

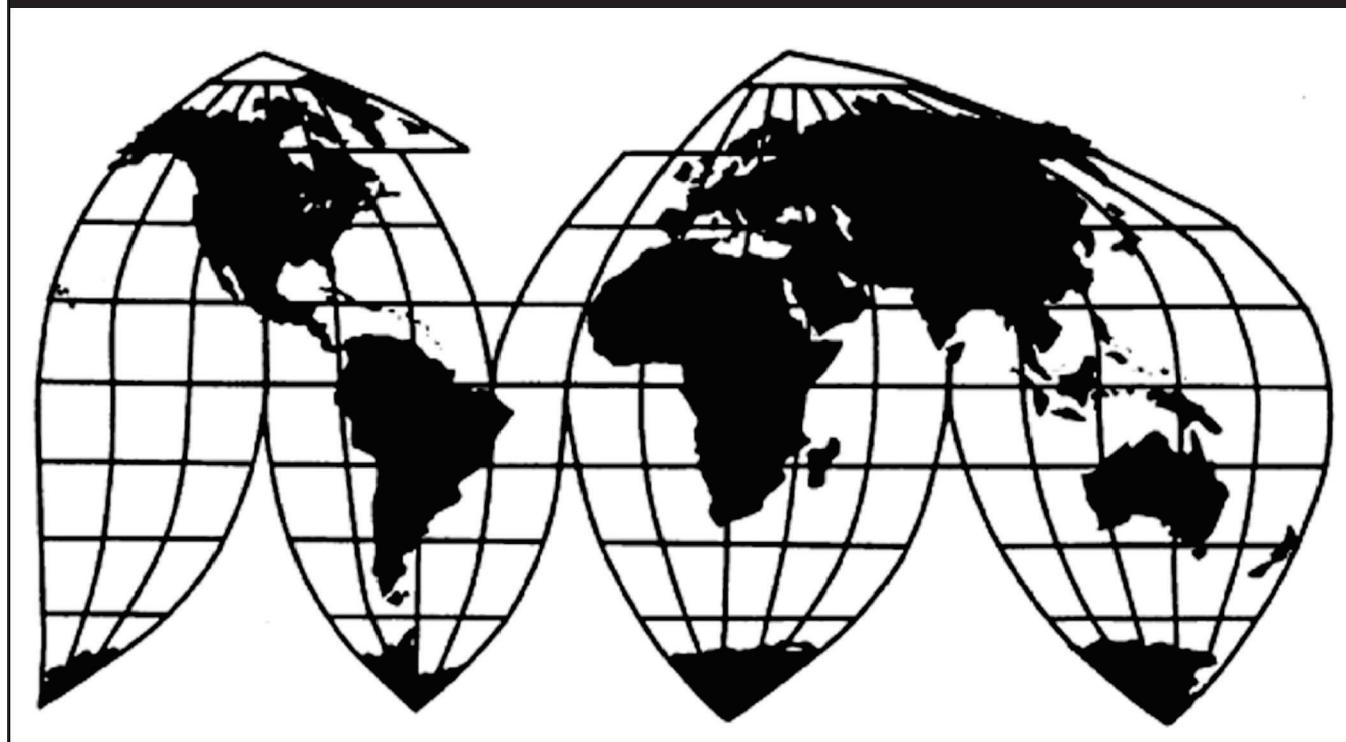
# Hardwood Plywood from China

Investigation Nos. 701-TA-565 and 731-TA-1341 (Review)

Publication 5426

May 2023

**U.S. International Trade Commission**



Washington, DC 20436

# U.S. International Trade Commission

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# **U.S. International Trade Commission**

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# **UNITED STATES INTERNATIONAL TRADE COMMISSION**

Investigation Nos. 701-TA-565 and 731-TA-1341 (Review)

Hardwood Plywood from China

## **DETERMINATION**

On the basis of the record<sup>1</sup> developed in the subject five-year reviews, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that revocation of the antidumping and countervailing duty orders on hardwood plywood from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

## **BACKGROUND**

The Commission instituted these reviews on December 1, 2022 (87 FR 73792) and determined on March 6, 2023 that it would conduct expedited reviews (88 FR 19986, April 4, 2023).

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<sup>1</sup> The record is defined in § 207.2(f) of the Commission’s Rules of Practice and Procedure (19 CFR 207.2(f)).





## Views of the Commission

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

### I. Background

*Original Investigations.* The Commission instituted the original investigations on November 18, 2016, in response to petitions filed by the Coalition for Fair Trade of Hardwood Plywood, a coalition comprised of domestic producers of hardwood plywood (“the Domestic Coalition”).<sup>1</sup> In December 2017, the Commission determined that an industry in the United States was materially injured by reason of imports of hardwood plywood from China that the U.S. Department of Commerce (“Commerce”) found to be sold at less than fair value and subsidized by the government of China.<sup>2</sup> Commerce issued antidumping and countervailing duty orders on imports of hardwood plywood from China on January 4, 2018.<sup>3</sup>

*Current Reviews.* The Commission instituted these reviews on December 1, 2022.<sup>4</sup> The Commission received a response to the notice of institution from the Domestic Coalition, which in these reviews is comprised of five U.S. producers of hardwood plywood: Columbia Forest Products, Commonwealth Plywood Co., Ltd., Manthei Wood Products, States Industries LLC (“States Industries”), and Timber Products.<sup>5</sup> The Commission also received a joint response to

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<sup>1</sup> *Hardwood Plywood From China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*, 81 Fed. Reg. 85,639 (Nov. 28, 2016). The Domestic Coalition consisted of Columbia Forest Products, Commonwealth Plywood, Inc., Murphy Company, Roseburg Forest Products Co., States Industries, Inc., and Timber Products Company (“Timber Products”). *Id.* at 3, n.1.

<sup>2</sup> *Hardwood Plywood from China*, Inv. Nos. 701-TA-565 and 731-TA-1341 (Final), USITC Pub. 4747 (Dec. 2017) (“*Original Determinations*”).

<sup>3</sup> *Certain Hardwood Plywood Products From the People’s Republic of China: Amended Final Determination of Sales at Less Than Fair Value, and Antidumping Duty Order*, 83 Fed. Reg. 504 (Jan. 4, 2018); *Certain Hardwood Plywood Products From the People’s Republic of China: Countervailing Duty Order*, 83 Fed. Reg. 513 (Jan. 4, 2018).

<sup>4</sup> *Hardwood Plywood From China; Institution of Five-Year Reviews*, 87 Fed. Reg. 73,792 (Dec. 1, 2022).

<sup>5</sup> The Domestic Coalition’s Response to the Notice of Institution, Jan. 3, 2023 (“Domestic Coalition’s Substantive Response”).

the notice of institution from eight U.S. importers of hardwood plywood from China: Canusa Wood Products Limited (“Canusa”), Hardwoods Specialty Products USLP (“HSP”), Holland Southwest International, Inc. (“Holland”), McCorry & Company Limited (“McCorry”), Medallion Forest Products (“Medallion”), Northwest Hardwoods, Inc. (“NWH”), Richmond International Forest Products, LLC (“Richmond”), and Taraca Pacific, Inc. (“Taraca”) (collectively, “respondent interested parties”).<sup>6</sup> On March 6, 2023, the Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate.<sup>7</sup> Finding no other circumstances that would warrant conducting full reviews, the Commission determined that it would conduct

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<sup>6</sup> Respondent Interest Parties’ Response to the Notice of Institution, Jan. 3, 2023 (“Respondent Interested Parties’ Substantive Response”); Respondent Interested Parties’ Supplemental Response to the Notice of Institution, Jan. 18, 2023 (“Respondent Interested Parties’ Supplemental Response”).

<sup>7</sup> *Hardwood Plywood From China; Scheduling of Expedited Five-Year Reviews*, 88 Fed. Reg. 19,986 (April 4, 2023). On March 6, 2023, Chairman David S. Johanson and Commissioner Amy A. Karpel voted to conduct full reviews on the record of the adequacy phase in these first reviews. See Commission Adequacy Vote, EDIS Doc. 794710, Mar. 6, 2023.

Chairman Johanson found, as did all of the Commissioners, that the responses to the notice of institution by each of the eight importers were individually adequate. *Id.* He differed from the majority, however, in that he found that these individual responses collectively represented an adequate group response by the respondent interested parties. *Id.* He made this finding despite the share of subject imports in 2021 accounted for by these respondents being \*\*\* percent. CR/PR at Table I-2. Chairman Johanson’s determination of group adequacy was based on the fact that most of these importers (five of eight) were members of the American Alliance for Hardwood Plywood (AAHP) that participated fully during the original investigations, in both the preliminary (2016) and final (2017) phases, and in the previous investigations that terminated in negative determinations in 2013, again in both the preliminary and final phases. Appendix B found in USITC Pubs. 4361, 4434, 4661, and 4747. In 2016, during the final phase of the original investigations, these firms accounted for a cumulative \*\*\* percent of imports from China. CR/PR at Table I-2 note. \*\*\*. CR/PR at I-19. While the Commission’s typical reliance on data from the “most recent calendar year” (63 Fed. Reg. 30,599, 30,603 (June 5, 1998)) is sound, this is the rare instance in which taking into account other data on the record is warranted. Indeed, the Uruguay Round’s Statement of Administrative Action (“SAA”) contemplates just such an inquiry when it provides that the “agencies . . . consider the proportion of parties that respond and their *likely* share of the market if the order were revoked or the suspended investigation terminated.” SAA, H.R. Rep. No. 103-316, Vol. I at 880 (1994) (emphasis added). On the basis of this record, Chairman Johanson considers it likely that, in the event of revocation of the orders, these importers would again possess a market share of U.S. imports of subject merchandise similar to the level recorded in 2016, which he accordingly finds to be a group adequate participation by respondent interested parties.

expedited reviews of the orders.<sup>8</sup> The Domestic Coalition submitted final comments pursuant to Commission rule 207.62(d)(1) on April 27, 2023.<sup>9</sup>

U.S. industry data are based on information supplied by the Domestic Coalition in their response to the notice of institution, accounting for an estimated \*\*\* percent of total U.S. production of hardwood plywood in 2021.<sup>10</sup> U.S. import data are based on official Commerce statistics and data from the original investigations.<sup>11</sup> Foreign industry data and related information are based on information from the original investigations, information supplied by the Domestic Coalition in its response to the notice of institution, information supplied by respondent interested parties in their response to the notice of institution, and publicly available information gathered by the Commission.<sup>12</sup>

## **II. Domestic Like Product and Industry**

### **A. Domestic Like Product**

In making its determination under section 751(c) of the Tariff Act, the Commission defines the “domestic like product” and the “industry.”<sup>13</sup> The Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle.”<sup>14</sup> The Commission’s

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<sup>8</sup> *Hardwood Plywood From China; Scheduling of Expedited Five-Year Reviews*, 88 Fed. Reg. 19,986 (Apr. 4, 2023).

<sup>9</sup> Domestic Coalition’s Final Comments, Apr. 27, 2023.

<sup>10</sup> Confidential Report, Memorandum INV-VV-017, Feb. 22, 2023 (“CR”); *Hardwood Plywood from China*, Inv. Nos. 701-TA-565 and 731-TA-1341 (Review), USITC Pub. 5426 (May 2023) (“PR”) at Table I-2; Domestic Coalition’s Substantive Response at 2. For the years 2014-2016, data are compiled using data submitted in the Commission’s original investigations. For the year 2021, data are compiled using data submitted by the Domestic Coalition. CR/PR at Table I-5; Domestic Coalition’s Substantive Response at Exh. 1.

<sup>11</sup> CR/PR at I-19-22.

<sup>12</sup> CR/PR at I-23-29; Domestic Coalition Substantive Response at 7-13, Exhs. 2-14. The Domestic Coalition noted that most of the information available concerning the Chinese industry is with regard to total plywood, which includes both hardwood plywood and out-of-scope merchandise. Domestic Coalition Substantive Response at n.33.

<sup>13</sup> 19 U.S.C. § 1677(4)(A).

<sup>14</sup> 19 U.S.C. § 1677(10); *see, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96<sup>th</sup> Cong., 1<sup>st</sup> Sess. 90-91 (1979).

practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.<sup>15</sup>

Commerce has defined the imported merchandise within the scope of the orders under review as follows:

The merchandise subject to these *Orders* is hardwood and decorative plywood, and certain veneered panels as described below. For purposes of this proceeding, hardwood and decorative plywood is defined as a generally flat, multilayered plywood or other veneered panel, consisting of two or more layers or plies of wood veneers and a core, with the face and/or back veneer made of non-coniferous wood (hardwood) or bamboo. The veneers, along with the core may be glued or otherwise bonded together. Hardwood and decorative plywood may include products that meet the American National Standard for Hardwood and Decorative Plywood, ANSI/HPVA HP-1-2016 (including any revisions to that standard).

For purposes of this proceeding a “veneer” is a slice of wood regardless of thickness which is cut, sliced or sawed from a log, bolt, or flitch. The face and back veneers are the outermost veneer of wood on either side of the core irrespective of additional surface coatings or covers as described below.

The core of hardwood and decorative plywood consists of the layer or layers of one or more material(s) that are situated between the face and back veneers. The core may be composed of a range of materials, including but not limited to hardwood, softwood, particleboard, or medium density fiberboard (MDF).

All hardwood plywood is included within the scope of these *Orders* regardless of whether or not the face and/or back veneers are surface coated or covered and whether or not such surface coating(s) or covers obscures the grain, textures, or markings of the wood. Examples of surface coatings and covers include, but are not limited to: ultra violet light cured polyurethanes; oil or oil-modified or water based polyurethanes; wax; epoxy-ester finishes; moisture-cured urethanes; paints; stains; paper; aluminum; high pressure laminate; MDF; medium density overlay (MDO); and phenolic film. Additionally, the face veneer of hardwood plywood may be sanded; smoothed or given a “distressed” appearance through such methods as hand-scraping or wire brushing. All hardwood plywood is

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<sup>15</sup> See, e.g., *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

included within the scope even if it is trimmed; cut-to-size; notched; punched; drilled; or has undergone other forms of minor processing.

All hardwood and decorative plywood is included within the scope of these *Orders*, without regard to dimension (overall thickness, thickness of face veneer, thickness of back veneer, thickness of core, thickness of inner veneers, width, or length). However, the most common panel sizes of hardwood and decorative plywood are 1219 x 1829 mm (48 x 72 inches), 1219 x 2438 mm (48 x 96 inches), and 1219 x 3048 mm (48 x 120 inches).

Subject merchandise also includes hardwood and decorative plywood that has been further processed in a third country, including but not limited to trimming, cutting, notching, punching, drilling, or any other processing that would not otherwise remove the merchandise from the scope of the *Orders* if performed in the country of manufacture of the in-scope product.

The scope of the *Orders* excludes the following items: (1) structural plywood (also known as “industrial plywood” or “industrial panels”) that is manufactured to meet U.S. Products Standard PS 1-09, PS 2-09, or PS 2-10 for Structural Plywood (including any revisions to that standard or any substantially equivalent international standard intended for structural plywood), and which has both a face and a back veneer of coniferous wood; (2) products which have a face and back veneer of cork; (3) multilayered wood flooring, as described in the antidumping duty and countervailing duty orders on Multilayered Wood Flooring from the People’s Republic of China, Import Administration, International Trade Administration. *See Multilayered Wood Flooring from the People’s Republic of China*, 76 FR 76690 (December 8, 2011) (amended final determination of sales at less than fair value and antidumping duty order), and *Multilayered Wood Flooring from the People’s Republic of China*, 76 FR 76693 (December 8, 2011) (countervailing duty order), as amended by *Multilayered Wood Flooring from the People’s Republic of China: Amended Antidumping and Countervailing Duty Orders*, 77 FR 5484 (February 3, 2012); (4) multilayered wood flooring with a face veneer of bamboo or composed entirely of bamboo; (5) plywood which has a shape or design other than a flat panel, with the exception of any minor processing described above; (6) products made entirely from bamboo and adhesives (also known as “solid bamboo”); and (7) Phenolic Film Faced Plyform (PFF), also known as Phenolic Surface Film Plywood (PSF), defined as a panel with an “Exterior” or “Exposure 1” bond classification as is defined by The Engineered Wood Association, having an opaque phenolic film layer with a weight equal to or greater than 90g/m<sup>3</sup> permanently bonded on both the face and back veneers and an opaque, moisture resistant coating applied to the edges.

Excluded from the scope of these *Orders* are wooden furniture goods that, at the time of importation, are fully assembled and are ready for their intended uses. Also excluded from the scope of these *Orders* is “ready to assemble” (RTA) furniture. RTA furniture is defined as (A) furniture packaged for sale for ultimate purchase by an end-user that, at the time of importation, includes (1) all wooden components (in finished form) required to assemble a finished unit of furniture; (2) all accessory parts (e.g., screws, washers, dowels, nails, handles, knobs, adhesive glues) required to assemble a finished unit of furniture; and (3) instructions providing guidance on the assembly of a finished unit of furniture; (B) unassembled bathroom vanity cabinets, having a space for one or more sinks, that are imported with all unassembled hardwood and hardwood plywood components that have been cut-to-final dimensional component shape/size, painted or stained prior to importation, and stacked within a singled shipping package, except for furniture feet which may be packed and shipped separately; or (C) unassembled bathroom vanity linen closets that are imported with all unassembled hardwood and hardwood plywood components that have been cut-to-final dimensional shape/size, painted or stained prior to importation, and stacked within a single shipping package, except for furniture feet which may be packed and shipped separately.

Excluded from the scope of these *Orders* are kitchen cabinets that, at the time of importation, are fully assembled and are ready for their intended uses. Also excluded from the scope of these *Orders* are RTA kitchen cabinets. RTA kitchen cabinets are defined as kitchen cabinets packaged for sale for ultimate purchase by an end-user that, at the time of importation, includes (1) all wooden components (in finished form) required to assemble a finished unit of cabinetry; (2) all accessory parts (e.g., screws, washers, dowels, nails, handles, knobs, hooks, adhesive glues) required to assemble a finished unit of cabinetry; and (3) instructions providing guidance on the assembly of a finished unit of cabinetry.

Excluded from the scope of these *Orders* are finished table tops, which are table tops imported in finished form with pre-cut or drilled openings to attach the underframe or legs. The table tops are ready for use at the time of import and require no further finishing or processing.

Excluded from the scope of these *Orders* are finished countertops that are imported in finished form and require no further finishing or manufacturing.

Excluded from the scope of these *Orders* are laminated veneer lumber door and window components with (1) a maximum width of 44 millimeters, a thickness from 30 millimeters to 72 millimeters, and a length of less than 2413 millimeters; (2) water boiling point exterior adhesive; (3) a modulus of elasticity of 1,500,000 pounds per square inch or higher; (4) finger-jointed or lap-jointed core veneer with all layers oriented so that the grain is running parallel or with no more than

3 dispersed layers of veneer oriented with the grain running perpendicular to the other layers; and (5) top layer machined with a curved edge and one or more profile channels throughout.

Excluded from the scope of these *Orders* are certain door stiles and rails made of laminated veneer lumber that have a width not to exceed 50 millimeters, a thickness not to exceed 50 millimeters, and a length of less than 2,450 millimeters.<sup>16</sup>

Since the original investigations, Commerce has conducted several scope and circumvention proceedings.<sup>17</sup> It conducted a changed circumstances review that resulted in a partial revocation of the antidumping and countervailing duty orders with respect to certain finished laminated veneer lumber door stiles and rails on June 2, 2021.<sup>18</sup> On January 21, 2022, Commerce determined that hardwood plywood assembled in Vietnam using two-ply panels imported from China are products of China and thus subject to the orders.<sup>19</sup> Commerce's determination is currently on appeal before the U.S. Court of International Trade ("CIT").<sup>20</sup> On

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<sup>16</sup> See Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People's Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at 2-4; see also Department of Commerce Memorandum from James Maeder to Lisa W. Wang, *Issues and Decision Memorandum for the Final Results of the Administrative Review of the Antidumping Duty Order on Certain Hardwood Plywood Products from the People's Republic of China; 2021*, Feb. 10, 2023, EDIS Doc. 793886 at 2-4.

<sup>17</sup> See Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People's Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at 7-8.

<sup>18</sup> Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People's Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at 8; *Certain Hardwood Plywood Products from the People's Republic of China: Final Results of Changed Circumstances Reviews, and Revocation of the Antidumping and Countervailing Duty Orders in Part*, 86 Fed. Reg. 29,562 (June 2, 2021).

<sup>19</sup> Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People's Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at 7-8; *Notice of Scope Rulings*, 87 Fed. Reg. 31,859 (May 25, 2022).

<sup>20</sup> Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People's Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at n.18.

July 29, 2022, Commerce preliminarily determined that certain hardwood plywood and veneered panel products assembled in Vietnam using hardwood plywood inputs sourced from China are products of China and thus subject to the orders.<sup>21</sup> Commerce also preliminarily determined that other hardwood plywood products produced in Vietnam using certain plywood inputs sourced from China are products of China that are circumventing the orders.<sup>22</sup>

Hardwood and decorative plywood are wood panel products made by gluing two or more layers of wood veneer to a core which may itself be composed of veneers or other type of wood material such as medium density fiberboard (“MDF”), particleboard, lumber, or oriented strand board. The outer ply or face veneer is typically the identifying species for the hardwood plywood product and is the side of the product that will be visible in most uses. Many hardwood species are used in hardwood plywood manufacturing, including oak, birch, maple, poplar, cherry, and tropical varieties. Hardwood plywood includes at least one face or back veneer that is a hardwood species, but may have a face or back veneer and/or other layers of veneer of softwood species. Hardwood plywood is manufactured in a variety of thicknesses and dimensions.<sup>23</sup>

Hardwood plywood products are differentiated by species, quality of veneer, overall thickness, number of plies, type of core (veneer, particleboard, MDF, or other), and the type of adhesive used in the manufacturing process. Grades of hardwood plywood are determined by criteria such as number and size of knots, visible decay, splits or insect holes, surface roughness, and other defects. Grades are assigned to both the face and back veneers. Plywood with the highest face grades is used in applications where appearance is a primary consideration. Most

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<sup>21</sup> Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People’s Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at 8; *Certain Hardwood Plywood Products From the People’s Republic of China: Preliminary Scope Determination and Affirmative Preliminary Determination of Circumvention of the Antidumping and Countervailing Duty Orders*, 87 Fed. Reg. 45,753 (July 29, 2022).

<sup>22</sup> *Certain Hardwood Plywood Products From the People’s Republic of China: Preliminary Scope Determination and Affirmative Preliminary Determination of Circumvention of the Antidumping and Countervailing Duty Orders*, 87 Fed. Reg. 45,753 (July 29, 2022). Commerce’s final determinations regarding certain hardwood plywood and veneered panel products exported from Vietnam are pending. Department of Commerce Memorandum from James Maeder to Abdelali Elouaradia, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Countervailing Duty Order on Certain Hardwood Plywood Products from the People’s Republic of China*, Feb. 27, 2023, EDIS Doc. 793886 at 8.

<sup>23</sup> CR/PR at I-11.



hardwood plywood produced in the United States is graded according to a consensus-based voluntary standard developed by the Hardwood Plywood and Veneer Association (“HPVA”).<sup>24</sup>

In the original investigations, the Commission defined a single domestic like product corresponding to the scope of the investigations, based on its analysis of the like product factors from its preliminary determinations.<sup>25</sup> In those determinations, the Commission found that hardwood plywood consisted of two or more layers of wood veneer glued to a core, was made using a one-step or a two-step process, and was used in a range of interior applications.<sup>26</sup> It was characterized by species, veneer quality, thickness, number of plies, type of core, or the type of adhesive used in the manufacturing, and was generally graded according to the HPVA standard.<sup>27</sup> It was sold predominantly to distributors based on grade, type of core, panel thickness, and face species, and price was a function of the quality or grade of the veneer and the composition of the core.<sup>28</sup> Finding the relevant information unchanged in the final phase of the investigations, the Commission again defined a single domestic like product corresponding to the scope.<sup>29</sup>

In these reviews, the Domestic Coalition agrees with the Commission’s definition of the domestic like product from the original investigations.<sup>30</sup> Respondent interested parties contend that the Commission may need to reexamine the definition of the domestic like product, citing developments in Commerce’s anticircumvention proceeding with respect to the orders.<sup>31</sup>

The record of these reviews does not contain any new information suggesting that the pertinent product characteristics and uses of hardwood plywood have changed since the original investigations so as to warrant revisiting the Commission’s domestic like product definition. Accordingly, we again define a single domestic like product corresponding to all hardwood plywood within Commerce’s scope.

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<sup>24</sup> CR/PR at I-11-12.

<sup>25</sup> *Original Determinations*, USITC Pub. 4747 at 10.

<sup>26</sup> *Original Determinations*, USITC Pub. 4747 at 9-10.

<sup>27</sup> *Original Determinations*, USITC Pub. 4747 at 10.

<sup>28</sup> *Original Determinations*, USITC Pub. 4747 at 10.

<sup>29</sup> *Original Determinations*, USITC Pub. 4747 at 10.

<sup>30</sup> Domestic Coalition’s Substantive Response at 22.

<sup>31</sup> Respondent Interested Parties’ Substantive Response at Exh. 1, responses of all firms to Question 13. Specifically, the respondent interested parties argue that the Commission may need to consider whether to define the domestic like product to include out-of-scope softwood plywood and in-scope panels made from only two layers, based upon the Domestic Coalition’s arguments in Commerce’s scope and anticircumvention proceedings. *Id.* We note that Commerce has not expanded the scope of the orders under review through its scope and anticircumvention inquiries.

## **B. Domestic Industry**

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”<sup>32</sup> In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In the original investigations, the Commission found that domestic producer \*\*\* qualified for possible exclusion under the related parties provision based on its imports of subject merchandise, but that appropriate circumstance did not exist for its exclusion.<sup>33</sup> Accordingly, the Commission defined the domestic industry to include all U.S. producers of hardwood plywood.<sup>34</sup>

In these five-year reviews, the Domestic Coalition agrees with the Commission’s definition of the domestic industry from the original investigations.<sup>35</sup> There are no related parties issues in these reviews.<sup>36</sup> Consequently, consistent with our definition of the domestic like product, we again define the domestic industry to include all U.S. producers of hardwood plywood.

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

### **A. Legal Standards**

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that

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<sup>32</sup> 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. See 19 U.S.C. § 1677.

<sup>33</sup> *Original Determinations*, USITC Pub. 4747 at 11-12; *Confidential Original Determinations*, EDIS Doc. 788960 at 14-15. The Commission found that \*\*\* principal interest appeared to be in domestic production due to its \*\*\*, the fact that its domestic production was far larger than its imports of subject merchandise, and the fact that no party argued for its exclusion from the domestic industry. *Original Determinations*, USITC Pub. 4747 at 12; *Confidential Original Determinations*, EDIS Doc. 788960 at 15.

<sup>34</sup> *Original Determinations*, USITC Publication 4747 at 12.

<sup>35</sup> Domestic Coalition’s Substantive Response at 22.

<sup>36</sup> See CR/PR at I-16-17; Domestic Coalition’s Substantive Response at Exh. 1.

dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”<sup>37</sup> The SAA states that “under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.”<sup>38</sup> Thus, the likelihood standard is prospective in nature.<sup>39</sup> The CIT has found that “likely,” as used in the five-year review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.<sup>40</sup>

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.”<sup>41</sup> According to the SAA, a “‘reasonably foreseeable time’ will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”<sup>42</sup>

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<sup>37</sup> 19 U.S.C. § 1675a(a).

<sup>38</sup> SAA at 883-84. The SAA states that “{t}he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” *Id.* at 883.

<sup>39</sup> While the SAA states that “a separate determination regarding current material injury is not necessary,” it indicates that “the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked.” SAA at 884.

<sup>40</sup> See *NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int’l Trade 2003) (“‘likely’ means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)”), *aff’d mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) (“more likely than not” standard is “consistent with the court’s opinion;” “the court has not interpreted ‘likely’ to imply any particular degree of ‘certainty’”); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) (“standard is based on a likelihood of continuation or recurrence of injury, not a certainty”); *Usinor v. United States*, 26 CIT 767, 794 (2002) (“‘likely’ is tantamount to ‘probable,’ not merely ‘possible’”).

<sup>41</sup> 19 U.S.C. § 1675a(a)(5).

<sup>42</sup> SAA at 887. Among the factors that the Commission should consider in this regard are “the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may (Continued...)

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to “consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated.”<sup>43</sup> It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).<sup>44</sup> The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission’s determination.<sup>45</sup>

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.<sup>46</sup> In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.<sup>47</sup>

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to

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(...Continued)

only manifest themselves in the longer term, such as planned investment and the shifting of production facilities.” *Id.*

<sup>43</sup> 19 U.S.C. § 1675a(a)(1).

<sup>44</sup> 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the antidumping duty order under review. See Department of Commerce memorandum from James Maeder to Lisa W. Wang, *Issues and Decision Memorandum for the Final Results of the Administrative Review of the Antidumping Duty Order on Certain Hardwood Plywood Products from the People’s Republic of China*, Feb. 10, 2023.

<sup>45</sup> 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

<sup>46</sup> 19 U.S.C. § 1675a(a)(2).

<sup>47</sup> 19 U.S.C. § 1675a(a)(2)(A-D).

consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.<sup>48</sup>

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.<sup>49</sup> All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.<sup>50</sup>

U.S. importers that previously imported hardwood plywood from China, \*\*\*, were the only respondent interested parties that responded to the notice of institution.<sup>51</sup> The record, therefore, contains limited new information with respect to the hardwood plywood industry in China. There also is limited information on the hardwood plywood market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigations, and the limited new information on the record in these reviews.

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<sup>48</sup> See 19 U.S.C. § 1675a(a)(3). The SAA states that “[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.

<sup>49</sup> 19 U.S.C. § 1675a(a)(4).

<sup>50</sup> The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

<sup>51</sup> CR/PR at Table I-2; Respondent Interested Parties’ Supplemental Response at 4-5. Respondent Interested Parties reported that \*\*\*. *Id.*

## **B. Conditions of Competition and the Business Cycle**

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”<sup>52</sup> The following conditions of competition inform our determinations.

### **1. Demand Conditions**

*Original Investigations.* The Commission found that U.S. demand for hardwood plywood depends on the demand for the U.S.-produced downstream products in which it is used, including kitchen cabinets, recreational vehicles (“RVs”), manufactured homes, fixtures, underlayment, and furniture.<sup>53</sup> It also found that the main industries that drive demand for hardwood plywood generally reflect U.S. economic activity, and are closely tied to new home construction and remodeling activity.<sup>54</sup> Nearly all producers, a sizeable share of importers, and some purchasers indicated that the market for hardwood plywood was subject to business cycles or distinctive conditions of competition, including a strong seasonal component.<sup>55</sup> Most responding purchasers reported that demand had increased since 2014.<sup>56</sup>

Apparent U.S. consumption of hardwood plywood increased during the POI from 3.3 billion square feet in 2014 to 3.5 billion square feet in 2015 and 3.8 billion square feet in 2016, and was higher in interim 2017, at 2.0 billion square feet, than in interim 2016, at 1.9 billion square feet.<sup>57</sup>

*Current Reviews.* The information available indicates that demand for hardwood plywood continues to depend on the demand for U.S.-produced downstream products in which it is used, including kitchen cabinets, RVs, manufactured homes, fixtures, underlayment, and furniture.<sup>58</sup> The main industries that drive demand for hardwood plywood continue to generally reflect U.S. economic activity, including new home construction and remodeling activity.<sup>59</sup> The Domestic Coalition claims that the COVID-19 pandemic began impacting domestic consumption of hardwood plywood towards the end of the period of review, with

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<sup>52</sup> 19 U.S.C. § 1675a(a)(4).

<sup>53</sup> *Original Determinations*, USITC Pub. 4747 at 16.

<sup>54</sup> *Original Determinations*, USITC Pub. 4747 at 16.

<sup>55</sup> *Original Determinations*, USITC Pub. 4747 at 16.

<sup>56</sup> *Original Determinations*, USITC Pub. 4747 at 17.

<sup>57</sup> *Original Determinations*, USITC Pub. 4747 at 17.

<sup>58</sup> CR/PR at I-11-12.

<sup>59</sup> CR/PR at I-11-12.

demand declining during the initial phase of the COVID-19 pandemic in 2020 before rebounding in 2021 and 2022 as lockdowns were lifted.<sup>60</sup> Nevertheless, the Domestic Coalition asserts that demand has since softened and is expected to weaken further in the reasonably foreseeable future due to weakening economic growth and declining demand from the major consuming industries.<sup>61</sup>

Other information submitted by the Domestic Coalition is consistent with its forecasted weakening demand for hardwood plywood. According to the National Association of Home Builders/Wells Fargo Housing Market Index, single-family home builder sentiment declined in every month of 2022 and is expected to continue declining into 2023, and housing starts in November 2022 were down 11.2 percent compared to October 2022 and 22.4 percent compared to November 2021.<sup>62</sup> According to an OECD report concerning the economic outlook for the United States in 2022, private investment in housing has weakened and is expected to moderate further in response to weaker demand and higher interest rates.<sup>63</sup> Other information provided by the Domestic Coalition indicates that demand for RVs is also expected to decline.<sup>64</sup>

Respondent interested parties argue that \*\*\*.<sup>65</sup>

Apparent U.S. consumption of hardwood plywood was 5.8 billion square feet in 2021, which was 54.8 percent higher than in 2016, at 3.8 billion square feet.<sup>66</sup>

## **2. Supply Conditions**

*Original Investigations.* The Commission found that the domestic industry was the smallest source of supply in the U.S. market; its share of apparent U.S. consumption decreased during the POI from 21.0 percent in 2014 to 17.3 percent in 2016, and was lower in interim

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<sup>60</sup> Domestic Producers' Substantive Response at 18-19, 22, Exh. 18.

<sup>61</sup> Domestic Producers' Substantive Response at 17-19, Exhs. 19-20.

<sup>62</sup> Domestic Producers' Substantive Response at 18, Exhs. 16-17.

<sup>63</sup> Domestic Producers' Substantive Response at 18, Exh. 15.

<sup>64</sup> Domestic Producers' Substantive Response at 18, Exh. 17.

<sup>65</sup> Respondent Interested Parties' Substantive Response at Exh. 1, responses of all firms to Question 12.

<sup>66</sup> CR/PR at Table I-7. Apparent U.S. consumption may be understated in these reviews compared to apparent consumption in the original investigations due to lower data coverage of the domestic industry in these reviews. Domestic industry data in these reviews are based upon the responses of domestic producers that accounted for an estimated \*\*\* percent of domestic production of hardwood plywood in 2021, whereas domestic industry data in the original investigations was based on the responses of domestic producers that accounted for nearly all domestic production of hardwood plywood in 2016. *Id.* at I-16.

2017 than in interim 2016.<sup>67</sup> The Commission found that the domestic producers' capacity was less than apparent U.S. consumption throughout the POI.<sup>68</sup>

Subject imports were the second largest source of supply; their share of apparent U.S. consumption increased during the POI from 37.9 percent in 2014 to 40.1 percent in 2016, but was lower in interim 2017 than in interim 2016.<sup>69</sup> Nonsubject imports were the largest source of supply; their share of apparent U.S. consumption increased during the POI from 41.1 percent in 2014 to 42.6 percent in 2016, and was higher in interim 2017 than in interim 2016.<sup>70</sup>

*Current Reviews.* U.S. producers were the second largest source of hardwood plywood in the U.S. market in 2021, accounting for 7.3 percent of apparent U.S. consumption that year.<sup>71</sup> There were several changes to the domestic industry during the period of review, including one expansion and two acquisitions.<sup>72</sup> The Domestic Coalition claims that the domestic industry experienced temporary supply imbalances and price spikes in 2021 and 2022 as demand recovered from the COVID-19 pandemic, but that supply chain disruptions appear to be easing.<sup>73</sup> Responding importer \*\*\* claims that \*\*\*.<sup>74</sup>

Subject imports were the smallest source of hardwood plywood in the U.S. market in 2021, accounting for 5.9 percent of apparent U.S. consumption that year.<sup>75</sup> The Domestic

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<sup>67</sup> *Original Determinations*, USITC Pub. 4747 at 17.

<sup>68</sup> *Original Determinations*, USITC Pub. 4747 at 17.

<sup>69</sup> *Original Determinations*, USITC Pub. 4747 at 18.

<sup>70</sup> *Original Determinations*, USITC Pub. 4747 at 18.

<sup>71</sup> CR/PR at Table I-7. Domestic industry market share may be understated in these reviews compared to domestic industry market share in the original investigations due to lower data coverage of the domestic industry in these reviews. Domestic industry data in these reviews are based upon the responses of domestic producers that accounted for an estimated \*\*\* percent of domestic production of hardwood plywood in 2021, whereas domestic industry data in the original investigation was based on the responses of domestic producers that accounted for nearly all domestic production of hardwood plywood in 2016. *Id.* at I-16.

<sup>72</sup> Domestic producer States Industries introduced a new automated operation line in early 2021 that increased its production capacity for high value panels. CR/PR at Table I-4. Switzerland-based Bauwerk Group AG acquired Kentucky-based hardwood flooring firm Somerset Hardwood Flooring, effective May 1, 2022, but no changes are expected to its operations or branding. *Id.* U.S. importer Boise Cascade completed a \$512 million acquisition of Coastal Plywood Company in June 2022. *Id.*

<sup>73</sup> Domestic Coalition's Substantive Response at 18-19.

<sup>74</sup> Respondent Interested Parties' Substantive Response at Exh. 1, response of \*\*\* to Question 12. Responding importer \*\*\* claims that \*\*\*. *Id.*, response of \*\*\* to Question 12.

<sup>75</sup> CR/PR at Table I-7.



Coalition contends that subject plywood producers in China began to develop ways to circumvent the orders after they were imposed in 2018.<sup>76</sup>

Nonsubject imports were the largest source of hardwood plywood in the U.S. market in 2021, accounting for 86.8 percent of apparent U.S. consumption that year.<sup>77</sup> The largest sources of nonsubject imports of hardwood plywood in 2021 were Brazil, Indonesia, and Vietnam.<sup>78</sup> The respondent interested parties contend that \*\*\*.<sup>79</sup>

### **3. Substitutability and Other Conditions**

*Original Investigations.* The Commission found that subject imports and the domestic like product were moderately substitutable, and that price was an important factor in purchasing decisions.<sup>80</sup>

The Commission found that subject imports and the domestic like product overlapped with respect to numerous product characteristics, including plywood thickness, the use of hardwood cores, face veneer species and grade, and end uses.<sup>81</sup> In terms of end uses, the Commission found that cabinetry was a significant end-use category for both domestic and subject hardwood plywood, with overlapping applications for exposed uses and some overlap in terms of the finishing applied, but noted that underlayment was a substantial end-use category for subject imports in which the domestic industry had only a small presence.<sup>82</sup> The Commission also recognized that there was little overlap between domestic and subject hardwood plywood with respect to face veneer thickness, while noting that the evidence concerning the importance of face veneer thickness to purchasers was mixed.<sup>83</sup>

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<sup>76</sup> Domestic Coalition's Substantive Response at 21-22.

<sup>77</sup> CR/PR at Table I-7.

<sup>78</sup> CR/PR at Table I-6.

<sup>79</sup> Respondent Interested Parties' Substantive Response at Exh. 1, responses of all firms to Question 12.

<sup>80</sup> *Original Determinations*, USITC Pub. 4747 at 18. Purchasers most frequently reported price, quality, and availability as being among the three most important factors in purchasing decisions, with quality the most cited first-most important factor and price the most cited second-most important factor. *Id.*

<sup>81</sup> *Original Determinations*, USITC Pub. 4747 at 19.

<sup>82</sup> *Original Determinations*, USITC Pub. 4747 at 20.

<sup>83</sup> *Original Determinations*, USITC Pub. 4747 at 20.

The Commission found that the major raw material costs for hardwood plywood were the hardwood veneer and other plywood used in its production, and that raw material costs showed minor variations but increased on a per unit basis during the POI.<sup>84</sup>

*Current Reviews.* The record contains no new information to indicate that the degree of substitutability between subject imports and the domestic like product or the importance of price in purchasing decisions has changed since the original investigations.<sup>85</sup> Accordingly, we continue to find that subject imports and the domestic like product are moderately substitutable, and that price remains an important factor in purchasing decisions for hardwood plywood.

Hardwood plywood originating in China became subject to a 10 percent *ad valorem* duty on September 24, 2018, under section 301 of the Trade Act of 1974, which was later increased to 25 percent *ad valorem* on May 10, 2019.<sup>86</sup>

### C. Likely Volume of Subject Imports

*Original Investigations.* The Commission found that the volume of subject imports increased over the POI from 1.3 billion square feet in 2014 to 1.5 billion square feet in 2016, but was lower in interim 2017 than in interim 2016.<sup>87</sup> It also found that subject imports' market share increased over the POI, largely at the expense of the domestic industry.<sup>88</sup> While acknowledging that some of the increase in subject import volume occurred in the underlayment segment, the Commission found that subject imports gained substantial volume and market share in end-use segments that had substantial domestic industry participation.<sup>89</sup> Subject import volume, excluding shipments of underlayment, increased over the POI from \*\*\* square feet in 2014 to \*\*\* square feet in 2016, but was lower in interim 2017 than in interim 2016.<sup>90</sup> From 2014 to 2016, subject imports market share, excluding underlayment, increased by \*\*\* percentage points while the domestic industry's market share decreased by \*\*\*

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<sup>84</sup> *Original Determinations*, USITC Pub. 4747 at 21.

<sup>85</sup> Domestic Producers assert that these factors have not changed since the original investigations. Domestic Coalition's Substantive Response at 15. Respondent interested parties argue that \*\*\*. Respondent Interested Parties' Substantive Response at Exh. 1, responses of all firms to Question 4.

<sup>86</sup> CR/PR at I-10.

<sup>87</sup> *Original Determinations*, USITC Pub. 4747 at 21.

<sup>88</sup> *Original Determinations*, USITC Pub. 4747 at 21.

<sup>89</sup> *Original Determinations*, USITC Pub. 4747 at 21-22.

<sup>90</sup> *Original Determinations*, USITC Pub. 4747 at 22; *Confidential Original Determinations*, EDIS Doc. 788960 at 29.

percentage points.<sup>91</sup> Over the same period, subject import market share for cabinetry end use increased 6.9 percentage points, while the domestic industry's market share declined by 5.1 percentage points.<sup>92</sup> The Commission concluded that the volume of subject imports and the increase in that volume were significant in both absolute terms and relative to production and consumption.<sup>93</sup>

*Current Reviews.* Subject imports of hardwood plywood maintained a substantial presence in the U.S. market throughout the period of review, even under the disciplining effects of the orders. The volume of subject imports declined from 1.4 billion square feet in 2017 to 871.2 million square feet in 2018, 287.6 million square feet in 2019, and 246.8 million square feet in 2020, before increasing to 341.1 million square feet in 2021, accounting for 5.9 percent of apparent U.S. consumption that year.<sup>94</sup>

The record in these expedited reviews contains limited information on the subject industry in China.<sup>95</sup> The information available, however, indicates that subject producers have the means and incentive to increase their exports of subject merchandise to the U.S. market to significant levels if the orders were revoked.

According to data from the Food and Agricultural Organization of the United Nations ("FAO"), China remained the world's largest producer of plywood during the period of review, accounting for 51.8 percent of global plywood production in 2019.<sup>96</sup> The Domestic Coalition identified 113 possible producers of hardwood plywood in China, but claims there may be thousands of such producers.<sup>97</sup> According to the International Tropical Timber Association, subject producers had an estimated capacity of 262 billion square feet in 2019,<sup>98</sup> while another source estimates that they possessed capacity of 276 billion square feet in 2021.<sup>99</sup> Given this, and the U.S. Department of Agriculture's estimate that the Chinese plywood industry produced

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<sup>91</sup> *Original Determinations*, USITC Pub. 4747 at 22; *Confidential Original Determinations*, EDIS Doc. 788960 at 29-30.

<sup>92</sup> *Original Determinations*, USITC Pub. 4747 at 22.

<sup>93</sup> *Original Determinations*, USITC Pub. 4747 at 22.

<sup>94</sup> CR/PR at Tables I-6-7.

<sup>95</sup> See CR/PR at I-23-29. Interested parties did not identify any major developments in the Chinese plywood industry since the original investigations. *Id.* at I-23.

<sup>96</sup> CR/PR at I-26-27.

<sup>97</sup> CR/PR at I-23; Domestic Coalition's Substantive Response at 10, Exhs. 1, 4-6. It is unclear from the cited materials how many of these additional producers produce hardwood plywood as opposed to other forms of plywood.

<sup>98</sup> Domestic Coalition's Substantive Response at 10, Exh. 6.

<sup>99</sup> Domestic Coalition's Substantive Response at 10, Exh. 7.

206 billion square feet of plywood in 2021, the subject industry possessed substantial excess capacity in 2021.<sup>100</sup>

The available information also indicates that the subject industry in China remains a large exporter. The FAO estimates that of the 2.7 billion cubic feet of plywood produced by the subject industry in 2021, 352.5 million cubic feet was exported.<sup>101</sup> According to the information provided by the Domestic Coalition, Chinese plywood exports hit a record high in 2021 and were projected to increase by 10 percent in 2022.<sup>102</sup> Consistent with this information, Global Trade Atlas (“GTA”) data show that China was the world’s largest exporter of plywood and wood flooring products, a category including hardwood plywood and out-of-scope products, throughout the period of review.<sup>103</sup> China’s exports of plywood and wood flooring products increased irregularly by 15.5 percent over the period of review, from \$5.1 billion in 2017 to \$5.9 billion in 2021, and accounted for 28.5 percent of global exports of such merchandise, by value, in 2021.<sup>104</sup>

The Domestic Coalition argues that subject producers could further increase their production of hardwood plywood for export to the United States after revocation by shifting production from out-of-scope products made in the same facilities, such as softwood plywood.<sup>105</sup> As support, it contends that Chinese producers rapidly shifted their production from hardwood-faced plywood to softwood-faced plywood after imposition of the orders in an effort to evade the orders.<sup>106</sup>

Available information also indicates that the U.S. market remains attractive to subject producers. Subject imports maintained a significant presence in the U.S. market throughout the period of review, indicating that subject producers maintained customers and distribution networks in the United States. GTA data show that the United States was China’s largest export market for plywood and wood flooring products, including hardwood plywood and out-of-scope products, throughout the period of review, except in 2020 when the United States was

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<sup>100</sup> Domestic Coalition’s Substantive Response at 9, Exh. 2.

<sup>101</sup> CR/PR at I-23.

<sup>102</sup> Domestic Coalition’s Substantive Response at 11, Exhs. 2, 8. According to the information provided by the Domestic Coalition, Chinese plywood exports totaled 12.35 million cubic meters in 2021. *Id.*

<sup>103</sup> CR/PR at I-27, Table I-10.

<sup>104</sup> CR/PR at I-27, Tables I-8, I-10.

<sup>105</sup> Domestic Coalition’s Substantive Response at 13.

<sup>106</sup> Domestic Coalition’s Substantive Response at 13, Exh. 14.

China's second largest export market for such merchandise.<sup>107</sup> In 2021, China's exports of plywood and wood flooring products to the United States were valued at \$497.1 million, accounting for 8.4 percent of total exports of such merchandise from China that year.<sup>108</sup> Furthermore, Commerce's preliminary determination that subject producers have circumvented the orders by shipping Chinese origin hardwood plywood through Vietnam indicates that subject producers remain interested in serving the U.S. market.<sup>109</sup>

The information available also indicates that other factors would create incentives for subject producers to increase their exports of hardwood plywood to the U.S. market after revocation of the orders. According to information provided by the Domestic Coalition, demand for wood products in China is declining due in large part to a downturn in the Chinese real estate market.<sup>110</sup> The Domestic Coalition also asserts that hardwood plywood prices in the U.S. market are generally higher than in China and third country markets, citing evidence that the United States was China's fourth largest export market for plywood by volume but its largest export market by value.<sup>111</sup> Numerous antidumping and countervailing duty orders covering Chinese plywood in third country markets, including South Korea, Morocco, Turkey, and the European Union, would create an additional incentive for subject producers to export hardwood plywood to the United States after revocation of the orders.<sup>112</sup>

Given the foregoing, including the significant and increasing volume of subject imports during the original investigations, the substantial presence of subject imports in the U.S. market during the current period of review, the subject industry's substantial capacity, including excess capacity, and exports, and the attractiveness of the U.S. market to subject producers, we find

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<sup>107</sup> CR/PR at Table I-8.

<sup>108</sup> CR/PR at I-23-24, Table I-8.

<sup>109</sup> *Certain Hardwood Plywood Products From the People's Republic of China: Preliminary Scope Determination and Affirmative Preliminary Determination of Circumvention of the Antidumping and Countervailing Duty Orders*, 87 Fed. Reg. 45,753 (July 29, 2022).

<sup>110</sup> Domestic Coalition's Substantive Response at 11-12, Exh. 2.

<sup>111</sup> Domestic Coalition's Substantive Response at 12, Exh. 2.

<sup>112</sup> CR/PR at Table I-9. South Korea imposed orders on plywood and coniferous wood plywood from China, effective October 18, 2013, and March 3, 2016, respectively. *Id.* Morocco imposed an order on plywood from China, effective June 6, 2012. *Id.* Turkey imposed an order on plywood (consisting solely of sheets of wood, each ply not exceeding 6mm thickness) from China, effective October 20, 2006. *Id.* The European Union imposed an order on okoumé plywood from China, effective November 12, 2004. *Id.* The Domestic Coalition additionally noted orders imposed by Canada on decorative and other non-structural plywood from China. Domestic Coalition's Substantive Response at 12, Exh. 9.

that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the orders were revoked.<sup>113</sup>

#### **D. Likely Price Effects**

*Original Investigations.* The Commission found that subject imports undersold the domestic like product in all 84 quarterly price comparisons, involving 1.2 billion square feet of subject imports, at underselling margins ranging from 27.4 percent to 57.1 percent.<sup>114</sup> Accordingly, the Commission found that subject imports significantly undersold the domestic like product by subject imports.<sup>115</sup>

Despite increasing demand and raw material costs, the Commission found that there had been little movement in prices for the domestic like product.<sup>116</sup> It found that the large and increasing volume of low-priced subject imports that competed with and took market share away from the domestic like product in the end-use segments with substantial domestic industry participation had a restraining effect on prices for the domestic like product.<sup>117</sup> The Commission found that the domestic industry's inability to increase prices commensurately with costs in a period of rising demand was due in significant part to subject imports.<sup>118</sup>

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<sup>113</sup> The record does not contain data addressing existing inventories of the subject merchandise. The Domestic Coalition however contends that there is reason to believe that subject producers maintained substantial inventories of subject merchandise. Domestic Coalition's Substantive Response at 12.

We do not find that the section 301 duties imposed on imports of hardwood plywood from China would prevent subject imports from increasing to significant levels if the orders were revoked. CR/PR at I-10. Notwithstanding these duties, subject imports increased 18.6 percent from 2019 to 2021 and the United States remained China's largest destination market for plywood and wood flooring products (including hardwood plywood and out-of-scope products). *Id.* at Table I-6. Nor are these duties likely to prevent subject producers from increasing their exports to the United States to significant levels after revocation of the orders, in light of their substantial excess capacity and the attractiveness of the U.S. market.

<sup>114</sup> *Original Determinations*, USITC Pub. 4747 at 23.

<sup>115</sup> *Original Determinations*, USITC Pub. 4747 at 23. The Commission also found that a substantial number of purchasers, 13 of 23, had purchased subject imports instead of the domestic like product because it was lower priced. *Id.*

<sup>116</sup> *Original Determinations*, USITC Pub. 4747 at 23-24. Prices for the six domestically produced pricing products displayed small declines from the first quarter of 2014 to the second quarter of 2017, and the average unit value ("AUV") of the domestic industry's net sales remained flat over the POI. *Id.* at 24.

<sup>117</sup> *Original Determinations*, USITC Pub. 4747 at 24.

<sup>118</sup> *Original Determinations*, USITC Pub. 4747 at 24.

Accordingly, the Commission found that subject imports had suppressed prices for the domestic like product to significant degree.<sup>119</sup>

*Current Reviews.* As discussed above, we continue to find that subject imports and the domestic like product are moderately substitutable, and that price remains an important factor in purchasing decisions for hardwood plywood.

The record in these expedited reviews does not contain new product-specific pricing information. Based on the information available, including the significant underselling by subject imports in the original investigations, the moderate degree of substitutability between subject imports and the domestic like product, and the importance of price in purchasing decisions, we find that underselling by subject imports would likely be significant in the event the orders were revoked. Given this, and the likely significant volume of subject imports, subject imports would likely force the domestic industry to lower prices, forgo needed price increases, or lose sales and market share to subject imports, as they did in the original investigations. Consequently, we find that if the orders were revoked, subject imports would likely have significant price effects.

#### **E. Likely Impact**

*Original Investigations.* Despite an increase in apparent U.S. consumption over the POI, the Commission found that many of the domestic industry's performance indicators had declined during the period, including its production, capacity utilization, U.S. shipments, market share, total net sales revenues, gross profit, operating income, net income, and operating income to net sales ratio.<sup>120</sup>

The Commission found that the domestic industry's declining market share during the POI, resulting from the significant increase in low-priced subject imports, led to the domestic industry's indicia of output being worse than they would have been otherwise. It also found that price suppression caused by low-priced subject imports further reduced the domestic industry's revenues and profitability.<sup>121</sup>

Considering the role of nonsubject imports in the U.S. market, the Commission acknowledged that nonsubject imports were sold at lower AUVs than the domestic like product throughout the POI.<sup>122</sup> However, the Commission found that competition between nonsubject

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<sup>119</sup> *Original Determinations*, USITC Pub. 4747 at 24.

<sup>120</sup> *Original Determinations*, USITC Pub. 4747 at 25-27.

<sup>121</sup> *Original Determinations*, USITC Pub. 4747 at 27.

<sup>122</sup> *Original Determinations*, USITC Pub. 4747 at 27.

imports and the domestic industry was limited because nonsubject imports, unlike subject imports and the domestic like product, were overwhelmingly sold with face veneers of tropical species, highly concentrated in very thin plywood, mostly sold for use in RVs, and rarely sold for use in cabinetry.<sup>123</sup> Consequently, the Commission found that nonsubject imports could not explain the magnitude of the domestic industry's loss of market share or the price effects attributed to subject imports.<sup>124</sup>

*Current Reviews.* The record in these expedited reviews contains limited information concerning the domestic industry's performance since the original investigations.

The information available indicates that the domestic industry's performance was worse in 2021 than during the original investigations according to some measures, but better with respect to financial indicators.<sup>125</sup> The domestic industry's capacity, at 904.2 million square feet, and production, at 417.3 million square feet, were lower in 2021 than in the original investigations.<sup>126</sup> Its capacity utilization in 2021, at 46.2 percent, matched that of 2016 but was lower than in 2014 and 2015.<sup>127</sup> The domestic industry's U.S. shipments in 2021, at 426.0 million square feet valued at \$657.8 million, were lower than in the original investigations.<sup>128</sup> Furthermore, its net sales were lower in 2021, at \$658.7 million, than in the original investigations.<sup>129</sup> On the other hand, the domestic industry's COGS to net sales ratio (84.2 percent) was lower in 2021 than in the original investigations, while its gross profit (\$103.8

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<sup>123</sup> *Original Determinations*, USITC Pub. 4747 at 27-28.

<sup>124</sup> *Original Determinations*, USITC Pub. 4747 at 28.

<sup>125</sup> CR/PR at Table I-5. Some indicia of the domestic industry's performance are understated in these reviews compared to the original investigations due to the lower data coverage of the domestic industry in these reviews. Domestic industry data in these reviews are based upon the responses of domestic producers that accounted for an estimated \*\*\* percent of domestic production of hardwood plywood in 2021, whereas domestic industry data in the original investigations was based on the responses of domestic producers that accounted for nearly all domestic production of hardwood plywood in 2016. *Id.* at I-16.

<sup>126</sup> CR/PR at Table I-5. The domestic industry's capacity and production were 1.4 billion square feet and 723.5 million square feet, respectively, in 2014, 1.4 billion square feet and 692.1 million square feet, respectively, in 2015, and 1.4 billion square feet and 660.5 million square feet, respectively, in 2016. *Id.*

<sup>127</sup> CR/PR at Table I-5. The domestic industry's capacity utilization was 50.4 percent in 2014, 48.3 percent in 2015, and 46.2 percent in 2016. *Id.*

<sup>128</sup> CR/PR at Table I-5. The domestic industry's U.S. shipments were 700.8 million square feet and \$852.3 million, respectively, in 2014, 680 million square feet and \$828.9 million, respectively, in 2015, and 651.6 million square feet and \$790.9 million, respectively, in 2016. *Id.*

<sup>129</sup> CR/PR at Table I-5. The domestic industry's net sales were \$812.6 million in 2014, \$788.7 million in 2015, and \$749.0 million in 2016. *Id.*



million), operating income (\$56.8 million), and operating income to net sales ratio (8.6 percent) were all higher.<sup>130</sup> The limited information available in these expedited reviews is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury if the orders were revoked.

Based on the information available, as discussed above, we find that revocation of the orders would likely result in a significant volume of subject imports that would likely undersell the domestic like product to a significant degree and have significant price effects. The likely significant volume of subject imports and their price effects would likely negatively affect the domestic industry's production, capacity utilization, U.S. shipments, employment, total net sales revenues, and market share, which, in turn, would have a direct adverse impact on the industry's profitability. Consequently, we conclude that, if the orders were revoked, subject imports from China would be likely to have a significant impact on the domestic industry within a reasonably foreseeable time.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports. Nonsubject imports increased throughout the period of review, from 2.4 billion square feet in 2017 to 5.1 billion square feet in 2021, and accounted for 86.8 percent of apparent U.S. consumption in 2021.<sup>131</sup> However, the available information on the record suggests that competition between nonsubject imports and the domestic industry is limited.<sup>132</sup> Given this, the moderate degree of substitutability between subject imports and the domestic like product, and the importance of price in purchasing decisions, we find that the significant increase in low-priced subject imports that is likely after revocation of the orders would come at least in part at the expense of the domestic industry and/or depress or suppress prices for the domestic like product. Consequently, we find that subject imports would likely cause adverse effects on the domestic industry that are distinct from any effects attributable to nonsubject imports in the event of revocation.

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<sup>130</sup> CR/PR at Table I-5. The domestic industry's COGS to net sales ratio was 88.2 percent in 2014, 89.8 percent in 2015, and 91.1 percent in 2016. *Id.* Its gross profit was \$96.1 million in 2014, \$80.2 million in 2015, and \$66.9 million in 2016. *Id.* Its operating income and operating income to net sales ratio were \$33.5 million and 4.1 percent, respectively, in 2014, \$18.7 million and 2.4 percent, respectively, in 2015, and \$5.4 million and 0.7 percent, respectively, in 2016. *Id.*

<sup>131</sup> CR/PR Tables I-6-7. Nonsubject imports were 1.4 billion square feet in 2014, 1.5 billion square feet in 2015, 1.6 billion square feet in 2016, 2.4 billion square feet in 2017, 3.4 billion square feet in 2018, 3.7 billion square feet in 2019, and 4.1 billion square feet in 2020. *Id.*

<sup>132</sup> *Original Determinations*, USITC Pub. 4747 at 27-28.

We recognize that the Domestic Coalition claims that U.S. demand for hardwood plywood has begun to decline and is expected to weaken further in the reasonably foreseeable future, due in part to higher interest rates and a slowing housing market.<sup>133</sup> Nevertheless, the information available shows that apparent U.S. consumption was 54.8 percent higher in 2021 than in 2016, suggesting that demand for hardwood plywood has grown substantially since the original investigations.<sup>134</sup> However, to the extent that demand for hardwood plywood declines within a reasonably foreseeable time, the increase in low-priced subject imports that is likely after revocation would exacerbate the effects of declining demand on the domestic industry.

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

#### **IV. Conclusion**

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

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<sup>133</sup> See Domestic Coalition's Substantive Response at 17-19.

<sup>134</sup> CR/PR at Table I-7.

# Information obtained in these reviews

## Background

On December 1, 2022, the U.S. International Trade Commission (“Commission”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),<sup>1</sup> that it had instituted reviews to determine whether revocation of the antidumping and countervailing duty orders on hardwood plywood from China would likely lead to the continuation or recurrence of material injury to a domestic industry.<sup>2</sup> All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.<sup>3</sup> Table I-1 presents information relating to the background and schedule of this proceeding:

**Table I-1**  
**Hardwood plywood: Information relating to the background and schedule of this proceeding**

Effective date	Action
December 1, 2022	Notice of initiation by Commerce (87 FR 73757, December 1, 2022)
December 1, 2022	Notice of institution by Commission (87 FR 73792, December 1, 2022)
March 6, 2023	Commission’s vote on adequacy
March 6, 2023	Commerce’s results of its expedited review of the countervailing duty order (88 FR 13782, March 6, 2023)
April 5, 2023	Commerce’s results of its expedited review of the antidumping duty order (88 FR 20121, April 5, 2023, 2023)
May 19, 2023	Commission’s determinations and views

## Responses to the Commission’s notice of institution

### Individual responses

The Commission received two submissions in response to its notice of institution in the subject reviews. They were filed on behalf of the following entities:

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<sup>1</sup> 19 U.S.C. 1675(c).

<sup>2</sup> 87 FR 73792, December 1, 2022. In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders. 87 FR 73757, December 1, 2022. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission’s website ([www.usitc.gov](http://www.usitc.gov)).

<sup>3</sup> As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in the original investigations are presented in app. C.

1. The Coalition for Fair Trade in Hardwood Plywood (the “Coalition”), comprising of five individual members, Columbia Forest Products, Commonwealth Plywood Co., Ltd. (“Commonwealth Plywood”), Manthei Wood Products (“Manthei”), States Industries LLC (“States Industries”), and Timber Products Company (“Timber Products”), domestic producers of hardwood plywood (collectively referred to herein as “domestic interested parties”)
2. Canusa Wood Products Limited (“Canusa”), Hardwoods Specialty Products USLP (“HSP”), Holland Southwest International, Inc. (“Holland”), McCorry & Company Limited (“McCorry”), Medallion Forest Products (“Medallion”), Northwest Hardwoods, Inc. (“NWH”), Richmond International Forest Products, LLC (“Richmond”), and Taraca Pacific, Inc. (“Taraca”), U.S. importers of hardwood plywood from China (collectively referred to herein as “respondent interested parties”)

A complete response to the Commission’s notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

**Table I-2**

**Hardwood plywood: Summary of completed responses to the Commission’s notice of institution**

Interested party	Type	Number of firms	Coverage
U.S. producer	Domestic	5	***%
U.S. importer	Respondent (China)	8	***%

Note: The U.S. producer coverage figure presented is the domestic interested parties’ estimate of their share of total U.S. production of hardwood plywood during 2021. Domestic interested parties’ response to the notice of institution, January 3, 2023, p. 2.

Note: The U.S. importer coverage figure presented, as provided by the respondent interested parties in their response, represents the firms’ aggregate share of the quantity of total U.S. imports of hardwood plywood from China during 2021. \*\*\* respondent interested parties reported U.S. imports of hardwood plywood from China during 2021. Of the respondent interested parties, \*\*\*. Respondent interested parties’ response to additional questions on notice of institution, January 18, 2023, pp. 4-5. The eight responding importers accounted for \*\*\* percent of reported 2016 imports of hardwood plywood from China. Investigation Nos. 701-TA-565 and 731-TA-1341 (Final): Hardwood Plywood from China, Confidential Report, INV-PP-149, November 16, 2017, as revised in INV-PP-154, November 21, 2017 (“Original confidential report”), table IV-1.

## Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews from the domestic interested parties. The domestic interested parties request that the Commission conduct expedited reviews of the antidumping and countervailing duty orders on hardwood plywood from China.<sup>4</sup>

## The original investigations

The original investigations resulted from petitions filed on November 18, 2016 with Commerce and the Commission by Columbia Forest Products, Greensboro, North Carolina; Commonwealth Plywood, Whitehall, New York; Murphy Plywood Co. (“Murphy Plywood”), Eugene, Oregon; Roseburg Forest Products Co. (“Roseburg Forest Products”), Roseburg, Oregon; States Industries, Inc., Eugene, Oregon; and Timber Products Company, Springfield, Oregon, combined as the Coalition for Fair Trade of Hardwood Plywood.<sup>5</sup> On November 16, 2017, Commerce determined that imports of hardwood plywood from China were being sold at less than fair value (“LTFV”) and subsidized by the Government of China.<sup>6</sup> The Commission determined on December 20, 2017 that the domestic industry was materially injured by reason of LTFV and subsidized imports of hardwood plywood from China.<sup>7</sup> On January 4, 2018, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margin of 183.36 percent and net subsidy rates ranging from 22.98 to 194.90 percent.<sup>8</sup>

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<sup>4</sup> Domestic interested parties’ comments on adequacy, February 9, 2023, p. 1.

<sup>5</sup> Hardwood Plywood from China, Inv. Nos. 701-TA-565 and 731-TA-1341 (Final), USITC Publication 4747, December 2017 (“Original publication”), p. I-1.

<sup>6</sup> 82 FR 53460 and 82 FR 53473, November 16, 2017.

<sup>7</sup> 82 FR 61325, December 27, 2017. The Commission also found that imports subject to Commerce’s affirmative critical circumstances determination were not likely to undermine seriously the remedial effect of the order on China.

<sup>8</sup> 83 FR 504 and 83 FR 513, January 4, 2018.

## Previous and related investigations

The Commission has conducted a number of previous import relief investigations on hardwood plywood or similar merchandise, as presented in table I-3.

**Table I-3**  
**Hardwood plywood: Previous and related Commission proceedings and status of orders**

Date	Number	Product / Country	ITC original determination	Current status of order
2010	701-TA-476	Multilayered wood flooring / China	Affirmative	Ongoing second review
2010	731-TA-1179	Multilayered wood flooring / China	Affirmative	Ongoing second review
2012	701-TA-490	Hardwood plywood / China	Negative	---
2012	731-TA-1204	Hardwood plywood / China	Negative	---

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

Note: "Date" refers to the year in which the investigation was instituted by the Commission.

Note: Merchandise covered under the scope of the multilayered wood flooring investigations (Inv. Nos. 701-TA-476 and 731-TA-1179) may enter the United States under HTS statistical reporting numbers included in Commerce's scope definition for this current hardwood plywood proceeding. Specifically, U.S. imports of hardwood plywood from China covered by the orders on multilayered wood flooring from China are excluded from the scope of the hardwood plywood orders under review. For a full description of the scope of these current reviews of the orders on imports of hardwood plywood from China, please see "Commerce's scope" section.

Note: Commerce preliminarily determined in July 2022 that certain hardwood plywood and veneered panel products exported from Vietnam, which were assembled in Vietnam using hardwood plywood inputs sourced from China, are products of China. Under the preliminary determination, these products are subject to the antidumping and countervailing duty orders on hardwood plywood from China and are circumventing those orders. 87 FR 45753, July 29, 2022.

Note: Hardwood plywood was also subject to a General Factfinding Section 332 investigation in 2007-08, Wood Flooring and Hardwood Plywood: Competitive Conditions Affecting the U.S. Industries (Inv. No. 332-487). Additionally, there is a current ongoing first review of orders of a related product, softwood lumber from Canada, USITC. Inv. Nos. 701-TA-566 and 731-TA-1342.

## Commerce's five-year reviews

Commerce announced that it would conduct expedited reviews with respect to the orders on imports of hardwood plywood from China with the intent of issuing the final results of these reviews based on the facts available not later than March 31, 2023.<sup>9</sup> Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at <https://access.trade.gov/public/FRNoticesListLayout.aspx>. Issues and Decision Memoranda contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping and countervailing duty orders on imports of hardwood plywood from China are noted in the sections titled "The original investigations" and "U.S. imports," if applicable.

## The product

### Commerce's scope

Commerce has defined the scope as follows:

*The merchandise subject to this investigation is hardwood and decorative plywood, and certain veneered panels as described below. For purposes of this proceeding, hardwood and decorative plywood is defined as a generally flat, multilayered plywood or other veneered panel, consisting of two or more layers or plies of wood veneers and a core, with the face and/or back veneer made of non-coniferous wood (hardwood) or bamboo. The veneers, along with the core may be glued or otherwise bonded together. Hardwood and decorative plywood may include products that meet the American National Standard for Hardwood and Decorative Plywood, ANSI/HPVA HP-1-2016 (including any revisions to that standard).*

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<sup>9</sup> Letter from Alex Villanueva, Senior Office Director, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, January 25, 2023.

*For purposes of this investigation a “veneer” is a slice of wood regardless of thickness which is cut, sliced or sawed from a log, bolt, or flitch. The face and back veneers are the outermost veneer of wood on either side of the core irrespective of additional surface coatings or covers as described below.*

*The core of hardwood and decorative plywood consists of the layer or layers of one or more material(s) that are situated between the face and back veneers. The core may be composed of a range of materials, including but not limited to hardwood, softwood, particleboard, or medium-density fiberboard (MDF).*

*All hardwood plywood is included within the scope of this investigation regardless of whether or not the face and/or back veneers are surface coated or covered and whether or not such surface coating(s) or covers obscures the grain, textures, or markings of the wood. Examples of surface coatings and covers include, but are not limited to: Ultra violet light cured polyurethanes; oil or oil-modified or water based polyurethanes; wax; epoxy-ester finishes; moisture-cured urethanes; paints; stains; paper; aluminum; high pressure laminate; MDF; medium density overlay (MDO); and phenolic film. Additionally, the face veneer of hardwood plywood may be sanded; smoothed or given a “distressed” appearance through such methods as hand-scraping or wire brushing. All hardwood plywood is included within the scope even if it is trimmed; cut-to-size; notched; punched; drilled; or has underwent other forms of minor processing.*

*All hardwood and decorative plywood is included within the scope of this investigation, without regard to dimension (overall thickness, thickness of face veneer, thickness of back veneer, thickness of core, thickness of inner veneers, width, or length). However, the most common panel sizes of hardwood and decorative plywood are 1219 x 1829 mm (48 x 72 inches), 1219 x 2438 mm (48 x 96 inches), and 1219 x 3048 mm (48 x 120 inches).*



*Subject merchandise also includes hardwood and decorative plywood that has been further processed in a third country, including but not limited to trimming, cutting, notching, punching, drilling, or any other processing that would not otherwise remove the merchandise from the scope of the investigation if performed in the country of manufacture of the in-scope product.*

*The scope of the investigation excludes the following items: (1) Structural plywood (also known as “industrial plywood” or “industrial panels”) that is manufactured to meet U.S. Products Standard PS 1-09, PS 2-09, or PS 2-10 for Structural Plywood (including any revisions to that standard or any substantially equivalent international standard intended for structural plywood), and which has both a face and a back veneer of coniferous wood; (2) products which have a face and back veneer of cork; (3) multilayered wood flooring, as described in the antidumping duty and countervailing duty orders on Multilayered Wood Flooring from the People's Republic of China, Import Administration, International Trade Administration. See Multilayered Wood Flooring from the People's Republic of China, 76 FR 76690 (December 8, 2011) (amended final determination of sales at less than fair value and antidumping duty order), and Multilayered Wood Flooring from the People's Republic of China, 76 FR 76693 (December 8, 2011) (countervailing duty order), as amended by Multilayered Wood Flooring from the People's Republic of China: Amended Antidumping and Countervailing Duty Orders, 77 FR 5484 (February 3, 2012); (4) multilayered wood flooring with a face veneer of bamboo or composed entirely of bamboo; (5) plywood which has a shape or design other than a flat panel, with the exception of any minor processing described above; (6) products made entirely from bamboo and adhesives (also known as “solid bamboo”); and (7) Phenolic Film Faced Plyform (PFF), also known as Phenolic Surface Film Plywood (PSF), defined as a panel with an “Exterior” or “Exposure 1” bond classification as is defined by The Engineered Wood Association, having an opaque phenolic film layer with a weight equal to or greater than 90g/m<sup>3</sup> permanently bonded on both the face and back veneers and an opaque, moisture resistant coating applied to the edges.*

*Excluded from the scope of this investigation are wooden furniture goods that, at the time of importation, are fully assembled and are ready for their intended uses. Also excluded from the scope of this investigation is “ready to assemble” (RTA) furniture. RTA furniture is defined as (A) furniture packaged for sale for ultimate purchase by an end-user that, at the time of importation, includes (1) all wooden components (in finished form) required to assemble a finished unit of furniture, (2) all accessory parts (e.g., screws, washers, dowels, nails, handles, knobs, adhesive glues) required to assemble a finished unit of furniture, and (3) instructions providing guidance on the assembly of a finished unit of furniture; (B) unassembled bathroom vanity cabinets, having a space for one or more sinks, that are imported with all unassembled hardwood and hardwood plywood components that have been cut-to-final dimensional component shape/size, painted or stained prior to importation, and stacked within a singled shipping package, except for furniture feet which may be packed and shipped separately; or (C) unassembled bathroom vanity linen closets that are imported with all unassembled hardwood and hardwood plywood components that have been cut-to-final dimensional shape/size, painted or stained prior to importation, and stacked within a single shipping package, except for furniture feet which may be packed and shipped separately.*

*Excluded from the scope of this investigation are kitchen cabinets that, at the time of importation, are fully assembled and are ready for their intended uses. Also excluded from the scope of this investigation are RTA kitchen cabinets. RTA kitchen cabinets are defined as kitchen cabinets packaged for sale for ultimate purchase by an end-user that, at the time of importation, includes (1) all wooden components (in finished form) required to assemble a finished unit of cabinetry, (2) all accessory parts (e.g., screws, washers, dowels, nails, handles, knobs, hooks, adhesive glues) required to assemble a finished unit of cabinetry, and (3) instructions providing guidance on the assembly of a finished unit of cabinetry.*

*Excluded from the scope of this investigation are finished table tops, which are table tops imported in finished form with pre-cut or drilled openings to attach the underframe or legs. The table tops are ready for use at the time of import and require no further finishing or processing.*

*Excluded from the scope of this investigation are finished countertops that are imported in finished form and require no further finishing or manufacturing.*

*Excluded from the scope of this investigation are laminated veneer lumber door and window components with (1) a maximum width of 44 millimeters, a thickness from 30 millimeters to 72 millimeters, and a length of less than 2413 millimeters (2) water boiling point exterior adhesive, (3) a modulus of elasticity of 1,500,000 pounds per square inch or higher, (4) finger-jointed or lap-jointed core veneer with all layers oriented so that the grain is running parallel or with no more than 3 dispersed layers of veneer oriented with the grain running perpendicular to the other layers; and (5) top layer machined with a curved edge and one or more profile channels throughout.<sup>10</sup>*

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<sup>10</sup> 83 FR 504, January 4, 2018.

## U.S. tariff treatment<sup>11</sup>

Hardwood plywood is currently provided for in subheadings 4412.10, 4412.31, 4412.32, 4412.33, 4412.34, 4412.51, 4412.52, 4412.91, 4412.92, and 4412.94 of the Harmonized Tariff Schedule of the United States (“HTS”).<sup>12</sup> The merchandise subject to the reviews may also be provided for in HTS subheadings 4412.39, 4412.59, and 4412.99. These tariff classifications contain other products outside the scope of the reviews and are subdivided at the 8-digit U.S. subheading level.

The general rates of duty are “free” or 8 percent ad valorem for HTS subheadings 4412.10, 4412.31, 4412.51, 4412.52, 4412.91, and 4412.92. The general rates of duty are 5.1 percent or 8 percent ad valorem for HTS subheading 4412.34. The general rates of duty are free, 5.1 percent, or 8 percent ad valorem for HTS subheadings 4412.32 and 4412.33. The general rates of duty are free, 3.4 percent, 5.1 percent, or 8 percent ad valorem for HTS subheadings 4412.39, 4412.59, 4412.94, and 4412.99.<sup>13</sup> Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Effective September 24, 2018, hardwood plywood originating in China was subject to an additional 10 percent ad valorem duty that was increased on May 10, 2019, to 25 percent ad valorem, under section 301 of the Trade Act of 1974.<sup>14</sup>

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<sup>11</sup> Unless otherwise noted, this information is based on the Original publication, pp. I-12 – I-13.

<sup>12</sup> HTS subheading 4412.32 was deleted and HTS subheadings 4412.33 and 4412.34 were added on October 1, 2018. Harmonized Tariff Schedule of the United States (2018) Revision 12, Publication 4825, September 2018. HTS subheadings 4412.51, 4412.52, 4412.59, 4412.91, and 4412.92 were added, subheading 4412.94 was deleted, and subheading 4412.99 was modified (article description) on January 1, 2022. Harmonized Tariff Schedule of the United States (2022) Basic Edition, Publication 5277, January 2022.

<sup>13</sup> USITC, HTS (2022) Basic Revision 12, Publication 5394, November 2022, pp. 44-25 – 44-28.

<sup>14</sup> 83 FR 47974, September 21, 2018, and 84 FR 20459, May 9, 2019. See also HTS heading 9903.88.03 and U.S. notes 20(e) and 20(f) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2022) Revision 12, USITC Publication 5394, November 2022, pp. 99-III-26, 99-III-27, and 99-III-39.

## Description and uses<sup>15</sup>

Hardwood plywood is a wood panel product made from gluing two or more layers of wood veneer<sup>16</sup> to plywood substrate commonly referred to as a core. The core itself may be composed of veneers or other type of wood material such as medium density fiberboard (“MDF”), particleboard, lumber, or oriented strand board (“OSB”).<sup>17</sup> The outer ply or face veneer is typically the identifying species for the hardwood plywood product and is the side of the product that will be visible in most uses. A wide variety of hardwood species is used in hardwood plywood manufacturing including oak, birch, maple, poplar, cherry, and tropical varieties. Hardwood plywood includes at least a face or back veneer that is of a hardwood species. However, it may have a face or back veneer and/or other layers of veneer of softwood species.

Hardwood plywood is manufactured in a variety of thicknesses depending upon customer requirements and the intended end use. The most common thicknesses range from 1/8 inch (3.2 mm) to 1 inch (25.4 mm). The most common panel dimensions are 48 inches by 72 inches (1219 x 1829 mm), 48 inches by 96 inches (1219 x 2438 mm), and 48 inches by 120 inches (1219 x 3048 mm), but hardwood plywood is also sold in smaller and larger sheet sizes.

The distinguishing characteristic of hardwood plywood products is that they are used in interior and non-structural applications. Hardwood plywood is commonly chosen for decorative and aesthetic reasons, for use in products such as furniture, kitchen cabinets, architectural woodwork, wall paneling, manufactured homes, and recreational vehicles (“RVs”). The product is almost always used in interior applications where moisture exposure is not an issue, although some hardwood plywood is made specifically for marine applications. Its construction process gives it dimensional stability and makes it resistant to expansion and contraction caused by humidity. Hardwood plywood is also used in some construction-related applications where structural strength is not a requirement, such as for providing a flat, stable underlayment for a finished flooring product.

Hardwood plywood products are differentiated by species, quality of veneer (e.g., grade), thickness, number of plies, type of core (veneer, particleboard, MDF, or other), and the type of adhesive used in the manufacturing process. Grades of hardwood plywood are

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<sup>15</sup> Unless otherwise noted, this information is based on the Original publication, pp. I-13 – I-14.

<sup>16</sup> Hardwood plywood includes at least a face or back veneer that is of a hardwood species.

<sup>17</sup> Depending on the application, the configuration of the core may take structural requirements, thickness, screw-holding ability, surface smoothness, and other characteristics into account.

determined by characteristics such as number and size of knots, visible decay, splits or insect holes, surface roughness, and other defects. Grades are assigned to both the face and back veneer. Plywood with the highest face grades is used in applications where appearance is a primary consideration. Most hardwood plywood produced in the United States is graded according to a consensus-based voluntary standard developed by the Hardwood Plywood and Veneer Association (“HPVA”), an American National Standard Institute (“ANSI”) accredited standards developer.<sup>18</sup> The highest and clearest face grades of hardwood plywood carry an “AA” or “A” grade, followed by “B,” “C,” “D,” and “E” as more knots, blemishes, or other defects are considered in the grading process. The HPVA standard assigns back veneers numerical grades from “1” to “4” and assigns internal veneers certain other letter grades. End use and specie dictates veneer thickness.<sup>19</sup> However, not all hardwood plywood sold in the United States conforms to the HPVA standard.<sup>20 21</sup>

## **Manufacturing process<sup>22</sup>**

The production of hardwood plywood begins with the conditioning and debarking of logs of a size and quality suitable for cutting or slicing to make veneer. Veneer is a thin sheet of wood that has been rotary cut, sliced, or sawed from a log, round bolt, or flitch (unfinished plank). Veneer quality logs (commonly called “peeler logs”<sup>23</sup>) are generally of higher quality and value than those used for other wood products. Wood is a natural material, so the quality of veneer will vary by species and by any given log. Each tree—even within the same specie—is influenced by many factors, including weather, soil quality, and the presence of insects. Approximately \*\*\* percent of a log that is rotary cut for veneer in the United States will yield C

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<sup>18</sup> The current consensus-based ANSI/HPVA standard for Hardwood and Decorative Plywood is labeled “American National Standard for Hardwood and Decorative Plywood ANSI/HPVA HP-1-2016.”

<sup>19</sup> The HPVA standard states that \*\*\*. Original confidential report, p. I-17.

<sup>20</sup> Respondents in the final investigations stated that there was no standard grading system used by the Chinese producers.

<sup>21</sup> The International Wood Products Association (“IWPA”)—an international trade association representing North American companies and trade organizations engaged in importing hardwoods and softwoods from sustainably managed forests—has designed voluntary international grading rules and standards intended to be used by North American buyers, distributors, and world suppliers on imported veneer products and platforms. The current IWPA standard is labeled “Imported Rotary Cut Veneer and Platforms Standard (IWPA-2010).”

<sup>22</sup> Unless otherwise noted, this information is based on the Original publication, pp. I-14 – I-18.

<sup>23</sup> Logs from which veneer is rotary cut on a lathe, intended for the production of plywood.

grade or below, \*\*\* percent will yield A or AA grade veneer, and the balance will yield B grade material.<sup>24</sup> The average amount of rotary cut face grade yield differs by species.<sup>25</sup> \*\*\* U.S. birch logs are rotary cut, whereas \*\*\* percent of maple and \*\*\* percent of red oak are rotary cut. Respondents stated in the final investigations that Chinese hardwood plywood producers primarily rotary cut Chinese birch logs, which have a smaller diameter than U.S. birch logs, and consequently yield a much higher percentage of lower grade veneers.

Harvested logs, bolts, and flitches are kept moist while they are stored in a yard to prevent dry out and end checking.<sup>26</sup> The heating of veneer logs in a vat or steam chamber temporarily softens wood, making it more pliable. This also smooths the surface and reduces the likelihood of knife checks. The logs are then sawn to the desired length and debarked. The quality and yield changes based upon the decision to rotary cut or use one of several slicing techniques. Rotary-cut veneer is made by transferring the conditioned (moist and warm) log to a lathe charger that positions it mechanically for optimal slicing. The charger holds the log as it is placed into the lathe that spins the log against a blade at very high speed. This makes a continuous layer of thin veneer that is then cut to the desired length and width. Rotary cutting produces a variegated grain pattern, yields the most veneer per log, and is generally the least expensive of wood veneers. In 2021, approximately \*\*\* percent of unfinished U.S. hardwood plywood panel production was manufactured using rotary-cut veneer.<sup>27 28</sup>

In contrast, sliced or sawed veneers are thin sheets that are cut from conditioned lumber, flitches, or blocks of wood. Slicing yields less per log than the rotary-cut method, results in a more distinct repeating pattern—the cathedral and straight grain patterns—and is often used to make higher grades and specialty plywood. Sliced or sawed veneers are cut into variable lengths and widths depending upon the form and dimension of the wood’s raw material.

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<sup>24</sup> For birch, the average yield of AA and A grade is \*\*\* percent and C grade and below is \*\*\* percent; for maple, the average yield of AA and A grade is \*\*\* percent and C grade and below is \*\*\* percent; and for red oak, the average yield of AA and A grade is \*\*\* percent and C grade and below is \*\*\* percent. Original confidential report, p. I-18.

<sup>25</sup> For birch, the average face grade yield is \*\*\* percent; for maple, the average face grade yield is \*\*\* percent; for red oak, the average face grade yield is \*\*\* percent; for cherry, the average face grade yield is \*\*\* percent; and for other (including ash, pine, alder, poplar, and others), the average face grade yield is \*\*\* percent. Original confidential report, p. I-18.

<sup>26</sup> End checking and splitting are related to the reduction of the surface moisture content to a value so low that it causes drying stresses that will pull the wood apart.

<sup>27</sup> HPVA Annual Statistical Report for Calendar Year 2021, p. 41.

<sup>28</sup> Most U.S. plywood panels (\*\*\* ) are unfinished. Original confidential report, p. I-19.

Whether rotary-produced or sliced, veneer is cut to thicknesses ranging from as thin as 0.01 inch (0.25 mm) to greater than 0.25 inch (6.35 mm). The sheets are loaded into dryers with forced hot air which gradually lowers the moisture content of the veneer to 6 to 12 percent. Veneer is graded and sorted by quality prior to use in hardwood plywood manufacturing. Face veneers are often—but not always—produced at a separate facility or by a different company than the hardwood plywood manufacturer.

Generally, the basic steps in the manufacturing process are similar for both imported and domestic hardwood plywood. The U.S. producers use both the one-step and two-step processes, while the Chinese producers usually use the two-step process. Some U.S. producers employ a “one-step” process, which is a continuous system from the log to the finished product. In the one-step process, face and back veneers are glued and pressed at the same time as the core veneers. The other prevalent system is referred to as a “two-step” process. The core is manufactured separately in the first step, after which it is patched and sanded. In the second step, a press is used to apply the face and back veneers to the core. The one-step process is reportedly less costly because it requires half the handling of the two-step process. Some U.S. producers use the two-step process while others use either process depending on the product ordered. Chinese producers use the two-step process.<sup>29</sup> In many cases, manufacturers purchase face veneers of a particular species and grade from other veneer producers to glue onto the core material, completing the manufacturing process. Prior to pressing, the face and core veneers are dried, sorted for defects, repaired or patched, taped or stitched to make larger sheets from smaller pieces, and trimmed. The veneers are stacked with their grain in alternating directions—crossbands—in order to provide strength and stability to the finished product.<sup>30</sup> The thickness of each layer must balance around the center, but the core, crossbands, and the face and back can be different thicknesses and materials.<sup>31</sup> Depending on the manufacturing process, a cold press may be used to fabricate the several plies of veneer together prior to being hot pressed to glue the veneers together. The thickness and number of

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<sup>29</sup> Since Chinese hardwood plywood producers use veneers that are too thin to use the one-step method, hardwood plywood in China is typically made using the two-step process.

<sup>30</sup> The crossbands are the stacked veneer sheets whose grain is at alternating directions to one another (when there are multiple crossband layers) and the face veneer. Plywood involves an odd number of layers. Its balanced construction and crossband layers provide dimensional stability; hardwood plywood does not warp, shrink or swell as much as lumber and has uniform strength both with and across the grain.

<sup>31</sup> Each layer from the core must be of equal thickness. For example, the top and bottom crossbands must be of equal thickness and so must the face and back veneers.



plies depends upon the product ordered. After pressing and trimming, panels are sanded and, in some cases, finished depending on the end use. Finishing can involve some degree of texturing for a particular appearance, grooving, and/or staining or coloring. Typical finishes include ultra-violet light cured polyurethanes, oil or oil-modified or water-based polyurethanes, wax, epoxy-ester finishes, and moisture-cured urethanes. The process will vary somewhat if a core of composite wood (e.g., MDF or particleboard) or other material is used. In 2021, the distribution of core type in U.S. unfinished panel production was approximately \*\*\* percent veneer, \*\*\* percent MDF, \*\*\* percent particleboard, and \*\*\* percent lumber, OSB, or combinations of materials.<sup>32</sup> Chinese hardwood plywood producers primarily use fast-growing species of poplar and eucalyptus, which are generally harvested from plantations and farms in China, for the veneer cores of their hardwood plywood.<sup>33</sup> The poplar and eucalyptus logs are relatively small.

The adhesive formulation is a key factor in hardwood plywood manufacturing and performance. Thermosetting adhesives are used to bond the veneer plies and/or core material. Urea-formaldehyde (“UF”) based resins are the most common type of adhesives used in hardwood plywood manufacture because they are suitable for interior use, have relatively fast cure times, and do not bleed color through the plies. Under California law, formaldehyde emissions from hardwood plywood and other wood panel products sold in that state are regulated under what is commonly called the CARB rule.<sup>34</sup> On June 8, 2020, the U.S. Environmental Protection Agency (“EPA”) finalized amendments to the Air Toxics Standards for Plywood and Composite Wood Products, which apply these standards to formaldehyde and other source emissions.<sup>35</sup> To meet regulations limiting formaldehyde emissions, manufacturers have changed the formulation of adhesives through the use of various additives or by using no-

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<sup>32</sup> HPVA Annual Statistical Report for Calendar Year 2021, p. 28.

<sup>33</sup> Because hardwoods are denser than softwoods, hardwood cores are arguably superior to softwood cores on strength, dimensional stability, and fastener holding properties.

<sup>34</sup> The California Air Resource Board (“CARB”) enacted state rules to regulate formaldehyde emissions on products sold in California. In addition, formaldehyde has been categorized as a carcinogenic and toxic material.

<sup>35</sup> The EPA finalized a rule that is similar to the California “Phase 2” formaldehyde emission standards for certain wood products. The EPA has amended the final rule, effective August 13, 2020, to improve compliance and implementation. National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products Residual Rule and Technology Review, 85 FR 40434, August 13, 2020 and 85 FR 51668, August 21, 2020. For additional information, see Plywood and Composite Wood Products Manufacture: National Emission Standards for Hazardous Air Pollutants (NESHAP), <https://www.epa.gov/stationary-sources-air-pollution/plywood-and-composite-wood-products-manufacture-national-emission>, retrieved February 2, 2023.

added UF, soy-based alternatives. These are referred to as ultra-low-emitting formaldehyde (“ULEF”)<sup>36</sup> or no-added formaldehyde (“NAF”) resins.<sup>37</sup> Another type of adhesive formulated with phenol-formaldehyde (“PF”) resins emits less formaldehyde (also referred to as non-added urea formaldehyde (“NAUF”)) and is more moisture resistant, but PF resins have color disadvantages and are typically used only if the plywood product is made for exterior applications.

## **The industry in the United States**

### **U.S. producers**

During the final phase of the original investigations, the Commission received U.S. producer questionnaires from nine firms, which accounted for nearly all U.S. production of hardwood plywood in the United States during 2016.<sup>38</sup>

In response to the Commission’s notice of institution in these current reviews, domestic interested parties provided a list of ten known and currently operating U.S. producers of hardwood plywood. Five firms providing U.S. industry data in response to the Commission’s notice of institution accounted for approximately \*\*\* percent of production of hardwood plywood in the United States during 2021.<sup>39</sup>

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<sup>36</sup> ULEF resins contain formaldehyde but are formulated so that the formaldehyde emissions from the product are below applicable CARB Phase 2 emission standards.

<sup>37</sup> These are resins made from soy, polyvinyl acetate, or methylene diisocyanate.

<sup>38</sup> Original publication, p. I-4.

<sup>39</sup> Domestic interested parties’ response to the notice of institution, January 3, 2023, p. 2.

## Recent developments

Table I-4 presents developments in the U.S. industry since the Commission’s original investigations.<sup>40</sup>

**Table I-4**  
**Hardwood plywood: Developments in the U.S. industry**

Item	Firm	Event
Production automation	States Industries	In early 2021, States Industries—based in Eugene, Oregon—introduced a new automated operation line to produce hardwood plywood panels through a “short cycle multi-opening press.” This automation advancement allowed the firm to increase production capacity of high-value panels.
Acquisition	Bauwerk Group AG/Somerset Hardwood Flooring (“SHF”)	Effective May 1, 2022, Switzerland-based Bauwerk Group AG acquired the Kentucky-based hardwood flooring firm SHF. SHF’s production operations are in Somerset, Kentucky and Crossville, Tennessee. Operations and branding are expected to continue business-as-usual following the acquisition.
Acquisition	Boise Cascade/Coastal Plywood Company	In June 2022, Boise Cascade completed a \$512 million acquisition of Coastal Plywood Company, which included two manufacturing operations that employ 750 people in Havana, Florida, and Chapman, Alabama.

Source: Woodworking Network, “States Industries automates hardwood plywood panel production with Biele press,” May 5, 2022, <https://www.woodworkingnetwork.com/news/woodworking-industry-news/states-industries-automates-hardwood-plywood-panel-production-biele>, retrieved December 30, 2022; Floor Daily, “Bauwerk Group Acquires Somerset Hardwood,” May 2, 2022, <https://www.floordaily.net/flooring-news/bauwerk-group-boen-acquires-somerset-hardwood>, retrieved December 19, 2022; Boise Cascade, “Boise Cascade Reaches Agreement to Acquire Coastal Plywood Operations,” June 10, 2022, <https://www.bc.com/boise-cascade-reaches-agreement-to-acquire-coastal-plywood-operations/>, retrieved December 7, 2022.

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<sup>40</sup> For developments, if any, in tariff treatment, please see “U.S. tariff treatment” section.

## U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in the current five-year reviews.<sup>41</sup> Table I-5 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigations and current five-year reviews.

**Table I-5**  
**Hardwood plywood: Trade and financial data submitted by U.S. producers, by period**

Quantity in 1,000 square feet; value in 1,000 dollars; unit value in dollars per square foot; ratio is in percent

Item	Measure	2014	2015	2016	2021
Capacity	Quantity	1,435,359	1,433,299	1,428,894	904,207
Production	Quantity	723,513	692,094	660,502	417,307
Capacity utilization	Ratio	50.4	48.3	46.2	46.2
U.S. shipments	Quantity	700,756	680,044	651,558	426,019
U.S. shipments	Value	852,295	828,855	790,933	657,753
U.S. shipments	Unit value	1.22	1.22	1.21	1.54
Net sales	Value	812,565	788,737	748,961	658,696
COGS	Value	716,501	708,517	682,100	554,862
COGS to net sales	Ratio	88.2	89.8	91.1	84.2
Gross profit or (loss)	Value	96,064	80,220	66,861	103,834
SG&A expenses	Value	62,603	61,490	61,503	47,017
Operating income or (loss)	Value	33,461	18,730	5,358	56,816
Operating income or (loss) to net sales	Ratio	4.1	2.4	0.7	8.6

Source: For the years 2014-16, data are compiled using data submitted in the Commission's original investigations. For the year 2021, data are compiled using data submitted by domestic interested parties. Domestic interested parties' response to the notice of institution, January 3, 2023, exh. 1.

Note: For a discussion of data coverage, please see "U.S. producers" section.

<sup>41</sup> Individual company trade and financial data are presented in app. B.

## Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties provision, the Commission may exclude a U.S. producer from the domestic industry for purposes of its injury determination if “appropriate circumstances” exist.<sup>42</sup>

In its original determinations, the Commission defined a single domestic like product corresponding to Commerce's scope and it defined the domestic industry to include all U.S. producers of hardwood plywood.<sup>43</sup>

## U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from 74 firms, which accounted for approximately 94 percent of total U.S. imports of hardwood plywood from China, and virtually all imports from nonsubject sources (by quantity) during 2016.<sup>44</sup> Import data presented in the original investigations are based on questionnaire responses.

In their response to the notice of institution for these current reviews, eight importers of the subject merchandise reported \*\*\* during 2021 (See appendix B). \*\*\* of the responding firms reported last importing subject merchandise from China in \*\*\*. The respondent interested parties \*\*\*.<sup>45</sup> The domestic interested parties provided a list of 75 firms that may currently import subject merchandise.<sup>46</sup>

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<sup>42</sup> Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

<sup>43</sup> 87 FR 73792, December 1, 2022.

<sup>44</sup> Original publication, pp. I-4 – I-5.

<sup>45</sup> In their initial response, the importers responded “\*\*\*\*” to the Commission’s request for a list of all known and currently operating U.S. importers of the subject merchandise. In their response \*\*\*, the importers indicated “\*\*\*\*.” Respondent interested parties’ response to the notice of institution, January 3, 2023, exh. 1; Respondent interested parties’ response to additional questions on notice of institution, January 18, 2023, p. 3.

<sup>46</sup> Domestic interested parties’ response to the notice of institution, January 3, 2023, exh. 1.

## U.S. imports

Table I-6 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2021 imports by quantity).<sup>47</sup>

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<sup>47</sup> U.S. import data are compiled from official U.S. import statistics for the following HTS statistical reporting numbers (“primary HTS statistical reporting numbers”): 4412.10.0500; 4412.31.0620; 4412.31.0640; 4412.31.0660; 4412.31.2610; 4412.31.2620; 4412.31.4140; 4412.31.4150; 4412.31.4155; 4412.31.4165; 4412.31.4180; 4412.31.4200; 4412.31.4500; 4412.31.4850; 4412.31.4860; 4412.31.4863; 4412.31.4865; 4412.31.4866; 4412.31.4869; 4412.31.4880; 4412.31.5235; 4412.31.5255; 4412.31.5260; 4412.31.5262; 4412.31.5264; 4412.31.5265; 4412.31.5266; 4412.31.5268; 4412.31.5270; 4412.31.5275; 4412.31.6100; 4412.31.9200; 4412.32.0620; 4412.32.0640; 4412.32.0670; 4412.32.2610; 4412.32.2630; 4412.32.3235; 4412.32.3255; 4412.32.3265; 4412.32.3275; 4412.32.3285; 4412.32.5700; 4412.33.0620; 4412.33.0640; 4412.33.0670; 4412.33.2630; 4412.33.3235; 4412.33.3255; 4412.33.3265; 4412.33.3275; 4412.33.3285; 4412.33.5700; 4412.34.2600; 4412.34.3235; 4412.34.3255; 4412.34.3265; 4412.34.3275; 4412.34.3285; 4412.34.5700; 4412.39.1000; 4412.39.3000; 4412.39.4011; 4412.39.4012; 4412.39.4019; 4412.39.4031; 4412.39.4032; 4412.39.4039; 4412.39.4051; 4412.39.4052; 4412.39.4059; 4412.39.4061; 4412.39.4062; 4412.39.4069; 4412.39.5010; 4412.39.5030; 4412.39.5050; 4412.51.1030; 4412.51.1050; 4412.51.3111; 4412.51.3121; 4412.51.3141; 4412.51.3161; 4412.51.3175; 4412.51.4100; 4412.51.5100; 4412.52.1030; 4412.52.1050; 4412.52.3121; 4412.52.3141; 4412.52.3161; 4412.52.3175; 4412.52.4100; 4412.52.5100; 4412.59.6000; 4412.59.7000; 4412.59.8000; 4412.59.9000; 4412.59.9500; 4412.91.0600; 4412.91.1020; 4412.91.1030; 4412.91.1040; 4412.91.3110; 4412.91.3120; 4412.91.3130; 4412.91.3140; 4412.91.3150; 4412.91.3160; 4412.91.3170; 4412.91.4100; 4412.91.5115; 4412.92.0700; 4412.92.1120; 4412.92.1130; 4412.92.1140; 4412.92.3120; 4412.92.3150; 4412.92.3160; 4412.92.3170; 4412.92.4200; 4412.92.5215; 4412.94.1030; 4412.94.1050; 4412.94.3111; 4412.94.3121; 4412.94.3141; 4412.94.3161; 4412.94.3175; 4412.94.4100; 4412.99.0600; 4412.99.1020; 4412.99.1030; 4412.99.1040; 4412.99.3110; 4412.99.3120; 4412.99.3130; 4412.99.3140; 4412.99.3150; 4412.99.3160; 4412.99.3170; 4412.99.4100; 4412.99.5115; and 4412.99.5710. The primary HTS statistical reporting numbers include those identified in Commerce’s antidumping and countervailing duty orders, including any corresponding changes in subsequent HTS revisions. The primary HTS statistical reporting numbers do not include these six HTS statistical reporting numbers identified in the orders, (including any corresponding changes in subsequent HTS revisions) that contain primarily out-of-scope wood flooring: 4412.31.4075, 4412.31.5125, 4412.32.0565, 4412.32.2525, 4412.32.3125, and 4412.94.3105.

**Table I-6**  
**Harwood plywood: U.S. imports, by source and period**

Quantity in 1,000 square feet; value in 1,000 dollars; unit value in dollars per square foot

U.S. imports from	Measure	2017	2018	2019	2020	2021
China	Quantity	1,367,050	871,213	287,646	246,810	341,143
Brazil	Quantity	653,043	819,571	849,757	1,008,755	1,137,618
Indonesia	Quantity	38,136	362,679	404,484	574,115	854,090
Vietnam	Quantity	28,296	231,149	480,495	505,917	734,789
All other sources	Quantity	1,691,334	2,014,415	2,002,203	2,046,731	2,332,440
Nonsubject sources	Quantity	2,410,808	3,427,813	3,736,938	4,135,518	5,058,936
All import sources	Quantity	3,777,859	4,299,026	4,024,584	4,382,328	5,400,078
China	Value	651,980	474,505	160,477	118,307	169,343
Brazil	Value	211,461	311,388	250,950	319,279	642,424
Indonesia	Value	27,286	266,913	251,222	311,695	576,922
Vietnam	Value	19,625	121,373	254,331	280,892	414,472
All other sources	Value	885,129	1,136,787	1,065,276	1,090,243	1,645,580
Nonsubject sources	Value	1,143,500	1,836,461	1,821,779	2,002,109	3,279,397
All import sources	Value	1,795,480	2,310,967	1,982,255	2,120,415	3,448,741
China	Unit value	0.48	0.54	0.56	0.48	0.50
Brazil	Unit value	0.32	0.38	0.30	0.32	0.56
Indonesia	Unit value	0.72	0.74	0.62	0.54	0.68
Vietnam	Unit value	0.69	0.53	0.53	0.56	0.56
All other sources	Unit value	0.52	0.56	0.53	0.53	0.71
Nonsubject sources	Unit value	0.47	0.54	0.49	0.48	0.65
All import sources	Unit value	0.48	0.54	0.49	0.48	0.64

Source: Compiled from official Commerce statistics for the primary HTS statistical reporting numbers, accessed January 30, 2023.

Note: The quantity entry data for official import statistics are reported in terms of volume (cubic meters) and area (square meters) whereas quantity data in this table and report are presented in 1,000 square feet. Quantities in meters cubed were converted to 1,000 square feet using a 1.024 conversion factor. A conversion factor of 1 cubic meter equaling 1,024 square feet was used in the original investigations where the petitioners believed this conversion factor to be reasonable, and it had historically been used by the Commission in past proceedings. Original publication, p. IV-2. Quantities in meters squared were converted to 1,000 square feet using a standard conversion: 1 square meter = 10.763910417 square feet.

Note: Certain merchandise covered under the scope of the multilayered wood flooring from China investigations (Inv. Nos. 701-TA-476 and 731-TA-1179) may enter the United States under HTS statistical reporting numbers included in Commerce's scope definition for this current hardwood plywood proceeding.

Note: Commerce preliminarily determined in July 2022 that certain hardwood plywood and veneered panel products exported from Vietnam, which were assembled in Vietnam using hardwood plywood inputs sourced from China, are products of China. Under the preliminary determination, these products are subject to the antidumping and countervailing duty orders on hardwood plywood from China and are circumventing those orders. 87 FR 45753, July 29, 2022.

Note: Because of rounding, figures may not add to total shown.

## Apparent U.S. consumption and market shares

Table I-7 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

**Table I-7**  
**Hardwood plywood: Apparent U.S. consumption and market shares, by source and period**

Quantity in 1,000 square feet; value in 1,000 dollars; shares in percent

Source	Measure	2014	2015	2016	2021
U.S. producers	Quantity	700,756	680,044	651,558	426,019
China	Quantity	1,265,296	1,382,815	1,509,584	341,143
Nonsubject sources	Quantity	1,372,668	1,466,287	1,601,865	5,058,936
All import sources	Quantity	2,637,964	2,849,102	3,111,449	5,400,078
Apparent U.S. consumption	Quantity	3,338,720	3,529,146	3,763,007	5,826,097
U.S. producers	Value	852,295	828,855	790,933	657,753
China	Value	615,915	687,950	715,708	169,343
Nonsubject sources	Value	485,314	500,088	518,699	3,279,397
All import sources	Value	1,101,229	1,188,038	1,234,407	3,448,741
Apparent U.S. consumption	Value	1,953,524	2,016,893	2,025,340	4,106,494
U.S. producers	Share of quantity	21.0	19.3	17.3	7.3
China	Share of quantity	37.9	39.2	40.1	5.9
Nonsubject sources	Share of quantity	41.1	41.5	42.6	86.8
All import sources	Share of quantity	79.0	80.7	82.7	92.7
U.S. producers	Share of value	43.6	41.1	39.1	16.0
China	Share of value	31.5	34.1	35.3	4.1
Nonsubject sources	Share of value	24.8	24.8	25.6	79.9
All import sources	Share of value	56.4	58.9	60.9	84.0

Source: For the years 2014-16, data are compiled using data submitted in the Commission's original investigations. For the year 2021, U.S. producers' U.S. shipments are compiled from the domestic interested parties' response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under the primary HTS statistical reporting numbers, accessed January 30, 2023.

Note: Share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent.

Note: For 2014-16, apparent U.S. consumption is derived from U.S. producers' U.S. shipments and U.S. shipments of imports, rather than U.S. imports.

Note: For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections.



## The industry in China

### Producers in China

During the final phase of the original investigations, the Commission received foreign producer/exporter questionnaires from 92 firms, 53 of which identified themselves as producers of subject merchandise and 39 of which identified themselves as resellers of subject merchandise. These firms accounted for less than half of production of hardwood plywood in China during 2016, and approximately 86.0 percent of reported U.S. imports of hardwood plywood from China in 2016.<sup>48</sup>

Although the Commission did not receive responses from any Chinese producers in these five-year reviews, the domestic interested parties provided a list of 113 possible producers of hardwood plywood in China.<sup>49</sup>

### Recent developments

There were no major developments in the Chinese industry since the imposition of the orders identified by interested parties in the proceeding. Certain relevant information on the Chinese industry from other sources is incorporated in “The global market” section.

### Exports

Table I-8 presents export data for plywood and wood flooring products, a category that includes hardwood plywood and out-of-scope products, from China (by export destination in descending order of quantity for 2021). In 2021, China produced an estimated 2.7 billion cubic feet of plywood and exported an estimated 352.5 million cubic feet.<sup>50 51</sup> The top three

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<sup>48</sup> Original publication, pp. VII-3 – VII-4. In the original investigations, counsel for Chinese respondents provided USITC staff with estimated 2016 capacity and production quantities (approximately 1.8 billion square feet of production capacity and 1.5 billion square feet of production of hardwood plywood) of 90 nonresponding foreign producers of the subject merchandise in China. Together, the data provided by responding foreign producers and the estimates provided for non-responding foreign producers were believed to have accounted for the majority of the capacity and production of hardwood plywood in China in 2016. Virtually all exports of hardwood plywood from China to the United States that were produced by a non-responding foreign producer were reportedly accounted for by the 39 resellers in China that provided the Commission with questionnaire responses in the original investigations.

<sup>49</sup> Domestic interested parties’ response to the notice of institution, January 3, 2023, exh. 1.

<sup>50</sup> Food and Agricultural Organization, FAOSTAT, “[Forestry Production and Trade](#)”, 2021, retrieved January 31, 2023.

<sup>51</sup> Cubic meters are converted to cubic feet using a factor of 35.3147 cubic feet per cubic meter.

destination markets were the United States (8.4 percent), Philippines (7.4 percent), and United Kingdom (7.4 percent), which collectively accounted for 23.2 percent of the global export value for China in 2021. The share of the top three destination markets in 2021 is close to the United States' share of China's export value in 2017, which was 22.3 percent.

**Table I-8**

**Plywood and wood flooring products: Value of exports from China, by destination and period**

Value in 1,000 dollars

Destination market	2017	2018	2019	2020	2021
United States	1,138,599	1,073,115	439,332	334,191	497,142
Philippines	332,517	379,173	362,221	346,346	438,065
United Kingdom	274,738	339,017	286,075	270,708	435,328
Japan	289,991	294,571	273,399	226,363	373,334
Canada	217,424	237,804	212,901	205,108	332,933
Belgium	136,787	145,522	138,560	157,634	287,173
Australia	135,435	166,082	157,039	171,165	251,666
Vietnam	177,923	224,488	232,437	247,579	234,962
Germany	118,665	136,867	129,199	147,738	201,709
Mexico	77,837	98,658	90,683	95,430	181,765
All other markets	2,207,670	2,456,678	2,164,646	2,023,444	2,663,190
All markets	5,107,584	5,551,975	4,486,492	4,225,708	5,897,268

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 4412.10, 4412.31, 4412.32, 4412.33, 4412.34, 4412.39, 4412.51, 4412.52, 4412.59, 4412.91, 4412.94, and 4412.99, accessed January 6, 2023. These data may be overstated, as these HS subheadings contain products outside the scope of these reviews.

Note: Because of rounding, figures may not add to totals shown.

Note: Only values are shown for GTA export data throughout this report for comparability purposes, as multiple countries report quantity in different units of measure.

## Third-country trade actions

Table I-9 presents information on third-country antidumping duty orders on plywood and wood flooring products from China. The European Union ("EU"), Turkey, Morocco, and South Korea have all extended either ad valorem or specific duty rates on various forms of plywood from China, with South Korea most recently imposing a second antidumping duty order on coniferous wood plywood from China.<sup>52</sup>

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<sup>52</sup> In 2020, Canada initiated antidumping and countervailing duty investigations with respect to imports of certain decorative and other non-structural plywood from China, with the Canadian International Trade Tribunal making a negative injury determination in 2021. Decorative and Other Non-structural Plywood, Case number NQ-2020-002, <https://decisions.citt-tcce.gc.ca/citt-tcce/a/en/item/492972/index.do>, retrieved on February 16, 2023.

Table I-9

**Plywood and wood flooring products: Third-country orders on subject countries**

Subject country	Country imposing orders	Product description	Imposition date	Duty rates
China	South Korea	Coniferous wood plywood	March 3, 2016, last extended November 6, 2020	5.33 percent to 7.15 percent; Other 7.15 percent
China	South Korea	Plywood	October 18, 2013, last extended November 6, 2020	3.98 percent to 27.21 percent; Other 17.48 percent
China	Morocco	Plywood	June 6, 2012, last extended July 27, 2018	25 percent
China	Turkey	Plywood consisting solely of sheets of wood, each ply not exceeding 6 mm thickness	October 20, 2006, last extended on May 22, 2018	\$140/m <sup>3</sup>
China	European Union	Okoumé plywood	November 12, 2004	6.5 percent to 23.5 percent; All others 66.7 percent

Source: World Trade Organization (“WTO”), Semi-Annual Report under Article 16.4 of the Agreement: Republic of Korea, G/ADP/N/370/KOR, October 14, 2022, p. 5, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N370KOR.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: Republic of Korea, G/ADP/N/350/KOR, April 22, 2021, p. 4, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N350KOR.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: Morocco, G/ADP/N/370/MAR, August 24, 2022, p. 6, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N370MAR.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: Morocco, G/ADP/N/314/MAR, September 25, 2018, p. 3, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N314MAR.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: Turkey, G/ADP/N/370/TUR, October 4, 2022, p. 18, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N370TUR.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: Turkey, G/ADP/N/314/TUR, September 18, 2018, p. 6, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N314TUR.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: European Union, G/ADP/N/370/EU, October 5, 2022, p. 11, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N370EU.pdf&Open=True>, retrieved January 13, 2023; WTO, Semi-Annual Report under Article 16.4 of the Agreement: European Union, G/ADP/N/216/EEC, October 14, 2011, p. 8, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/G/ADP/N216EEC.pdf&Open=True>, retrieved January 13, 2023.

Note: On October 28, 2016, Turkey extended its antidumping duty orders on plywood from China to Bulgaria and Vietnam due to circumvention.

## The global market

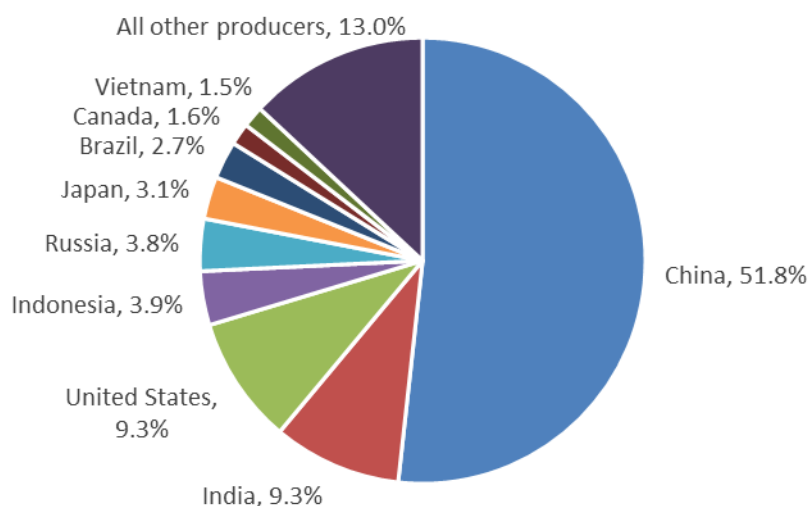
China has remained the world's largest producer and exporter of plywood and wood flooring products since the original investigations. The Food and Agricultural Organization ("FAO") provides annual production data for plywood, which can include products other than hardwood plywood, such as structural plywood and multilayered wood flooring. In 2019, global production of plywood totaled 3.79 billion cubic feet, a decline from the 3.95 billion cubic feet of plywood produced in 2015. Figure I-1 displays plywood production by major countries in 2019. Over the reporting period, plywood producers increasingly adopted new production and automation methods to reduce costs (including rising labor costs) and generally enhance productivity.<sup>53</sup> Relative to 2015 data, China has lost close to a quarter of its global share of plywood production, while India has quickly increased its market share as a major plywood producer. The market growth in India is partially attributed to government housing initiatives fueling demand for new construction, along with increasing consumer spending power leading to residential and commercial renovations in the country.<sup>54</sup>

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<sup>53</sup> The Business Research Company, Cision PR Newswire, "Companies in the Plywood Market," November 1, 2022, <https://www.prnewswire.com/news-releases/companies-in-the-plywood-market-are-integrating-automation-and-robotics-into-their-operations-to-enhance-productivity-301663215.html>, retrieved January 19, 2023.

<sup>54</sup> Anderson, Elena, EIN Presswire, "Indian Plywood Markets," September 23, 2022, [https://www.einnews.com/pr\\_news/592390284/indian-plywood-market-is-projected-to-reach-inr-297-2-billion-by-2027-propelled-by-increasing-demand-for-furniture](https://www.einnews.com/pr_news/592390284/indian-plywood-market-is-projected-to-reach-inr-297-2-billion-by-2027-propelled-by-increasing-demand-for-furniture), retrieved January 19, 2023.

**Figure I-1: Plywood production by major country, 2019**



Source: Food and Agriculture Organization of the United Nations, *FAO Yearbook, Forest Products*, 2019, pp. 214-216, <https://www.fao.org/3/cb3795m/cb3795m.pdf>, retrieved January 19, 2023.

Table I-10 presents global export value data for plywood and wood flooring products, a category that includes hardwood plywood and out-of-scope products, (by source in descending order of value for 2021). Global export value in plywood and wood flooring products increased by 35.3 percent from 2017 to 2021. Increased demand from downstream industries including building construction, furniture manufacturing, and ship building contributes to this export value growth, with a sharp rise in 2021 global export value associated with increased spending downstream in residential and commercial construction following the COVID-19 pandemic.<sup>55</sup>

Leading exporters China (28.5 percent), Indonesia (12.2 percent), and Russia (9.4 percent) accounted for just over half of global export value in 2021. Brazil and Vietnam rounded out the top five in export value in 2021, increasing their global export value by 95 percent and 190 percent over the reporting period, respectively.<sup>56</sup> The United States exported \$370.2 million in plywood and wood flooring products in 2021, roughly 1.8 percent of global export value.

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<sup>55</sup> Anderson, Elena, EIN Presswire, "Indian Plywood Markets," September 23, 2022, [https://www.einnews.com/pr\\_news/592390284/indian-plywood-market-is-projected-to-reach-inr-297-2-billion-by-2027-propelled-by-increasing-demand-for-furniture](https://www.einnews.com/pr_news/592390284/indian-plywood-market-is-projected-to-reach-inr-297-2-billion-by-2027-propelled-by-increasing-demand-for-furniture), retrieved January 19, 2023.

<sup>56</sup> As noted earlier, Commerce preliminarily determined in July 2022 that certain hardwood plywood and veneered panel products exported from Vietnam, which were assembled in Vietnam using hardwood plywood inputs sourced from China, are products of China. Under the preliminary determination, these products are subject to the antidumping and countervailing duty orders on hardwood plywood from China and are circumventing those orders. 87 FR 45753, July 29, 2022.

Industry analysts note that the wood-based paneling market is experiencing a shift in market opportunities from developed economies toward developing economies as developing economies experience increasing urbanization and relative rises in disposable income for residential consumption in downstream industries.<sup>57</sup> There may be a lag in this trend appearing in data for global exports, as domestic demand in the developing economies of major plywood producing countries outpaces increased production in the short term.

**Table I-10**  
**Plywood and wood flooring products: Value of global exports by country and period**

Value in 1,000 dollars

Exporting country	2017	2018	2019	2020	2021
China	5,107,584	5,551,975	4,486,492	4,225,708	5,897,268
Indonesia	1,751,349	2,059,602	1,690,804	1,744,322	2,517,816
Russia	1,102,233	1,352,652	1,137,830	1,154,108	1,934,423
Brazil	620,581	774,693	550,543	645,648	1,210,558
Vietnam	383,655	665,269	676,020	714,469	1,113,433
Malaysia	1,067,991	1,132,155	822,099	677,333	790,582
Finland	657,591	683,014	584,630	524,720	663,223
Canada	356,595	384,340	365,266	369,057	520,764
Chile	310,779	440,561	353,528	354,601	430,611
Germany	309,995	333,343	297,998	289,053	386,868
All other exporters	3,607,239	4,083,844	3,816,431	3,805,453	5,201,237
All exporters	15,275,592	17,461,447	14,781,642	14,504,472	20,666,784

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 4412.10, 4412.31, 4412.32, 4412.33, 4412.34, 4412.39, 4412.51, 4412.52, 4412.59, 4412.91, 4412.94, and 4412.99, accessed January 6, 2023. These data may be overstated, as these HS subheadings contain products outside the scope of these reviews.

Note: Because of rounding, figures may not add to total shown.

Note: Only values are shown, as multiple countries report quantity in different units of measure.

Table I-11 presents export value data for plywood and wood flooring products, a category that includes hardwood plywood and out-of-scope products, from the second leading global exporter, Indonesia (by export destination in descending order of quantity for 2021). The top three destination markets were the United States (35.0 percent), Japan (25.8 percent), and South Korea (12.8 percent), which collectively accounted for 73.6 percent of global export value

<sup>57</sup> Forth, Karl, Woodworking Network, "Global Wood-based Panel Market Growth Slows," May 2, 2018, <https://www.woodworkingnetwork.com/news/woodworking-industry-news/global-wood-based-panel-market-growth-slows>, retrieved January 19, 2023.

for Indonesia in 2021. Notably, the export value to the United States has increased more than fourfold from 2017 to 2021. Meanwhile, the total global export value of plywood and wood flooring products from Indonesia increased by 43.8 percent over the reporting period. Some industry analysts attribute the growth in wood products exports—particularly to the United States—to the development of Indonesia’s Legality and Sustainability Verification System (“SVLK”), which has garnered international recognition as the only certification process accepted as equivalent to the European Union’s FLEGT licensing.<sup>58</sup>

**Table I-11**  
**Plywood and wood flooring products: Value of exports from Indonesia, by destination and period**

Value in 1,000 dollars

Destination market	2017	2018	2019	2020	2021
United States	204,692	356,857	249,253	422,798	881,306
Japan	576,724	735,430	570,857	473,824	650,066
Korea, South	236,074	290,537	251,654	256,069	323,471
Malaysia	72,152	95,750	92,107	65,185	121,261
Australia	44,466	52,250	43,400	44,424	61,336
Taiwan	62,228	54,247	66,892	74,465	58,381
United Kingdom	37,705	48,889	38,364	24,419	56,619
Saudi Arabia	67,936	63,588	66,273	87,022	45,718
Singapore	38,696	45,669	36,064	25,355	44,516
India	31,025	38,108	31,245	21,839	30,782
All other markets	379,651	278,277	244,696	248,922	244,359
All markets	1,751,349	2,059,602	1,690,804	1,744,322	2,517,816

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 4412.10, 4412.31, 4412.32, 4412.33, 4412.34, 4412.39, 4412.51, 4412.52, 4412.59, 4412.91, 4412.94, and 4412.99, accessed January 6, 2023. These data may be overstated, as these HS subheadings contain products outside the scope of these reviews.

Note: Because of rounding, figures may not add to total shown.

Note: Only values are shown, as multiple countries report quantity in different units of measure.

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<sup>58</sup> Salim, Gunawan, World of Wood Annual Convention, “Exports of Indonesian Plywood to the North American Market under Indonesia’s SVLK Legality Certification Program,” April 5-7, 2017, [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi7vNC089P8AhVKKFkFHeluDUQFnoECCcQAQ&url=https%3A%2F%2Fcdn.ymaws.com%2Fwww.iwpawo.org%2Fresource%2Fresmgr%2Fwow2017%2FPresentations%2F1500A\\_APKINDO\\_-\\_IWPA\\_2017\\_-\\_pdf&usg=AOvVaw2DWQ3alZkuZVan5bQ-CvHl](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi7vNC089P8AhVKKFkFHeluDUQFnoECCcQAQ&url=https%3A%2F%2Fcdn.ymaws.com%2Fwww.iwpawo.org%2Fresource%2Fresmgr%2Fwow2017%2FPresentations%2F1500A_APKINDO_-_IWPA_2017_-_pdf&usg=AOvVaw2DWQ3alZkuZVan5bQ-CvHl), retrieved January 19, 2023.





**APPENDIX A**  
**FEDERAL REGISTER NOTICES**



The Commission makes available notices relevant to its investigations and reviews on its website, [www.usitc.gov](http://www.usitc.gov). In addition, the following tabulation presents, in chronological order, Federal Register notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
87 FR 73757, December 1, 2022	<i>Initiation of Five-Year (Sunset) Reviews</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2022-12-01/pdf/2022-26154.pdf">https://www.govinfo.gov/content/pkg/FR-2022-12-01/pdf/2022-26154.pdf</a>
87 FR 73792, December 1, 2022	<i>Hardwood Plywood From China; Institution of Five-Year Reviews</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2022-12-01/pdf/2022-26047.pdf">https://www.govinfo.gov/content/pkg/FR-2022-12-01/pdf/2022-26047.pdf</a>



**APPENDIX B**  
**COMPANY-SPECIFIC DATA**



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**APPENDIX C**  
**SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS**



Table C-1

**Hardwood plywood: Summary data concerning the U.S. market, 2014-16, January to June 2016, and January to June 2017**

(Quantity=1,000 square feet; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per square foot; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	2014	Calendar year 2015	2016	January to June 2016	January to June 2017	2014-16	Calendar year 2014-15	2015-16	Jan-Jun 2016-17
<b>U.S. consumption quantity:</b>									
Amount.....	3,338,720	3,529,146	3,763,007	1,984,695	1,998,407	12.7	5.7	6.6	0.7
Producers' share (fn1).....	21.0	19.3	17.3	17.0	16.5	(3.7)	(1.7)	(2.0)	(0.5)
Importers' share (fn1):									
China.....	37.9	39.2	40.1	37.9	36.7	2.2	1.3	0.9	(1.2)
Nonsubject sources.....	41.1	41.5	42.6	45.1	46.7	1.5	0.4	1.0	1.7
All import sources.....	79.0	80.7	82.7	83.0	83.5	3.7	1.7	2.0	0.5
<b>U.S. consumption value:</b>									
Amount.....	1,953,524	2,016,893	2,025,340	1,063,448	1,076,692	3.7	3.2	0.4	1.2
Producers' share (fn1).....	43.6	41.1	39.1	38.8	37.4	(4.6)	(2.5)	(2.0)	(1.4)
Importers' share (fn1):									
China.....	31.5	34.1	35.3	34.3	35.7	3.8	2.6	1.2	1.4
Nonsubject sources.....	24.8	24.8	25.6	26.9	26.9	0.8	(0.0)	0.8	(0.0)
All import sources.....	56.4	58.9	60.9	61.2	62.6	4.6	2.5	2.0	1.4
<b>U.S. importers' U.S. shipment from:</b>									
China:									
Quantity.....	1,265,296	1,382,815	1,509,584	753,078	734,088	19.3	9.3	9.2	(2.5)
Value.....	615,915	687,950	715,708	364,734	384,238	16.2	11.7	4.0	5.3
Unit value.....	\$0.49	\$0.50	\$0.47	\$0.48	\$0.52	(2.6)	2.2	(4.7)	8.1
Ending inventory quantity.....	377,297	456,457	416,288	355,149	480,086	10.3	21.0	(8.8)	35.2
Nonsubject sources:									
Quantity.....	1,372,668	1,466,287	1,601,865	894,226	934,002	16.7	6.8	9.2	4.4
Value.....	485,314	500,088	518,699	286,387	289,573	6.9	3.0	3.7	1.1
Unit value.....	\$0.35	\$0.34	\$0.32	\$0.32	\$0.31	(8.4)	(3.5)	(5.1)	(3.2)
Ending inventory quantity.....	318,312	533,570	467,001	454,695	423,227	46.7	67.6	(12.5)	(6.9)
All import sources:									
Quantity.....	2,637,964	2,849,102	3,111,449	1,647,304	1,668,090	17.9	8.0	9.2	1.3
Value.....	1,101,229	1,188,038	1,234,407	651,121	673,811	12.1	7.9	3.9	3.5
Unit value.....	\$0.42	\$0.42	\$0.40	\$0.40	\$0.40	(5.0)	(0.1)	(4.9)	2.2
Ending inventory quantity.....	695,609	990,027	883,289	809,844	903,313	27.0	42.3	(10.8)	11.5
<b>U.S. producers:</b>									
Average capacity quantity.....	1,435,359	1,433,299	1,428,894	715,502	718,663	(0.5)	(0.1)	(0.3)	0.4
Production quantity.....	723,513	692,094	660,502	346,992	336,866	(8.7)	(4.3)	(4.6)	(2.9)
Capacity utilization (fn1).....	50.4	48.3	46.2	48.5	46.9	(4.2)	(2.1)	(2.1)	(1.6)
<b>U.S. shipments:</b>									
Quantity.....	700,756	680,044	651,558	337,391	330,317	(7.0)	(3.0)	(4.2)	(2.1)
Value.....	852,295	828,855	790,933	412,327	402,881	(7.2)	(2.8)	(4.6)	(2.3)
Unit value.....	\$1.22	\$1.22	\$1.21	\$1.22	\$1.22	(0.2)	0.2	(0.4)	(0.2)
<b>Export shipments:</b>									
Quantity.....	17,420	12,824	10,651	5,468	5,278	(38.9)	(26.4)	(16.9)	(3.5)
Value.....	21,760	15,751	13,217	6,730	6,888	(39.3)	(27.6)	(16.1)	2.3
Unit value.....	\$1.25	\$1.23	\$1.24	\$1.23	\$1.31	(0.7)	(1.7)	1.0	6.0
Ending inventory quantity.....	42,388	41,614	39,907	45,747	41,178	(5.9)	(1.8)	(4.1)	(10.0)
Inventories/total shipments (fn1).....	5.9	6.0	6.0	6.7	6.1	0.1	0.1	0.0	(0.5)
Production workers.....	2,430	2,368	2,294	2,311	2,264	(5.6)	(2.6)	(3.1)	(2.0)
Hours worked (1,000s).....	4,874	5,037	4,648	2,316	2,331	(4.6)	3.3	(7.7)	0.6
Wages paid (\$1,000).....	94,076	99,561	97,464	47,313	49,553	3.6	5.8	(2.1)	4.7
Hourly wages (dollars).....	\$19.30	\$19.77	\$20.97	\$20.43	\$21.26	8.6	2.4	6.1	4.1
Productivity (square feet per hour) (fn3).....	138.9	128.7	133.2	140.0	136.1	(4.1)	(7.4)	3.5	(2.8)
Unit labor costs (fn3).....	\$0.14	\$0.15	\$0.16	\$0.15	\$0.16	13.3	10.5	2.5	7.1
<b>Net sales:</b>									
Quantity.....	671,730	650,301	620,049	320,085	315,796	(7.7)	(3.2)	(4.7)	(1.3)
Value.....	812,565	788,737	748,961	388,534	383,495	(7.8)	(2.9)	(5.0)	(1.3)
Unit value.....	\$1.21	\$1.21	\$1.21	\$1.21	\$1.21	(0.1)	0.3	(0.4)	0.0
Cost of goods sold (COGS).....	716,501	708,517	682,100	347,652	348,578	(4.8)	(1.1)	(3.7)	0.3
Gross profit or (loss).....	96,064	80,220	66,861	40,882	34,917	(30.4)	(16.5)	(16.7)	(14.6)
SG&A expenses.....	62,603	61,490	61,503	31,390	30,784	(1.8)	(1.8)	0.0	(1.9)
Operating income or (loss).....	33,461	18,730	5,358	9,492	4,133	(84.0)	(44.0)	(71.4)	(56.5)
Net income or (loss).....	31,629	15,549	4,957	8,760	3,590	(84.3)	(50.8)	(68.1)	(59.0)
Capital expenditures.....	15,158	21,853	16,536	9,515	4,613	9.1	44.2	(24.3)	(51.5)
Unit COGS.....	\$1.07	\$1.09	\$1.10	\$1.09	\$1.10	3.1	2.1	1.0	1.6
Unit SG&A expenses.....	\$0.09	\$0.09	\$0.10	\$0.10	\$0.10	6.4	1.5	4.9	(0.6)
Unit operating income or (loss).....	\$0.05	\$0.03	\$0.01	\$0.03	\$0.01	(82.7)	(42.2)	(70.0)	(55.9)
Unit net income or (loss).....	\$0.05	\$0.02	\$0.01	\$0.03	\$0.01	(83.0)	(49.2)	(66.6)	(58.5)
COGS/sales (fn1).....	88.2	89.8	91.1	89.5	90.9	2.9	1.7	1.2	1.4
Operating income or (loss)/sales (fn1).....	4.1	2.4	0.7	2.4	1.1	(3.4)	(1.7)	(1.7)	(1.4)
Net income or (loss)/sales (fn1).....	3.9	2.0	0.7	2.3	0.9	(3.2)	(1.9)	(1.3)	(1.3)

**Notes:**

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Undefined.

fn3.--These ratios are based on production excluding \*\*\* which did not provide employment data.

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

