.[2]

Table III-1 lists U.S. producers of chassis, their production locations, positions on the petition, and shares of total production.

[1] The petition identified a small U.S. producer, Pro-Haul, which CAMC estimated produced *** chassis (or *** percent of reported U.S. production) in 2019. The firm has not provided a response to the U.S. producer's questionnaire.

[2] Staff issued U.S. producer questionnaires to ***. ***. *** email message to USITC, December 23, 2020. ***. ***.

Table III-1
Chassis: U.S. producers of chassis, their positions on the petition, production locations, and shares of reported production, 2020

Firm	Position on petition	Production location(s)	Share of production (percent)
Cheetah	Petitioner	Berwick, PA Sumter, SC	***
CIE	***	South Gate, CA Emporia, VA	***
Hercules	Petitioner	Hillsborough, NJ	***
Pitts	Petitioner	Pittsview, AL	***
Pratt	Petitioner	Bridgman, MI Niles, MI	***
Stoughton	Petitioner	Stoughton, WI Evansville, WI	***
Total			***

Note: Stoughton reported ***.

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms. *** to foreign producers of the subject merchandise as well as to importers of the subject merchandise ***.[3] Select domestic industry data excluding *** is provided in Appendix F. As described in further detail below, *** reported imports of chassis during 2018-20.

[3] Petitioner noted that ***. Petitioner's prehearing brief at p. 112. Staff issued a U.S. importer's questionnaire to ***.

Table III-2
Chassis: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Ownership:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Related importers/exporters:		
***	***	***
***	***	***
***	***	***
Related producers:		
***	***	***
***	***	***
***	***	***
	***	

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

The Commission requested that U.S. producers comment on the complexity and importance of chassis assembly (table III-3), and rate the complexity on a 1 to 5 scale, with one being the least complex, and 5 being the most complex. *** firms rated chassis assembly at a 1, defined in the U.S. producer's questionnaire as minimally complex, intense, and important. *** rated chassis assembly at a 4, explaining that ***.

Table III-3
Chassis: U.S. producers' response to complexity and importance

Item	Rating of complexity (1=least complex, 5=most complex)				
	1	2	3	4	5
	Count of firms				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table III-3—Continued
Chassis: U.S. producers' response to complexity and importance

Firm	Narrative
***	***
***	***
***	***
***	***
***	***

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

In 2018 and 2019, ***. Table III-4 provides responses comparing integrated chassis producers and assembly-only operations.

Table III-4
Chassis: Comparison of integrated chassis producers and assembly-only operations.

Factor	Chassis integrated production	Chassis assembly only operations
Source and extent of the firm's capital investment[1]	***	***
Technical expertise involved in U.S. production activities[2]	***	***
Value added to the product in the United States[3]	***	***
Employment levels[4]	***	***
Quantity and type of parts and materials sourced in the United States[5]	***	***

[1] Aggregate reported investments from a greenfield investments standpoint.

[2] Technical expertise based on aggregate R&D (range 2018-20). ***.

[3] Total conversion costs/total COGS (range 2018-20). ***.

[4] Aggregate production and related workers (PRW) (range 2018-20). ***.
[5] Aggregate raw material values (range 2018-20). These values are being reported under the assumption that raw materials other than chassis subassemblies are being sourced domestically. Raw materials value for assembly only operations has been adjusted to remove the value of imported subassemblies. ***.

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

Table III-5 provides *** responses to the nature and extent of its assembly-only operations.

Table III-5
Chassis: U.S. producers' extent of processing in operations

Firm	Extent of processing in operations
	Narrative
Capital investments:	
***	***
Technical expertise:	
***	***
Value added:	
***	***
Employment:	
***	***
Quantity, type, and source of parts:	
***	***
Costs and activities:	
***	***

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

Table III-6 presents U.S. producers' reported changes in operations since January 1, 2018. Two firms reported plant openings, one firm reported expansions, one firm reported consolidations, and four firms reported prolonged shutdowns or curtailments.

Table III-6
Chassis: U.S. producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changed in operations
Plant openings:	
***	***
***	***
Expansions:	
***	***
Consolidations:	
***	***

Table continued on next page.

Table III-6—Continued
Chassis: U.S. producers' reported changes in operations, since January 1, 2018

Prolonged shutdowns or curtailments:	
***	***
***	***
***	***

Table continued on next page.

Table III-6—Continued
Chassis: U.S. producers' reported changes in operations, since January 1, 2018

Prolonged shutdowns or curtailments (continued):	
***	***
Other:	
***	***
***	***
***	***

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

U.S. production, capacity, and capacity utilization

Table III-7 and figure III-1 present U.S. producers' production, capacity, and capacity utilization.[4] Capacity increased during 2018-20 by *** percent, with all firms reporting either steady or increasing capacity during the period.[5]

- Cheetah, *** explained that the firm's capacity is calculated based on ***.[6]
- Hercules, *** stated that its capacity is calculated based on ***.[7]
- Pitts stated that its capacity is based on ***.[8]

[4] In general, quantity data related to U.S. producers' operations is of full chassis. ***. Email message from ***, February 22, 2021.

[5] Petitioner provided an adjusted production, capacity, and capacity utilization table for 2020 ***. The adjusted table shows a capacity utilization in 2020 of *** percent, as opposed to *** percent as shown in table III-7. Petitioner's posthearing brief at exh. 1, p. 26-28.

[6] Cheetah noted that the firm operates ***. Cheetah's U.S. producer questionnaire response at question II-3c and Petitioner's posthearing brief at exh. 1, p. 23. Cheetah reported ***.

[7] Hercules stated that based on a normal product mix, the firm can produce ***. The firm plans for *** production days per year. Hercules's U.S. producer questionnaire response at question II-3c and Petitioner's posthearing brief at exh. 1, p. 23. Hercules reported ***.

[8] Pitts's U.S. producer questionnaire response at question II-9 and Petitioner's posthearing brief at exh. 1, p. 23. ***.

- Pratt stated that the firm's capacity was calculated based on ***.[9]
- Stoughton reported that its capacity calculation is based on ***.[10]
- CIE reported that its capacity calculation is based on ***.[11]

In contrast to the increase in capacity, production during 2018-20 decreased by *** percent. ***, nearly all firms reported decreased production to varying degrees throughout the period.[12] Generally, all U.S. producers reported low capacity utilization in at least one year of the period, with firm-specific capacity utilization *** in 2020. Capacity utilization of all firms decreased during 2018-20 by *** percentage points.

Some U.S. producers commented that ***. ***.[13]

[9] Pratt noted that ***. Pratt's U.S. producer questionnaire response at II-3c and Petitioner's posthearing brief at exh. 1, p. 23. Pratt reported ***.

[10] Petitioner's posthearing brief at exh. 1, p. 24. ***.

[11] Between January 2018 and May 2020, CIE's operations ***. CIE's U.S. producers' questionnaire response at question II-4 and II-3c.

[12] Stoughton reported production ***. ***.

[13] Petitioner's posthearing brief at exh. 1, p. 30.

***.[14]

U.S. producers reported various production constraints, including ***, ***, and ***.[15] Assuming that a firm has the necessary staffing, U.S. producers reported that it would take *** to re-start an idled production line.

[14] Petitioner's posthearing brief at exh. 1, p. 31.

[15] U.S. producers' questionnaire responses at question II-3f.

Table III-7
Chassis: U.S. producers' production, capacity, and capacity utilization, 2018-20

Item	Calendar year		
	2018	2019	2020
	Capacity (units)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Production (units)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Capacity utilization (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Share of production (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***

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

Figure III-1
Chassis: U.S. producers' production, capacity, and capacity utilization, 2018-20

* * * * * * *

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

Alternative products

As shown in table III-8, *** percent of the product produced during 2020 by U.S. producers was chassis. Specific trailers excluded from the scope, including dry van trailers, refrigerated trailers and flatbed trailers, accounted for *** percent of total production during 2020, while *** percent was of other out-of-scope products, including ***.[16]

[16] The *** of out-of-scope production was reported by ***, which accounted for *** percent of the production of other out-of-scope products in any period. *** U.S. producers' questionnaire response at question II-3a.

Table III-8
Chassis: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Theoretical capacity	***	***	***
Overall capacity	***	***	***
Production: Chassis	***	***	***
Out-of-scope production: Specifically excluded trailers	***	***	***
Other products	***	***	***
All out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production: Chassis	***	***	***
Share of out-of-scope production: Specifically excluded trailers	***	***	***
Other products	***	***	***
All out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Note: Theoretical capacity is defined in the foreign producers'/exporters' questionnaire as the maximum level of production that establishment(s) could have attained during the specified periods without additional investment in machinery and staff. Theoretical capacity is also known as nameplate capacity, rated capacity, maximum achievable capacity, or nominal capacity, and does not take into account normal operating levels and downtime.

Note: Overall production capacity is defined in the foreign producers'/exporters' questionnaire as the level of production that establishment(s) could reasonably have expected to attain during the specified periods, assuming normal operating conditions (i.e., using equipment and machinery in place and ready to operate; normal operating levels (hours per week/weeks per year) and time for downtime, maintenance, repair, and cleanup).

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

The Commission requested that U.S. producers comment on underutilization of their chassis production operations (table III-9). Some responses in table III-9, as well as responses in table III-6, noted that ***.

Table III-9
Chassis: U.S. producers' underutilization of capacity narratives, by company, 2018-20

Company	Narrative
Cheetah	***
CIE	***
Hercules	***
Pratt	***
Stoughton	***

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

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

Table III-10 presents U.S. producers' U.S. shipments, export shipments, and total shipments.[17] The quantity of U.S. shipments and export shipments decreased each year during 2018-20, for an overall decrease of *** percent and *** percent, respectively. During 2018-20, U.S. shipments accounted for between *** percent and *** percent of total shipments. *** reported internal consumption during 2018-20, and company transfers reported over the period were ***. Subsequently, export shipments accounted for *** percent of total shipments. Reported export destinations include ***.

The value of U.S. shipments and export shipments decreased each year during 2018-20, for an overall decrease of *** percent and *** percent, respectively. As a share of value, U.S. shipments accounted for between *** percent and *** percent of total shipments, and export shipments accounted for *** percent of total shipments. *** reported internal consumption during 2018-20, and company transfers reported over the period were ***. The unit value of U.S. shipments (based on unit quantity) increased by *** percent between 2018 and 2019, then decreased by *** percent between 2019 and 2020, for an overall decrease of *** percent.[18] In contrast, the unit value of export shipments increased each year during 2018-20, for an overall increase of *** percent.

[17] A detailed table of U.S. producers' U.S. shipments of complete chassis and of subassemblies is available in Appendix E. A table of U.S. producers' U.S. shipments, export shipments, and total shipments, excluding ***, is available in Appendix F.

[18] In 2018, ***. In contrast, ***. Email message from ***, February 19, 2021.

Table III-10
Chassis: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Value (1,000 dollars)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Unit value (dollars per unit)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Share of quantity (percent)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Share of value (percent)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***

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

The Commission requested that U.S. producers report their capacity, production, and U.S. shipments by the type of container for which the chassis is designed. As shown in Table III-11, chassis designed for marine/international container types accounted for the majority (between *** percent and *** percent) of U.S. producers' production and shipments during 2018-20.

Table III-11
Chassis: U.S. producers' capacity, production, and U.S. shipments by container type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Capacity (units)		
Marine/international	***	***	***
Domestic	***	***	***
Other	***	***	***
All container types	***	***	***
	Production (units)		
Marine/international	***	***	***
Domestic	***	***	***
Other	***	***	***
All container types	***	***	***
	Capacity utilization (percent)		
Marine/international	***	***	***
Domestic	***	***	***
Other	***	***	***
All container types	***	***	***
	U.S. shipments quantity (units)		
Marine/international	***	***	***
Domestic	***	***	***
Other	***	***	***
All container types	***	***	***
	Share of U.S. shipments quantity (percent)		
Marine/international	***	***	***
Domestic	***	***	***
Other	***	***	***
All container types	***	***	***

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

U.S. producers' inventories

Table III-12 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**.** Inventories increased by *** percent between 2018 and 2019, then decreased *** percent between 2019 and 2020, ending higher than inventories in 2018 and increasing overall by *** percent. During 2018-20, inventories increased by *** percentage points as a ratio to U.S. production, and by *** percentage points as a ratio to U.S. and total shipments.[19] [20]

Table III-12
Chassis: U.S. producers' inventories, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. producers' end-of-period inventories	***	***	***
	Ratio (percent)		
Ratio of inventories to.--			
U.S. production	***	***	***
U.S. shipments	***	***	***
Total shipments	***	***	***

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

[19] During 2018-20, *** held the vast majority of inventories. In contrast, ***. Email message from ***, February 19, 2021.

[20] Petitioner argues that the "spike" in subject imports in 2018 led to inventory overhang, citing state registration data ***. Petitioner's prehearing brief at p. 66 and exh. 31. Petitioner argues that it considers this data to be very reliable, as chassis must be registered before they can be used on U.S. roadways, and thus these data reflect chassis that are placed into service by end users. Petitioner's posthearing brief, pp. 39-40.

CIMC contends that state registration data is inaccurate, pointing out that ***, even when accounting for any time lag in registration. CIMC's posthearing brief, exh. 1, p. 36.

U.S. producers' imports and purchases

U.S. producers' imports and purchases of chassis are presented in table III-13. *** reported imports *** in 2020, which were *** percent as a ratio to its U.S. production. *** reported imports from *** in 2020, which were *** percent and *** percent, respectively, as a ratio to its U.S. production.[21]

[21] The import data shown in table III-13 ***.

Table III-13
Chassis: U.S. producers' U.S. production and imports, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
*** U.S. production	***	***	***
*** U.S. imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All imports sources	***	***	***
	Ratio (percent)		
*** ratio to U.S. production of *** imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All imports sources	***	***	***
	Narrative		
*** reason for importing	***		
	Quantity (units)		
*** U.S. production	***	***	***
*** U.S. imports from.-- Nonsubject sources	***	***	***
	Ratio (percent)		
*** ratio to U.S. production of imports from.-- Nonsubject sources	***	***	***
	Narrative		
*** reason for importing	***		

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

U.S. employment, wages, and productivity

Table III-14 shows U.S. producers' employment-related data.[22] Several indicators related to staffing and productivity decreased, while hourly wages and unit labor costs increased. The number of production and related workers (PRWs) decreased each year during 2018-20, for an overall decrease of *** percent.[23] Similarly, total hours worked and hours worked per PRW decreased during 2018-20, by *** percent and *** percent, respectively. As a result of declining PRWs, total wages paid decreased by *** percent during 2018-20 (commensurate with the decline in PRWs), although hourly wages increased slightly from $*** per hour in 2018 to $*** per hour in 2020. Unit labor costs increased during 2018-20 by *** percent, though most of this increase occurred between 2019 and 2020.[24] [25] Productivity declined each year during 2018-20, for an overall decrease of *** percent.

[22] A table of U.S. producers' employment-related data, excluding ***, is available in Appendix F.

[23] Labor statistics indicate that the job outlook, or change in employment, for welders, cutters, solderers, and brazers (which may encompass welders of in-scope chassis) is expected increase between 2019 and 2029 by 3 percent, characterized as "as fast as average". The job outlook, or change in employment, for automotive body and glass repairers (which may encompass other chassis manufacturing technician positions) is expected increase between 2019 and 2029 by 2 percent, or slower than average. The national average change of employment for all occupations in the United States is 4 percent. *U.S. Bureau of Labor Statistics, Occupational Outlook Handbook: Welders, Cutters, Solderers, and Brazers,* https://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm, retrieved February 22, 2021. *U.S. Bureau of Labor Statistics, Occupational Outlook Handbook: Automotive Body and Glass Repairers,* https://www.bls.gov/ooh/installation-maintenance-and-repair/automotive-body-and-glass-repairers.htm, retrieved February 22, 2021.

[24] *** unit labor costs of all U.S. producers during 2018-20. ***. Email message from ***, February 19, 2021.

[25] Generally, ***. Email message from ***, February 19, 2021.

Table III-14
Chassis: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2018-20

Item	Calendar year		
	2018	2019	2020
Production and related workers (PRWs) (number)	***	***	***
Total hours worked (1,000 hours)	***	***	***
Hours worked per PRW (hours)	***	***	***
Wages paid ($1,000)	***	***	***
Hourly wages (dollars per hour)	***	***	***
Productivity (units per 1,000 hours)	***	***	***
Unit labor costs (dollars per unit)	***	***	***

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

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to eight firms believed to be importers of chassis, as well as to all U.S. producers of chassis.[1] Usable questionnaire responses were received from three firms believed to account for nearly all imports of chassis and chassis subassemblies from subject and nonsubject sources.[2] [3] [4]

[1] The Commission issued questionnaires to those firms identified in the petition, along with ***.

Though chassis could potentially be entered under this statistical reporting number, as well as under statistical reporting number 8716.90.5060, such numbers are "basket" categories that may contain nonsubject merchandise. Therefore, data reported in this part are based on the questionnaire responses of CIMC, Pitts, and Hyundai, which are believed to account for nearly all imports of chassis from both subject and nonsubject sources. (CIMC reported that it is the only exporter of subject merchandise from China to the United States, and further noted that it agreed with the petitioner that Hyundai's imports from Mexico represent the only notable source of nonsubject imports of chassis. CIMC's postconference brief, pp. 16-18.)

[2] ***. Petitioner noted that ***. Petitioner's prehearing brief at p. 112. Staff issued a U.S. importer's questionnaire to ***.

In the prehearing report, it was noted that ***. Email message *** from ***. Per staff's request, on March 17, 2021, CIMC submitted a consolidated U.S. importer's questionnaire response which combined the import and shipment operations *** of CV, DCVC, SCVC, and CIE. The data provided in this staff report is based on CIMC's consolidated U.S. importer questionnaire.

[4] Staff issued U.S. producer questionnaires to ***. ***. ***. ***. ***. *** additionally submitted a certified response stating that the firm did not import chassis and/or subassemblies since January 1, 2018.

Table IV-1 lists all responding U.S. importers of chassis from China and other sources, their locations, and their shares of U.S. imports, in 2019.[5]

Table IV-1
Chassis: U.S. importers by source, 2018-20

Firm	Headquarters	Share of imports by source (percent)		
		China	Nonsubject sources	All import sources
CIMC	Shenzhen, China Dongguan, China South Gate, CA	***	***	***
Hyundai	San Diego, CA	***	***	***
Pitts	Pittsview, AL	***	***	***
Total		***	***	***

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

U.S. imports

Table IV-2 and figure IV-1 present data for U.S. imports of chassis and subassemblies from China and from all other sources.[6] Imports of chassis from China decreased *** percent by quantity from 2018 to 2019, then increased by *** percent between 2019 and 2020, for an overall decrease of *** percent during 2018-20.[7] Imports of chassis from nonsubject

[5] CV is the owner of SCVC and DCVC, the factories which produced chassis in China for export to the United States during the data collection period. Conference transcript, p. 204 (Ash). SCVC was previously the primary factory in China producing chassis for the U.S. market until 2018, as it shifted its production to produce products other than chassis for the Chinese domestic market, at which point DCVC primarily took over chassis production. CIMC's postconference brief, exh. 1, pp. 2-3. CIE is a U.S.-based subsidiary of CV.

[6] Appendix E provides further information on U.S. importers' U.S. shipments of imports of complete chassis and of chassis subassemblies.

[7] In the prelim phase of these investigations, the Commission found that subject imports increased from *** units (chassis and subassemblies combined) in 2017 to *** units in 2018, or by *** percent, and decreased to *** units in 2019, or by *** percent, for an overall decrease of *** percent from 2017 to 2019.

The difference in reporting of subject imports between the preliminary phase and the final phase is primarily due to ***. CIMC's posthearing brief at exh. 1, pp. 51-52. CIMC also noted that ***. CIMC's posthearing brief at exh. 1, p. 52.

The petitioner alleged that the increase in imports from China from 2017 to 2018 was driven by Chinese chassis producers' attempts to "flood the U.S. market" with chassis before Section 301 tariffs took effect, and that the volume of such imports was "far in excess of anything demanded by the market." Conference transcript, p. 8 (DeFrancesco); Petitioner's postconference brief, p. 23.

CIMC asserted that there was existing demand for chassis to address an ongoing chassis shortage regardless of section 301 tariffs taking effect, and that if section 301 tariffs had any effect it was to

(*continued*...)

sources (primarily Mexico) decreased overall by *** percent from 2018-20, though were lowest in 2019. Imports from China accounted for at least *** percent of all U.S. imports in any given period.

increase demand for chassis from all sources to handle the overall increase in imports from goods from China as importers and purchasers “rushed to beat the tariffs”. CIMC’s postconference brief, pp. 9-11.

Table IV-2
Chassis: U.S. imports by source, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. imports from.--			
China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Value (1,000 dollars)		
U.S. imports from.--			
China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Unit value (dollars per unit)		
U.S. imports from.--			
China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Share of quantity (percent)		
U.S. imports from.--			
China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Share of value (percent)		
U.S. imports from.--			
China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Ratio to U.S. production		
U.S. imports from.--			
China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***

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

Figure IV-1
Chassis: U.S. imports by source, 2018-20

* * * * * * *

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

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[8] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[9] As reported in table IV-3, imports from China accounted for *** percent of total imports of chassis and subassemblies by quantity during July 2019 through June 2020.

Table IV-3
Chassis: U.S. imports in the twelve-month period preceding the filing of the petition, July 2019 through June 2020

Item	July 2019 through June 2020	
	Quantity (units)	Share quantity (percent)
U.S. imports from.-- China	***	***
Nonsubject sources	***	***
All import sources	***	***

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

[8] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[9] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Apparent U.S. consumption

Table IV-4 and figure IV-2 present data on apparent U.S. consumption and U.S. market shares for U.S. producers' and importers' U.S. shipments (inclusive of commercial shipments and internal consumption,[10] but exclusive of transfers to related firms) of complete chassis and subassemblies combined. Generally, U.S. producers held *** throughout the period, while subject imports held the greatest market share, ranging from *** to *** percent as a share of quantity, and *** percent to *** percent as a share of value.[11] As a share of quantity, U.S. producer's market share increased by *** percentage points between 2018 and 2019, then dropped by *** percentage points between 2019 and 2020, resulting in *** from 2018 to 2020. As a share of value, U.S. producers' market share increased by *** percentage points during 2018-20, but was highest in 2019 at *** percent. During 2018-20 market share held by subject imports decreased by *** percentage points as a share of quantity, though increased by *** percentage points as a share of value. Nonsubject imports' market share increased during 2018-20 by *** percentage points as a share of quantity, but decreased by *** percentage points as a share of value.

[10] ***.

[11] *** accounted for *** percent of the quantity and *** percent of the value of U.S. producers' U.S. shipments in 2020, and *** percent of the quantity and *** percent of the value of total apparent consumption.

Table IV-4
Chassis: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Apparent U.S. consumption	***	***	***
	Quantity (short tons)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Apparent U.S. consumption	***	***	***
	Value (1,000 dollars)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Apparent U.S. consumption	***	***	***
	Share of quantity based on units (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Share of quantity based on short tons (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	Share of value (percent)		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***

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

Figure IV-2
Chassis: Apparent U.S. consumption and market share, 2018-20

* * * * * * *

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

Tables IV-5 and IV-6 provide additional information on U.S. producers' U.S. shipments, and U.S. importers' U.S. shipments of imports of complete chassis only and of subassemblies only, respectively.[12] [13] [14] A summary view of these data for 2020 are presented in figure IV-3, which presents quantity and average unit value data by source on U.S. producers' shipments, and U.S. importers' U.S. shipments imports of complete chassis and of collective subassemblies. The majority of the value of apparent consumption is of *** in 2020. In contrast, shipments of subassemblies account for *** percent of the quantity of

[12] U.S. producers were asked to provide additional data for their U.S. shipments of complete chassis and of specific subassemblies, including chassis frames, running gear/axle subassemblies, landing gear subassemblies, and "all other" subassemblies. Similarly, U.S. importers were asked to provide additional data for their U.S. shipments of imports of complete chassis and these specific subassemblies. Detailed data on these shipments of complete chassis and individual subassemblies is presented in appendix E.

[13] Tables with U.S. producers' U.S. shipments, excluding ***, and U.S. importers' U.S. shipments of imports of complete chassis only and of subassemblies only are available in Appendix F.

[14] ***. ***.

apparent consumption, and shipments of complete chassis account for *** percent of the quantity of apparent consumption in 2020.[15]

Figure IV-3
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports by product type, 2020

* * * * * * *

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

During 2018-20, the quantity of shipments of complete chassis decreased by *** percent (table IV-5). Shipments of imports from China accounted for *** volume and *** decline, although shipments from all other sources, including nonsubject and shipments of U.S.-produced complete chassis also experienced a decline in shipments. While the weight of U.S. producers' and subject imports' U.S. shipments generally increased on a per unit basis, in 2020 U.S. producers' U.S. shipments of complete chassis had a greater weight per-unit ratio than that of subject and nonsubject imports.

[15] CIMC ***. ***, during 2018-20, *** percent of the quantity of CIMC Dongguan's U.S. shipments of subassemblies had a value of *** per unit, *** percent of the quantity of CIMC Shenzhen's U.S. shipments of subassemblies had a value of *** per unit, and *** percent of the quantity of CV's U.S. shipments of subassemblies had a value of *** per unit.

Table IV-5
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports of complete chassis, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Quantity (short tons)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Value (1,000 dollars)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Unit value (dollars per unit)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Unit value (dollars per short ton)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Table continued on next page.

Table IV-5—Continued
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports of complete chassis, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio (short tons per unit)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity based on units (percent)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity based on short tons (percent)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of value (percent)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Table continued on next page.

Table IV-5—Continued
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports of complete chassis, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio to overall apparent consumption quantity in units (percent)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption value (percent)		
Complete chassis.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. U.S. importer data relate to U.S. imports, as opposed to U.S. shipments, so the ratios to apparent consumption may not sum to 100 percent across both complete chassis and subassemblies.

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

Table IV-6
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports of subassemblies, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Quantity (short tons)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Value (1,000 dollars)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Table continued on next page.

Table IV-6—Continued
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports of subassemblies, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Unit value (dollars per short ton)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio (short tons per unit)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Table continued on next page.

Table IV-6—Continued
Chassis: U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of imports of subassemblies, 2018-20

Item	Calendar year		
	2018	2019	2020
	Share of quantity based on units (percent)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity based on short tons (percent)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of value (percent)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption quantity in units (percent)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption value (percent)		
Subassemblies.-- U.S. producers' U.S. shipments	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. U.S. importer data relate to U.S. imports, as opposed to U.S. shipments, so the ratios to apparent consumption may not sum to 100 percent across both complete chassis and subassemblies.

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

Part V: Pricing data

Factors affecting prices

Raw material costs

Over January 2018 to December 2020, raw materials represented slightly more than *** percent of the costs of goods sold ("COGS") for U.S. chassis production in each year. Other factory costs represented a larger share of the COGS (between *** percent) than labor (*** percent).

The primary raw material inputs for chassis and subassemblies are steel and steel components.[1] Petitioner stated that chassis production primarily involves fabrication and assembly of welded steel parts. Other raw materials and components used in the production of chassis include tires and wheels, gear assemblies, paint, air brake systems, and electrical systems.[2] Figure V-1 presents trends in the costs of hot-rolled steel from January 2018 to December 2020. The price of hot-rolled steel bar increased by 22.8 percent between January 2018 and January 2019, but decreased by nearly the same amount through September 2020, and was 6.0 percent higher in December 2020 than in January 2018.

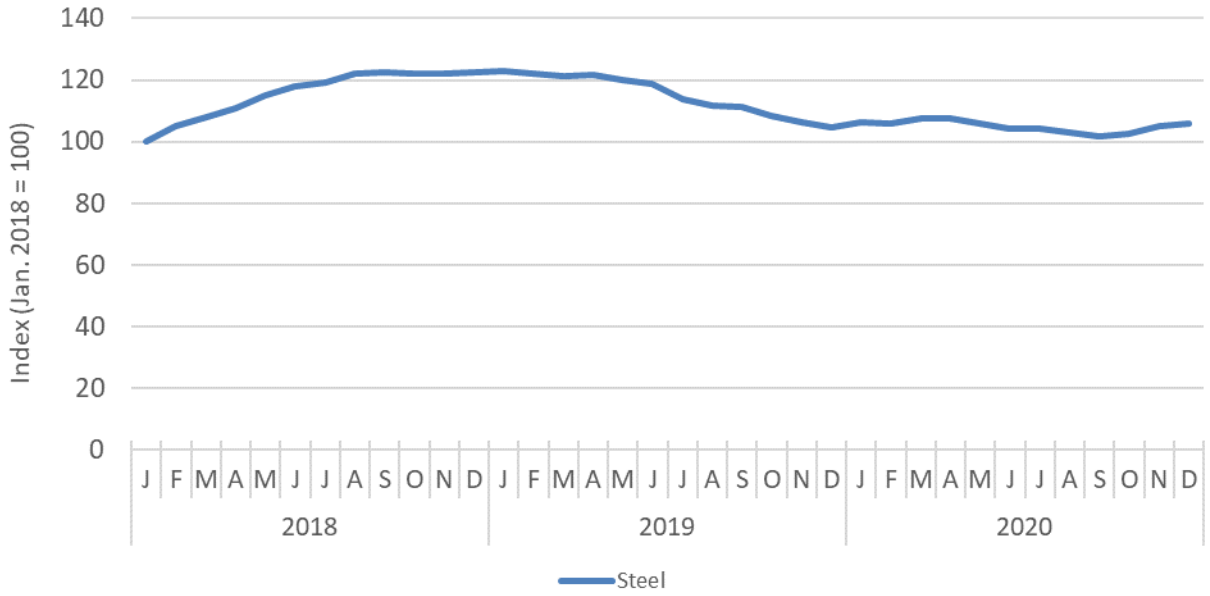
Overall, 5 of 6 producers, *** responding importers, and 3 of 19 purchasers characterized raw material prices as having fluctuated during the period of investigation.[3] Most of the responding purchasers (14 of 19) characterized raw material prices as increasing during January 2018 to December 2020, however. Nearly half of purchasers (13 of 27) reported familiarity with raw material prices in the chassis industry and almost half (10 of 21) of responding purchasers reported that it affects their contracts for chassis.

[1] Conference transcript, p. 135 (DeFrancesco), Petitioner's postconference brief, exh. 1, p. 27. Petitioner stated that similar types of steel are used in the production of domestic chassis and chassis produced in China and that all producers are using high-strength materials. Conference transcript, p. 180 (Fenton).

[2] Petition, pp. 9-10; Petitioner's postconference brief, exh. 1, p. 27.

[3] *** reported that raw material prices had increased, but ***.

Figure V-1
Chassis: Producer price index (PPI) for hot-rolled steel bars, plates, and structural shapes, January 2018=100, January 2018-December 2020



Source: U.S. Bureau of Labor Statistics, Producer Price Index by Commodity for Metals and Metal Products: Hot Rolled Steel Bars, Plates, and Structural Shapes ***, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/WPU101704, February 19, 2021.

U.S. producers and importers[4] were asked to characterize how the section 232 tariffs on imported steel products had affected the U.S. market for chassis. Four U.S. producers and *** described the tariffs as having caused raw material prices to fluctuate, and two U.S. producers and *** described them as having caused raw material prices to increase.[5] In contrast, 12 purchasers indicated that section 232 tariffs caused higher raw material prices, 4 indicated they had no effect, and 2 indicated that they caused raw material prices to fluctuate.

[4] The CIMC group ***.
[5] *** reported that raw material prices had increased due to section 232 tariffs, but ***.

Similarly, three U.S. producers and *** described the section 232 tariffs as having caused chassis prices to fluctuate, while two U.S. producers described the section 232 tariffs as not having changed U.S. chassis prices and one reported that they had caused U.S. chassis prices to increase.[6] One U.S. producer and *** stated that they had caused U.S. chassis prices to increase. Twelve purchasers reported that chassis prices increased due to these tariffs, five noted no change, and one reported fluctuations due to the tariffs.

Transportation costs to the U.S. market

Transportation costs for chassis shipped from China to the United States averaged 12.9 percent during 2020. These estimates were derived from official import data and represent the transportation and other charges on imports.[7]

U.S. inland transportation costs

Two of six responding U.S. producers and *** responding importers reported that they typically arrange transportation to their customers.[8] Most U.S. producers reported that their U.S. inland transportation costs ranged from 0 to 10 percent (***) while ***. Respondent CIMC noted, however, that the U.S. producers' presence along the West Coast is minimal, and that transportation to the West Coast from U.S. producers' facilities, all located east of the Mississippi River, would be more costly.[9] Subsequently, these percentages would likely be higher for shipments made to the West Coast.[10]

[6] The increase was reported by producer ***.

[7] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2020 and then dividing by the customs value based on the HTS subheading 8716.90.5060 and 8716.39.0090.

[8] ***.

[9] Respondent CIMC's prehearing brief, pp. 56-57.

[10] Hearing transcript, p.219 (Noel) and pp. 233-234 (LaBar). Respondent CIMC provided an analysis from DAT Freight and Analytics, which showed that ***. Respondent CIMC's prehearing brief, Attachment C, p. 25.

Purchaser *** stated that CIMC's "ability to drop ship the chassis to different ports in the {United States} is a huge factor in saving time and positioning cost." Similarly, in the preliminary phase, respondent TRAC Intermodal argued that movement and other transportation costs are important in the chassis industry and that the flat rack system for bulk movement of chassis developed by Chinese producers resulted in moving them more quickly, reliably, and cheaply to all U.S. locations than U.S. producers can.[11]

Pricing methods

Most responding U.S. producers and *** importers reported using transaction-by-transaction negotiations. In addition, half of U.S. producers reported using contracts and set price lists. An equal number of importers reported *** (table V-1).

Table V-1
Chassis: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Importers
Transaction-by-transaction	5	***
Contract	3	***
Set price list	3	***
Other	0	***
Responding firms	6	3

Note: ***.
Note: The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

U.S. producers reported selling the majority of their chassis on the spot market (***), while importers reported selling the vast majority of their chassis through short-term contracts ranging from 90 to 180 days (table V-2). U.S. producers and importers reported that short-term contracts do not allow for price renegotiation, fix price and quantity, and are not indexed to raw material costs.

[11] Conference transcript, p. 215 (Layton).

Table V-2
Chassis: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2020

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

Note: Because of rounding, figures may not add to the totals shown.

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

Four responding purchasers reported that they purchase product annually, three purchases quarterly, six purchase monthly, and two purchase weekly. The majority (14 purchasers) reported that they purchase at some other frequency, with most noting purchasing on an "as needed" basis or per market-based demand. Twenty-four of 27 purchasers reported that their purchasing frequency had not changed since 2018. Although three purchasers only contact one supplier, three will contact as many as seven. On average, purchasers will contact two to four suppliers before making a purchase.

Sales terms and discounts

Most U.S. producers typically quote prices on an f.o.b. basis. ***. Most producers and importers reported not offering discounts. U.S. producers *** reported offering discounts on a case-by-case basis or only very rarely. Importer *** reported offering quantity discounts.

Price leadership

Eight purchasers reported the existence of price leaders in the chassis market. CIMC/CIE was noted to be a price leader by four purchasers, Cheetah by three purchasers, and Hercules by one purchaser. One purchaser noted Cheetah as a leader due to it being the oldest U.S. producer, and another noted that it was the first to increase prices. One purchaser reported that Pratt has better pricing than CIE, but not as good of quality. CIE was noted to be a leader by *** due to its low prices, and by *** as having competitive prices and a high-quality product that is deliverable anywhere in the United States. Purchaser *** stated that "CIMC's ability to produce large quantities of chassis makes them a price leader." *** "Hercules … was able to increase their prices above market levels following the implementation of the Section 301 tariffs and potential AD/CVD duties."

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 chassis products shipped to unrelated U.S. customers during January 2018-December 2020.

Product 1.--Tandem axle gooseneck chassis for carriage of 53' domestic containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 2.--Tandem axle gooseneck chassis for carriage of 40' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 3.--Extendable Tandem axle chassis for carriage of 20' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 4.--Triaxle chassis capable of extension for carriage of heavy 20' up to 40' containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 5.--Specialty chassis for carriage of 20' storage tanks, without PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 6.--Tandem axle gooseneck chassis for carriage of 40' ISO containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 7.--Tandem axle gooseneck chassis for carriage of 53' domestic containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension

Product 8.--Triaxle chassis capable of extension for carriage of heavy 20' up to 40' containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension

Six U.S. producers and one importer provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[12] [13] Pricing data reported by these firms accounted for approximately 49.4 percent of U.S. producers' shipments of chassis and 22.3 percent of U.S. shipments of subject imports from China in 2020 (73.0 percent of complete chassis shipments).[14] On a value basis, these data would cover 46.1 percent of U.S. producers' shipments and 59.2 percent of U.S. shipments of subject imports in 2020.

Price data for products 1-8 are presented in tables V-3 to V-10 and figures V-2 to V-9. There were frequent quarters during which no sales of chassis of a particular type were reported. As such, some of the data series are non-continuous. There were also numerous quarters in which small numbers of chassis of a particular type were sold, whereas in other quarters, particular configurations were in the hundreds of units, and for chassis imported from China, in the thousands of units. Producers and importers were also asked what proportion of these products were remanufactured ("remack") chassis. No responding producer or importer reported that any of their quarterly pricing data contained sales of remack chassis.

[12] 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.

[13] ***.

[14] Pricing coverage is based on U.S. shipments reported in questionnaires.

Table V-3
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	--	0	***	***	--
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	--	0	***	***	--
2019: Jan.-Mar.	--	0	***	***	--
Apr.-June	--	0	***	***	--
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020: Jan.-Mar.	--	0	--	0	--
Apr.-June	***	***	***	***	***
July-Sept.	--	0	***	***	--
Oct.-Dec.	--	0	***	***	--

Note: Product 1: Tandem axle gooseneck chassis for carriage of 53' domestic containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.
Note: ***.

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

Table V-4
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***

Note: Product 2: Tandem axle gooseneck chassis for carriage of 40’ ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.
Note: ***.

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

Table V-5
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***
Apr.-June	--	0	***	***	--
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***

Note: Product 3: Extendable Tandem axle chassis for carriage of 20' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Table V-6
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	--	0	--
July-Sept.	***	***	--	0	--
Oct.-Dec.	***	***	***	***	***

Note: Product 4: Triaxle chassis capable of extension for carriage of heavy 20' up to 40' containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Table V-7
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	0	***
Apr.-June	***	***	***	0	***
July-Sept.	***	***	***	0	***
Oct.-Dec.	***	***	***	0	***

Note: Product 5: Specialty chassis for carriage of 20' storage tanks, without PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Table V-8
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 6 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	11,013	170	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	11,316	269	***	***	***
2019: Jan.-Mar.	11,698	216	***	***	***
Apr.-June	11,262	118	***	***	***
July-Sept.	12,524	341	***	***	***
Oct.-Dec.	10,436	72	***	***	***
2020: Jan.-Mar.	10,815	158	***	***	***
Apr.-June	***	***	--	0	--
July-Sept.	***	***	--	0	--
Oct.-Dec.	***	***	--	0	--

Note: Product 6: Tandem axle gooseneck chassis for carriage of 40' ISO containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Table V-9
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 7 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	--	0	***	***	--
Apr.-June	--	0	***	***	--
July-Sept.	--	0	***	***	--
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	--	0	***	***	--
Apr.-June	--	0	***	***	--
July-Sept.	--	0	***	***	--
Oct.-Dec.	--	0	***	***	--
2020: Jan.-Mar.	--	0	***	***	--
Apr.-June	--	0	--	0	--
July-Sept.	--	0	--	0	--
Oct.-Dec.	***	***	--	0	--

Note: Product 7: Tandem axle gooseneck chassis for carriage of 53' domestic containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Table V-10
Chassis: Weighted-average f.o.b. prices and quantities of domestic and imported product 8 and margins of underselling/(overselling), by quarter, January 2018-December 2020

Period	United States		China		
	Price (dollars per chassis)	Quantity (chassis)	Price (dollars per chassis)	Quantity (chassis)	Margin (percent)
2018: Jan.-Mar.	--	0	***	***	--
Apr.-June	--	0	***	***	--
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	--	0	***	***	--
Oct.-Dec.	--	0	***	***	--
2020: Jan.-Mar.	--	0	***	***	--
Apr.-June	--	0	***	***	--
July-Sept.	***	***	***	***	***
Oct.-Dec.	--	0	***	***	--

Note: Product 8: Triaxle chassis capable of extension for carriage of heavy 20' up to 40' containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Figure V-2
Chassis: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2018-December 2020

* * * * * * *

Product 1: Tandem axle gooseneck chassis for carriage of 53’ domestic containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.
Note: ***.

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

Figure V-3
Chassis: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2018-December 2020

* * * * * * *

Product 2: Tandem axle gooseneck chassis for carriage of 40' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.
Note: ***.

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

Figure V-4
Chassis: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2018-December 2020

* * * * * * *

Product 3: Extendable Tandem axle chassis for carriage of 20' ISO containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Figure V-5
Chassis: Weighted-average prices and quantities of domestic and imported product 4, by quarter, January 2018-December 2020

* * * * * * *

Product 4: Triaxle chassis capable of extension for carriage of heavy 20’ up to 40’ containers, without PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Figure V-6
Chassis: Weighted-average prices and quantities of domestic and imported product 5, by quarter, January 2018-December 2020

* * * * * * *

Note: Product 5: Specialty chassis for carriage of 20’ storage tanks, without PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Figure V-7
Chassis: Weighted-average prices and quantities of domestic and imported product 6, by quarter, January 2018-December 2020

* * * * * * *

Product 6: Tandem axle gooseneck chassis for carriage of 40’ ISO containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Figure V-8
Chassis: Weighted-average prices and quantities of domestic and imported product 7, by quarter, January 2018-December 2020

* * * * * * *

Product 7: Tandem axle gooseneck chassis for carriage of 53’ domestic containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Figure V-9
Chassis: Weighted-average prices and quantities of domestic and imported product 8, by quarter, January 2018-December 2020

* * * * * * *

Product 8: Triaxle chassis capable of extension for carriage of heavy 20’ up to 40’ containers, with PSI tire inflation system, with steel wheels, and with mechanic suspension.

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

Price trends

In general, prices increased during January 2018-December 2020. Table V-11 summarizes the price trends, by country and by product. As shown in the table, domestic price increases occurred in 7 of the 8 products and ranged from 7.4 to 76.4 percent during January 2018-December 2020 while import price increases ranged from 10.4 to 30.3 percent across all eight products. The price of product 8, the only product for which price did not increase, decreased by 10.4 percent. It was the *** for domestic producers, and the *** for importers. The product with the largest increase in domestic price, ***, was the *** for domestic producers, but *** for importers. There were no sales of product 5 from China in 2020, nor were there sales of products 6 and 7 in the final three quarters of 2020. Despite prices increasing across nearly all of the pricing products, prices changes were not necessarily smooth. The two panels of figure V-10 present indexed prices for the eight domestic pricing products and those imported from China.

Table V-11
Chassis: Summary of sales volumes, weighted-average f.o.b. prices, and price changes for products 1-8 from the United States and China

Item	Number of quarters	Volume of shipments (units)	Low price (per unit)	High price (per unit)	Change in price (percent)
Product 1					
United States	5	***	***	***	***
China	11	***	***	***	***
Product 2					
United States	12	***	***	***	***
China	12	***	***	***	***
Product 3					
United States	11	***	***	***	***
China	12	***	***	***	***
Product 4					
United States	12	***	***	***	***
China	10	***	***	***	***
Product 5					
United States	12	***	***	***	***
China	8	***	***	***	***
Product 6					
United States	12	***	***	***	***
China	9	***	***	***	***
Product 7					
United States	2	***	***	***	***
China	9	***	***	***	***
Product 8					
United States	5	***	***	***	***
China	12	***	***	***	***

Note: Percentage change from the first quarter in which data were available in 2018 to the last quarter in which price data were available in 2020.
Note: ***.

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

Figure V-10
Chassis: Indexed weighted-average prices of domestic and imported products, by quarter, January 2018-December 2020

* * * * * * *

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

Price comparisons

As shown in table V-12, prices for product imported from China were below those for U.S.-produced product in 58 of 61 instances (44,679 chassis); margins of underselling ranged from 4.3 to 55.4 percent and averaged 20.8 percent. In the remaining 3 instances (451 chassis), prices for product from China were between 0.6 and 17.7 percent above prices for the domestic product, averaging 7.8 percent.

Table V-12
Chassis: Instances of underselling/overselling and the range and average of margins, by product, January 2018-December 2020

Source	Underselling				
	Number of quarters	Quantity (units)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Product 5	***	***	***	***	***
Product 6	***	***	***	***	***
Product 7	***	***	***	***	***
Product 8	***	***	***	***	***
Total	58	44,679	20.8	4.3	55.4
Source	**(Overselling)**				
	Number of quarters	**Quantity[1] (units)**	**Average margin (percent)**	**Margin range (percent)**	
				Min	**Max**
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Product 5	***	***	***	***	***
Product 6	***	***	***	***	***
Product 7	***	***	***	***	***
Product 8	***	***	***	***	***
Total	3	451	(7.8)	(0.6)	(17.7)

Note: These data include only quarters in which there is a comparison between the U.S. and subject product.
Note: ***.

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

Lost sales and lost revenue

In the preliminary phase of the investigation, the Commission requested that U.S. producers of chassis report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of chassis from China during January 2017-September 2020. Of the six responding U.S. producers, five reported that they had to reduce prices and one U.S. producer reported that it had to roll back announced price increases. Four U.S. producers submitted lost sales and lost revenue allegations. The four responding U.S. producers identified 20 firms with which they lost sales or revenue (17 consisting of lost sales allegations, and 3 consisting of both types of allegations).

Staff contacted 39 purchasers and received responses from 27 firms.[15] Responding purchasers reported purchasing 289,451 units of chassis during January 2018-December 2020 (table V-13).

[15] One of the 12 purchasers that submitted lost sales/lost revenue survey responses in the preliminary phase did not submit purchaser questionnaire responses in the final phase.

Table V-13
Chassis: Purchasers' reported purchases and imports, January 2018-December 2020

Purchaser	Purchases in January 2018-December 2020 (chassis)			Change in domestic share (pp, 2018-20)	Change in subject country share (pp, 2018-20)
	Domestic	Subject	All other		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	131,911	137,477	20,063	41.6	(45.7)
Total ***	***	***	***	***	***

Note: ***.
Note: ***.
Note: All other includes all other sources and unknown sources.
Note: Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

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

Of the 27 responding purchasers, 17 reported that they had purchased imported chassis from China instead of U.S.-produced product since 2018. Twelve of these 17 purchasers reported that subject import prices were lower than U.S.-produced product, but only four of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product.[16]

Each of these four were asked whether they would have purchased chassis from China if the prices were equal to those in the United States. One of the four said it would not have done so: *** stated "If the question of 'priced equal' means all in cost (transportation, taxes, etc.) then the decision would come down to how either was spec'd/designed. Given the history of certain components that are on the Chinese made chassis, we would have then chosen domestic over Chinese. Typically speaking, we prefer to purchase domestic over Chinese products."[17]

The other three purchasers stated they still would have purchased Chinese products. *** noted its preference for chassis from China due to "CIMC's ability to consistently meet *** needs with large production runs and timely delivery to locations across the U.S.," that U.S. chassis are only superior with respect to one of the factors listed in the questionnaire (packaging), but inferior on nine factors, and that while price is important, "it is not the only factor in buying chassis."[18] *** stated it still "would have purchased the imported chassis had they been priced equal to domestic chassis, because the imported chassis met {its} lightweight, modular design specifications and the manufacturer had production capacity to meet large orders."[19] Lastly, *** stated it "absolutely" would have purchased chassis imported from China because they are "better built." It added that "the real issue with U.S. producers is they are not innovative… CIMC worked on streamlining their process and constantly improving their manufacturing and thus built a better chassis. U.S. manufacturers can do the same thing if they wanted to… The U.S. producer could be more competitive if they worked harder, used more technology in the process, focused on continuous improvement of the product and the process. U.S. manufacturers are weighted down with burdensome labor laws, unions and do not seem to incentivize employees to help build a better product."[20]

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[16] In addition, one purchaser (***) did not indicate that price was a primary reason, but listed a quantity that it purchased instead of domestic chassis.

[17] Email from ***.

[18] Email from ***.

[19] Email from ***.

[20] Emails from ***.

Twelve purchasers that bought chassis imported from China reported reasons for doing so: eight noted doing so based on product availability/delivery timing, four noted that it was based on quality, three on production capacity, two on payment terms, and one each on adherence to specifications, dealership, transportation costs, and warranty terms. Five purchasers estimated the quantity of chassis from China purchased instead of domestic product (14,146 chassis); quantities ranged from *** chassis to just over *** chassis (table V-14).

Of the 14 responding purchasers, two reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China.[21] Purchaser *** stated that U.S. manufacturers were willing to honor a *** percent discount and purchaser *** stated that only one U.S. producer (***) would offer a discount, which amounted to *** percent.

[21] In addition, 13 purchasers reported that they did not know.

Table V-14
Chassis: Purchasers' responses to purchasing subject imports instead of domestic product

Purchaser	Purchased imports instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (units)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***

Table continued on next page.

Table V-14—Continued
Chassis: Purchasers' responses to purchasing subject imports instead of domestic product

Purchaser	Purchased imports instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (units)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--17; No--10	Yes--12; No--5	Yes--4; No--11	***	

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

Part VI: Financial experience of U.S. producers

Background

The U.S.-produced chassis financial results of six firms (Cheetah, CIE, Hercules, Pitts, Pratt, Stoughton) are presented in this section of the report, covering the period January 1, 2018 through December 31, 2020.[1] *** combined accounted for *** percent of the period's total reported sales quantity: *** (*** percent) and *** (*** percent). The remaining firms accounted for shares ranging from *** percent of the period's total sales quantity (***) to *** percent (***).

During January 2018 through December 2020, U.S. producers' chassis operations reflect/include the following company-specific actions/initiatives: ***.[2] [3]

[1] Petitioning U.S. producers (Cheetah, Hercules, Pitts, Pratt, Stoughton) are privately held companies. Conference transcript, p. 7 (DeFrancesco). CIE is a subsidiary of CIMC Vehicles Group, a publicly-traded company headquartered in Shenzhen, China. All firms reported their financial results on the basis of U.S. generally accepted accounting principles (GAAP) and for calendar-year periods. Staff conducted a verification of Cheetah's financial results and related information on March 18, 2021. Changes resulting from verification are noted in the relevant sections below.

[2] ***, U.S. producer questionnaires, responses to II-2. Email from ***, February 22, 2021.

[3] ***. Petitioner's postconference brief, exh. 1, p. 42.

Operations on Chassis

Table VI-1 and table VI-2 present income-and-loss data for U.S. producers' chassis operations and corresponding changes in average per chassis values (AUVs), respectively. Table VI-3 presents selected company-specific financial information.[4] Appendix G presents overall financial results ***.

Table VI-1
Chassis: Results of operations of U.S. producers, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Total net sales	***	***	***
	Value (1,000 dollars)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Total COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income or (loss)	***	***	***
Depreciation/amortization	***	***	***
Estimated cash flow from operations	***	***	***
	Ratio to net sales (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

Table continued on next page.

[4] Due to the relatively wide range of company-specific average per chassis sales values, as well as some changes in company-specific product mix during the period (see *Revenue* section), a variance analysis is not presented in this section of the report.

Table VI-1--Continued
Chassis: Results of operations of U.S. producers, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio to total COGS (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Unit value (dollars per unit)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***
	Number of firms reporting		
Operating losses	***	***	***
Net losses	***	***	***
Data	***	***	***

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

Table VI-2
Chassis: Changes in AUVs, 2018-20

Item	Between calendar years		
	2018-20	2018-19	2019-20
	Change in AUVs (percent)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Change in AUVs (dollars per unit)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

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

Table VI-3
Chassis: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Total net sales (units)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Total net sales (1,000 dollars)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***

Table continued on next page.

Table VI-3--Continued
Chassis: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Cost of goods sold (1,000 dollars)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Gross profit or (loss) (1,000 dollars)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	SG&A expenses (1,000 dollars)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Operating income or (loss) (1,000 dollars)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Net income or (loss) (1,000 dollars)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***

Table continued on next page.

Table VI-3--Continued
Chassis: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	COGS to net sales ratio (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Gross profit or (loss) to net sales ratio (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	SG&A expenses to net sales ratio (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Operating income or (loss) to net sales ratio (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Net income or (loss) to net sales ratio (percent)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***

Table continued on next page.

Table VI-3--Continued
Chassis: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit net sales value (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit raw materials (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit direct labor (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit other factory costs (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit conversion costs		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***

Table continued on next page.

Table VI-3--Continued
Chassis: Results of operations of U.S. producers, by firm, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit COGS (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit gross profit or (loss) (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit SG&A expenses (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit operating income or (loss) (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***
	Unit net income or (loss) (dollars per unit)		
Cheetah	***	***	***
CIE	***	***	***
Hercules	***	***	***
Pitts	***	***	***
Pratt	***	***	***
Stoughton	***	***	***
All firms	***	***	***

Table continued on next page.

Table VI-3--Continued
Chassis: Results of operations of U.S. producers, by firm, 2018-20

Note 1: ***. Petitioner's postconference brief, exh. 1, p. 38. See also footnote 15. ***. Ibid.
Note 2: ***. Petitioner's postconference brief, exh. 1, p. 38. *** U.S. producer questionnaire, response to III-10.
Note 3: Conversion costs equal combined direct labor and other factory costs.

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

Sales

The majority of chassis revenue reflects commercial sales (*** percent of the period's total sales quantity) but also includes a relatively small share of transfer sales (*** percent).[5] No internal consumption was reported. Given the predominance of commercial sales throughout the period, a single revenue line item is presented in the tables above.

Sales quantity

The U.S. industry reported its highest level of total sales quantity in 2018, followed by declines in 2019 and 2020. Among the larger volume producers, *** and *** reported the largest company-specific sales quantity declines in 2019 and 2020, *** percent and *** percent respectively.[6] *** was the *** U.S. producer with operations throughout the period that reported an increase in sales quantity in 2020. ***, also reported higher sales quantity in 2020.

Sales value

On an overall basis, average per chassis sales value increased to its highest level in 2019 and then declined to its lowest level in 2020. As shown in table VI-3, the relatively wide range of

[5] ***. *** U.S. producer questionnaire, response to II-15.
[6] ***. Petitioner's postconference brief, exh. 1, p. 35.

company-specific average sales values reflects basic differences such as size (e.g., 53-foot versus 40-foot) but also the presence or absence of more complex features; e.g., the degree of customization necessary to meet geographic requirements.[7] U.S. producers were mixed in terms of the extent to which period-to-period changes in company-specific average per chassis sales value reflect changes in underlying product mix.[8] [9]

Directionally and while magnitudes varied, most U.S. producers reported the same pattern of higher average sales value in 2019 followed by declines in 2020. *** was the *** U.S. producer that reported a higher average sales value in 2020. While average per chassis sales value fluctuated somewhat during the period, the overall and company-specific pattern of total sales value was largely driven by sales quantity.

Cost of goods sold and gross profit or loss

Raw materials

Total raw material cost is the largest component of cost of goods sold (COGS), ranging from *** percent (2020) of total COGS to *** percent (2018). U.S. producers generally

[7] Conference transcript, p. 124 (Katz).

[8] ***. Petitioner's postconference brief, exh. 1, p. 31. ***. Email from ***, February 22, 2021. ***. Ibid. ***. Petitioner's postconference brief, exh. 1, p. 34. ***. Email from ***, February 22, 2021. ***. Petitioner's postconference brief, exh. 1, p. 38 and p. 43. ***. Email from ***, February 22, 2021.

[9] ***. Email from ***, February 22, 2021.

purchase and hold material inventory in order to fulfill specific purchase orders.[10] While some chassis customers reportedly specify aspects of chassis procurement (e.g., tires, steel supplier certification, running gear parts), this is generally the exception.[11] ***.[12]

As a share of 2020 raw material cost, steel for fabrication ranged from *** percent (***) to *** percent (***), fabricated steel components ranged from *** percent (***) to *** percent (***), running gear ranged from *** percent (***) to *** percent (***), landing gear ranged from *** percent (***) to *** percent (***), electrical components ranged from *** percent (***) to *** percent (***), and other material inputs ranged from *** percent (***) to *** percent (***).[13] [14]

On an average per chassis basis, the U.S. industry's raw material cost increased in 2019 and then declined in 2020 to a level marginally lower compared to 2018. On a company-specific

[10] Chassis that are produced for inventory can reflect anticipated orders that did not materialize (Conference transcript, p. 124 (Katz)) and/or an effort to consume available material inventory and utilize incremental capacity. Conference transcript, p. 124 (Wahlin); pp. 124-125 (Gill); p. 125 (Musick). It was also noted that the level of chassis production achieved can indirectly affect material input costs. As described by an industry witness and in the context of U.S. producers' smaller production runs, ". . . when you have these high volume orders you have better negotiating power with your component suppliers." Conference transcript, p. 137 (Gill).

[11] Conference transcript, p. 122 (Katz).

[12] Petitioner's postconference brief, exh. 1, p. 34.

[13] *** U.S. producer questionnaires, responses to III-9c. Email from ***, February 22, 2021. While not uniform, U.S. producers provided similar descriptions of the items included in other material inputs: ***. *** U.S. producer questionnaires, responses to III-9c (note 1). Email from ***, February 22, 2021.

[14] The cost of steel, which is directly reflected in steel purchased for fabrication and indirectly in the cost of fabricated steel components and other items, reportedly fluctuated during the period. Petitioner's postconference brief, exh. 1, p. 27. Purchased steel is fabricated into required pieces for further assembly, while other components (e.g., wheels, axles, tire, landing gear, lights) are received separately and staged for assembly and/or subassembly. Conference transcript, pp. 84-85 (Katz). ***. Petitioner's postconference brief, exh. 1, p. 39.

basis, most U.S. producers shared the same directional pattern of increasing average per chassis raw material costs in 2019 followed by declines in 2020.[15] *** was the *** U.S. producer that reported higher average raw material cost in 2020.[16]

Direct labor and other factory costs

Direct labor, the smallest component of COGS, ranged from *** percent (2020) to *** percent (2018).[17] On an average per chassis basis direct labor cost increased in 2019 and then declined notably in 2020 to its lowest level of the period. On a company-specific basis, the directional pattern of average direct labor cost was mixed between 2018 and 2019 (increases and decreases) and then more uniform between 2019 and 2020 (primarily decreases). Most U.S. producers reported average direct labor costs that fluctuated but generally remained within a narrow range (see table VI-3). The range of average direct labor cost between companies, however, was relatively wide with *** reporting the *** average direct labor cost in 2020.[18]

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[15] ***. Email from ***, February 22, 2021. ***. Verification report (Cheetah), p. 4.

[16] ***. Email from ***, February 22, 2021.

[17] Based on a description of the chassis production process at the Commission's staff conference, direct labor appears to be divided into two primary categories: steel fabrication and assembly. Conference transcript, pp 84-85 (Katz).

[18] ***

Other factory costs, the second largest component of COGS, ranged from *** percent (2018) of total COGS to *** percent (2020). U.S. producers indicated that the level of other factory costs, in general, reflects smaller production runs and corresponding reduction in efficiencies, reportedly a feature of operations throughout the period examined.[19] The presence of other non-chassis activity was also described as a factor impacting the level of chassis costs.[20]

On an overall basis, the U.S. industry's average per chassis other factory costs increased in 2019 and then declined in 2020. On a company-specific basis, the directional pattern was

***. Email from ***, February 22, 2021. ***. Verification report (Cheetah), pp. 4-5. ***. Email from ***, February 22, 2021.

[19] In addition to confirming that the transition to smaller production runs began prior to the period and that chassis operations have been adapted/reconfigured accordingly, U.S. producers stated that capacity to produce chassis in larger production runs has been maintained. Conference transcript, pp. 133-135 (Katz); p. 135 (Wahlin); p. 136 (Conti); pp. 136-137 (Muscik); p. 137 (Gill).

[20] ***. Petitioner's postconference brief, exh. 1, p. 35.

mixed.[21] [22] *** were the *** U.S. producers with operations throughout the period that reported higher average other factory costs in both 2019 and 2020.[23]

COGS and gross profit or loss

In 2019, the decline in the U.S. industry's total COGS reflects lower total sales quantity, partially offset by higher average per chassis COGS. In 2020, the continued decline in total COGS reflects a combination of lower total sales quantity and lower average COGS. On an overall basis, changes in average COGS largely reflect changes in underlying raw material costs with direct labor and other factory costs generally playing a secondary role; i.e., either amplifying or partially offsetting corresponding changes in average per chassis raw material costs.

The U.S. industry's total gross profit declined throughout the period, reflecting declines in total sales value and underlying gross profit ratio (total gross profit divided by total sales value). On an overall basis, the contraction in gross profit ratio in 2019 reflects a percentage increase in average sales values that was exceeded by the corresponding percentage increase in average COGS. In 2020, the further contraction in gross profit ratio reflects a percentage decline in average sales value that exceeded the corresponding percentage decline in average COGS (see table VI-2).

The directional pattern of gross results, while declining for most U.S. producers, was not uniform: *** reported declining gross profit between 2018 and 2019 and

[21] ***. Email from ***, February 22, 2021.

[22] For the industry as whole, value added ratios (total conversion costs divided by total COGS), ranged from *** percent (2018) to *** percent (2020). ***.

[23] ***. Email from ***, February 22, 2021.

then transitioned to gross losses in 2020; *** reported gross losses in 2018 and 2019 and breakeven gross results in 2020; *** reported positive but declining gross profit throughout the period; *** reported increasing gross profit throughout the period; ***, with ***, reported an increase in gross profit in 2020.

SG&A expenses and operating income or loss

The U.S. industry's total SG&A expenses increased in 2019 and then declined in 2020. In conjunction with declines in total sales value, overall SG&A expense ratios (total SG&A expenses divided by total sales value) increased throughout the period. Table VI-3 shows that U.S. producers reported a range of company-specific SG&A expense ratios.

The U.S. industry transitioned from positive operating income in 2018 to an operating loss in 2019, reflecting a combination of lower total gross profit, the primary factor, and higher total SG&A expenses. In 2020, the expansion of the U.S. industry's operating loss reflects a continued decline in total gross profit, which was partially offset by lower SG&A expenses. On a company-specific basis, U.S. producers reported a mixed pattern of operating results: *** reported deteriorating operating results throughout all or most of the period; *** reported declining operating losses, reflecting substantially reduced sales activity;

*** reported increasing positive operating results; and ***, reported increasing operating income.[24] [25] [26]

Interest expense, other expenses and income, and net income or loss

Directionally, the U.S. industry's operating and net results reflect the same declining pattern throughout the period. On a company-specific basis, U.S. producers reported interest expense during all or part of the period. In contrast, other expenses and other income were reported by *** companies, respectively: other expenses (***) and other income (***).[27]

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[24] ***. Petitioner's postconference brief, exh. 1, p. 27.
[25] ***. Petitioner's postconference brief, exh. 1, p. 37.
[26] ***. Petitioner's postconference brief, exh. 1, pp. 40-41.
[27] ***

Capital expenditures and research and development expenses

Table VI-4 presents U.S. producers' capital expenditures and research and development (R&D) expenses related to their chassis operations and table VI-5 presents firm-specific narrative descriptions.

Table VI-4
Chassis: Total capital expenditures and research and development (R&D) expenses of U.S. producers, 2018-20

Item	Calendar year		
	2018	2019	2020
	Capital expenditures (1,000 dollars)		
All firms	***	***	***
	Research and development expenses (1,000 dollars)		
All firms	***	***	***

Note: ***.

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

***. *** U.S. producer questionnaire, response to III-10. *** reported other income throughout the period, while *** reported a relatively small amount of other income in 2019 only.

Table VI-5
Chassis: Narrative descriptions of U.S. producers' capital expenditures and R&D expenses since January 1, 2018

Capital expenditures	
Firm	**Narrative**
***	***
***	***
***	***
***	***
***	***
***	***
R&D expenses:	
Firm	**Narrative**
***	***
***	***
***	***
***	***
***	***
***	***

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

Assets and return on assets

Table VI-6 presents U.S. producers' total net assets and operating return on net assets related to operations on chassis.[28]

Table VI-6
Chassis: Total net assets and operating return on net assets of U.S. producers, 2018-20

Firm	Calendar years ended		
	2018	2019	2020
	Total net assets (1,000 dollars)		
All firms	***	***	***
	Operating return on net assets (percent)		
All firms	***	***	***

Note 1: ***.
Note 2: ***.

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

Capital and investment

The Commission requested the U.S. producers of chassis to describe any actual or potential negative effects on their return on investment or their growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of chassis from China. Table VI-7 tabulates the responses regarding actual negative effects on investment, growth, and development, as well as anticipated negative effects. Table VI-8 presents the narrative responses of U.S. producers regarding actual and anticipated negative effects on investment, growth, and development.

[28] With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of current and non-current assets, which, in many instances, are not product specific. In at least some instances, allocation factors were presumably necessary to report total asset values specific to U.S. producers' chassis operations. The ability of U.S. producers to assign total asset values to discrete product lines affects the meaningfulness of operating return on net assets.

Table VI-7
Chassis: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Item	No	Yes
Negative effects on investment	***	***
Cancellation, postponement, or rejection of expansion projects		***
Denial or rejection of investment proposal		***
Reduction in the size of capital investments		***
Return on specific investments negatively impacted		***
Other		***
Negative effects on growth and development	***	***
Rejection of bank loans		***
Lowering of credit rating		***
Problem related to the issue of stocks or bonds		***
Ability to service debt		***
Other		***
Anticipated negative effects of imports	***	***

Note: ***.

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

Table VI-8
Chassis: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Effects/Firm	Narrative
Negative impact on investment:	
Cancellation, postponement, or rejection of expansion projects	
***	***
***	***
***	***
Reduction in the size of capital investments	
***	***
Return on specific investments negatively impacted	
***	***

Table continued on next page.

Table VI-8--Continued
Chassis: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Effects/Firm	Narrative
Negative impact on investment--continued:	
Return on specific investments negatively impacted--continued	
***	***
***	***
***	***
Other	
***	***
***	***
Negative impact on growth and development:	
Lowering of credit rating	
***	***
Ability to service debt	
***	***
***	***
Other	
***	***

Table continued on next page.

Table VI-8--Continued
Chassis: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Effects/Firm	Narrative
Negative impact on growth and development--continued:	
Other--continued	
***	***
***	***
***	***
Anticipated negative effects of imports:	
***	***
***	***
***	***
***	***

Table continued on next page.

Table VI-8--Continued
Chassis: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2018

Effects/Firm	Narrative
Anticipated negative effects of imports--continued:	
***	***

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

Part VII: Threat considerations and information on nonsubject countries

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

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

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

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

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The industry in China

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export chassis from China. Usable responses to the Commission's questionnaire were received from eight firms, all affiliated with CIMC. These firms' exports to the United States accounted for *** U.S. imports of chassis from China in 2020.[3] According to estimates requested of the responding Chinese producers, the production of chassis in China reported in questionnaires accounts for approximately *** percent of overall production of chassis in China and *** percent of total exports to the United States of chassis produced in China.[4] [5]Table VII-1 presents information on the chassis operations of the responding producers and exporters in China.

[3] Nearly all importer questionnaire responses reporting imports from China and foreign producer responses are from CIMC-affiliated companies (indeed, CV, CIMC Dongguan, and CIMC Shenzhen filed responses to both the foreign producers' and filed responses to the importers' questionnaire that were later consolidated). In the preliminary phase of these investigations, the CIMC-affiliated Chinese producers did not account for a higher share of U.S. imports of chassis and chassis subassemblies from China because the foreign producer primary data responses included only exports of complete chassis, and not subassemblies. The foreign producers argued it would be "distortive" to report both complete chassis and subassemblies. For the final phase of these investigations, staff directed CIMC to report all relevant foreign producer data for complete chassis and subassemblies on a per-unit basis.

[4] CIMC asserts it is the only exporter of subject merchandise from China to the United States. CIMC's postconference brief, p. 16. CIMC also identified and provided questionnaire responses of its other related producers of chassis in China ***.

[5] Petitioner identified ***. Petitioner's prehearing brief at pp. 104-105. ***. ***.

Table VII-1
Chassis: Summary data for producers in China, 2020

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
CIMC Dongguan	***	***	***	***	***	***
CIMC Gansu	***	***	***	***	***	***
CIMC Liangshan	***	***	***	***	***	***
CIMC Qingdao	***	***	***	***	***	***
CIMC Shenzhen	***	***	***	***	***	***
CIMC Vehicles Liaoning	***	***	***	***	***	***
CIMC Yangzhou	***	***	***	***	***	***
CIMC Zhumadian	***	***	***	***	***	***
All firms	***	***	***	***	***	***

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

Changes in operations

As presented in table VII-2 producers in China reported several operational and organizational changes since January 1, 2018.

Table VII-2
Chassis: China producers' reported changes in operations, since January 1, 2018

Item / Firm	Reported changed in operations
Relocations:	
***	***
Other:	
***	***
***	***
***	***
***	***
***	***

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

Operations on chassis

Table VII-3 presents information on the chassis operations of the responding producers and exporters in China. In ***. Because of this shift, *** accounted for the majority of capacity, production, and exports of in-scope merchandise to the United States. While ***. Capacity decreased during 2018-20 by *** percent, and production experienced a steeper decline, decreasing by *** percent during 2018-20. Both capacity and production are projected to be lower in 2021 and 2022 than in reported capacity and production in 2020.[6]

***. Information on the capacity, production, and capacity utilization of *** can be found in table VII-4. With the exception of ***, individual firms generally reported *** capacity utilization rates during 2018-20, ranging from *** percent to *** percent. Chinese producers' capacity utilization decreased during 2018-20 by *** percentage points.[7]

Exports of chassis and subassemblies to the U.S. market decreased during 2018-20 by *** percent, and while most chassis produced in China were shipped as exports to the U.S. during 2018-20, home market shipments are projected to account for the majority of Chinese producers' shipments in 2021 and 2022.

[6] Petitioner contends that since CIMC is used as a key pillar of the Government of China's export-led strategy, the company has resources readily available through the Chinese government which allow it to increase capacity and production rapidly and on short notice. Petitioner's prehearing brief, p. 105.

[7] CIMC provided ***. Using this worksheet, staff separated ***.

Table VII-3
Chassis: Data for producers in China, 2018-20, projected calendar years 2021 and 2022

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2018	2019	2020	2021	2022
	Quantity (units)				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States of subassemblies	***	***	***	***	***
United States of complete chassis	***	***	***	***	***
All exports to the United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	Ratios and shares (percent)				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States of subassemblies	***	***	***	***	***
United States of complete chassis	***	***	***	***	***
All exports to the United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

Note: Capacity is based on ***, while production shown above is inclusive of ***. Capacity utilization is based on the capacity of *** and ***. See p. VII-6, footnote 7 for additional information.

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

***. Table VII-4 presents *** capacity, production, and capacity utilization, calculated based on the firm's maximum production ***.

Table VII-4
Chassis: Capacity, production, and capacity utilization based on maximum production of one foreign producer, *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Capacity-max production (units)		
Full chassis (reported capacity)	***	***	***
Frame subassemblies	***	***	***
Running gear/axle subassemblies	***	***	***
Landing leg subassemblies	***	***	***
Connection subassemblies	***	***	***
Other subassemblies	***	***	***
Total	***	***	***
	Production (units)		
Full chassis	***	***	***
Frame subassemblies	***	***	***
Running gear/axle subassemblies	***	***	***
Landing leg subassemblies	***	***	***
Connection subassemblies	***	***	***
Other subassemblies	***	***	***
Total	***	***	***
	Capacity utilization-max production, product-specific (percent)		
Full chassis	***	***	***
Frame subassemblies	***	***	***
Running gear/axle subassemblies	***	***	***
Landing leg subassemblies	***	***	***
Connection subassemblies	***	***	***
Other subassemblies	***	***	***

Source: Compiled from ***. Capacity for full chassis is based on ***.

Alternative products

As shown in table VII-5, responding foreign producers produced other products on the same equipment and machinery used to produce chassis. In *** periods, most production on the same equipment and machinery in China was of in-scope chassis. CIMC Shenzhen and CIMC Dongguan reported production of ***, while other CIMC entities reported producing ***.

Table VII-5
Chassis: China producers' overall capacity and production on the same equipment as subject production, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Theoretical capacity	***	***	***
Overall capacity	***	***	***
Production: Chassis and subassemblies	***	***	***
Out-of-scope production: Specifically excluded trailers	***	***	***
Other products	***	***	***
All out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	Ratios and shares (percent)		
Overall capacity utilization	***	***	***
Share of production: Chassis and subassemblies	***	***	***
Share of out-of-scope production: Specifically excluded trailers	***	***	***
Other products	***	***	***
All out-of-scope production	***	***	***
Total production on same machinery	***	***	***

Note: Theoretical and overall capacity is based on full chassis and out-of-scope trailers, while production is inclusive of full chassis and subassemblies. Overall capacity utilization is calculated using *** and ***.

Note: Theoretical capacity is defined in the foreign producers'/exporters' questionnaire as the maximum level of production that establishment(s) could have attained during the specified periods without additional investment in machinery and staff. Theoretical capacity is also known as nameplate capacity, rated capacity, maximum achievable capacity, or nominal capacity, and does not take into account normal operating levels and downtime.

Note: Overall production capacity is defined in the foreign producers'/exporters' questionnaire as the level of production that establishment(s) could reasonably have expected to attain during the specified periods, assuming normal operating conditions (i.e., using equipment and machinery in place and ready to operate; normal operating levels (hours per week/weeks per year) and time for downtime, maintenance, repair, and cleanup).

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

Exports

According to GTA, the leading export markets for trailers and semi-trailers for the transportation of goods from China are the United States, Mongolia, and Vietnam (table VII-6). During 2020, the United States was the top export market for trailers and semi-trailers from China, accounting for 23.3 percent, followed by Mongolia, accounting for 13.3 percent. The leading export markets for trailers and semi-trailers for the transportation of goods, not mechanically propelled, from China were the United States, Germany, and Australia (table VII-7). In 2020 the United States was the top export market for these goods, accounting for 29.0 percent, followed by Germany, accounting for 7.0 percent.[8]

[8] GTA data was accessed for two HS codes: 8716.39 (Other trailers and semi-trailers for the transport of goods (excluding tanker trailers and semi-trailers)); and 8716.90 (Parts thereof for Trailers and semi-trailers and other vehicles, not mechanically propelled). These codes were accessed based on petitioner's assertion that chassis can be imported under HTS statistical reporting numbers 8716.39.0090 and 8716.90.5060. These HTS codes are basket categories believed to contain nonsubject merchandise (petitioner believes that most or all imports from China entered under 8716.39.0090 are subject product, but that merchandise from other sources entered under that number includes "large" amounts of nonsubject product). Therefore, it is likely that products exported under these HS codes contain large amounts of nonsubject products.

Table VII-6
Trailers and semi-trailers for the transportations of goods: Exports from China, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Value (1,000 dollars)		
United States	422,168	174,332	116,564
Mongolia	21,341	26,085	66,670
Vietnam	28,716	29,541	39,646
Australia	32,477	41,356	38,544
Nigeria	32,400	50,323	25,192
Japan	19,715	25,998	21,375
Myanmar	12,242	8,783	17,608
Tanzania	19,184	27,985	16,133
Sudan	1,729	6,496	11,387
All other destination markets	172,103	202,316	147,302
All destination markets	762,075	593,214	500,423
	Share of value (percent)		
United States	55.4	29.4	23.3
Mongolia	2.8	4.4	13.3
Vietnam	3.8	5.0	7.9
Australia	4.3	7.0	7.7
Nigeria	4.3	8.5	5.0
Japan	2.6	4.4	4.3
Myanmar	1.6	1.5	3.5
Tanzania	2.5	4.7	3.2
Sudan	0.2	1.1	2.3
All other destination markets	22.6	34.1	29.4
All destination markets	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 8716.39, as reported by China Customs in the Global Trade Atlas database, accessed February 16, 2021.

Table VII-7
Trailers and semi-trailers for the transportations of goods, not mechanically propelled: Exports from China, 2018-20

Destination market	Calendar year		
	2018	2019	2020
	Value (1,000 dollars)		
United States	594,674	505,955	421,112
Germany	108,851	106,819	101,254
Australia	72,170	67,696	75,747
Netherlands	78,785	74,342	71,846
Russia	50,709	56,536	71,199
United Kingdom	58,359	53,577	53,438
Korea	45,388	49,427	47,368
Mexico	36,994	39,949	36,785
Vietnam	24,208	29,879	36,145
All other destination markets	542,888	569,975	538,161
All destination markets	1,613,026	1,554,154	1,453,054
	Share of value (percent)		
United States	36.9	32.6	29.0
Germany	6.7	6.9	7.0
Australia	4.5	4.4	5.2
Netherlands	4.9	4.8	4.9
Russia	3.1	3.6	4.9
United Kingdom	3.6	3.4	3.7
Korea	2.8	3.2	3.3
Mexico	2.3	2.6	2.5
Vietnam	1.5	1.9	2.5
All other destination markets	33.7	36.7	37.0
All destination markets	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 8716.90, as reported by China Customs in the Global Trade Atlas database, accessed February 11, 2021.

U.S. inventories of imported merchandise

Table VII-8 presents data on U.S. importers' reported end-of-period inventories of chassis. Inventories of imports from China decreased each year during 2018-20, for an overall decrease of *** percent. ***.[9]

Table VII-8
Chassis: U.S. importers' end-of-period inventories, 2018-20

Item	Calendar year		
	2018	2019	2020
	Inventories (units); Ratios (percent)		
Imports from China			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from nonsubject sources:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from all import sources:			
Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***

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

[9] In the preliminary phase of these investigations, the petitioner alleged that imports from China rose considerably in 2018, beyond the level of demand for chassis, to come in before imposition of section 301 tariffs, resulting in an inventory overhang that impacted demand in 2019 and into 2020. Petitioner's postconference brief, p. 9 and pp. 47-48. CIMC countered that the decrease in commercial shipment value of subject imports and the decreased market share held by subject imports from 2018 to 2019 is evidence that an inventory overhang was not "forced" onto the market in 2019 or 2020, and further that inventories held by CIMC's dealer customers, not CIMC itself, is part of normal business operation. CIMC's postconference brief, p. 29 and exh. 1, pp. 10-12.

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of chassis from China after January 1, 2021 (table VII-9).

Table VII-9
Chassis: U.S. importers' arranged imports, January 2021 through December 2021

Item	Period				
	Jan-Mar 2021	Apr-Jun 2021	Jul-Sept 2021	Oct-Dec 2021	Total
	Quantity (units)				
Arranged U.S. imports from.-- China	***	***	***	***	***
All other sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Quantity (short tons)				
Arranged U.S. imports from.-- China	***	***	***	***	***
All other sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Antidumping or countervailing duty orders in third-country markets

On September 30, 2016, India applied an antidumping order on "axles for trailers" from China. This antidumping order may cover imports of axle subassemblies for the assembly of chassis in India.[10]

Information on nonsubject countries

Chassis produced by Hyundai de Mexico are the primary source of nonsubject chassis. Mexico's export data is presented below (Tables VII-10 and VII-11). It likely includes out-of-scope trailers and parts of trailers, including refrigerated trailers. Based on questionnaire data, Hyundai's chassis exports to the United States make up *** of the value of Mexico's total exports of trailers and semi-trailers for the transportation of finished goods to the United States.[11] The United States is the primary destination for Mexican exports of trailers, and, to a lesser extent, parts of trailers.

[10] Petitioner's postconference brief, p. 30.

[11] Hyundai's importer questionnaire response, p. 18. Comparing reported import value to GTA data in table VII-10.

Table VII-10
Chassis: Mexico exports of trailers and semi-trailers for the transportation of goods, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	1,281,001	1,536,557	1,176,983
Venezuela	3,077	23	---
Uruguay	16	9	---
Philippines	2	---	---
Panama	482	1,124	---
Nicaragua	1,247	261	---
Kuwait	---	27	---
Korea	---	1	---
Japan	---	47	---
All other destination markets	4,603	5,172	---
All destination markets	1,290,429	1,543,221	1,176,983
	Share of value (percent)		
United States	99.3	99.6	100.0
Venezuela	0.2	0.0	---
Uruguay	0.0	0.0	---
Philippines	0.0	---	---
Panama	0.0	0.1	---
Nicaragua	0.1	0.0	---
Kuwait	---	0.0	---
Korea	---	0.0	---
Japan	---	0.0	---
All other destination markets	0.4	0.3	---
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Data are presented for 2017-2019 due to data availability.

Source: Official exports statistics under HS subheading 8716.39, as reported by INEGI in the Global Trade Atlas database, accessed February 16, 2021.

Table VII-11
Chassis: Mexico exports of parts of trailers, semi-trailers, and other vehicles, not mechanically propelled, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	33,128	69,590	84,975
Canada	2,214	2,955	405
Guatemala	835	562	177
Belize	84	87	96
Colombia	140	105	57
Dominican Republic	152	178	34
Honduras	74	101	26
Panama	212	114	13
Costa Rica	90	78	10
All other destination markets	11,280	13,351	8
All destination markets	48,209	87,123	85,799
	Share of value (percent)		
United States	68.7	79.9	99.0
Canada	4.6	3.4	0.5
Guatemala	1.7	0.6	0.2
Belize	0.2	0.1	0.1
Colombia	0.3	0.1	0.1
Dominican Republic	0.3	0.2	0.0
Honduras	0.2	0.1	0.0
Panama	0.4	0.1	0.0
Costa Rica	0.2	0.1	0.0
All other destination markets	23.4	15.3	0.0
All destination markets	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Data are presented for 2017-2019 due to data availability.

Source: Official exports statistics under HS subheading 8716.90, as reported by INEGI in the Global Trade Atlas database, accessed February 11, 2021.

Global exports of trailers, semi-trailers, and parts thereof by source of exports are presented in tables VII-12 and VII-13.

Table VII-12
Chassis: Global exports of trailers and semi-trailers for the transportation of goods, 2017-19

Exporter	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	1,135,411	1,335,268	1,403,097
China	571,894	762,075	593,214
Germany	3,450,476	3,902,456	3,229,436
Mexico	1,290,429	1,543,221	1,176,983
Netherlands	476,738	478,872	411,498
Poland	282,805	336,322	365,410
France	215,053	225,067	214,352
Austria	210,209	245,761	213,084
Turkey	198,380	320,255	294,190
Belgium	184,538	189,713	201,692
Spain	183,710	224,544	207,107
Canada	146,567	185,731	178,830
All other exporters	1,483,819	1,882,726	1,612,325
All reporting exporters	9,830,026	11,632,012	10,101,218
	Share of value (percent)		
United States	11.6	11.5	13.9
China	5.8	6.6	5.9
Germany	35.1	33.5	32.0
Mexico	13.1	13.3	11.7
Netherlands	4.8	4.1	4.1
Poland	2.9	2.9	3.6
France	2.2	1.9	2.1
Austria	2.1	2.1	2.1
Turkey	2.0	2.8	2.9
Belgium	1.9	1.6	2.0
Spain	1.9	1.9	2.1
Canada	1.5	1.6	1.8
All other exporters	15.1	16.2	16.0
All reporting exporters	100.0	100.0	100.0

Note.--United States and China are shown at the top, all remaining top exporters shown in descending order of 2019 data. Data are presented for 2017-2019 due to data availability.

Source: Official exports statistics under HS subheading 8716.39 reported by various national statistical authorities in the Global Trade Atlas database, accessed February 16, 2021.

Table VII-13
Chassis: Global exports of parts of trailers, semi-trailers, and other vehicles, not mechanically propelled, 2017-19

Exporter	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	828,190	1,009,335	943,125
China	1,362,231	1,613,026	1,554,154
Germany	1,887,357	2,070,096	1,928,191
Netherlands	398,869	458,419	462,711
Poland	347,109	451,235	414,657
Hungary	391,000	434,434	383,832
Italy	334,996	371,297	338,401
Czech Republic	183,915	216,681	187,934
France	193,315	212,770	183,962
Belgium	190,859	200,767	178,579
Slovakia	115,569	131,468	107,916
Turkey	82,239	122,755	107,331
All other exporters	1,377,337	1,635,737	1,677,286
All reporting exporters	7,692,986	8,928,018	8,468,078
	Share of value (percent)		
United States	10.8	11.3	11.1
China	17.7	18.1	18.4
Germany	24.5	23.2	22.8
Netherlands	5.2	5.1	5.5
Poland	4.5	5.1	4.9
Hungary	5.1	4.9	4.5
Italy	4.4	4.2	4.0
Czech Republic	2.4	2.4	2.2
France	2.5	2.4	2.2
Belgium	2.5	2.2	2.1
Slovakia	1.5	1.5	1.3
Turkey	1.1	1.4	1.3
All other exporters	17.9	18.3	19.8
All reporting exporters	100.0	100.0	100.0

Note.--United States and China are shown at the top, all remaining top exporters shown in descending order of 2019 data. Data are presented for 2017-2019 due to data availability.

Source: Official exports statistics under HS subheading 8716.90 reported by various national statistical authorities in the Global Trade Atlas database, accessed February 11, 2021.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
85 FR 47400, August 5, 2020	*Chassis From China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-08-05/pdf/2020-17055.pdf
85 FR 52549, August 26, 2020	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Initiation of Countervailing Duty Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-08-26/pdf/2020-18712.pdf
85 FR 52552, August 26, 2020	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-08-26/pdf/2020-18713.pdf
85 FR 58386, September 18, 2020	*Chassis From China; Determinations*	https://www.govinfo.gov/content/pkg/FR-2020-09-18/pdf/2020-20593.pdf
85 FR 63251, October 7, 2020	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Postponement of Preliminary Determination in the Countervailing Duty Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-10-07/pdf/2020-22177.pdf

Citation	Title	Link
85 FR 68559; October 29, 2020	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Postponement of Preliminary Determination in the Less-Than-Fair-Value Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-10-29/pdf/2020-23972.pdf
86 FR 56, January 4, 2021	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2021-01-04/pdf/2020-29101.pdf
86 FR 3193, January 14, 2021	*Chassis From China; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2021-01-14/pdf/2021-00622.pdf
86 FR 7559, January 29, 2021	*Chassis From China; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations; Correction*	https://www.govinfo.gov/content/pkg/FR-2021-01-29/pdf/2021-01318.pdf
86 FR 12616, March 4, 2021	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2021-03-04/pdf/2021-04409.pdf
86 FR 15186, March 22, 2021	*Certain Chassis and Subassemblies Thereof From the People's Republic of China: Final Affirmative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2021-03-22/pdf/2021-05815.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared in the United States International Trade Commission's hearing via videoconference:

Subject: Chassis and Subassemblies from China

Inv. Nos.: 701-TA-657 and 731-TA-1537 (Final)

Date and Time: March 16, 2021 - 9:30 a.m.

OPENING REMARKS:

Petitioner (**Robert E. DeFrancesco**, Wiley Rein LLP)
Respondents (**Jay C. Campbell**, White & Case LLP)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Wiley Rein LLP
Washington, DC
on behalf of

Coalition of American Chassis Manufacturers

Frank Katz, Chairman, Cheetah Chassis Corporation

Frank Conti, Chief Operations Officer, Hercules Enterprises, LLC

Ed Gill, Vice President, Sales, Pitts Enterprises, Inc.

Kent Musick, President, Pratt Industries, LLC

Robert P. Wahlin, President and Chief Executive Officer,
Stoughton Trailers, LLC

Amy Sherman, Trade Analyst, Wiley Trade Analytics Group

Dr. Seth T. Kaplan, Economist, International Economic Research

Isaac Kaplan, Research Analyst, International Economic Research

Timothy C. Brightbill)
Robert E. DeFrancesco) – OF COUNSEL
Laura El-Sabaawi)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

White & Case LLP
Washington, DC
on behalf of

CIMC Vehicles (Group) Co., Ltd. ("CIMC Vehicles") and CIMC Intermodal Equipment, LLC ("CIE")(collectively, "CV")

Gary Anderson, Chief Operating Officer, CV

Trevor Ash, Executive Vice President, CV

Don Hu, Executive Vice President, Chief Financial Officer, CV

Daniel Smith, Principal, The Tioga Group, Inc

Frank Harder, Principal, The Tioga Group, Inc

Tony Kotler, Practice Lead, Kotler Marketing Group, Inc.

Jeffrey Dudenhefer, Executive Vice President, NACPAC

Ayman Awad, Chief Executive Officer, Trend Intermodal Chassis, LLC

Fred Johring, President, GSL Transportation Services, Inc.

David Duncan, Owner, Duncan and Sons Lines, Inc.

Weston LaBar, Chief Executive Officer, Harbor Trucking Association

Jay C. Campbell)
) – OF COUNSEL
Ting-Ting Kao)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Faegre Drinker Biddle & Reath LLP
Washington, DC
on behalf of

J.B. Hunt Transport, Inc. ("J.B. Hunt")

Jeff Mitchell, Senior Director, Corporate Counsel, J.B. Hunt

Chris Nanos, Director and Corporate Counsel, J.B. Hunt

Douglas J. Heffner)
) – OF COUNSEL
Richard P. Ferrin)

Sidley Austin LLP
Washington, DC
on behalf of

Flexi-Van Leasing, LLC ("Flexi-van")

Nathaniel Seeds, Chief Operating Officer, Flexi-Van

Richard L.A. Weiner)
) – OF COUNSEL
Justin R. Becker)

INTERESTED PARTIES IN OPPOSITION:

Mayer Brown LLP
Washington, DC
on behalf of

Institute of International Container Lessors Ltd. ("IICL")
TRAC Intermodal, LLC
TAL International Group, Inc.
Direct ChassisLink, Inc. ("DCLI")

James Heidenreich, Executive Vice President and Counsel, DCLI

David Esposito, Director, Corporate Maintenance and Repair, DCLI

Mike O'Malley, Senior Vice President, DCLI

INTERESTED PARTIES IN OPPOSITION (continued):

Val Noel, Executive Vice President and Chief Operations Officer,
TRAC Intermodal, LLC

Gregg Carpene, Executive Vice President and Chief Legal Officer,
TRAC Intermodal, LLC

Aaron Cox, Vice President, TAL International Group, Inc.

Steven Blust, Senior Advisor, IICL

Duane W. Layton) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

Petitioner (**Robert E. DeFrancesco**, Wiley Rein LLP)
Respondents (**Jay C. Campbell**, White & Case LLP)

-END-

APPENDIX C

SUMMARY DATA

All U.S. producers

Table C-1
Chassis: Summary data concerning the U.S. market, 2018-20

(Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. consumption quantity in units:						
Amount	***	***	***	▼***	▼***	▲***
Producers' share (fn1)	***	***	***	▼***	▲***	▼***
Importers' share (fn1):						
China	***	***	***	▼***	▼***	▲***
Nonsubject sources	***	***	***	▲***	▼***	▲***
All import sources	***	***	***	▲***	▼***	▲***
U.S. consumption quantity in short tons:						
Amount	***	***	***	▼***	▼***	▼***
Producers' share (fn1)	***	***	***	▲***	▲***	▼***
Importers' share (fn1):						
China	***	***	***	▼***	▼***	▼***
Nonsubject sources	***	***	***	▼***	▼***	▲***
All import sources	***	***	***	▼***	▼***	▲***
U.S. consumption value:						
Amount	***	***	***	▼***	▼***	▼***
Producers' share (fn1)	***	***	***	▲***	▲***	▼***
Importers' share (fn1):						
China	***	***	***	▼***	▼***	▲***
Nonsubject sources	***	***	***	▼***	▼***	▲***
All import sources	***	***	***	▼***	▼***	▲***
U.S. importers' U.S. shipments of imports from:						
China:						
Quantity in units	***	***	***	▼***	▼***	▲***
Quantity in short tons	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▲***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▲***	▲***	▲***
Ending inventory in units	***	***	***	▼***	▼***	▼***
Nonsubject sources:						
Quantity in units	***	***	***	▼***	▼***	▲***
Quantity in short tons	***	***	***	▼***	▼***	▲***
Value	***	***	***	▼***	▼***	▲***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▲***	▲***	▼***
Ending inventory in units	***	***	***	***	***	***
All import sources:						
Quantity in units	***	***	***	▼***	▼***	▲***
Quantity in short tons	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▲***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▲***	▲***	▲***
Ending inventory in units	***	***	***	▼***	▼***	▼***

Table continued on next page.

Table C-1--Continued
Chassis: Summary data concerning the U.S. market, 2018-20

(Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. producers':						
Average capacity in units	***	***	***	▲***	▲***	▲***
Production in units	***	***	***	▼***	▼***	▼***
Capacity utilization (fn1)	***	***	***	▼***	▼***	▼***
U.S. shipments:						
Quantity in units	***	***	***	▼***	▼***	▼***
Quantity in short tons	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▼***	▲***	▼***
Export shipments:						
Quantity in units	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value based on units	***	***	***	▲***	▲***	▲***
Ending inventory in units	***	***	***	▲***	▲***	▼***
Inventories/total shipments (fn1)	***	***	***	▲***	▲***	▲***
Production workers	***	***	***	▼***	▼***	▼***
Hours worked (1,000s)	***	***	***	▼***	▼***	▼***
Wages paid ($1,000)	***	***	***	▼***	▼***	▲***
Hourly wages (dollars per hour)	***	***	***	▲***	▲***	▲***
Productivity (units per 1,000 hours)	***	***	***	▼***	▼***	▼***
Unit labor costs	***	***	***	▲***	▲***	▲***
Net sales:						
Quantity in units	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value based on units	***	***	***	▼***	▲***	▼***
Cost of goods sold (COGS)	***	***	***	▼***	▼***	▼***
Gross profit or (loss) (fn2)	***	***	***	▼***	▼***	▼***
SG&A expenses	***	***	***	▼***	▲***	▼***
Operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Capital expenditures	***	***	***	▼***	▼***	▲***
Research and development expenses	***	***	***	▼***	▼***	▼***
Net assets	***	***	***	▼***	▲***	▼***
Unit COGS	***	***	***	▲***	▲***	▼***
Unit SG&A expenses	***	***	***	▲***	▲***	▲***
Unit operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
COGS/sales (fn1)	***	***	***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

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

Related party exclusion

Table C-2

Chassis: Summary data concerning the U.S. market, excluding one U.S. producer *, 2018-20**

(Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. consumption quantity in units:						
Amount	***	***	***	▼***	▼***	▲***
Producers' share (fn1)						
Included producers	***	***	***	▼***	▲***	▼***
Excluded producers	***	***	***	▲***	▲***	▲***
All producers	***	***	***	▼***	▲***	▼***
Importers' share (fn1):						
China	***	***	***	▼***	▼***	▲***
Nonsubject sources	***	***	***	▲***	▼***	▲***
All import sources	***	***	***	▲***	▼***	▲***
U.S. consumption quantity in short tons:						
Amount	***	***	***	▼***	▼***	▼***
Producers' share (fn1)						
Included producers	***	***	***	▲***	▲***	▼***
Excluded producers	***	***	***	▲***	▲***	▲***
All producers	***	***	***	▲***	▲***	▼***
Importers' share (fn1):						
China	***	***	***	▼***	▼***	▼***
Nonsubject sources	***	***	***	▼***	▼***	▲***
All import sources	***	***	***	▼***	▼***	▲***
U.S. consumption value:						
Amount	***	***	***	▼***	▼***	▼***
Producers' share (fn1)						
Included producers	***	***	***	▲***	▲***	▼***
Excluded producers	***	***	***	▲***	▲***	▲***
All producers	***	***	***	▲***	▲***	▼***
Importers' share (fn1):						
China	***	***	***	▼***	▼***	▲***
Nonsubject sources	***	***	***	▼***	▼***	▲***
All import sources	***	***	***	▼***	▼***	▲***
U.S. importers' U.S. shipments of imports from:						
China:						
Quantity in units	***	***	***	▼***	▼***	▲***
Quantity in short tons	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▲***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▲***	▲***	▲***
Ending inventory in units	***	***	***	▼***	▼***	▼***
Nonsubject sources:						
Quantity in units	***	***	***	▼***	▼***	▲***
Quantity in short tons	***	***	***	▼***	▼***	▲***
Value	***	***	***	▼***	▼***	▲***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▲***	▲***	▼***
Ending inventory in units	***	***	***	***	***	***

Table continued on next page.

Table C-2--Continued
Chassis: Summary data concerning the U.S. market, excluding one U.S. producer *, 2018-20**

(Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
U.S. importers' U.S. shipments of imports from:--Continued						
All import sources:						
Quantity in units	***	***	***	▼***	▼***	▲***
Quantity in short tons	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▲***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▲***	▲***	▲***
Ending inventory in units	***	***	***	▼***	▼***	▼***
Included U.S. producers':						
Average capacity quantity	***	***	***	▲***	▲***	***
Production quantity	***	***	***	▼***	▼***	▼***
Capacity utilization (fn1)	***	***	***	▼***	▼***	▼***
U.S. shipments:						
Quantity in units	***	***	***	▼***	▼***	▼***
Quantity in short tons	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value based on units	***	***	***	▼***	▲***	▼***
Unit value based on short tons	***	***	***	▼***	▲***	▼***
Export shipments:						
Quantity in units	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value based on units	***	***	***	▲***	▲***	▲***
Ending inventory in units	***	***	***	▼***	▲***	▼***
Inventories/total shipments (fn1)	***	***	***	▲***	▲***	▼***
Production workers	***	***	***	▼***	▼***	▼***
Hours worked (1,000s)	***	***	***	▼***	▼***	▼***
Wages paid ($1,000)	***	***	***	▼***	▼***	▼***
Hourly wages (dollars per hour)	***	***	***	▲***	▲***	▲***
Productivity (units per 1,000 hours)	***	***	***	▼***	▼***	▼***
Unit labor costs	***	***	***	▲***	▲***	▲***

Table continued on next page.

Table C-2--Continued
Chassis: Summary data concerning the U.S. market, excluding one U.S. producer *, 2018-20**

(Quantity=units; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per unit; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Comparison years		
	2018	2019	2020	2018-20	2018-19	2019-20
Included U.S. producers':--Continued						
Net sales:						
Quantity in units	***	***	***	▼***	▼***	▼***
Value	***	***	***	▼***	▼***	▼***
Unit value based on units	***	***	***	▼***	▲***	▼***
Cost of goods sold (COGS)	***	***	***	▼***	▼***	▼***
Gross profit or (loss) (fn2)	***	***	***	▼***	▼***	▼***
SG&A expenses	***	***	***	▼***	▲***	▼***
Operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Capital expenditures	***	***	***	▼***	▼***	▼***
Research and development expenses	***	***	***	▼***	▼***	▼***
Net assets	***	***	***	▼***	▼***	▼***
Unit COGS	***	***	***	▲***	▲***	▼***
Unit SG&A expenses	***	***	***	▲***	▲***	▲***
Unit operating income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
Unit net income or (loss) (fn2)	***	***	***	▼***	▼***	▼***
COGS/sales (fn1)	***	***	***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	▼***	▼***	▼***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

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

APPENDIX D

U.S. PRODUCERS' AND U.S. IMPORTERS' NARRATIVES REGARDING UNFINISHED VS FINISHED PRODUCTS

Table D-1
Chassis: U.S. producers' narratives regarding unfinished vs finished products

Item / Firm	Narrative
U.S. producers: Other uses	
***	***
***	***
***	***
U.S. producers: Separate market	
***	***
***	***
***	***
***	***
U.S. producers: Differences in characteristics	
***	***
***	***
***	***

Table continued on next page.

Table D-1--Continued
Chassis: U.S. producers' narratives regarding unfinished vs finished products

Item / Firm	Narrative
U.S. producers: Differences in cost	
***	***
***	***
U.S. producers: Transformation intensive	
***	***
***	***
***	***
***	***

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

Table D-2
Chassis: U.S. importers' narratives regarding unfinished vs finished products

Item / Firm	Narrative
U.S. importers: Other uses	
***	***
***	***
U.S. importers: Separate market	
***	***
***	***
U.S. importers: Differences in characteristics	
***	***
***	***
U.S. importers: Differences in cost	
***	***
***	***
U.S. importers: Transformation intensive	
***	***
***	***

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

APPENDIX E

U.S. PRODUCERS' AND U.S. IMPORTERS' U.S. SHIPMENTS BY PRODUCT TYPE

Figure E-1
Chassis: U.S. producers' and U.S. importers' share of U.S. shipments, 2020

* * * * * * *

Source: Compiled in response to Commission questionnaires.

Table E-1
Chassis: U.S. producers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Quantity (short tons)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

Table continued on next page.

Table E-1--Continued
Chassis: U.S. producers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Unit value (dollars per short ton)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

Table continued on next page.

Table E-1--Continued
Chassis: U.S. producers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio (short tons per unit)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of quantity based on units (percent)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of quantity based on short tons (percent)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S producers' U.S. shipments: Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

Table continued on next page.

Table E-1—Continued
Chassis: U.S. producers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018-20	2018-19	2019-20
	Change of quantity based on units (percent)		
U.S producers' U.S. shipments: Complete chassis	▼***	▼***	▼***
Frame subassemblies	***	***	***
Running gear subassemblies	▼***	▼***	***
Landing gear subassemblies	▼***	▼***	▼***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	▼***	▼***	▼***
All product types	▼***	▼***	▼***
	Change of quantity based on short tons (percent)		
U.S producers' U.S. shipments: Complete chassis	▼***	▼***	▼***
Frame subassemblies	***	***	***
Running gear subassemblies	▼***	▼***	▲***
Landing gear subassemblies	▼***	▼***	▼***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	▼***	▼***	▼***
All product types	▼***	▼***	▼***
	Percentage point changes for share of quantity based on units (percent)		
U.S producers' U.S. shipments: Complete chassis	▲***	▲***	▲***
Frame subassemblies	***	***	***
Running gear subassemblies	▲***	▼***	▲***
Landing gear subassemblies	▼***	▼***	▼***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	▼***	▼***	▼***
All product types	***	***	***
	Percentage point changes for share of quantity based on short tons (percent)		
U.S producers' U.S. shipments: Complete chassis	▲***	▲***	▲***
Frame subassemblies	***	***	***
Running gear subassemblies	▼***	▼***	▲***
Landing gear subassemblies	▼***	▲***	▼***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	▼***	▼***	▼***
All product types	***	***	***

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

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

Table E-2
Chassis: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Quantity (short tons)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

Table continued on next page.

Table E-2—Continued
Chassis: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Unit value (dollars per short ton)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

Table continued on next page.

Table E-2—Continued
Chassis: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio (short tons per unit)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of quantity based on units (percent)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of quantity based on short tons (percent)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. shipments of imports from: China.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

Table continued on next page.

Table E-2—Continued
Chassis: U.S. importers' U.S. shipments by product type, 2018-20

Item	Calendar year		
	2018-20	2018-19	2019-20
	Change of quantity based on units (percent)		
U.S. shipments of imports from: China.--Complete chassis	▼***	▼***	▼***
Frame subassemblies	▼***	▼***	▼***
Running gear subassemblies	▲***	▼***	▲***
Landing gear subassemblies	▼***	▼***	▲***
Connection subassemblies	***	***	***
All other subassemblies	▼***	▼***	▲***
All subassemblies	▼***	▼***	▲***
All product types	▼***	▼***	▲***
	Change of quantity based on short tons (percent)		
U.S. shipments of imports from: China.--Complete chassis	▼***	▼***	▼***
Frame subassemblies	▲***	▼***	▲***
Running gear subassemblies	▲***	▼***	▲***
Landing gear subassemblies	▼***	▼***	▲***
Connection subassemblies	***	***	***
All other subassemblies	▼***	▼***	▲***
All subassemblies	▲***	▼***	▲***
All product types	▼***	▼***	▼***
	Percentage point changes for share of quantity based on units (percent)		
U.S. shipments of imports from: China.--Complete chassis	▼***	▲***	▼***
Frame subassemblies	▲***	▲***	▼***
Running gear subassemblies	▲***	▼***	▲***
Landing gear subassemblies	▲***	▼***	▲***
Connection subassemblies	***	***	***
All other subassemblies	▼***	▼***	▲***
All subassemblies	▲***	▼***	▲***
All product types	***	***	***
	Percentage point changes for share of quantity based on short tons (percent)		
U.S. shipments of imports from: China.--Complete chassis	▼***	▼***	▼***
Frame subassemblies	▲***	▲***	▲***
Running gear subassemblies	▲***	▼***	▲***
Landing gear subassemblies	▲***	▼***	▲***
Connection subassemblies	***	***	***
All other subassemblies	▼***	▼***	▲***
All subassemblies	▲***	▲***	▲***
All product types	***	***	***

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

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

Table E-3
Chassis: U.S. importers' U.S. shipments by product type, nonsubject sources, 2018-20

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. shipments of imports from: Nonsubject sources.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Quantity (short tons)		
U.S. shipments of imports from: Nonsubject sources.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Value (1,000 dollars)		
U.S. shipments of imports from: Nonsubject sources.-- Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

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Table E-3—Continued
Chassis: U.S. importers' U.S. shipments by product type, nonsubject sources, 2018-20

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Unit value (dollars per short ton)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

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Table E-3—Continued
Chassis: U.S. importers' U.S. shipments by product type, nonsubject sources, 2018-20

Item	Calendar year		
	2018	2019	2020
	Ratio (short tons per unit)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of quantity based on units (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of quantity based on short tons (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***
	Share of value (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

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Table E-3--Continued
Chassis: U.S. importers' U.S. shipments by product type, nonsubject sources, 2018-20

Item	Calendar year		
	2018-20	2018-19	2019-20
	Change of quantity based on units (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	▼***	▼***	▲***
Frame subassemblies	***	***	***
Running gear subassemblies	▲***	▼***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	▲***	▼***	***
All product types	▼***	▼***	▲***
	Change of quantity based on short tons (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	▼***	▼***	▲***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	▼***	▼***	▲***
	Percentage point changes for share of quantity based on units (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	▼***	▲***	▼***
Frame subassemblies	***	***	***
Running gear subassemblies	▲***	▼***	▲***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	▲***	▼***	▲***
All product types	***	***	***
	Percentage point changes for share of quantity based on short tons (percent)		
U.S. shipments of imports from: Nonsubject sources.--Complete chassis	***	***	***
Frame subassemblies	***	***	***
Running gear subassemblies	***	***	***
Landing gear subassemblies	***	***	***
Connection subassemblies	***	***	***
All other subassemblies	***	***	***
All subassemblies	***	***	***
All product types	***	***	***

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

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

APPENDIX F

DOMESTIC INDUSTRY DATA EXCLUDING ONE U.S. PRODUCER

Table F-1
Chassis: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution excluding one U.S. producer *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Share of U.S. shipments (percent)		
U.S. producers:			
to Trucking and end users	***	***	***
to Distributors and dealers	***	***	***
U.S. importers: China			
to Trucking and end users	***	***	***
to Distributors and dealers	***	***	***
U.S. importers: Nonsubject			
to Trucking and end users	***	***	***
to Distributors and dealers	***	***	***
U.S. importers: All sources			
to Trucking and end users	***	***	***
to Distributors and dealers	***	***	***

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

Table F-2
Chassis: U.S. producers' capacity, production, and capacity utilization excluding one U.S. producer *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Capacity	***	***	***
Production	***	***	***
	Ratio (percent)		
Capacity utilization	***	***	***

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

Figure F-1
Chassis: U.S. producers' capacity, production, and capacity utilization excluding one U.S. producer *, 2018-20**

* * * * * * *

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

Table F-3
Chassis: U.S. producers' U.S. shipments, export shipments, and total shipments excluding one U.S. producer *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Value (1,000 dollars)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Unit value (dollars per unit)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Share of quantity (percent)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Share of value (percent)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***

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

Table F-4
Chassis: U.S. producers' employment related data excluding one U.S. producer *, 2018-20**

Item	Calendar year		
	2018	2019	2020
Production and related workers (PRWs) (number)	***	***	***
Total hours worked (1,000 hours)	***	***	***
Hours worked per PRW (hours)	***	***	***
Wages paid ($1,000)	***	***	***
Hourly wages (dollars per hour)	***	***	***
Productivity (units per 1,000 hours)	***	***	***
Unit labor costs (dollars per unit)	***	***	***

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

Table F-5
Chassis: U.S. producers' and U.S. importers' U.S. shipments of complete chassis, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Quantity (short tons)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Value (1,000 dollars)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

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Table F-5--Continued
Chassis: U.S. producers' and U.S. importers' U.S. shipments of complete chassis, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Unit value (dollars per short ton)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio (short tons per unit)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

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Table F-5--Continued
Chassis: U.S. producers' and U.S. importers' U.S. shipments of complete chassis, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Share of quantity based on units (percent)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity based on short tons (percent)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of value (percent)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

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Table F-5--Continued
Chassis: U.S. producers' and U.S. importers' U.S. shipments of complete chassis, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Ratio to overall apparent consumption quantity in units (percent)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption value (percent)		
Complete chassis.-- U.S. producers' U.S. shipments excluding ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.
Note U.S. importer data relate to U.S. imports, as opposed to U.S. shipments, so the ratios to apparent consumption may not sum to 100 percent across both complete chassis and subassemblies.

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

Table F-6
Chassis: U.S. producers' and U.S. importers' U.S. shipments of subassemblies, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Quantity (short tons)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Value (1,000 dollars)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

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Table F-6--Continued
Chassis: U.S. producers' and U.S. importers' U.S. shipments of subassemblies, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Unit value (dollars per short ton)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio (short tons per unit)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

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Table F-6--Continued
Chassis: U.S. producers' and U.S. importers' U.S. shipments of subassemblies, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Share of quantity based on units (percent)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of quantity based on short tons (percent)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Share of value (percent)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

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Table F-6--Continued
Chassis: U.S. producers' and U.S. importers' U.S. shipments of subassemblies, with one U.S. producer * shown separately, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Ratio to overall apparent consumption quantity in units (percent)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***
	Ratio to overall apparent consumption value (percent)		
Subassemblies.-- U.S. producers' U.S. shipments excluding one U.S. producer ***	***	***	***
*** U.S. shipments	***	***	***
Total	***	***	***
U.S. shipments of imports from.-- China	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
All sources	***	***	***

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.
Note U.S. importer data relate to U.S. imports, as opposed to U.S. shipments, so the ratios to apparent consumption may not sum to 100 percent across both complete chassis and subassemblies.

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

APPENDIX G

U.S. PRODUCERS' FINANCIAL RESULTS EXCLUDING U.S. PRODUCER ***

Table G-1
Chassis: Results of operations of U.S. producers excluding U.S. producer *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Quantity (units)		
Total net sales	***	***	***
	Value (1,000 dollars)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Total COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income or (loss)	***	***	***
Depreciation/amortization	***	***	***
Estimated cash flow from operations	***	***	***
	Ratio to net sales (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***
	Ratio to total COGS (percent)		
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***

Table continued on next page.

Table G-1--Continued
Chassis: Results of operations of U.S. producers excluding U.S. producer *, 2018-20**

Item	Calendar year		
	2018	2019	2020
	Unit value (dollars per unit)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***
	Number of firms reporting		
Operating losses	***	***	***
Net losses	***	***	***
Data	***	***	***

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

Table G-2
Chassis: Changes in AUVs, excluding U.S. producer *, 2018-20**

Item	Between calendar years		
	2018-20	2018-19	2019-20
	Change in AUVs (percent)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	Change in AUVs (dollars per unit)		
Total net sales	***	***	***
Cost of goods sold.-- Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

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

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