Hardwood Plywood from China

Investigation Nos. 701-TA-490 and 731-TA-1204 (Final)

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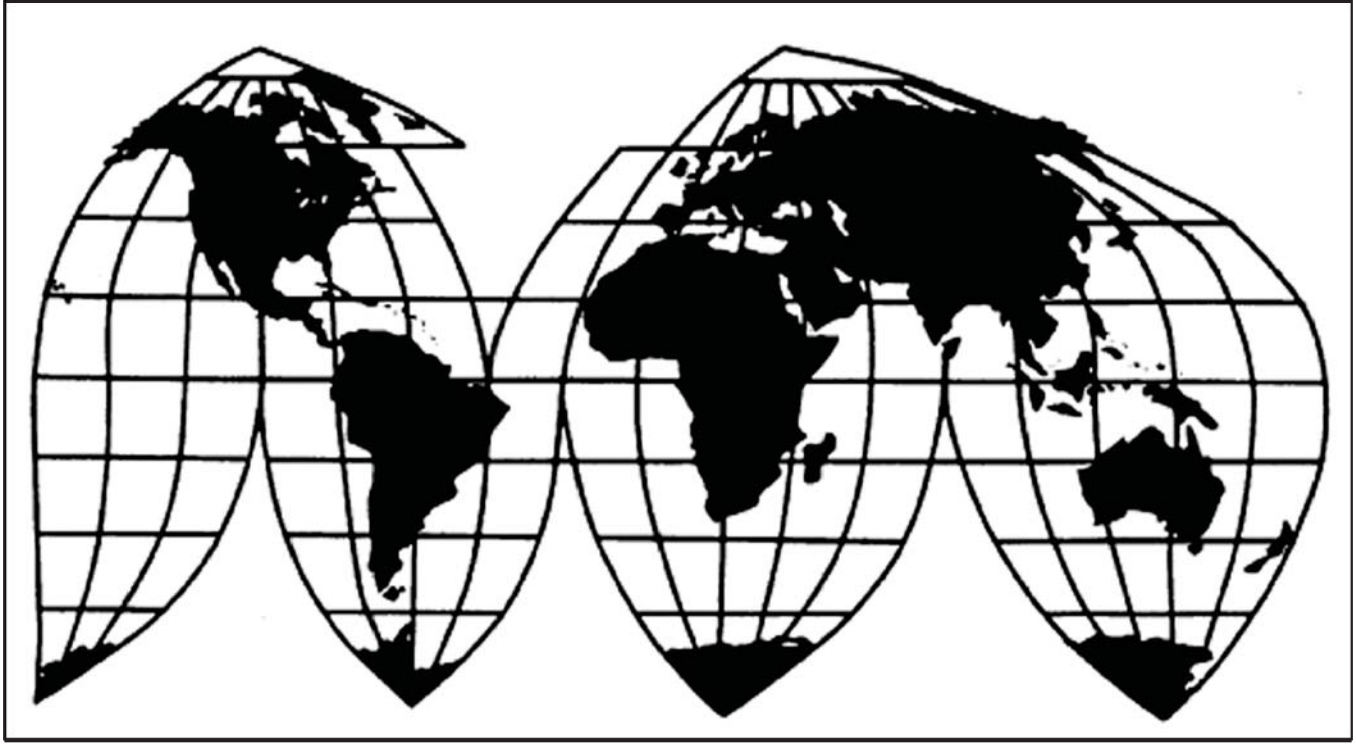
U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-490 and 731-TA-1204 (Final)

HARDWOOD PLYWOOD FROM CHINA

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to sections 705(b) and 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b)) and (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is not materially injured or threatened with material injury, and the establishment of an industry in the United States is not materially retarded, by reason of imports of hardwood plywood from China provided for in subheading(s) 4412.10; 4412.31; 4412.32; 4412.39; 4412.94; and 4412.99 of the Harmonized Tariff Schedule of the United States, that the U.S. Department of Commerce has determined are subsidized and sold in the United States at less than fair value ("LTFV").[2]

BACKGROUND

The Commission instituted these investigations effective September 27, 2012, following receipt of a petition filed with the Commission and Commerce by Columbia Forest Products, Greensboro, NC; Commonwealth Plywood Co., Ltd., Whitehall, NY; Murphy Plywood, Eugene, OR; Roseburg Forest Products Co., Roseburg, OR; States Industries LLC, Eugene, OR; and Timber Products Company, Springfield, OR combined as The Coalition for Fair Trade of Hardwood Plywood. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of hardwood plywood from China were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. § 1671b(b)) and dumped within the meaning of 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on June 19, 2013 (78 FR 36791). The hearing was held in Washington,

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

[2] Chairman Irving A. Williamson and Commissioners Shara L. Aranoff, Dean A. Pinkert, David S. Johanson, and Meredith M. Broadbent voted in the negative. Commissioner F. Scott Kieff did not participate in these investigations.

DC, on September 19, 2013, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the final phase of these investigations, we find that an industry in the United States is neither materially injured nor threatened with material injury by reason of imports of hardwood and decorative plywood ("hardwood plywood") from China found by the U.S. Department of Commerce ("Commerce") to be subsidized and sold in the United States at less than fair value.[1]

I. Background

Parties to the Investigations. The petitions in these investigations were filed on September 27, 2012 by Columbia Forest Products ("Columbia"), Commonwealth Plywood Co., Ltd. ("Commonwealth"), Murphy Plywood ("Murphy"), Roseburg Forest Products Co. ("Roseburg"), States Industries LLC ("States"), and Timber Products Company ("Timber Products"), appearing collectively as the Coalition for Fair Trade of Hardwood Plywood ("CFTHP"). Representatives of CFTHP appeared at the hearing accompanied by counsel, and CFTHP submitted prehearing and posthearing briefs.

Two respondent groups participated in the final phase investigations. Representatives and counsel for China National Forest Products Industry Association and its members ("Chinese Producers' Association"), Chinese producers and exporters of the subject merchandise, appeared at the hearing and submitted prehearing and posthearing briefs, as did representatives and counsel for the American Alliance for Hardwood Plywood ("AAHP"), a coalition of importers of hardwood plywood.

Data Coverage. U.S. industry data are based on questionnaire responses from eight domestic producers that accounted for nearly all U.S. production of hardwood plywood in 2012.[2] U.S. import data are based on official Commerce import statistics and from questionnaire responses of 42 U.S. importers of hardwood plywood from China over the period of investigation, which encompasses the period January 1, 2010 through June 30, 2013.[3] These 42 importers accounted for nearly 70 percent of subject imports from China in 2012.[4] The

[1] Commissioner Kieff did not participate in these investigations.

[2] Confidential Staff Report ("CR") and Public Staff Report ("PR") at Table III-1.

[3] Petitioners argued that the Commission should use official statistics in its analysis, while respondents argued that the Commission should use questionnaire data. The relevant subheadings from official Census data consist largely of subject product, although some nonsubject imports are also included. However, we find that the questionnaire data cover too low a share of imports to be as reliable as the official statistics. Thus, we find that official Census data are more comprehensive and rely on those data in our analysis. We note, however, that even if we had relied on the questionnaire data, we would have made the same findings and reached the same conclusions as we have using the official statistics.

[4] CR/PR at IV-1.

Commission also received questionnaire responses from 89 foreign producers that accounted for approximately 52.4 percent of U.S. imports of hardwood plywood from China in 2012.[5]

II. Domestic Like Product

A. In General

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

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[9] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[10] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[11] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or

[5] CR at VII-3, PR at VII-3.

[6] 19 U.S.C. § 1677(4)(A).

[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(10).

[9] See, e.g., Cleo Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

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

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

sold at less than fair value,[12] the Commission determines what domestic product is like the imported articles Commerce has identified.[13]

B. Product Description

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

> ***ardwood and decorative plywood. Hardwood and decorative plywood is a flat panel composed of an assembly of two or more layers or plies of wood veneers in combination with a core. The veneers, along with the core, are glued or otherwise bonded together to form a finished product. A hardwood and decorative plywood panel must have face and back veneers which are composed of one or more species of hardwoods, softwoods, or bamboo. Hardwood and decorative plywood may include products that meet the American National Standard for Hardwood and Decorative Plywood, ANSI/HPVA HP-1-2009.
>
> All hardwood and decorative plywood is included within the scope of ***, 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).
>
> A "veneer" is a thin slice of wood which is rotary cut, sliced or sawed from a log, bolt or flitch. The face veneer is the exposed veneer of a hardwood and decorative plywood product which is of a superior grade than that of the back veneer, which is the other exposed veneer of the product (i.e., as opposed to the inner veneers). When the two exposed veneers are of equal grade, either one can be considered the face or back veneer. For products that are entirely composed of veneer,

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[12] *See*, *e.g., USEC, Inc. v. United States*, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[13] *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations in which Commerce found five classes or kinds).

such as Veneer Core Platforms, the exposed veneers are to be considered the face and back veneers, in accordance with the descriptions above.

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 veneers, particleboard, and medium-density fiberboard ("MDF").

All hardwood and decorative plywood is included within the scope of *** regardless of whether or not the face and/or back veneers are surface coated, unless the surface coating obscures the grain, texture or markings of the wood. Examples of surface coatings which may not obscure the grain, texture or markings of the wood include, but are not limited to, ultra-violet light cured polyurethanes, oil or oil-modified or water based polyurethanes, wax, epoxy-ester finishes, and moisture-cured urethanes. Hardwood and decorative plywood that has face and/or back veneers which have an opaque surface coating which obscures the grain, texture or markings of the wood, are not included within the scope of ***.
Examples of surface coatings which may obscure the grain, texture or markings of wood include, but are not limited to, paper, aluminum, high pressure laminate ("HPL"), MDF, medium density overlay ("MDO"), and phenolic film). Additionally, the face veneer of hardwood and decorative plywood may be sanded, smoothed or given a "distressed" appearance through such methods as hand-scraping or wire brushing. The face veneer may be stained.

The scope of the investigation excludes the following items:
(1) Structural plywood (also known as "industrial plywood" or "industrial panels") that is manufactured and stamped to meet U.S. Products Standard PS 1-09 for Structural Plywood (including any revisions to that standard or any substantially equivalent international standard intended for structural plywood), including but not limited to the "bond performance" requirements set forth at paragraph 5.8.6.4 of that Standard and the performance criteria detailed at Table 4 through 10 of that Standard; (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, U.S. Department of Commerce Investigation Nos. A-570-970 and C-570-971 (published December 8, 2011),and additionally, multilayered wood flooring with a face veneer of bamboo or composed entirely of bamboo;

(4) plywood which has a shape or design other than a flat panel;
(5) products made entirely from bamboo and adhesives (also known as "solid bamboo").[14]

The scope in the final phase of these investigations is virtually identical to the scope in the preliminary phase of the investigations, with the addition of bamboo to exclusion (3), the simplification of exclusion (4), and the addition of exclusion (5).[15]

Hardwood plywood is a wood panel product made by gluing two or more layers of wood veneer to a core that may itself be composed of veneers or other types of wood material such as medium density fiberboard ("MDF"), particleboard, lumber, or oriented strand board ("OSB"). 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. Numerous hardwood species are used in hardwood plywood manufacture, including oak, birch, maple, poplar, and cherry. However, hardwood plywood within the scope of investigation includes plywood that may have a face veneer and/or other layers of veneer of softwood species. The distinguishing characteristic of hardwood plywood products is that they are used in interior and non-structural applications.[16]

Hardwood plywood is manufactured in a variety of thicknesses, with the most common ranging from ⅛ inch (3.2 mm) to 1 inch (25 mm), depending upon customer requirements and the intended end use. The most common panel dimensions are 4 feet by 8 feet (1219 x 1829 mm), but hardwood plywood is sold in smaller and larger sheet sizes.[17]

Hardwood plywood is commonly used in 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. Hardwood plywood is also used in some construction-related applications where structural strength and moisture resistance are not required, such as for providing a flat, stable underlayment for a finished flooring product.[18]

Hardwood plywood products are differentiated by species, quality of veneer, 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 such things as the 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 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").

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[14] 78 Fed. Reg. 58273, 58283 (Sept. 23, 2013).

[15] *See Hardwood Plywood from the People's Republic of China*, Inv. Nos. 701-TA-490 and 731-TA-1204 (Preliminary), USITC Pub. 4361 (Nov. 2012), at 4-5 ("Preliminary Determination").

[16] CR at I-10 – I-11, PR at I-9 – I-10.

[17] CR at I-11, PR at I-9.

[18] CR at I-11, PR at I-9.

The highest grades of hardwood plywood carry an "AA" or "A" face grade, followed by "B," "C," etc. for products with more knots, blemishes, or other defects. The HPVA standard also assigns numerical grades ranging from 1 to 4 to back veneers and certain other letter grades to internal veneers. However, not all hardwood plywood sold in the United States conforms to the HPVA standard.[19]

C. Domestic Like Product Analysis

In the preliminary determinations, the Commission defined a single domestic like product that was coextensive with the scope. In terms of physical characteristics and end uses, it found that all hardwood plywood consists of two or more layers of wood veneer glued to a core. The outer ply, or face veneer, is made from various hardwood species and is the part of the product that will generally be visible. All hardwood plywood is used in a range of interior applications, most often when exposure to moisture is not an issue.[20]

Regarding interchangeability, the Commission found that the various thicknesses and panel sizes of hardwood plywood are used in interior and non-structural applications. However, individual applications may require specific thicknesses, sizes, and/or grades.[21] In addition, it found that although the core material is typically manufactured separately from the veneers used for the face and/or back plies, all hardwood plywood is manufactured in the same facilities.[22] The Commission found that there are different grades of hardwood plywood, and hardwood plywood products differ according to the species of the hardwood used as well as the quality of the veneer, the type of core, and the type of adhesive used. Consequently, there are some differences in producer and customer perceptions among different hardwood plywood products.[23]

The Commission found that all hardwood plywood is sold in similar channels of distribution, namely to wholesalers or directly to original equipment manufacturers ("OEMs").[24] The Commission found that the price of a hardwood plywood product is a function of the panel size, face species, quality, thickness, and finish (whether stained, distressed, or otherwise treated).[25]

On the basis of the above findings and because no party argued to the contrary, the Commission defined one domestic like product, coextensive with the scope of the investigations, in the preliminary determinations.[26]

For these final phase investigations, petitioners argue that the Commission should again define the domestic like product to be coextensive with the scope.[27] Respondents do not

[19] CR at I-11 – I-12, PR at I-9 – I-10.
[20] Preliminary Determination, USITC Pub. 4361 at 7.
[21] Preliminary Determination, USITC Pub. 4361 at 7.
[22] Preliminary Determination, USITC Pub. 4361 at 7.
[23] Preliminary Determination, USITC Pub. 4361 at 7.
[24] Preliminary Determination, USITC Pub. 4361 at 7.
[25] Preliminary Determination, USITC Pub. 4361 at 7.
[26] Preliminary Determination, USITC Pub. 4361 at 7.
[27] Petitioners' Prehearing Brief at 3-4.

contest this position.[28] The information in the record pertaining to the like product factors is substantially unchanged from that in the preliminary phase.[29] Therefore, for the same reasons discussed in the preliminary determinations, we find one domestic like product that is coextensive with the scope of the investigations.

III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[30] 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.

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[31] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[32]

Two domestic producers imported and several others purchased subject imports from China during the period of investigation. The Commission must consequently determine whether these producers are subject to exclusion from the domestic industry pursuant to the related party provision of the statute and, if so, whether appropriate circumstances exist to exclude any of them.

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[28] Respondents have not addressed the issue of the domestic like product since the preliminary phase of the investigations, when they accepted petitioners' proposed definition. Chinese Producers' Association's Postconference Brief at 2; AAHP's Postconference Brief at 2-3.

[29] *See generally* CR at I-10 – I-20, PR at I-9 – I-15.

[30] 19 U.S.C. § 1677(4)(A).

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

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

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

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

(3) the position of the related producer vis-a-vis the rest of the industry, *i.e*., whether inclusion or exclusion of the related party will skew the data for the rest of the industry. *See*, *e.g*., *Torrington Co. v United States*, 790 F. Supp. at 1168.

We first analyze which domestic producers are subject to potential exclusion from the domestic industry pursuant to the related parties provision. *** and ***, each imported subject merchandise during the period of investigation.[33] Consequently, *** are related parties. We find that the five domestic producers that purchased subject imports are not related parties.[34]

We next examine whether appropriate circumstances exist to exclude *** from the domestic industry.

A. *

*** was the second largest domestic hardwood plywood producer in 2012, accounting for *** percent of domestic production.[35] The ratio of its subject imports to production was *** percent in 2010, *** percent in 2011, and *** percent in 2012; it was *** percent in January-June ("interim") 2012 and *** percent in interim 2013.[36] *** stated that it imported subject imports "due to their low cost."[37] Its operating income margin was higher than that of some of the other producers during the period.[38] [39] [40] In view of *** status as a ***, the fact

[33] CR/PR at Table III-5; Preliminary Determination , USITC Pub. 4361 at 9.

[34] Domestic producers *** purchased subject imports from China, but did not directly import such merchandise. CR/PR at Table III-5. The Commission has previously concluded that a purchaser may be treated as a related party if it controls large volumes of subject imports. The Commission has found such control to exist when the domestic producer was responsible for a predominant proportion of an importer's purchases and these purchases were substantial. *See Foundry Coke from China*, Inv. No. 731-TA-891 (Final), USITC Pub. 3449, at 8-9 (Sept. 2001).

In these investigations, although purchases of subject imports were made in every year of the period by all but one producer, the annual amounts were quite small. In 2012, *** was responsible for the largest amount of subject import purchases, which totaled only *** percent of all subject imports. *Compare* CR/PR at Table III-5 *with* CR/PR at Table IV-1. Each of the purchasers, except ***, is a ***. CR/PR at Table III-1. In view of the fact that none of the producers controls large volumes of subject imports, we find that none of these producers warrants treatment as a related party.

[35] CR/PR at Tables III-1 & III-5.

[36] CR/PR at Table III-5. *** imported *** square feet of subject merchandise in 2010, *** square feet in 2011, *** square feet in 2012, *** square feet in interim 2012, and *** square feet in interim 2013. *Id*.

[37] CR/PR at Table III-5 n.7.

[38] CR/PR at Table VI-2.

[39] Consistent with her practice in past investigations and reviews, Commissioner Aranoff does not rely on individual-company operating income margins, which reflect a domestic producer's financial operations related to production of the domestic like product, in assessing whether a related party has benefitted from importation of subject merchandise. Rather, she determines whether to exclude a related party based principally on its ratio of subject imports to domestic production and whether its primary interests lie in domestic production or importation.

[40] Commissioner Pinkert does not rely upon the importing companies' financial performance as a factor in determining whether there are appropriate circumstances to exclude them from the domestic industry in these investigations. The record is not sufficient to infer from their profitability on (Continued...)

that its domestic production was far larger than its subject imports, and that no party has argued for its exclusion from the domestic industry, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

B. ***

***, which ***, also imported subject merchandise throughout the period.[41] *** ceased production of hardwood plywood in 2011. It stated during the preliminary phase of the investigations that it participated in the market solely as an importer and purchaser after February 2011.[42] The Commission found that circumstances were appropriate to exclude *** from the domestic industry during the preliminary phase.[43]

In the final phase of these investigations, *** did not provide a questionnaire response.[44] As *** status has not changed since the preliminary phase, we again find that appropriate circumstances exist to exclude it as a related party.[45]

Accordingly, in light of the definition of the domestic like product and the foregoing analysis, we define a single domestic industry encompassing all U.S. producers of hardwood plywood, with the exception of ***.

IV. No Material Injury by Reason of Subject Imports

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[46] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[47] The statute defines

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(…Continued)
U.S. operations whether they have derived a specific benefit from importing. *See Allied Mineral Products v. United States,* 28 CIT 1861, 1865-67 (2004).

[41] We note that although petitioners argued that the record does not present appropriate circumstances upon which to exclude any current domestic producer from the domestic industry, they also maintained that the Commission should affirm its prior decision to exclude ***. Petitioners' Prehearing Brief at 8 & n.19.

[42] Petitioners' Postconference Brief at 7-8 n.20.

[43] Preliminary Determination, USITC Pub. 4361 at 9.

[44] CR/PR at III-1 n.1.

[45] We note that, because of its small size and cessation of operation, exclusion of *** from the industry as a related party does not significantly affect the data we rely on in our analysis.

[46] 19 U.S.C. §§ 1671d(b), 1673d(b).

[47] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

"material injury" as "harm which is not inconsequential, immaterial, or unimportant."[48] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[49] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[50]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[51] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[52] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[53]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[54] In performing its examination, however, the Commission need not isolate

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[48] 19 U.S.C. § 1677(7)(A).

[49] 19 U.S.C. § 1677(7)(C)(iii).

[50] 19 U.S.C. § 1677(7)(C)(iii).

[51] 19 U.S.C. §§ 1671d(a), 1673d(a).

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

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

[54] SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-

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the injury caused by other factors from injury caused by unfairly traded imports.[55] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[56] It is clear that the existence of injury caused by other factors does not compel a negative determination.[57]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[58] [59] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[60]

(…Continued)
than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

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

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

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

[58] *Mittal Steel*, 542 F.3d at 877-78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75.

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal Steel* all involved cases where the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[61] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[62] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals, Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant

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[59] Commissioner Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when considering present material injury, to undertake a particular kind of analysis of non-subject imports, albeit without reliance upon presumptions or rigid formulas. *Mittal Steel* explains as follows:

> What *Bratsk* held is that "where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market," the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

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

[61] *Mittal Steel*, 542 F.3d at 875-79.

[62] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[63]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[64] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[65]

B. Conditions of Competition and the Business Cycle[66]

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

1. Demand Considerations

Hardwood plywood is used in a variety of mostly indoor applications, including home remodeling applications such as kitchen cabinets. It is also used for RVs, manufactured homes, new homes, and commercial buildings.[67] The largest market segment for U.S. importers of hardwood plywood, and one of the largest for U.S. producers as well, is cabinetry. Other segments include underlayment, retail/store fixtures, and furniture.[68]

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[63] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in final phase investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in final phase investigations in which there are substantial levels of nonsubject imports.

[64] We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

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

[66] Hardwood plywood imports from subject producers in China accounted for 56.2 percent of total hardwood plywood imports between September 2011 and August 2012. *See* CR at IV-3, PR at IV-2 - IV-3 . Thus, imports from China accounted for more than three percent of the volume of hardwood plywood imported into the United States from all sources in the most recent 12-month period for which data are available preceding the filing of the petition and are therefore not negligible under 19 U.S.C. § 1677(24).

[67] CR/PR at II-1.

[68] CR/PR at Figure II-1. According to U.S. producers, the main segments for their product are retail fixtures (35 percent of shipments), cabinetry (30 percent), architectural work (13 percent), and furniture (10 percent). For importers, the main segments were cabinets (34 percent), underlayment (18 percent), general use (17 percent), furniture (12 percent), and RV/mobile home (12 percent). *Id*.

A little more than half of responding U.S. producers and importers, and just over 40 percent of responding purchasers, indicated that the market for hardwood plywood was subject to business cycles or distinctive conditions of competition, including seasonal demand that varied somewhat by region and by end use product. Several producers noted seasonal trends such as high demand from January to June or July and slower demand during the rest of the year.[69]

Market participants' perception of recent demand trends varied, with most U.S. producers reporting a decrease in U.S. demand since 2010, most importers reporting that demand increased or fluctuated, and most purchasers indicating that demand increased. Firms reporting an increase cited an improving construction and housing market and a slight upturn in the economy, while firms reporting decreased demand cited weak demand in construction and housing as well as low consumer confidence.[70] Market participants generally reported that demand improved in 2013.[71] Available data indicate that remodeling activity in the United States has generally increased since the first quarter of 2011, albeit at varying rates,[72] and that U.S. shipments of manufactured homes and RVs increased from 2010 to 2012.[73]

Apparent U.S. consumption was 3.3 billion square feet in 2010 and 2011 and 3.5 billion square feet in 2012. It was 1.7 billion square feet in interim 2012 and 1.6 billion square feet in interim 2013.[74]

2. Supply Considerations

The domestic industry's share of apparent U.S. consumption rose during the period of investigation. It increased from 17.2 percent in 2010 to 17.8 percent in 2011 and 18.4 percent in 2012; it was 19.1 percent in interim 2012 and 22.7 percent in interim 2013.[75] Four domestic firms accounted for almost 80 percent of 2012 U.S. production of hardwood plywood.[76]

During the period, subject imports supplied a larger portion of the U.S. market than either the domestic industry or nonsubject sources. Subject import market share was 41.9 percent in 2010, 45.8 percent in 2011, and 47.9 percent in 2012; it was 44.2 percent in interim 2012 and 33.2 percent in interim 2013.[77]

Nonsubject sources included Brazil, Chile, Canada, Indonesia, Malaysia, Romania, Russia, Uruguay, and Vietnam.[78] Nonsubject import market share was 40.8 percent in 2010,

[69] CR at II-13, PR at II-9.
[70] CR at II-15, PR at II-10.
[71] *See, e.g.*, Tr. at 127-28 (Mr. Dougan), 162, 165 (Mr. Rogers).
[72] CR/PR at Figure II-2.
[73] CR/PR at Table II-3.
[74] CR/PR at Table IV-3.
[75] CR/PR at Table IV-3.
[76] CR/PR at II-1 & n.1.
[77] CR/PR at Table IV-3.
[78] CR/PR at IV-1, App. F.

36.4 percent in 2011, and 33.7 percent in 2012; it was 36.7 percent in interim 2012 and 44.1 percent in interim 2013.[79]

3. Substitutability

Generally, the basic steps in the manufacturing process are similar for both imported and domestic hardwood plywood. However, the record shows that Chinese manufacturers use thinner face and back veneers that are laid up moist or wet to prevent splitting or breaking prior to being pressed. According to respondents, smaller logs are typically utilized to manufacture veneer for the plywood core, and the quality of veneer is typically lower than for the domestically produced product. The Chinese product is typically manufactured utilizing more labor and less automation, particularly for repairing defects, preparing veneers, and laying up veneer sheets for pressing.[80]

Over one-half of responding U.S. producers indicated that domestic hardwood plywood and the subject imports were always interchangeable, but more than 80 percent of importers and 60 percent of purchasers characterized them as either sometimes or never comparable.[81] More than two-thirds of responding importers and purchasers, but less than one-half of U.S. producers, found that differences other than price between U.S. and Chinese hardwood plywood were always or frequently significant.[82]

Importers and purchasers reported that interchangeability between various sources, including domestic and Chinese hardwood plywood, is limited by factors that include certain lengths and widths not being available domestically; differing characteristics such as wood species, core construction, face and back veneer thicknesses, panel strength, tolerances for moisture content, and glues; differing quality; and availability of product. Some importers and purchasers noted that Chinese product has a thinner face veneer (0.25 mm to 0.35 mm) than domestic product (0.5 mm to 0.75 mm). Some also reported that domestic hardwood plywood consists of high-quality decorative panels whereas imports are typically used for non-decorative uses.[83]

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[79] CR/PR at Table IV-3.

[80] CR at I-15 – I-16, PR at I-12.

[81] CR/PR at Table II-11, CR at II-27, PR at II-17.

[82] CR/PR at Table II-13, CR at II-31, PR at II-21.

[83] CR at II-28 – II-29, PR at II-17. One importer indicated that Chinese material is of adequate quality for certain finishing operations, but that higher-end cabinetry requires thicker face veneer to achieve the required end quality or finish. Another importer reported that hardwood plywood from the United States, Canada, and Russia is of higher quality and is more often interchangeable than is product from other sources and that product from China consistently lacks core quality, leading to panels that warp and crackle when handled and mold after use, contain many holes, and delaminate easily. CR at II-29, PR at II-20. Both parties provided testimony at the hearing regarding various quality differences. *See, e.g.*, Tr. at 91-93 (Mr. Roberts) (buys from domestic producers in order to obtain a quality product for higher end merchandise), 180 (Mr. Simon) (Chinese plywood is covered up), 188 (Mr. Simon) ("Chinese plywood is functional and domestic plywood is beautiful") 188 (Mr. Simon) (quality of veneers

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Depending on the market segment in which hardwood plywood is used, various attributes may be preferable or required. For example, differences in thickness and veneer quality limit substitutability for certain applications. Typically, thicker plywood is used in cabinet fronts and sides, while thinner plywood is used for cabinet backs, drawer bottoms, paneling, and underlayment. In 2012, more of U.S. producers' commercial shipments (58 percent) were reported to be of thicker plywood (at least 16 mm) than were U.S. importers' commercial shipments of subject Chinese imports (21 percent) and Chinese producers' U.S. exports (42 percent). U.S. producers' shipments of thin plywood (less than 6.5 mm) accounted for 21 percent of their total shipments in 2012, as compared to 45 percent of U.S. importers' commercial shipments of subject imports and 33 percent of Chinese producers' U.S. exports to the United States.

Some purchasers indicated that hardwood plywood produced in the United States and hardwood plywood produced in China are often used for different components of the same end product, particularly in cabinets. Subject imports are typically used to produce the interiors, backs, and drawer bottoms of cabinets, while domestic product is used for cabinet fronts and sides. Some purchasers pointed to differences in the core material/quality and/or the thinner veneer face of the subject product as making it more suitable for applications not requiring sanding and finishing or for laminated applications.[84] In 2012, a greater proportion of U.S. producers' product (68.1 percent) was reported to have softwood veneer as the core than was Chinese producers' product (8.3 percent). Only 3.8 percent of U.S. producers' product was reported to use hardwood veneer for the core, while 88.4 percent of the Chinese producers' product was reported to do so.[85] In the same year, 94.8 percent of U.S. producers' shipments had face veneers 0.6 mm and above in thickness, while only 0.4 percent of U.S. importers' and Chinese producers' shipments were of that thickness. Conversely, 83.2 percent of U.S. importers' shipments and 91.5 percent of Chinese producers' shipments had face veneers below 0.4 mm in thickness, while none of the U.S. producers' product was of that thickness.[86]

As the preceding discussion indicates, substitutability between the domestic like product and subject imports is limited because of variations in various product characteristics, resulting in reports by importers and purchasers that the domestic like product and the subject imports are often used for different applications. Indeed, petitioners acknowledge that subject imports are heavily concentrated in less demanding applications in the lower end of the market,[87] and the record does not indicate that subject imports would likely enter the higher end of the market in significant quantities in the imminent future.[88] Nevertheless, there is

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of domestically produced product is superior to Chinese), 298 (Mr. Weaver) (U.S. producers provide better quality UV finish than the Chinese).

[84] CR/PR at App. E, CR at II-35, PR at II-23 – II-24.

[85] CR/PR at Table D-1.

[86] CR/PR at Table D-3.

[87] *See, e.g.*, Petitioners' Posthearing Brief, Responses to Commissioners' Questions at 4; Tr. at 21, 96 (Mr. Thompson), 41 (Mr. Oglesby), 50 (Mr. Awalt), 87 (Mr. Roberts).

[88] We acknowledge that petitioners offered statements that subject imports are moving into higher grades. *See* Petitioners' Posthearing Brief, Exhs. 1 at 1, 8 at 3; Tr. at 96 (Mr. Thompson), 99 (Mr. (Continued...)

some overlap between the domestic like product and the subject imports across many of these product characteristics,[89] as well as some reports from purchasers that the products are used for the same applications.[90] We find that the record indicates, overall, that the domestic like product and the subject imports are moderately substitutable.

4. Other Conditions

Although price is an important factor in purchasing decisions, quality[91] and availability are other top factors.[92] Only six of 40 responding purchasers indicated that price was the most important factor, and seven of 40 responding purchasers indicated that availability was the most important factor.[93]

Raw material costs accounted for nearly 80 percent of U.S. producers' total cost of goods sold ("COGS") from 2010 to 2012. Logging prices increased by 16 percent between January 2010 and August 2013, while hardwood veneer prices decreased by one percent.[94]

U.S. producers and importers reported that increases in raw material prices were the result of various factors, including increases in the prices of logs, MDF, imported platforms, composite core materials, softwood veneers, veneer cores, and resin. Firms reported that rising demand in the United States and abroad for raw materials, including increased demand in China for logs and curtailments in hardwood and softwood veneer availability, contributed to increased raw material prices. Firms also reported increased costs for labor and freight.[95]

Approximately half of responding purchasers require their suppliers to be certified for at least some of their purchases. Certification procedures vary by purchaser, including testing samples, visiting and auditing vendors, and/or relying on industry standards such as the California Air Resource Board ("CARB") certification. Most suppliers reported that completion of certification takes two weeks to four months, although responses ranged up to one year. Eight purchasers reported a supplier failing in its attempt to be certified to supply hardwood plywood since 2010.[96]

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Levin). However, these statements are not supported by the record. *See* CR/PR at Table D-4 (Chinese producers' and U.S. importers' shares of thicker grades of hardwood plywood remained relatively flat over the period of investigation); *see also, e.g.*, AAHP's Posthearing Brief , Exhs. 9 (making "domestic-style" product in China is not cost-effective), 11 (***).

[89] *See* CR/PR at Tables D-1 – D-3.

[90] *See* CR/PR at App. E.

[91] Quality is determined by such factors as strength, thickness, flatness, glue bond, moisture content, veneer thickness, core integrity, appearance, soundness, panel stability, smoothness, telegraphing, grain pattern, and lack of odor, delamination, mold, voids, and warp. CR at II-18, II-20, PR at II-12.

[92] CR/PR at Table II-6.

[93] CR/PR at Table II-6, CR at II-20, PR at II-12.

[94] CR/PR at V-1 & Figure V-1.

[95] CR/PR at V-1.

[96] CR/PR at II-21 – II-22, PR at II-15.

The Lacey Act imposes certain requirements on imports.[97] Six U.S. producers indicated that they have procedures in place to comply with the Lacey Act, and the majority of purchasers indicated that they check to ensure that suppliers are in compliance with the law and that the required import documentation has been filed.[98]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[99]

The volume of subject imports increased from 2010 to 2012, but was lower in interim 2013 than in interim 2012. Subject import volume was 1.4 billion square feet in 2010, 1.5 billion square feet in 2011, and 1.7 billion square feet in 2012; it was 749.5 million square feet in interim 2012 and 535.0 million square feet in interim 2013.[100] The market share of subject imports was 41.9 percent in 2012, 45.8 percent in 2011, and 47.9 percent in 2012; it was 44.2 percent in interim 2012 and 33.2 percent in interim 2013.[101]

Although subject import volume increased from 2010 to 2012, it did so solely at the expense of nonsubject imports. Shipments of the domestic like product rose steadily throughout the period of investigation. They totaled 565.5 million square feet in 2010, 594.7 million square feet in 2011, and 642.2 million square feet in 2012, and were 323.8 million square feet in interim 2012 and 366.2 million square feet in interim 2013.[102] The volume of nonsubject imports, by contrast, declined from 1.3 billion square feet in 2010 to 1.2 billion square feet in 2011 and 2012; it was 623.4 million square feet in interim 2012 and 712.1 million square feet in interim 2013.[103] The market share of the domestic like product rose steadily from 17.2 percent in 2010 to 17.8 percent in 2011 and 18.4 percent in 2012; it was 19.1 percent in interim 2012 and 22.7 percent in interim 2013. In contrast, the market share of nonsubject imports fell from 40.8 percent in 2010 to 36.4 percent in 2011 and 33.7 percent in 2012; it was 36.7 percent in interim 2012 and 44.1 percent in interim 2013. The 7.1 percentage points in market share that nonsubject imports lost from 2010 to 2012 exceeded the 6.0 percentage points in market share that subject imports gained during that period.[104]

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[97] The Lacey Act, 6 U.S.C. §§ 3371-78, prohibits trafficking in "illegal" wildlife, fish, and plants. Among other things, it makes it unlawful to import certain plants and plant products – including wood that may be used in hardwood plywood – without an import declaration, which must be filed by the importer of record. CR at II-22 & n.25, PR at II-15 & n.25; Tr. at 257 (Mr. Grimson). Compliance with the law can be costly. Tr. at 259 (Mr. Dougherty); *see also* Tr. at 71-75 (Mr. Howlett).

[98] CR at II-22, PR at II-15.

[99] 19 U.S.C. § 1677(7)(C)(i).

[100] CR/PR at Table IV-1.

[101] CR/PR at Table IV-3.

[102] CR/PR at Table IV-2.

[103] CR/PR at Table IV-2.

[104] CR/PR at Table IV-3.

In view of the foregoing, we find the volume of subject imports to be significant in absolute terms and relative to consumption in the United States. However, for the reasons we discuss below, we do not find significant adverse price effects or a significant adverse impact on the domestic industry by reason of the subject imports.

D. Price Effects of the Subject Imports

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

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[105]

As previously discussed, while price is an important factor in purchasing decisions, quality and availability are also important. Moreover, as discussed earlier, there are some non-price differences – particularly concerning veneer thickness and core quality – between the domestic like product and the subject imports.

The Commission collected pricing data on six products.[106] Subject imports undersold the domestic like product in 83 of 84 price comparisons, with margins of underselling ranging from 0.9 to 56.5 percent.[107] While we find this underselling to be significant within the meaning of the statute, as discussed below we do not find that subject imports had a significant adverse effect on prices for the domestic like product.

Pricing data do not show a significant correlation between subject import prices and the domestic industry's prices or shipment volumes. Prices for the subject imports trended upward throughout the period of investigation for all six of the products.[108] Prices also increased for most domestically produced products rather than moving downward toward the lower prices of

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[105] 19 U.S.C. § 1677(7)(C)(ii).

[106] The products differed in characteristics such as panel thickness, wood species, and grade. They did not differ in terms of veneer thickness due to the lack of overlap between subject merchandise and the domestic like product in this factor. *See* CR at V-4 – V-5, PR at V-3 – V-4. The petitioners chose all but one of the pricing products for which data were obtained in these investigations. *See* Petition at 40 (products 1-4); Letter from Jeffrey S. Levin to the Honorable Lisa Barton at 4 (May 1, 2013) (product 5). Respondents' proposal for a thin panel pricing product is reflected in the description for pricing product 6. *See* Letter from Jeffrey S. Grimson to the Honorable Lisa R. Barton at 7 (May 1, 2013). Pricing data accounted for seven percent of U.S. producers' shipments of hardwood plywood and 16 percent of U.S. shipments of subject imports from January 2010 through June 2013. CR at V-5, PR at V-4.

[107] CR at V-18, PR at V-11.

[108] *See* CR/PR at Tables V -3 – V-8.

subject imports.[109] Domestic prices increased from January-March 2010 to April-June 2013 for pricing products 1, 3, and 4 by 3.0 percent, 11.9 percent, and *** percent, respectively.[110] The price for product 2 was *** in April-June 2013 as in January-March 2010 (it was 1.2 percent lower).[111] For product 5, the price fluctuated, ending 4.0 percent lower in April-June 2013 compared to January-March 2010.[112] The price for product 6 fluctuated as well, ending 16.4 percent lower in April-June 2013 compared to January-March 2010.[113]

We note petitioners' argument that, because of subject import competition, they had to lower prices for lower-grade products, while at the same time raising prices for higher-grade product for which there was less subject import competition.[114] However, the pricing data show that during the period of investigation the domestic industry was able to raise prices for products 1 and 3, which are lower-grade products that accounted for the largest volumes of domestic product among the pricing products, despite substantial volumes of subject imports of those products at lower prices.[115] The domestic industry was also able to raise prices for product 4, a higher-grade product, but here, too, there was substantial subject import volume.[116] Only one of the six responding U.S. producers reported having to roll back announced price increases.[117] Thus, we do not find that the record shows that prices have been depressed to a significant degree by subject imports.

Additionally, the underselling did not cause a shift in volume from the domestic like product to the subject imports. To the contrary, for most of the pricing products, quarterly shipments of domestically produced hardwood plywood were greater in 2012 when total subject import volume was at its peak, than in 2010.[118] We also note that despite the prevalent underselling over the period of investigation, the domestic industry did not lose market share. Rather, as discussed above, the domestic industry's share of apparent U.S. consumption

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[109] *See* CR/PR at Tables V-3 – V-8.

[110] *See* CR/PR at Tables V-3, V-5 & V-6.

[111] The price was $1.07 per square foot in January-March 2010 and $*** per square foot in April-June 2013. CR/PR at Table V-5.

[112] CR/PR at Table V-7.

[113] CR/PR at Table V-8.

[114] Domestic Producers' Posthearing Brief, Responses to Commissioner Questions at 17-18. *Compare* CR/PR at Table V-6 (higher-grade product 4) *with* CR/PR at Table V-8 (lower-grade product 6). Product 4 is a Grade B product. CR/PR at Table V-6 n.1. *See also* Tr. at 42 (Mr. Oglesby) (domestic industry has to charge more for Grade A and B products because of subject import competition in Grade C and D products). Despite the fact that domestic producers raised prices in product 4, the volume of that product sold by domestic producers remained relatively constant. This evidence contradicts petitioners' theory that injury was experienced by the domestic industry in the higher grades. Tr. at 94-95 (Mr. Thompson) (stating that because domestic producers had to raise their prices in the higher grades "to an exorbitant amount," that "people won't buy it.").

[115] CR/PR at Tables V-3 & V-5. While there were declines in prices in some quarters for these products, there were also many consecutive quarters for which prices remained effectively stable despite subject imports.

[116] CR/PR at Table V-6.

[117] CR at V-21, PR at V-13.

[118] CR/PR at Tables V-3, V-4, V-5, V-7 & V-8.

increased steadily throughout the period of investigation while lower-priced subject imports also gained market share.[119] To the extent that subject imports gained market share, they did so at the expense of nonsubject imports and without depressing domestic prices.[120]

We also do not find that subject imports have prevented price increases to a significant degree. The domestic industry's COGS/net sales ratio was generally flat throughout most of the period of investigation, but improved in interim 2013 as compared to interim 2012. It was 90.1 percent in 2010, 90.6 percent in 2011 and 90.7 percent in 2012. It was 90.6 percent in interim 2012 and 88.8 percent in interim 2013.[121] Thus, domestic producers were able to raise prices consistent with rising production costs.

In view of the foregoing, we find no significant price depression or suppression. While there are confirmed lost sales in the amount of $***,[122] this factor does not outweigh other data in the record showing the lack of significant price effects. Accordingly, we do not find significant adverse price effects by reason of the subject imports.[123]

F. Impact of the Subject Imports[124]

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[125] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."

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[119] CR/PR at Table IV-3.

[120] CR/PR at Table IV-3.

[121] CR/PR at Table VI-2.

[122] CR/PR at Table V-11. Petitioners' allegations of lost sales totaled $44.6 million. CR at V-21, PR at V-13. No firm alleged lost revenues. *Id*.

[123] We note that the lack of price effects, despite significant subject import volume and underselling, may be due in some degree to differences in product characteristics between domestic product and subject imports, as discussed earlier. Regardless of whether competition is attenuated, however, the lack of evidence of adverse price effects speaks for itself.

[124] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less value, Commerce found antidumping duty margins ranging from 55.76 percent to 121.65 percent for imports of hardwood plywood from China. 78 Fed. Reg. 58273, 58276 (Sept. 23, 2013).

[125] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

Most of the industry's trade and employment indicators improved during the period of investigation, including in interim 2013 as the industry continued to recover from the recession. The domestic industry's U.S. shipments increased steadily from 2010 to 2012 and were higher in interim 2013 than in interim 2012.[126] Domestic producers' production increased steadily throughout the period as well,[127] as did capacity utilization.[128] Capacity was steady between 2010 and 2012, although it was slightly lower in interim 2013 than in interim 2012.[129]

The number of production and related workers rose steadily from 2010 to 2012, and there were more workers in interim 2013 than in interim 2012.[130] Hours worked followed the same trend,[131] as did wages paid,[132] and productivity improved.[133]

The domestic industry's financial indicators were somewhat less positive. In particular, operating income declined in 2011 and 2012 (but increased between interim periods),[134] although net income increased.[135] The operating income margin declined from 2010 to 2012,

[126] U.S. shipments rose from 565.5 million square feet in 2010 to 594.7 million square feet in 2011 and 642.2 million square feet in 2012. They were 323.8 million square feet in interim 2012 and 366.2 million square feet in interim 2013. CR/PR at Table III-3.

[127] Production increased from 587.7 million square feet in 2010 to 619.8 million square feet in 2011 and 669.3 million square feet in 2012. It was 338.1 million square feet in interim 2012 and 383.3 million square feet in interim 2013. CR/PR at Table III-2.

[128] Capacity utilization climbed from 44.3 percent in 2010 to 46.7 percent in 2011 and 51.1 percent in 2012. It was 51.4 percent in interim 2012 and 59.4 percent in interim 2013. CR/PR at Table III-2.

[129] Capacity totaled 1.3 billion square feet from 2010 to 2012. It was 658.4 million square feet in interim 2012 and 645.5 million square feet in interim 2013. CR/PR at Table III-2.

We note that the industry's inventories rose over the period of investigation. Inventories increased from 34.5 million square feet in 2010 to 35.5 million square feet in 2011 and 37.4 million square feet in 2012. They were 39.2 million square feet in interim 2012 and 41.0 million square feet in interim 2013. CR/PR at Table III-4.

[130] The number of production and related workers increased from 1,753 in 2010 to 1,799 in 2011 and 1,868 in 2012. It was 1,829 in interim 2012 and 1,944 in interim 2013. CR/PR at Table III-6.

[131] Hours worked climbed from 3.8 million hours in 2010 to 3.9 million hours in 2011 and 4.1 hours in 2012. They totaled 2.1 million hours in interim 2012 and 2.2 million hours in interim 2013. CR/PR at Table III-6.

[132] Wages paid rose from $65.1 million in 2010 to $66.2 million in 2011 and $72.2 million in 2012. They totaled $35.6 million in interim 2012 and $39.0 million in interim 2013. CR/PR at Table III-6.

[133] Productivity increased from 156.0 square feet per hour in 2010 to 157.4 square feet per hour in 2011, then to 163.2 square feet per hour in 2012. It was 162.1 square feet per hour in interim 2012 and 174.1 square feet per hour in interim 2013. CR/PR at Table III-6.

[134] Operating income declined from $12.5 million in 2010 to $10.4 million in 2011 and increased to $11.0 million in 2012. It was $8.2 million in interim 2012 and $19.8 million in interim 2013. CR/PR at Table VI-1.

[135] Net income rose from $5.4 million in 2010 to $8.3 million in 2011 and fell to $6.9 million in 2012. It totaled $5.7 million in interim 2012 and $17.6 million in interim 2013. CR/PR at Table VI-1.

but was higher in interim 2013 than in interim 2012.[136] Capital expenditures increased steadily over the period,[137] while research and development expenses declined.[138]

Thus, despite a significant volume of subject imports and significant underselling, most of the industry's trade and employment indicators improved over the period of investigation. The industry's operating margin was low throughout the period and declined only slightly from 2010 to 2012. Therefore, we do not find that the record shows a significant negative correlation between subject imports and the industry's condition, much less a causal relationship.

We note that some indicators improved in interim 2013 after the petitions were filed. However, the domestic industry's market share, trade and employment indicators, and prices were improving before the petitions were filed and before preliminary duties were imposed. In addition, most market participants reported improving market conditions in 2013, which explains at least some of the industry's recent improvement. Thus, while the petitions may have had some beneficial effect on the industry, we do not find that the pendency of these investigations fully explains the improvement in the industry's condition in interim 2013 or supports a conclusion that subject imports were having an injurious impact on the domestic industry prior to the filing of the petition.

Consequently, we find that the subject imports have not had a significant impact on the domestic industry.

V. Threat of Material Injury by Reason of Subject Imports

A. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the domestic industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[139] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.[140] In making our

[136] The operating income margin was 2.1 percent in 2010 and 1.6 percent in 2011 and 2012. It was 2.3 percent in interim 2012 and 4.8 percent in interim 2013. CR/PR at Table VI-1.

[137] Capital expenditures increased from $4.1 million in 2010 to $7.3 million in 2011 and $7.4 million in 2012. They totaled $2.7 million in interim 2012 and $8.8 million in interim 2013. CR/PR at Table VI-4.

[138] Research and development expenses fell from $*** in 2010 to $*** in 2011 and 2012. They totaled $*** in interim 2012 and $*** in interim 2013. CR/PR at Table VI-4.

[139] 19 U.S.C. § 1677(7)(F)(ii).

[140] 19 U.S.C. § 1677(7)(F)(ii).

determination, we consider all statutory threat factors that are relevant to these investigations.[141]

B. Analysis[142]

As discussed above, the domestic industry's performance generally improved during the period of investigation, including when comparing interim periods. During the period, the domestic industry was able to increase its market share in a growing U.S. market and to increase prices overall for its hardwood plywood products, and its operating income ratio

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[141] These factors are as follows:

(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement) and whether imports of the subject merchandise are likely to increase,

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

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

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

(V) inventories of the subject merchandise,

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

…

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

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

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

[142] In its final affirmative countervailing duty determination on hardwood plywood from China, Commerce found one subsidy program to be countervailable. Issues and Decision Memorandum for the Final Affirmative Determination in the Countervailing Duty Investigation of Hardwood and Decorative Plywood from the People's Republic of China, Final Affirmative Countervailing Duty Determination (Sept. 16, 2013). The program determined to be countervailable is the provision of electricity to Chinese producers for less than adequate remuneration.

reached a period high in interim 2013. We also have found that the subject imports did not have a significant impact on the domestic industry during the period of investigation.

We find that the increase in subject import volume and market share during the period of investigation does not indicate a likelihood that any increase in subject import volume in the imminent future would result in declines in the domestic industry's output or market share. As described above, we have found that the increased volume of subject imports did not have significant adverse effects on the domestic industry during the period of investigation, during which the industry's market share and U.S. shipments also increased. Increases in subject imports resulted in declines in the volume of nonsubject imports, rather than of domestic product. There is no evidence in the record that these trends will change in the imminent future.

In fact, U.S. demand is expected to continue to increase in the near future.[143] The domestic industry has increased its production[144] and market share[145] as apparent U.S. consumption has grown.[146] We find no evidence in the record that this trend will not continue in the imminent future.

We also find that excess capacity in China does not indicate the likelihood of substantially increased imports of the subject merchandise.[147] First, subject Chinese producers' capacity increased only 5.3 percent between 2010 and 2012.[148] Responding subject foreign producers reported excess capacity of 243.4 million square feet in 2012,[149] which represents 8 percent of total apparent U.S. consumption in that year.[150] Subject Chinese hardwood plywood shipments to the home market steadily increased over the period.[151] Exports to other markets increased over the period as well.[152] The ratio of subject Chinese exports to the United

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[143] AAHP's Posthearing Brief, Exh. 5 at 3-4; Tr. at 124-26 (Mr. Howlett), 270-72 (Mr. Weaver).

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

[145] CR/PR at Table IV-3.

[146] CR/PR at Table IV-3.

[147] Petitioners argue that the reported data regarding Chinese hardwood producers reflect only a fraction of the entire hardwood plywood industry in China. They submit that the production capacity of, and production and shipments by, the Chinese producers are significantly greater than the reported data indicate. Petitioners' Prehearing Brief at 53-54. However, the data obtained from the Chinese foreign producers accounted for approximately 52.4 percent of U.S. imports of hardwood plywood from China in 2012, and constitute the facts available on the record. CR at VII-3, PR at VII-3.

[148] CR/PR at Table VII-1.

[149] CR/PR at Table VII-1. Subject Chinese capacity utilization was 83.1 percent in 2010, 86.9 percent in 2011 and 87.9 percent in 2012. It was 70.5 percent in interim 2012 and 80.2 percent in interim 2013. Subject Chinese capacity utilization is projected to be at 85.7 percent in 2013 and increase to 88.9 percent in 2014. *Id*.

[150] *Compare* CR/PR at Table VII-1 *with* CR/PR at Table IV-3.

[151] Home market shipments were 657.8 million square feet in 2010, 728.4 million square feet in 2011, 749.0 million square feet in 2012, 367.5 million square feet in interim 2012, and 403.7 million square feet in interim 2013. They are projected to be 823.7 million square feet in 2013 and 847.8 million square feet in 2014. CR/PR at Table VII-1.

[152] Exports to other markets were 454.8 million square feet in 2010, 540.1 million square feet in 2011, 528.0 million square feet in 2012, 242.2 million square feet in interim 2012, and 270.9 million (Continued...)

States as a share of Chinese producers' total shipments increased from 35.2 percent in 2010 to 40.0 percent in 2012, but was lower in interim 2013 than in interim 2012.[153] In view of Chinese producers' increased shipments to the home market[154] and exports to other countries,[155] we find that significantly increased imports of the subject merchandise into the United States are not imminently likely. Further, even if subject exports from China do increase somewhat, we do not find that any such increase would likely threaten material injury to the domestic industry given the lack of a causal nexus between the significant volume of subject imports and any injury to the domestic industry over the period of investigation.

We recognize that that there are outstanding antidumping duty orders or investigations on hardwood plywood from China in other countries.[156] Even if these orders have some disciplining effect on the volume and prices of subject Chinese exports to certain markets in the imminent future, the record does not indicate that they will significantly restrict China's exports generally and they will not deter the growth of home market shipments.

We recognize that U.S. importers' end-of-period inventories increased between 2010 and 2012, rising nearly 45 percent from 2010 to 2012. They were significantly lower in interim 2013 than in interim 2012, however.[157] While 30 U.S. importers reported that they had placed

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(…Continued)
square feet in interim 2013. They are projected to be 568.9 million square feet in 2013 and 579.1 million square feet in 2014. CR/PR at Table VII-1.

[153] Exports to the United States as a share of total shipments were 35.2 percent in 2010, 35.7 percent in 2011, 40.0 percent in 2012, 38.8 percent in interim 2012, and 28.3 percent in interim 2013. They are projected to be 29.8 percent in 2013 and 31.1 percent in 2014. CR/PR at Table VII-1.

[154] Home market shipments as a share of total shipments were 37.1 percent in 2010, 35.8 percent in 2011, 34.2 percent in 2012, 35.7 percent in interim 2012 and 41.5 percent in interim 2013. They are projected to be 40.3 percent in 2013 and 39.7 percent in 2014. CR/PR at Table VII-1.

[155] Exports to other markets as a share of total shipments were 25.7 percent in 2010, 26.6 percent in 2011, 24.1 percent in 2012, 23.5 percent in interim 2012 and 27.9 percent in interim 2013. They are projected to be 27.8 percent in 2013 and 27.1 percent in 2014. CR/PR at Table VII-1.

[156] In 2011, the European Union ("EU") imposed a definitive antidumping duty on imports of okumé plywood from China. Antidumping duties have also been imposed by Turkey and Israel on certain imports from China of plywood products. In 2013, South Korea reportedly imposed preliminary antidumping duties on plywood imports from China, and Argentina and Colombia initiated investigations on imports of Chinese plywood. CR at VII-6 – VII-7, PR at VII-5 – VII-6. The Chinese Producers' Association contends that the antidumping duty orders on Chinese plywood in the EU, Turkey and Israel do not serve as a significant barrier to Chinese exports, because Turkey and Israel are insignificant markets and the order in the EU covers only one specific type of plywood, which is an insignificant percentage of total Chinese production. Chinese Producers' Association's Prehearing Brief at 26; Chinese Producers' Association's Posthearing Brief, Commissioner Questions at 15.

[157] U.S. importers' inventories were 248.3 million square feet in 2010, 231.4 million square feet in 2011, and 360.7 million square feet in 2012. They were 250.8 million square feet in interim 2012 and 218.4 million square feet in interim 2013. CR/PR at Table VII-2. Subject Chinese producers' inventories as a percentage of their total shipments declined throughout the period and are projected to decline further in 2013 and 2014. They were 6.5 percent in 2010, 6.1 percent in 2011, 5.0 percent in 2012, (Continued...)

orders for subject hardwood plywood from China scheduled for entry into the United States after June 30, 2013, the total quantity could not be ascertained.[158] However, the domestic industry's market share and condition improved over the period of investigation, despite increasing inventories of low-priced subject imports. Moreover, subject import inventories have recently fallen, and demand is expected to increase. Thus, we do not find that these inventories will cause significant price effects or an adverse impact on the domestic industry in the imminent future.[159]

In addition, there is no indication in the record that the subject imports, which are heavily concentrated in the lower end of the U.S. market,[160] will enter the higher end of the market, in which the domestic industry's sales are focused, in significant quantities in the imminent future or at prices that are likely to depress or suppress domestic prices. As we explained above, petitioners' allegations that subject imports are moving into higher-grade hardwood plywood are not borne out by the record, given importer and purchaser statements to the contrary and data showing that subject Chinese producers' and U.S. importers' shares of thicker grade product remained relatively flat over the period of investigation.

We also find that imports of subject merchandise are not entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices. As detailed above, we have found that, during the period of investigation, subject imports neither depressed nor suppressed domestic like product prices to a significant degree, notwithstanding significant underselling. In view of improving U.S. market conditions and increased demand, even if subject imports continue to increase, it is likely that the absence of significant adverse price effects observed during the period of investigation will continue in the imminent future.[161]

As we discussed above, most indicators of the condition of the domestic industry improved during the period of investigation. Moreover, we found no significant causal relationship between the subject imports and the domestic industry's performance during the period of investigation. Nothing in the record of these investigations gives us reason to believe that subject imports will cause the condition of the domestic industry to deteriorate to a significant degree in the imminent future.

(…Continued)
6.4 percent in interim 2012 and 5.6 percent in interim 2013. They are projected to be 5.0 percent in 2013 and 4.0 percent in 2014. CR/PR at Table VII-2.

[158] CR at VII-6, PR at VII-5. The quantities of these orders were reported in a variety of different ways (*i.e.*, containers of different sizes, square feet, cubic feet, cubic meters, square meters, and a number reported by value only). Thus, an exact total quantity could not be established. *Id*.

[159] While other types of panel products are available, we note that product shifting is not an issue in these investigations. *See* CR at II-15, PR at II-10. No parties made any arguments that production could be switched from other products to hardwood plywood.

[160] *See, e.g.*, Petitioners' Posthearing Brief, Responses to Commissioners' Questions at 4; Tr. at 50 (Mr. Awalt), 87 (Mr. Roberts), 178-80, 244-45 (Mr. Simon), 245-46 (Mr. Wilkinson), 247-48 (Mr. Weaver).

[161] Moreover, price data on the record show continued increases through April-June 2013, with no indication of imminent reduced levels. *See* CR/PR at Tables V-3 – V-7.

We further find that subject imports have had no significant actual or potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product. In fact, the industry's capital expenditures increased steadily and significantly over the period of investigation.[162] They increased 80.1 percent between 2010 to 2012 and were 228.6 percent higher in interim 2013 than in interim 2012.[163]

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

VI. Conclusion

For the reasons stated above, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of subject imports of hardwood plywood from China that is subsidized and sold in the United States at less than fair value.

[162] CR/PR at Table VI-4.

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

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Columbia Forest Products (Columbia), Greensboro, NC; Commonwealth Plywood Co., Ltd. (Commonwealth), Whitehall, NY; Murphy Plywood (Murphy), Eugene, OR; Roseburg Forest Products Co. (Roseburg), Roseburg, OR; States Industries LLC (States), Eugene, OR; and Timber Products Company (Timber Products), Springfield, OR, combined as *The Coalition for Fair Trade of Hardwood Plywood* ("CFTHP") on September 27, 2012, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of hardwood plywood [1] from China. The tabulation on the following page provides information relating to the background of these investigations.[2][3]

Effective date	Action
September 27, 2012	Petition filed with Commerce and the Commission; institution of the Commission's investigation
October 24, 2012	Commerce's notice of initiation of countervailing duty investigation
October 25, 2012	Commerce's notice of initiation of antidumping investigation
November 13, 2012	Commission's preliminary determination
March 14, 2013	Commerce's preliminary countervailing duty determination (78 FR 16250, March 14, 2013)
May 3, 2013	Commerce's preliminary antidumping determination (78 FR 2594, May 3, 2013)
June 11, 2013	Scheduling of final phase of Commission investigation (78 FR 36791, June 19, 2013)
September 23, 2013	Commerce's final determination of antidumping (78 FR 58273)
September 23, 2013	Commerce's final determination of countervailing duty (78 FR 58283)
September 19, 2013	Commission's hearing
November 5, 2013	Commission's vote
November 25, 2013	Commission's determinations and views transmitted to Commerce

[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject to this/these investigation(s).

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

[3] App. B presents a list of hearing witnesses.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

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

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

Organization of report

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

MARKET SUMMARY

Hardwood plywood is generally used in the manufacturing of furniture, cabinetry, wall paneling, and similar products. The leading U.S. producers of hardwood plywood are ***. Member companies of the China National Forest Products Industry Association (CNFPIA) accounted for the majority of total reported Chinese production. The leading U.S. importers of hardwood plywood from China are ***.

Apparent U.S. consumption of hardwood plywood totaled approximately 3.5 billion square feet ($2.2 billion) in 2012. Currently, 10 firms are known to produce hardwood plywood in the United States. U.S. producers' U.S. shipments of hardwood plywood totaled 642.2 million square feet ($719.6 million) in 2012, and accounted for 18.4 percent of apparent U.S. consumption by quantity and 32.3 percent by value. U.S. imports from subject sources totaled 1.7 billion square feet ($829.0 million) in 2012 and accounted for 47.9 percent of apparent U.S. consumption by quantity and 37.2 percent by value. U.S. imports from nonsubject sources totaled 1.2 billion square feet ($677.2 million) in 2012 and accounted for 33.7 percent of apparent U.S. consumption by quantity and 30.4 percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, tables C-1 (using imports compiled from official Commerce statistics), C-2 (using imports from data submitted in response to Commission questionnaires), and C-3 (summary data concerning the U.S. market with *** included).[4] Except as noted, U.S. industry data are based on questionnaire responses of nine firms that accounted for the majority of U.S. production of hardwood plywood during 2012. U.S. imports are based on official Commerce statistics.

PREVIOUS AND RELATED INVESTIGATIONS

Hardwood plywood was subject to a Section 332 investigation in 2007-08, *Wood Flooring and Hardwood Plywood: Competitive Conditions Affecting the U.S. Industries, Inv. 332-487, USITC Pub. 4032 (August 2008)*, and has not been the subject of prior countervailing or antidumping duty investigations in the United States.

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On September 23, 2013, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of hardwood plywood from China.[5] Table I-1 presents Commerce's findings of subsidization of hardwood plywood in China. Fifteen companies (listed in the following table at 27.16 percent) are non-cooperative companies to which an adverse facts available rate were applied.

[4] ***. The Commission excluded *** as a related party, but excluded no other U.S. producer as related party. *Hardwood Plywood from China, Inv. Nos. 701-TA-490 and 731-TA-1204 (Preliminary),* USITC Publication 4361, November 2012, p. 9.

[5] *Hardwood and Decorative Plywood from the People's Republic of China: Final Affirmative Countervailing Duty Determination;*, 78 FR 58283, September 23, 2013.

Table I-1
Hardwood plywood: Commerce's final subsidy determination with respect to imports from China

Entity	Preliminary countervailable subsidy margin (*percent*)
Linyi City Dongfang Jinxin Economic & Trade Co.,Ltd.	de minimis
Linyi San Fortune Wood Co., Ltd.	de minimis
Shanghai Senda Fancywood Inc. a/k/a Shanghai Senda Fancywood Industry Co.	de minimis
Asia Dekor (Heyuan) Woods Co., Ltd.	27.16
Baishan Huafeng Wooden Product Co.	27.16
China Friend Limited	27.16
Feixian Guangyuan Plywood Factory	27.16
Feixian Xinfeng Wood Co., Ltd.	27.16
Huzhou Chen Hang Wood Co. Ltd.	27.16
Jiafeng Wood (Suzhou) Co., Ltd.	27.16
Linyi Guoxin Wood Co., Ltd.	27.16
Linyi Huayuan Wood Co., Ltd.	27.16
Linyi Sengong Wood Co., Ltd.	27.16
Lizhong Wood Industry Limited Co.	27.16
Shandong Lichen Group Co., Ltd.	27.16
Wellmade Floor Industries Co. Ltd.	27.16
Zhejiang Dadongwu GreenHome Wood Co.	27.16
Zhejiang Desheng Wood Industry Co., Ltd.	27.16
All others	13.58

Source: 78 FR 58283, September 23, 2013.

Sales at LTFV

On September 23, 2013, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports from China.[6] Tables I-2 present Commerce's dumping margins with respect to imports of product from China.

[6] *Hardwood and Decorative Plywood From the People's Republic of China: Final Determination of Sales at Less Than Fair Value*, 78 FR 58273, September 23, 2013.

Table I-2
Hardwood plywood: Commerce's final weighted-average LTFV margins with respect to imports from China

Exporter	Producer	Preliminary dumping margin (*percent*)
Linyi San Fortune Wood Co., Ltd	Linyi San Fortune Wood Co., Ltd	55.76
Jiangyang Group (consists of Xuzhou Jiangyang Wood Industries Co., Ltd. and Xuzhou Jiangheng Wood Products Co., Ltd.)	Jiangyang Group	62.55
100 exporters	371 producers	59.46
PRC-Wide Entity		121.65

Source: 78 FR 58273, September 23, 2013.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of this investigation as follows:

> *The merchandise subject to this investigation is hardwood and decorative plywood. Hardwood and decorative plywood is a flat panel composed of an assembly of two or more layers or plies of wood veneers in combination with a core. The veneers, along with the core, are glued or otherwise bonded together to form a finished product. A hardwood and decorative plywood panel must have face and back veneers which are composed of one or more species of hardwoods, softwoods, or bamboo. Hardwood and decorative plywood may include products that meet the American National Standard for Hardwood and Decorative Plywood, ANSI/HPVA HP–1–2009.*
>
> *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).*
>
> *A ''veneer'' is a thin slice of wood which is rotary cut, sliced or sawed from a log, bolt or flitch. The face veneer is the exposed veneer of a hardwood and decorative plywood product which is of a superior grade than that of the back veneer, which is the other exposed veneer of the product (i.e., as opposed to the inner veneers). When the two exposed veneers are of equal grade, either one can be considered the face or back veneer. For products that are entirely composed of veneer, such as Veneer Core*

Platforms, the exposed veneers are to be considered the face and back veneers, in accordance with the descriptions above.

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 veneers, particleboard, and medium-density fiberboard (''MDF'').

All hardwood and decorative plywood is included within the scope of this investigation regardless of whether or not the face and/or back veneers are surface coated, unless the surface coating obscures the grain, texture or markings of the wood in a permanent manner. Examples of surface coatings which may not obscure the grain, texture or markings of the wood include, but are not limited to, ultraviolet light cured polyurethanes, oil or oil-modified or water based polyurethanes, wax, epoxy-ester finishes, and moisture-cured urethanes. Hardwood and decorative plywood that has face and/or back veneers which have a permanent and opaque surface coating which obscures the grain, texture or markings of the wood, are not included within the scope of this investigation. Examples of permanently affixed surface coatings which may obscure the grain, texture or markings of wood include, but are not limited to, paper, aluminum, high pressure laminate (''HPL''), MDF, medium density overlay (''MDO''), and phenolic film. Additionally, the face veneer of hardwood and decorative plywood may be sanded, smoothed or given a ''distressed'' appearance through such methods as hand-scraping or wire brushing. The face veneer may be stained.

The scope of the investigation excludes the following items: (1) structural plywood (also known as ''industrial plywood'' or ''industrial panels'') that is manufactured and stamped 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), including but not limited to the ''bond performance'' requirements set forth at paragraph 5.8.6.4 of that Standard and the performance criteria detailed at Table 4 through 10 of that Standard; (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, U.S. Department of Commerce Investigation Nos. A–570–970 and C–570–971 (published December 8, 2011), and additionally, multilayered wood flooring with a face veneer of bamboo or composed entirely of bamboo; (4) plywood which has a shape or design other than a

flat panel; (5) products made entirely from bamboo and adhesives (also known as ''solid bamboo''). (''HTSUS''):

4412.10.0500; 4412.31.0520; 4412.31.0540; 4412.31.0560; 4412.31.2510; 4412.31.2520; 4412.31.4040; 4412.31.4050; 4412.31.4060; 4412.31.4070; 4412.31.5135; 4412.31.5155; 4412.31.5165; 4412.31.5175; 4412.31.6000; 4412.31.9100; 4412.32.0520; 4412.32.0540; 4412.32.0560; 4412.32.2510; 4412.32.2520; 4412.32.3135; 4412.32.3155; 4412.32.3165; 4412.32.3175; 4412.32.3185; 4412.32.5600; 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; 4412.94.1030; 4412.94.1050; 4412.94.3111; 4412.94.3121; 4412.94.3131; 4412.94.3141; 4412.94.3160; 4412.94.3171; 4412.94.4100; 4412.94.6000; 4412.94.7000; 4412.94.8000; 4412.94.9000; 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; 4412.99.5710; 4412.99.6000; 4412.99.7000; 4412.99.8000; 4412.99.9000; 4412.10.9000; 4412.31.4080; 4412.32.0570; 4412.32.2530; 4412.94.5100; 4412.94.9500; 4412.99.5115; and 4412.99.9500.

While HTSUS subheadings are provided for convenience and customs purposes, the written description of the subject merchandise as set forth herein is dispositive.[7]

Tariff treatment

Imports of the subject hardwood plywood are classified within several subheadings covering plywood, veneered panels and similar laminated wood under heading 4412, chapter 44, of the Harmonized Tariff Schedule of the United States (HTSUS). The predominant classifications are subheadings 4412.31 and 4412.32, HTSUS, which provide as follows:

4412.31 Other plywood {not of bamboo}, consisting solely of sheets of wood, each ply not exceeding 6 mm in thickness; with at least one outer ply of tropical wood (general rates of duty free or 8% ad valorem).

[7] *Hardwood and Decorative Plywood From the People's Republic of China: Final Determination of Sales at Less Than Fair Value*, 78 FR 58273, September 23, 2013.

4412.32 Other plywood {not of bamboo or in 4412.31} consisting solely of sheets of wood, each ply not exceeding 6 mm in thickness; with at least one outer ply of nonconiferous wood (general rates of duty free, 5.1% or 8% ad valorem)

4412.39 Other plywood {not of bamboo or in 4412.31-4412.32} consisting solely of sheets of wood, each ply not exceeding 6 mm in thickness; with both outer plies of coniferous wood (general rates of duty free, 3.4%, 5.1% or 8% ad valorem).

4412.94 Blockboard, laminboard and battenboard (general rates of duty free, 3.4%, 5.1% or 8% ad valorem).

4412.99 Other {plywood, veneered panels and similar laminated wood} (general rates of duty free, 3.4%, 5.1% or 8% ad valorem).

THE PRODUCT

Description and applications

Hardwood and decorative plywood (hardwood plywood) is a wood panel product made from 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 (OSB). 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 manufacture including oak, birch, maple, poplar, and cherry. However, hardwood plywood includes plywood that may have a face veneer and/or other layers of veneer of softwood species. The distinguishing characteristic of hardwood plywood products is that they are used in interior and non-structural applications.

Hardwood plywood is manufactured in a variety of thicknesses, with the most common ranging from 1/8 inch (3.2 mm) to 1 inch (25.4 mm), depending upon customer requirements and the intended end-use.[8] The most common panel dimensions are 4 feet by 8 feet (1219 x 1829 mm), but hardwood plywood is also sold in smaller and larger sheet sizes.

Hardwood plywood is commonly used in 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. Hardwood plywood is also used in some construction-related applications where structural strength and moisture resistance 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, 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 such

[8] Petition, p. 6.

things 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).[9] The highest and clearest grades of hardwood plywood carry an "AA" or "A' face grade, followed by "B," "C," etc. as more knots, blemishes or other defects are considered in the grading process. The HPVA standard also assigns back veneers numerical grades from "1" to "4," and certain other letter grades to internal veneers. However, not all hardwood plywood sold in the United States conforms to the HPVA standard.

Manufacturing processes

The production of hardwood plywood begins with the debarking of logs of a size and quality suitable for peeling or slicing to make veneer. Veneer is a thin sheet of wood that has been rotary cut, sliced, or sawed from a log, bolt, or flitch. Veneer quality logs, or peeler logs, are generally of higher quality and value than those used for other wood products, although the quality of veneer from any given log will vary. Petitioners indicated that approximately half or more of a log peeled for veneer in the United States will yield C grade or below (45–60 percent), with the yield of A grade veneer in the range of 9–14 percent, and the balance in B grade material.[10] Respondents indicated that fast-growing species of the kind used to manufacture subject imports, such as poplar and eucalyptus, are smaller and yield a much higher percentage of lower grade veneers.[11]

Rotary cut veneer is made using a lathe that spins a 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, typically 50" by 100" in order to produce a finished panel of 48" by 96" (4x8 feet). In 2012, approximately *** percent of U.S. hardwood plywood production was manufactured using rotary-cut veneer.[12] In contrast, sliced or sawed veneers are thin sheets cut from lumber, flitches, or blocks of wood. They are cut into variable lengths and widths depending upon the form and dimension of the wood raw material. Sliced veneer typically has a different grain pattern than rotary-cut veneer and is often utilized to make higher grades and specialty plywood. Whether rotary produced or sliced, veneer is cut to thicknesses ranging from as thin as 0.01 inch (0.25 mm) to greater than 1/4 inch (6.35 mm). Veneer is graded and sorted by quality, then dried prior to use in hardwood plywood manufacturing. Face veneers are often,

[9] Hardwood Plywood and Veneer Association (HPVA), American National Standard for Hardwood and Decorative Plywood, ANSI/HPVA HP-1-2009. Petition Supp, October 15, 2012, Supp. Exhibit I-15.

[10] Hearing transcript, p. 100 (Howlett). For birch, the average yield of "A" grade is 12 percent and "C" grade and below is 60 percent; for maple, the average yield of "A" grade is 9 percent and "C" grade and below is 52 percent; and for red oak, the average yield is 14 percent of "A" grade and 45 percent of "C" grade and below.

[11] AAHP posthearing brief, p. 13.

[12] HPVA Annual Statistical Report for Calendar Year 2012.

but not always, produced at a separate facility or by a different company than the manufacturer of hardwood plywood.

Some U.S. producers employ a "one-step" process which is a fully automated, continuous system from the log to the finished product.[13] 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, referred to as a “two-step” process, takes face and back veneers and combines them with a “core” or “platform” that is manufactured separately. In many cases, face veneers that are of a particular species and grade are purchased from other veneer producers and are then glued onto the core material to complete 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 in order to provide strength and stability to the finished product. 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.[14] The thickness and number of plies depends upon the product.

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. The process will vary somewhat if a core of composite wood (e.g., MDF or particleboard) or other material is used. In the U.S. industry, in 2012, veneer cores were used in approximately *** percent of production, MDF cores in *** percent, particleboard in *** percent, and lumber, OSB, or combinations of materials in *** percent.[15]

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.[16] Currently, 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.[17] Similar Federal regulations restricting formaldehyde emissions from hardwood plywood and other wood products are currently in the rule-making process and will likely take effect within the next year. To meet existing California and prospective Federal regulations limiting formaldehyde emissions, manufacturers have changed the formulation of adhesives through the use of various additives or by using no added UF soy-based alternatives. Another type of adhesive formulated with phenol-formaldehyde (PF) resins emits less formaldehyde and is more moisture resistant, but

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[13] Conference transcript, p. 110 (Thomson); Hearing transcript, AAHP Exhibit.

[14] See Colombia Forest Products “Hardwood Plywood: How It’s Made” at: http://columbiaforestproducts.com/CFPTV.

[15] ***.

[16] Conference transcript, p.70-71 (Howlett).

[17] CARB is an acronym for California Air Resources Board. The relevant rule is an airborne toxic control measure (ATCM) promulgated to reduce formaldehyde emissions from composite wood products.

PF resins have color disadvantages and are typically used only if the plywood product is made for exterior applications.[18]

Generally, the basic steps in the manufacturing process are similar for both imported and domestic hardwood plywood. However, Chinese manufactures use thinner face and back veneers that are laid up moist or wet (in a "wet" process) to prevent splitting or breaking prior to being pressed.[19] According to Respondents, smaller logs are typically utilized to manufacture veneer for the plywood core and the quality of veneer is typically lower.[20] The Chinese product is typically manufactured utilizing more labor and less automation, particularly for repairing defects, preparing veneers, and laying up veneer sheets for pressing.[21]

DOMESTIC LIKE PRODUCT ISSUES

The petitioner proposes that the Commission define the domestic like product co-extensive with the scope of the petitions.[22] Respondents have not challenged this proposed definition.

Physical Characteristics and Uses

The scope definition for hardwood and decorative plywood includes plywood that can be made from hardwood or softwood species or bamboo in its face, back, or inner veneers.[23] Also included in the scope is hardwood plywood made with a core of lumber or composite wood such as MDF or particleboard. All thicknesses of veneer and finished panels are included. The scope specifically excludes structural plywood, plywood made with cork faces or backs, multilayered wood flooring manufactured subject to a CVD/AD order, and plywood further worked beyond basic finishing.

Hardwood and decorative plywood includes plywood that may be made of softwood species. Respondents submit that softwood plywood that can be used in non-structural applications is covered within the scope of this investigation.[24] However, petitioners maintain that the structural and softwood plywood industry is a different industry with different products, different standards, and different end uses.[25] Structural or softwood plywood, in contrast to the subject product, is made to meet a structural standard and is used in framing, sheathing and other construction applications.[26] The U.S. softwood plywood industry is

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[18] Conference transcript, p.70-71 (Howlett).

[19] Hearing transcript, p. 177 (Simon).

[20] Hearing transcript, p. 171-172 (Dougherty).

[21] Conference transcript, p. 108-109 (Clausen); Hearing transcript, p. 175 (Simon) and p. 219 (Wu).

[22] Petition, p. 19

[23] Scope definition, I-7, however, products made entirely of bamboo ("solid bamboo") are excluded in the scope.

[24] Respondents' prehearing brief, p. 29-33.

[25] Hearing transcript, p. 90 (Levin).

[26] Structuaral plywood is manufactured to Department of Commerce Voluntary Product Standard PS-109 is the nationally recognized product standard for structural plywood. See Petitioner's Supplemental Submission, October 15, 2012, Exhibit Supp. I-16.

classified under a different North American Industrial Classification System (NAICS) code than is hardwood plywood, is governed by different standards, and, in contrast to hardwood plywood, typically uses adhesives designed to withstand use in exterior applications.[27]

Certain other panel products may compete with hardwood plywood for some applications. These include MDF, hardboard, particleboard, and, to a lesser extent, OSB. Examples of similar uses are as cabinet back or side panels and drawer components. Often, these products have a printed or laminate surface to give an appearance similar to wood grain in place of real wood veneer. However, each of the alternatives has a particular cost, quality, and appearance characteristic that distinguishes it from hardwood plywood.

Manufacturing Facilities and Production Employees

Unless a "one-step" process is used, the "core" material used in hardwood plywood is typically manufactured separately from the veneers used for the face and/or back plies. Whether veneers are produced by the hardwood manufacturer or purchased, the manufacturing technique is similar. Producers that use cores made from MDF, HDF, or other materials almost always purchase that material from other manufacturers. Plants and equipment used to manufacture hardwood plywood may also produce veneer or core material for sale to others which, in turn, is used in manufacturing hardwood plywood panels. In hardwood plywood facilities that also manufacture veneer, the same employees may be utilized.

Structural plywood is also fabricated from layers of veneers, commonly of softwood species. The manufacturing process is almost always a continuous process. Different formulations of glues are used for binding the plies together in manufacturing structural plywood than for hardwood plywood. In contrast to hardwood plywood, structural plywood is made to meet strength and performance requirements needed for structural applications. Similar types of equipment may be used for manufacturing structural plywood and hardwood plywood, but the two types of products are most often produced separately and at different facilities.

MDF, hardboard, particleboard, and OSB (collectively, composite panels) are different forms of panel products made by bonding wood fibers or small pieces of wood together with adhesives under high heat and pressure. The size and form of the wood particles differs in each case, as does the type of bonding agent and the manufacturing process generally. The manufacturing processes for making MDF, hardboard, particleboard, and OSB are each separate and distinct from manufacturing hardwood plywood, and they use different equipment and employees.

Interchangeability

Petitioners submit that hardwood and decorative plywood products are interchangeable in the market and in their end uses, distinguished by species, grade, appearance and quality.[28]

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[27] Petitioners' post-conference brief, response to question 2, p. 5-7.

Petitioners indicate that hardwood plywood products are perceived as the same class of product by producers and consumers.[29]

Hardwood and decorative plywood is generally not interchangeable with structural plywood which has different characteristics and applications. However, MDF, particleboard, and hardboard are sometimes used in the same applications as hardwood plywood such as for cabinet back panels, drawer bottoms, or to fabricate laminated surfaces using imprinted (and sometimes textured) paper or other material.

Channels of Distribution

Information provided by the petitioners indicates that U.S. hardwood plywood manufacturers sell the majority of the product to wholesalers or directly to secondary manufacturers (i.e., OEMs).[30] Retail outlets, including "big box" stores represented approximately 11 percent of U.S. producers' shipments in 2011, but petitioners suggest that they have a significant impact on pricing and are purchasing large volumes of imports.[31] Manufacturers do not generally sell directly to consumers who instead are purchasing a finished product utilizing hardwood plywood (such as a piece of furniture).

The channels of distribution are similar for composite panels as for hardwood plywood, but structural plywood is sold through a distribution network that serves home builders and construction contractors directly as opposed to OEMs and other secondary manufacturers.

(…*continued*)

[28] Petition, p. 20.

[29] Petition, p. 21.

[30] Conference transcript, p. 47 (Malashavich) and exhibit 1.

[31] Conference transcript, p. 46-47 (Malashavich).

Price

The price of hardwood plywood products is a function of the panel size, face species, quality, thickness, and finish (i.e., whether stained, distressed, or otherwise treated).

Prices of other types of panel products also vary depending on grade, thickness, application, and other characteristics. However, each type of panel product is sold and priced according to different standards. For example, the grades and other characteristics by which structural plywood is priced are different than for hardwood plywood. Composite panels such as MDF, particleboard, and hardboard are also priced and sold separately from hardwood plywood. Generally, but not always, structural plywood and composite panels are less expensive than hardwood and decorative plywood of similar thickness and dimension. Further discussion of pricing is contained in Part V of this report.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

Hardwood plywood is used in a variety of mostly indoor applications, particularly home remodeling applications such as kitchen cabinets, RVs, manufactured homes, new homes, and commercial buildings. Domestic producers supply less than 20 percent of the U.S. market with a few domestic firms accounting for the large majority of U.S. production of hardwood plywood.[1] Imports supply most of the U.S. market, with the largest share coming from China, but other countries including Canada, Indonesia, and Russia, also ship large quantities to the U.S. market.

Hardwood plywood is made from a variety of different wood species, in a variety of thicknesses, and in a variety of different grades (i.e., AA, A, B, C, D, and E). Grades A and B are used in visually important areas, while lower grades are often used as shelves and in the backs of cabinets.[2] Most U.S. produced hardwood plywood is sold unfinished.[3]

U.S. PURCHASERS

The Commission sent purchasers' questionnaires to 55 companies believed to have purchased hardwood plywood since 2010. Questionnaire responses were received from 42 purchasers, with 40 reporting that they had purchased hardwood plywood since 2010.[4] Fifteen responding purchasers reported that they were end users, 12 characterized themselves as distributors, seven reported being a "manufacturer" of some type, three reported being retailers or in "retail sales/wholesale/reseller," two characterized themselves as "laminators," and one reported being a "buying cooperative." Of the responding firms, the two largest U.S. purchasers of hardwood plywood in 2012 in terms of quantity were ***. All responding purchasers accounted for about 21 percent of U.S. apparent consumption in 2012.

CHANNELS OF DISTRIBUTION

U.S. producers and importers sold hardwood plywood mainly to distributors (table II-1). According to petitioners, although big box stores account for only about 11 percent of domestic sales, this channel currently wields a disproportionately severe impact on pricing at the margin due to considerable market power and logistical support.[5] Respondents indicate they do not

[1] The top four U.S. producers accounted for almost 80 percent of U.S. production during 2012.

[2] Conference transcript, p. 32 (Oglesby).

[3] Unfinished panels accounted for *** percent of North American production of hardwood plywood in 2012. HPVA, Hardwood Stock Panels, Annual Statistical Report for Calendar Year 2012, p. 14.

[4] Respondents indicated that the Commission ***.

[5] Conference transcript, pp. 46-47 (Malashevich).

Table II-1
Hardwood plywood: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2010-12, January-March 2012, and January-March 2013

	Period				
	Calendar year			January-March	
Item	2010	2011	2012	2012	2013
	Share of reported shipments (percent)				
U.S. producers' U.S. shipments of hardwood plywood:					
Distributors	86.9	83.3	85.7	85.2	85.5
End users	13.1	16.7	14.3	14.8	14.5
U.S. importers' U.S. shipments of hardwood plywood from China:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers' U.S. shipments of hardwood plywood from all other countries:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***

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

see the ripple effect out of big box stores alluded to by petitioners and that one of the petitioners recently entered into an agreement with one of the big box stores that will take a lot of capacity off of the market and has caused supply constraints for many distributors and end users.[6]

According to public data for the North American market, about *** percent of shipments to distributors went to distributors with multiple warehouses in 2011 and 2012. Direct shipments (not through a distributor) to cabinet OEMs and retail OEMs each made up just over *** of direct shipments to OEMs in 2012, with the remainder of direct shipments to furniture and fixture OEMs.[7]

Respondents assert that the domestic industry "has a rigid distribution system where a limited number of distributors are permitted to sell the product and no outside distributors have the ability to purchase the domestic product." They further contend that Chinese plywood is sold by a large number of distributors that can meet quick delivery schedules and that many small distributors are unable to purchase from the petitioners.[8]

[6] Hearing transcript, pp. 248-250 (Grimson, Simon).
[7] HPVA, Hardwood Stock Panels, Annual Statistical Report for Calendar Year 2012, p. 42 and 59.
[8] AAHP postconference brief, pp. 32-33. Hearing transcript, pp. 181-182 (Simon).

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling hardwood plywood to all U.S. regions (table II-2). U.S. producers reported that in 2012, 4 percent of their sales were within 100 miles of their production facilities, 61 percent were between 101 and 1,000 miles, and 35 percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. points of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

Table II-2

Hardwood plywood: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms

Region	Number of firms	
	U.S. Producers	Importers
Northeast	7	29
Midwest	7	34
Southeast	6	33
Central Southwest	6	31
Mountain	5	23
Pacific Coast	5	31
Other[1]	2	8
All regions (except Other)	5	22
Reporting firms	8	37

[1] All other U.S. markets, including AK, HI, PR, and VI, among others.

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. hardwood plywood producers have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of U.S.-produced hardwood plywood to the U.S. market. The main contributing factor to the moderate to high degree of responsiveness of supply is the availability of unused capacity. Responsiveness is constrained by the lack of significant alternate markets, low inventory levels, and the inability of most producers to produce alternate products.

Industry capacity

Capacity utilization increased during 2010-12, owing to the decrease in capacity and an increase in production during 2010-12. Capacity utilization increased to a little more than 50 percent in 2012. This relatively low level of capacity utilization suggests that U.S. producers may

have substantial capacity to increase production of hardwood plywood in response to an increase in prices.

Alternative markets

U.S. producers have a limited ability to divert shipments to or from alternative markets in response to changes in the price of hardwood plywood. U.S. producers' exports accounted for only 3 to 4 percent of total shipments during 2010-12.

Inventory levels

U.S. producers' inventories as a ratio to total shipments were relatively stable over 2010-12 at about 6 percent. These inventory levels suggest that U.S. producers may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Only two of nine responding producers manufacture other products on the same equipment used to produce hardwood plywood. One firm reported producing *** on the same equipment and another firm reported producing ***.

Supply constraints

One responding producer reported it had refused, declined, or was unable to supply hardwood plywood during the period examined. *** indicated that ***. In addition, one U.S. producer *** commented that it had refused, declined, or was unable to supply hardwood plywood only when it would not lower its price "to meet cheap Chinese plywood prices."

Subject imports from China

Based on available information, Chinese producers have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of hardwood plywood to the U.S. market. The main contributing factors to the moderate to large degree of responsiveness of supply is the existence of alternate markets. Responsiveness is constrained by the lack of unused capacity, low inventory levels, and the inability of most producers to produce alternate products.

Industry capacity

With production rising faster than capacity, capacity utilization increased to over 85 percent in 2012. This relatively high level of capacity utilization suggests that Chinese producers may have little additional capacity to increase production of hardwood plywood in response to an increase in prices.

Alternative markets

Between 2010 and 2012, more than one-half of Chinese shipments were either to the Chinese home market or export markets other than the United States. The existence of these other large non-U.S. markets indicates that Chinese producers likely have an ability to shift shipments between markets in response to a change in price.

Inventory levels

Chinese producers' inventories as a ratio to total shipments were relatively stable ranging between 5 and 7 percent during 2010 to 2012. These inventory levels suggest that Chinese producers may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

All but three responding Chinese producers reported that they do not produce other products on the same equipment used to produce hardwood plywood. One Chinese producer reported making solid and engineered wood flooring on the same equipment and another reporting making doorskins.

Supply constraints

About one-third of responding importers of product from China indicated that it had refused, declined, or was unable to supply hardwood plywood during the period examined. Several importers indicated that they had production delays, delayed shipments, and difficulty sourcing raw material at certain times. Importer *** indicated that it strives for quality and, therefore, cannot supply all of its customers' requirements many months of the year. Several importers indicated that they had supply constraints for imports from countries other than China.

Nonsubject imports

Nonsubject imports accounted for 45 percent of the landed value of total imports in 2012. The largest sources of nonsubject imports were Indonesia, Russia, and Canada. Combined, these three countries accounted for 26 percent of the landed value of nonsubject imports in 2012.

U.S. demand

Based on available information, the overall demand for hardwood plywood is likely to change moderately in response to changes in price. The main contributing factors are the availability of substitute products and the moderate cost share of hardwood plywood in most of its end-use products.

End uses

U.S. demand for hardwood plywood depends on the demand for U.S. produced downstream products which include: kitchen cabinets, RVs, manufactured homes, underlayment, and furniture. Petitioners estimate that 35 percent of U.S.-produced hardwood plywood is used for retail fixtures, 30 percent is used in cabinetry, and that 7 percent is used for underlayment and in RV manufacturing (figure II-1).[9] Respondents estimate that about one-third of imported Chinese hardwood plywood is used in producing cabinets, 30 percent is used for underlayment and RV manufacturing, and 7 percent is used in store fixtures, (figure II-1).[10]

Petitioners and respondents indicate that cabinets are the largest end use for both domestic and imported products.[11] Many producers, importers, and purchasers reported that this end use was among their top three end uses. The next most commonly listed end use reported by producers, importers, and purchasers was furniture.

According to petitioners, demand for hardwood plywood is more closely tied to remodeling activity, and construction of RVs, manufactured homes, and furniture cabinetry, than to new home construction.[12]

The Leading Indicator of Remodeling Activity (LIRA) (see figure II-2), which measures the value of homeowner improvements, increased by 24 percent between the first quarter of 2010 and the third quarter of 2013. Remodeling activity is expected to increase by about the same amount over the next year, with the value of the LIRA projected to increase by 15 percent between the second quarter of 2013 and the second quarter of 2014.

Seasonally adjusted housing starts increased by 46 percent between January 2010 and August 2013, with most of the increase since latter part of 2011 (figure II-3). Housing starts, however, remain well below historic averages.

Kitchen cabinet sales declined from 2009 to 2011, but increased each month between January 2012 and June 2013.[13] Shipments of RVs and manufactured homes increased from 2010 to 2012 (table II-3). Domestic wood furniture shipments increased slightly from 2010 to 2011 as did flooring sales.[14] Sales of hardwood and laminate flooring, both of which are produced from wood, increased by 7 percent and 1 percent respectively between 2011 and

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[9] Petitioners posthearing brief, Answers to Commissioners' questions from the hearing, p. 13 However, in the preliminary conference petitioners estimate that 40 to 50 percent of hardwood plywood production is used in kitchen cabinets. Conference transcript, p. 82 (Oglesby).

[10] AAHP postconference brief, exh. 1, p. 12. Respondents also reaffirmed that this is still an accurate estimate of the share of end-sues for imported hardwood plywood. AAHP posthearing brief, Questions from Chairman Williamson, p. 2.

[11] Conference transcript, (Clausen, Oglesby), pp. 82-83 and AAHP postconference brief, exh. 1, p. 12.

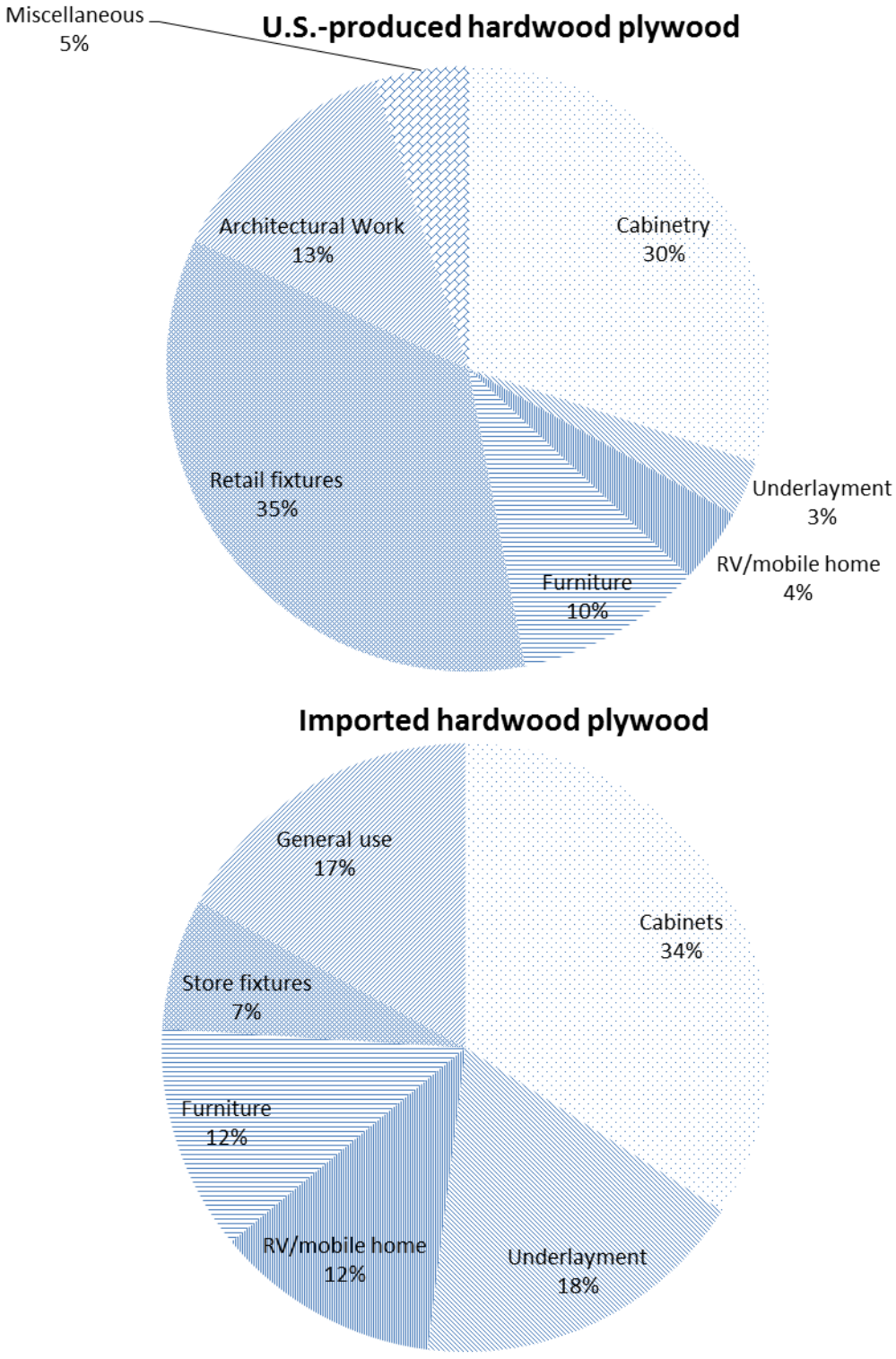
[12] Petitioners' postconference brief, pp. 20-21. Petitioners posthearing brief, Answers to Commissioners' questions from the hearing, p. 13.

[13] AAHP postconference brief, p. 9. KCMA, June 2012 Trend of Business Press Release, July 17, 2012. KCMA, "18 consecutive months of growth in cabinet sales!" August 1, 2013, http://www.kcma.org/blog/?p=38

[14] Domestic wood furniture shipments ***. AAHP postconference brief, p. 11.

Figure II-1

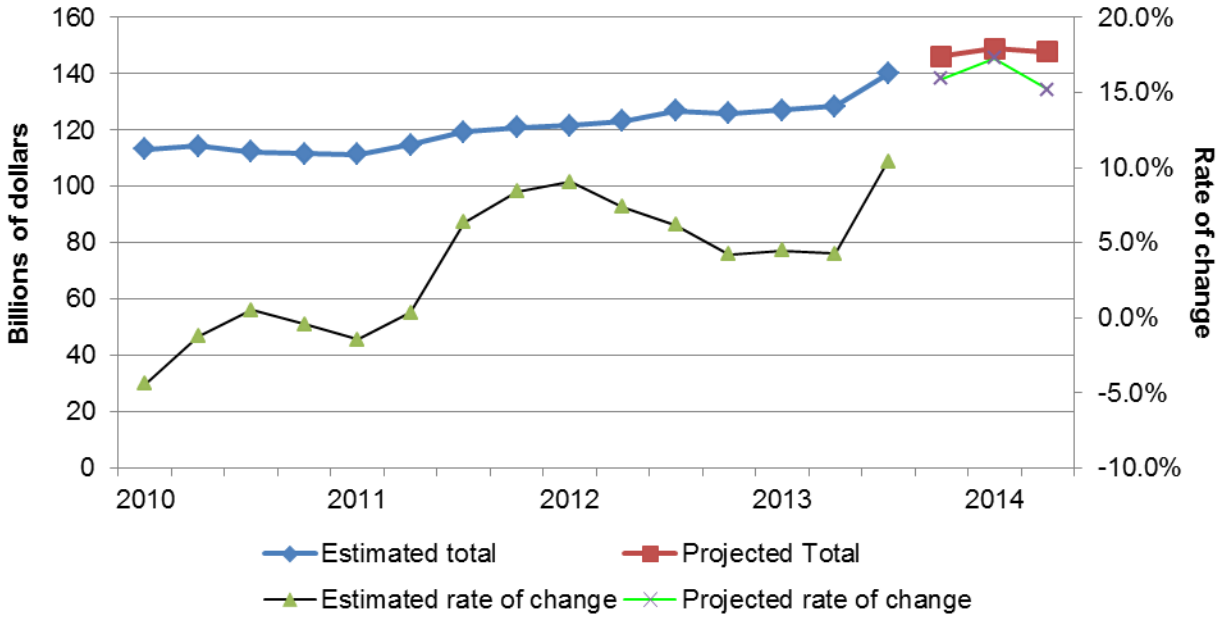
Hardwood plywood: Share of end uses for U.S.-produced and imported hardwood plywood



Source: Petitioners posthearing brief, Answers to Commissioners' questions from the hearing, p. 13 and AAHC postconference brief, exh. 1, p. 12.

Figure II-2

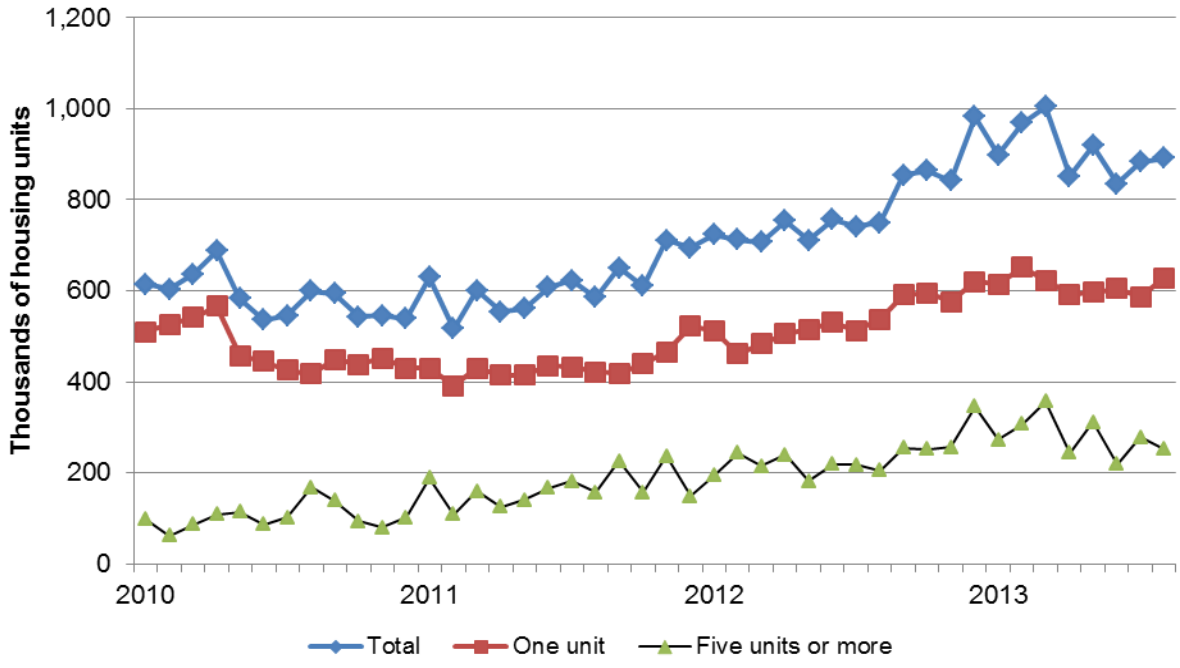
Homeowner improvements: Leading indicator of remodeling activity, four quarter moving total and rate of change, estimated and projected: quarterly, January 2010-June 2014



Source: Joint Center for Housing Studies of Harvard University http://www.jchs.harvard.edu/leading-indicator-remodeling-activity-lira (retrieved October 17, 2013).

Figure II-3

Housing starts: Seasonally adjusted housing starts, monthly, January 2010-August 2013



Source: U.S. Census Bureau, New Residential Construction. http://www.census.gov/construction/nrc/historical_data/ (retrieved October 17, 2013).

Table II-3

Manufactured homes and RVs: Annual shipments, thousands of units 2010-12, and January-June 2013

Item	2010	2011	2012	January-June 2013
Manufactured homes	50.0	51.6	54.9	29.1
Recreation Vehicles	242.3	252.3	285.9	174.9

Source: Recreational Vehicle Industry Association and U.S. Census Bureau. (Downloaded, August 16, 2013).

2012.[15] Petitioners reported that the commercial building sector, where hardwood plywood is used in office building foyers, libraries, and conference rooms, did not decline as much as did the housing sector during the recession.[16]

Business cycles

A little more than one-half of responding U.S. producers and importers, and just over 40 percent of responding purchasers indicated that the market was subject to business cycles or distinctive conditions of competition, including seasonal demand that varied somewhat by region and by end use product. Several producers noted seasonal trends such as high, demand from January-June or July, and slower demand in summer and in November and December.[17] Two of these producers also noted that hardwood plywood demand at least partially follows housing demand. Some importers and purchasers also reported similar seasonal trends as well as cyclical trends in the overall building industry based on new home construction, commercial construction, and remodeling. One importer noted that seasonality is based on the weather and can differ between regions. It noted for example, that demand in the Midwest is high in the winter when people are inside doing winter projects, whereas demand is high in Texas during summer when people prefer indoor projects because it is too hot to be outside. One importer reported that demand for plywood for truck bodies is higher during the first half of the year than during the second half of the year. Another importer reported that furniture sales are higher in the fall and also that different end use markets exhibit different trends.[18]

Several firms reported changes in conditions of competition. Two producers reported that cheap Chinese hardwood plywood and furniture had reduced demand for domestic product, and one also reported that housing starts had dropped. Importers and purchasers reported changes, including the large decline in the housing market and the gradual recovery; changes in input costs and ocean freight costs, and currency fluctuations; volume purchasing; a shift in demand for product with thinner faced veneer, shifting product lines due to the AD/CVD

[15] Floor Covering Weekly, July 22, 2013, p. 4.

[16] Conference transcript, p. 82 (Howlett).

[17] Remodeling activity is lower during October to December because of the Thanksgiving and Christmas holidays. Conference transcript, p. 77 (Oglesby).

[18] For example, its sales to the residential kitchen cabinet market dropped off markedly at the height of the recession in 2009 while its sales to the luxury market were much more stable.

orders, less kitchen remodeling (homeowners choosing to upgrade roofs and HVAC systems rather than kitchens); and moderate improvement in demand in homebuilding, remodeling, and RVs. One importer reported that Chilean supply was greatly reduced in 2010 and 2011 after the largest Chilean plywood mill was destroyed in an earthquake in February 2010 and then the rebuilt mill suffered a fire in 2011; and it reported that in 2012, Chilean supply was being replaced by Chinese supply.

Apparent consumption

The value of apparent U.S. consumption of hardwood plywood increased at a greater rate than quantity between 2010 and 2012, suggesting that demand increased to some extent during that period.

Demand trends

Most U.S. producers reported a decrease in U.S. demand since 2010; however, most importers reported that demand increased or fluctuated and most purchasers indicated that demand increased (table II-4). Firms reporting an increase cited an improving construction and housing market and a slight upturn in the economy, while firms reporting decreased demand cited weak demand in construction and housing as well as low consumer confidence.

Respondents assert that demand was especially strong for the products imported from China, which are thinner overall and/or have a thin face veneer on top of a hardwood core. According to respondents, demand for these products grew as a result of the recession when customers found that the thinner Chinese product was more efficient and more effective in certain applications where the hardwood plywood is not visible or will be painted or laminated.[19]

Substitute products

A majority of responding U.S. producers, importers, and purchasers reported that there were no substitutes for hardwood plywood. Of the remaining firms, the most frequently named substitutes were MDF, particleboard, and softwood plywood. Firms also reported substitutes such as composites, hardboard, hardwood lumber, HPL, laminates, melamine, mende board, OSB, solid wood, laminates, and softwood plywood. One producer, seven importers, and three purchasers indicated changes in the price of some substitute products affect the price of hardwood plywood. MDF and softwood plywood were the most frequently cited substitutes that affect the price of hardwood plywood.

[19] AAHP postconference brief, pp. 13-15. Hearing transcript, pp. 178-180 (Simon), pp. 188-190 (Weaver).

Table II-4
Hardwood plywood: Firms' perceptions regarding U.S. demand since 2010, by number of responding firms

	Number of firms reporting			
Item	**Increase**	**No change**	**Decrease**	**Fluctuate**
Demand in the United States				
U.S. producers	3	0	5	0
Importers	18	3	6	13
Purchasers	23	4	3	9
Demand outside the United States				
U.S. producers	0	0	4	0
Importers	3	5	7	9
Purchasers	5	2	1	4
Demand for purchasers' final products				
Purchasers	14	1	2	3

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

Cost share

Hardwood plywood typically accounts for a highly varied share of the cost of end-use products in which it is used. In their questionnaire responses, U.S. producers, importers, and purchasers reported cost shares ranging from 6 to 55 percent for cabinets, 20 to 40 percent for fixtures, 10 to 70 percent for furniture, 2 to 30 percent for RVs, and 80 percent for underlayment.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported hardwood plywood depends upon such factors as relative prices, quality (*e.g.*, grade standards, reliability of supply, defect rates, *et cetera*), and conditions of sale (*e.g.*, price discounts/rebates, lead times between order and delivery dates, payment terms, product services, *et cetera*). Based on available information, staff believes that there is a moderate degree of substitutability between U.S. produced hardwood plywood and that imported from China.

Lead times

U.S. producers reported selling almost all of their hardwood plywood produced to order with lead times generally between 7 and 14 days. Importers reported that about three-fourths of their sales are from U.S. inventory with lead times typically in one month or less, and the remaining sales produced to order with lead times of 60 to 180 days.

Knowledge of country sources

*** purchasers indicated they had marketing/pricing knowledge of domestic product, *** of Chinese product, and *** of nonsubject countries.

As shown in table II-5, most purchasers and their customers at most "sometimes" make purchasing decisions based on the producer or country of origin. Of the *** purchasers that reported that they "always" make decisions based on the producer, firms cited price, quality, purchasing from qualified suppliers, and using an exclusively developed grade of hardwood plywood.

Factors affecting purchasing decisions

Available information indicates that purchasers consider a variety of factors when purchasing hardwood plywood. While price and quality were cited most frequently as being top factors in their purchase decisions, other factors such as availability, product consistency, and reliability of supply were cited just as often as being very important purchasing factors. Quality was most frequently cited by purchasers as their top factor in purchasing plywood, and 33 of 40 purchasers indicated that quality was one of the three most important factors (see table II-6). Thirty-four of 40 responding purchasers indicated that quality meeting industry standards was a very important factor in their purchases (see table II-7). All but four purchasers indicated that quality exceeding industry standards was at least a somewhat important purchasing factor. U.S. purchasers identified various principal factors they considered in determining the quality of hardwood plywood including: strength, thickness; flatness; glue bond; moisture content; veneer thickness; core integrity; lack of odor, delamination, mold, voids, and warp; appearance; soundness; panel stability; smoothness; telegraphing; and grain pattern.

Six of 40 responding purchasers indicated that price was the most important factor in considering a purchase and 35 of 40 purchasers indicated that price was one of the three most important purchasing factors. All but five responding purchasers indicated that price is a very important factor in purchasing hardwood plywood. All but four responding purchasers indicated that they either "sometimes" or "usually" purchase the lowest price hardwood plywood.

Seven of 40 responding purchasers indicated that availability was its most important factor in purchasing hardwood plywood; over one-half indicated that it was one of their top three factors. All but two responding purchasers indicated that availability was a very important purchasing factor.

Six purchasers indicated that product consistency was one of its top three purchasing factors and all responding purchasers indicated that it was a very important purchasing factor. Thirty-six of 40 responding purchasers indicated that reliability of supply is a very important purchasing factor and two purchasers indicated that is one their top three purchasing factors.

Thirty-three of 40 purchasers indicated that panel thickness is a very important factor in their purchases and 25 of 39 purchasers indicated veneer thickness is a very important factor. About one-half of responding purchasers indicated that there are product or utilization-related considerations that would limit the substitution between a thicker face veneer product with a

Table II-5

Purchasing decisions based on producer and country of origin

Purchaser / Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	9	9	14	9
Purchaser's customers make decisions based on producer	1	4	16	14
Purchaser makes decision based on country	6	6	12	15
Purchaser's customers make decisions based on country	0	4	13	17

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

Table II-6

Hardwood plywood: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of reporting firms

Factor	First	Second	Third	Total
Availability	7	8	8	23
Delivery	0	1	1	2
Price	6	13	16	35
Product consistency	2	3	1	6
Product line	1	0	1	2
Quality	17	11	5	33
Reliability of supply	1	1	0	2
Service	0	0	1	1
Supplier history	1	0	0	1
Terms	0	0	1	1
Traditional suppliers	1	0	1	2
Other[1]	4	1	2	7

[1] Other factors include: ”consistent performance including availability, timely delivery, support of products,” “adherence to product specifications (within tolerances),” certification,” method of plywood layup," warehousing consignment delivery program, continuous improvement of the grade level of the material, and “applicability to our needs.”

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

Table II-7
Hardwood plywood: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms

	Number of firms responding		
Factor	**Very important**	**Somewhat important**	**Not important**
Availability	38	2	0
Core material species	19	18	3
Delivery time	34	5	1
Discounts offered	9	21	10
Extension of credit	7	11	22
Minimum qty requirements	5	18	17
Packaging	9	23	8
Panel thickness	33	7	0
Price	35	4	1
Product consistency	40	0	0
Quality exceeds industry standards	13	22	4
Quality meets industry standards	34	4	1
Product range	10	23	5
Reliability of supply	36	4	0
Technical support/service	14	20	6
U.S. transportation costs	20	16	4
Veneer thickness	25	14	0

Note: Does not include a response by *** that quality meeting industry standards is both "very and not important.

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

thin faced veneer product. Over one-half of these purchasers cited suitability for sanding as a limiting factor; a few cited lamination and appearance as limiting factors.

According to respondents, there is limited competition between imported and domestic hardwood plywood since the domestic products contain a softwood core with thick outer veneers of at least 0.5 mm while the Chinese products contain a hardwood core with outer veneers of 0.22 mm to 0.28 mm.[20] Respondents also indicate that domestic producers cannot produce panels with overall thickness of less than 6 mm while a large proportion of Chinese plywood has an overall thickness of 5.2 mm or less.[21] They report that these thinner panels are reportedly used as a flooring substrate (5.2 mm panels), and in RVs and manufactured homes (2.7 mm and 3.4 mm panels).[22] Petitioners, however, assert that the appearance of the panel,

[20] AAHP postconference brief, p. 16. AAHP posthearing brief, exhibit 6, pp. 1-5. Hearing transcript, pp. 199-201 (Spencer).

[21] According to respondents, 40 percent of Chinese imports are thicknesses of 5.2 mm or less. Conference transcript, p. 14 (Grimson). Available data indicate that in 2012, ***. HPVA, Hardwood Stock Panels, Annual Statistical Report for Calendar Year 2012, p. 16.

[22] AAHP postconference brief, p. 19.

rather than the thickness of the outer veneers (face thickness), is what is important to customers.[23]

Supplier certification

About one-half of responding purchasers indicated that they require that their suppliers be certified for at least some of their purchases. Certification procedures vary by purchaser with some purchasers testing samples, visiting and auditing vendors, and relying on industry standards such the California Air Resource Board (CARB) certification. Most suppliers reported that certification takes from two weeks up to 4 months, although some purchasers report shorter certification periods or certification taking up to one year. Eight purchasers reported that a supplier failed in its attempt to be certified to supply hardwood plywood since 2010. ***.

Lacey Act Procedures

The Lacey Act is a federal law dating back to 1900 (and amended several times) that prohibits trafficking in "illegal" wildlife, fish, and plants. It was most recently amended in 2008 to make it a crime to enter into commercial transactions involving plant material (including wood products) that is harvested or traded illegally.[24] The Act also requires importers to file a specific declaration upon importation of plant products (hardwood plywood in this case) that contains information about the genus, species, country of harvest, and quantity of plant material. When asked about procedures to comply with the Lacey Act, six U.S. producers responded that they have some form of Lacey Act specific procedures in place. The majority of purchasers also indicated that they check to ensure that suppliers are in compliance with the Lacey Act and that the required Lacey Act import documentation is filed. Some purchasers indicated that they rely on their suppliers to ensure compliance with filing of the Lacey Act declaration. Thirty-eight importers responding to this question indicated that they have procedures to file the necessary Lacey Act declaration upon importation.[25] Some importers noted that information for doing so is provided by the foreign supplier; some importers commented that they additionally require suppliers to confirm or certify compliance to the Lacey Act; some conduct visits to suppliers to verify source of raw materials; and some include assurances of compliance as part of signed purchasing agreements. Two importers provided detailed information on their management programs to implement the Lacey Act that include conducting supplier risk assessments, quarterly and annual reviews and/or auditing, verification of supplier information, third-party verification and document controls.

[23] Petitioners' postconference brief, p. 17. Conference transcript, pp. 86-87 (Thompson). Hearing transcript p. 101 (Gonyea), pp. 101-102 (Thompson).

[24] See additional information on the 2008 Lacey Act amendments at: http://www.aphis.usda.gov/plant_health/lacey_act/

[25] Under the Lacey Act, the importer of record is required to file the Lacey Act declaration.

Chain of Custody Certification and Certified Product

Seven domestic producers reported having a Chain of Custody (CoC) certification under one or more of FSC, PEFC, and SFI certification programs. Domestic producers indicated that approximately 10 percent of their production carried a SFI, PEFC, or FSC certification claim in 2012. While eighteen importers reported having a CoC certification under one or more of the FSC, PEFC, or SFI systems, they also reported that very little of imported subject product carries a certified content claim under one of the standards. On average, less than 3 percent of their total imported volume carried a certification claim. Importers generally indicated that there is very little demand for certified subject product. Eight purchasers indicated that they require suppliers to have a CoC certification and they reported that, on average, 3 percent of the volume they purchased in 2012 was certified. Importers and purchasers generally stated that they only supply certified material upon customer request.

Changes in purchasing patterns

Most purchasers reported increasing their purchases of hardwood plywood from both U.S. and subject sources since 2010 (table II-8). Many purchasers reported that they had increased sales due to increased demand. Over one-half of responding purchasers reported that they had changed suppliers since 2010. Specifically, firms dropped or reduced purchases from various suppliers because of price and/or quality, but some purchasers also cited reasons such as availability. About one-fourth of responding purchasers reported new suppliers such as American International, Dalin, Pavco, and Xuzhon Hansun.

Importance of purchasing domestic product

About one-half of responding purchasers reported that purchasing U.S.-produced product was an important factor in some of their purchasing decisions. Reported purchases of domestic product that were required by law, regulation, customers, or other reasons represented about 3 percent of apparent consumption of hardwood plywood from 2010 to June 2013. The bulk of these purchases were required by purchasers' customers and a very small amount were required by law or regulation. Petitioners argue that the domestic industry market share of 17 to 18 percent between 2010 and 2012 was not much greater than the minimum level possible given the legal, regulatory, customer, or other requirements. They estimate that total domestic purchases constitute *** percent of the U.S. market since the responding purchasers represented *** percent of apparent consumption.[26]

[26] Petitioners' posthearing brief, Responses to questions from Commissioners, p. 19.

Table II-8

Hardwood plywood: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	3	4	22	6	5
China	5	5	24	4	2
Other	8	7	13	7	1

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

Comparisons of domestic products, subject imports, and nonsubject imports

At least one-half of responding purchasers reported that U.S. and subject product were comparable in terms of discounts offered, extension of credit, minimum quantity requirements, packaging, panel thickness, quality meeting or exceeding industry standards, reliability of supply, and U.S. transportation costs (tables II-9 and II-10). Over one-half of responding purchasers indicated that U.S.-produced product was superior in terms of delivery time, product range, technical support/service, and veneer thickness. One-fourth of responding purchasers indicated that imports from China were superior compared to U.S.-produced hardwood plywood with regards to price. At least three-fourths of responding purchasers indicated that U.S.-produced hardwood plywood was comparable with nonsubject imports from Canada for all attributes. In all but one case, 70 percent of responding purchasers indicated that U.S-produced hardwood plywood was either superior or comparable to imports from other nonsubject countries for all attributes except for price. The exception was that almost all responding purchasers indicated that imports from Russia were either superior or comparable to U.S-produced hardwood plywood with respect to core material species.

While over one-half of U.S. producers indicated that domestic hardwood plywood and imported Chinese product are “always” interchangeable, more than 80 percent of importers and 60 percent of purchasers characterized them as either “sometimes” or “never” comparable (table II-11). In comparing domestic hardwood plywood to nonsubject imports, close to a majority of producers and a majority of importers and purchasers found the domestic and Canadian products to be “always” or “frequently” interchangeable, but that imports from other countries were “sometimes” or “never” interchangeable with domestic product.

Importers and purchasers reported that interchangeability between various sources including domestic and Chinese hardwood plywood is limited by the following: needed lengths and widths not available domestically; differing characteristics such as wood species, core construction, face and back veneer thicknesses, panel strength, tolerances for moisture content, and glues; differing quality; smaller volumes available from importers; and availability of product. Some importers and purchasers noted that Chinese product has a thinner veneer face (0.25 mm to 0.35 mm) than domestic product (0.5 mm to 0.75 mm). They also reported that domestic hardwood plywood consists of high quality decorative panels whereas imports are typically used for non-decorative uses.

Table II-9

Hardwood plywood: Purchasers' comparisons between U.S.-produced and imported product

	U.S. vs. China			U.S. vs. Canada			U.S. vs. Indonesia		
Factor	**S**	**C**	**I**	**S**	**C**	**I**	**S**	**C**	**I**
Availability	11	13	10	2	16	0	13	4	6
Core material species	12	16	6	0	18	0	7	12	4
Delivery terms	17	14	3	1	17	0	13	9	1
Delivery time	20	11	5	2	15	1	13	7	3
Discounts offered	9	22	3	1	16	1	7	13	2
Extension of credit	8	25	1	0	18	0	9	13	0
Minimum qty requirements	14	20	1	1	17	0	11	11	1
Packaging	17	18	0	2	16	0	11	11	1
Panel thickness	13	17	5	1	17	0	9	12	2
Price[1]	1	8	24	1	17	0	1	9	12
Product consistency	16	16	3	1	17	0	11	10	2
Quality exceeds industry standards	15	18	1	0	18	0	8	13	1
Quality meets industry standards	8	24	1	1	17	0	6	16	0
Product range	18	11	4	3	15	0	13	7	2
Reliability of supply	14	18	3	1	17	0	13	7	3
Technical support/service	23	12	0	1	16	1	16	6	1
U.S. transportation costs[1]	12	22	1	3	14	1	6	15	2
Veneer thickness	20	10	4	0	17	1	12	8	3

[1] A rating of superior means that price/U.S. transportation costs is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note: S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior. Does not include responses by *** that hardwood plywood produced in United States is both "superior" and "inferior" to hardwood plywood imported from China in terms of availability, price, product range, and veneer thickness.

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

Table II-10

Hardwood plywood: Purchasers' comparisons between U.S.-produced and imported product

	U.S. vs. Russia			U.S. vs. Other		
Factor	**S**	**C**	**I**	**S**	**C**	**I**
Availability	13	4	4	6	5	0
Core material species	1	11	9	4	7	0
Delivery terms	12	8	1	7	4	0
Delivery time	12	7	2	7	4	0
Discounts offered	8	12	1	3	8	0
Extension of credit	10	11	0	5	6	0
Minimum qty requirements	8	13	0	3	8	0
Packaging	5	15	1	4	7	0
Panel thickness	4	16	1	5	6	0
Price[1]	1	11	9	0	9	2
Product consistency	4	16	1	3	7	1
Quality exceeds industry standards	3	16	2	4	7	0
Quality meets industry standards	2	18	1	4	7	0
Product range	13	7	1	6	6	0
Reliability of supply	12	7	2	6	5	0
Technical support/service	14	7	0	6	5	0
U.S. transportation costs[1]	5	15	1	2	8	1
Veneer thickness	5	13	3	5	5	1

[1] A rating of superior means that price/U.S. transportation costs is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note: S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

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

Table II-11

Hardwood plywood: Perceived interchangeability between hardwood plywood produced in the United States and in other countries, by country pairs

	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
Country pair	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**
U.S. vs. subject countries:												
U.S. vs. China	4	2	1	0	3	4	24	9	2	11	18	4
Non-subject countries comparisons:												
U.S. vs. Canada	6	1	0	0	8	10	3	1	9	7	3	1
U.S. vs. Indonesia	1	2	2	1	1	4	15	11	2	4	9	7
U.S. vs. Russia	2	2	2	1	3	6	12	9	0	6	11	8
U.S. vs. other countries	1	0	1	1	0	2	4	2	0	1	5	2
China vs. Canada	3	3	1	0	2	1	15	2	0	4	11	2
China vs. Indonesia	2	1	1	1	2	7	18	1	2	7	6	3
China vs. Russia	2	1	2	0	2	2	17	6	2	3	10	5
China vs. other countries	1	0	1	0	0	2	5	2	0	2	5	0
Canada vs. Indonesia	1	2	2	1	1	4	9	6	1	1	8	4
Canada vs. Russia	2	2	2	0	1	4	8	6	0	3	9	5
Canada vs. other countries	1	0	1	0	0	1	4	0	0	0	3	0
Indonesia vs. Russia	1	0	2	1	0	2	7	12	0	2	7	8
Indonesia vs. other countries	1	0	0	1	0	2	7	0	0	1	6	0
Russia vs. other countries	1	0	1	0	0	2	2	4	1	0	3	2

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

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

One importer reported differences between domestic and Chinese product in the design of the tongue and groove, the finishing, and the treatments. Another firm noted that Chinese plywood is sized in millimeters while domestic plywood uses the Imperial System, and as a result, the two cannot be mixed in the same application. Another importer reported that the Chinese material is of adequate quality for certain finishing operations, but that higher end cabinetry requires the thicker face veneer to achieve the required end quality on finish.[27] One importer reported that hardwood plywood from the United States, Canada, and Russia is of higher quality and is more often interchangeable than product from other sources. This

[27] It noted that it "does interchange U.S. and Chinese hardwood plywood for the purposes of supply chain diversity and supply risk mitigation. However, the domestic supplier base does not offer a face veneer in the 0.25 to 0.35 mm thickness range. Since the domestic producers do not slice veneer to the lower spec, their veneer logs do not produce as many sheets of veneer. Unfortunately, this lowers the amount of A grade faces available for sale by the domestic vendors, and forces face grade negotiations (i.e, the kitchen cabinet manufacture is asked to sacrifice face grade versus the veneer thickness)."

importer reported that product from China and Southeast Asia consistently lacks core qualityleading to panels that warp and crackle when handled, and mold after use, and also contain many holes and delaminate easily.

U.S. producers reported that imports from nonsubject countries were not always substitutable with domestic product because of differing wood species (Chile and Indonesia do not have access to birch), densities, and prices. Another producer reported that Indonesian product uses thin (3.0 mm to 5.2 mm) Luan Meranti plywood. Another producer reported that Russian hardwood plywood has a different standard width and length and differing grade standards than plywood from other sources.

Importers and purchasers also reported differences in the type of product and wood species of hardwood plywood from nonsubject countries and that available from U.S. producers. One importer reported that Indonesian hardwood plywood uses tropical species that are more stable and can be used to make thinner products (2.3 mm and 3.4 mm) than what is produced in the United States. Another importer reported that Indonesian plywood is mainly Meranti and complements domestic product, and that Russian plywood also complements domestic product. Another importer reported that "South American products are generally perceived to be well built structurally, but are always lacking in consistent face quality."

As can be seen from table II-12, just under one-half of responding purchasers reported that domestically-produced product "always" met minimum quality specifications and almost all responding producers indicated that it at least "usually" met minimum quality specifications. Less than 20 percent of purchasers indicated that hardwood plywood imported from China "always" met minimum quality specifications and over 80 percent of purchasers indicated that it at least "usually" met minimum quality specification.

More than two-thirds of responding importers and purchasers, but less than half of U.S. producers (3 of 7), found that differences other than price between U.S. and Chinese hardwood plywood were "always" or "frequently" significant (table II-13).

Two U.S. producers noted that Chinese quality was lower than that of U.S. hardwood lumber. Importers reported a number of differences other than price between domestic products and Chinese products. Firms noted differences in sizes, veneer thickness, core species, and quality (including Chinese lower quality). Several firms noted that customers may source hardwood plywood offshore because domestic product is higher quality and has a thicker face veneer than what is needed for certain applications, or conversely that Chinese thin-veneered product may not be suitable for some end users. One importer reported that China has a wide range of product and makes timely deliveries while another reported that Chinese product is shipped in containers rather than truckloads, with longer lead times, smaller product range, no technical support, and no showrooms for builders/dealers. One importer reported that imports from Chinese and Russian products are typically poplar and birch and are used for lower quality applications such as apartments and rentals, whereas higher end applications use domestic red oak, cherry, maple, fir, and pine. Other comments regarding comparisons with nonsubject product include that the Russian and Indonesian products that are very different than domestic product; Russian and Chinese have different cores and different sizes; and that Indonesian panels are 2.7 mm to 3.4 mm thickness as a result of the tropical hardwood species used, and that these products cannot be produced by domestic producers.

Table II-12

Hardwood plywood: Ability to meet minimum quality specifications, by source and number of reporting firms[1]

	Number of firms reporting[1]			
Source	**Always**	**Usually**	**Sometimes**	**Rarely or never**
United States	15	18	1	0
China	6	22	5	2
Canada	7	10	1	0
Indonesia	2	15	4	1
Russia	9	10	3	0
Other [1]	0	7	0	0

[1] Purchasers were asked how often domestically produced or imported hardwood plywood meets minimum quality specifications for their own or their customers' uses.

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

Table II-13

Hardwood plywood: Significance of differences other than price between hardwood plywood produced in the United States and in other countries, by country pair

	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
Country pair	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**
U.S. vs. subject countries:												
U.S. vs. China	3	0	4	0	20	11	7	0	14	10	10	0
Non-subject countries comparisons:												
U.S. vs. Canada	2	0	1	4	5	0	9	3	4	2	8	5
U.S. vs. Indonesia	1	1	4	0	12	6	11	0	7	5	6	2
U.S. vs. Russia	3	0	3	0	13	7	6	1	7	4	7	5
U.S. vs. other countries	0	0	2	0	3	3	2	0	4	0	3	0
China vs. Canada	1	1	4	0	7	4	6	0	5	4	5	1
China vs. Indonesia	0	1	4	0	5	6	15	1	2	1	10	4
China vs. Russia	1	0	3	0	9	2	12	0	5	2	10	2
China vs. other countries	0	0	2	0	3	1	2	0	2	0	4	0
Canada vs. Indonesia	1	2	3	0	6	5	7	0	4	3	4	2
Canada vs. Russia	2	0	3	0	6	3	5	0	4	2	6	4
Canada vs. other countries	0	0	2	0	1	1	1	0	0	0	4	0
Indonesia vs. Russia	0	0	3	0	6	2	8	0	5	2	7	2
Indonesia vs. other countries	0	0	2	0	1	2	3	0	1	0	4	0
Russia vs. other countries	0	0	2	0	1	2	1	1	1	0	4	0

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

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

For the final phase of these investigations, the Commission collected data on U.S. and Chinese production by type of material utilized for the face veneer and in the core and shipments of U.S. and Chinese produced product and imports from China by thickness of the product and the face veneer (See appendix D). Chinese producers reported that almost 90 percent of exports to the United States in 2012 utilized hardwood veneer as the core material, while U.S. producers indicated that about two-thirds of domestically produced core material utilized softwood veneers (table D-1). Domestic producers also used a greater proportion (almost thirty percent) of "other" inputs such as MDF, lumber, etc. in 2012 as compared with 3 percent used by Chinese producers. The data were similar for the other years and year-to-date of the POI. According to public data, just over *** percent of North American produced panels contain a veneer core (with most of the remainder split between an MDF or particleboard core in 2012.[28]

However, both U.S. and Chinese producers reported that they use hardwood as face veneer for more than 90 percent of the hardwood plywood that they produce (table D-2). According to public data, in 2012 the most common species of the face veneer among panels produced in North America were maple (*** percent), birch (*** percent), and red oak (*** percent).[29]

U.S. producers reported that virtually all of domestically produced plywood utilized face veneer thicknesses greater than 0.4 mm during the POI, with the vast majority (95 percent in 2012) manufactured with face veneers greater than 0.6 mm (table D-3). In contrast, 99 percent of Chinese importers' commercial shipments utilized face veneers of less than 0.5 mm thick, with the majority of shipments (93 percent) thinner than 0.4 mm. Chinese producers' data also indicate that over 90 percent of face veneer utilized in exports to the United States in 2012 was less than 0.4 mm in thickness.

U.S. market demand is also characterized by different thicknesses of plywood.[30] Typically, thicker plywood is used in cabinet fronts and sides whereas thinner plywood is used for cabinet backs, drawer bottoms, paneling, and underlayment. In 2012, a greater proportion of U.S. producers' commercial shipments were reported to be in plywood thicknesses of at least 16 mm (58 percent) as compared with U.S. importers' commercial shipments of imports from China (21 percent) and Chinese producers' U.S. exports (42 percent) (table D-4). U.S. producers' shipments of thin plywood of less than 6.5 mm in thickness accounted for 21 percent of the total in 2012 while U.S. importers' commercial shipments of imports from China represented 45 percent. Chinese producers reported that plywood below 6.5 mm in thickness represented 33 percent of exports to the United States.

In commenting on whether the subject product is used differently than the domestic product in the same applications, some purchasers indicated that hardwood plywood produced in the United States and in China is not used differently while others indicated that it is often used for different components, particularly in cabinets (see appendix E). Purchasers indicating

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[28] HPVA, Hardwood Stock Panels, Annual Statistical Report for Calendar Year 2012, p. 17.
[29] Annual Statistical Report for Calendar Year 2012, p. 18.
[30] Conference Transcript, p. 152 (Wilkinson); AAHP Postconference Brief, p. 12, 18-19.

that there is a difference noted that imports from China are typically used to produce the interiors, backs and drawer bottoms of cabinets, while domestic product is used for cabinet fronts and sides. Three purchasers pointed to differences in the core material and/or the thinner veneer face of the subject product that make its more suitable for applications not requiring sanding and finishing. Two purchasers noted that the subject product is better suited for laminated applications. One purchaser commented that only domestic product is available with no-added formaldehyde.

Respondents assert that there is limited overlap in end-uses between U.S-produced product and imports from China. They indicate that although both U.S.-and Chinese-produced product are both used to produce kitchen cabinets, the U.S.-produced product serves the high-end segment and Chinese product serves a lower-end market in which the wood is laminated or painted.[31] According to respondents, kitchen cabinet manufacturers use the domestic product for the fronts of cabinets while the Chinese product may be used for cabinet backs, bottoms, shelves, and drawer sides.[32] Petitioners assert that although Chinese product was initially present only in the low end of the market, in the last few years, imported Chinese product has also competed in the high end of the market with panels made of walnut, oak, maple, and cherry hardwood veneer from U.S. logs.[33]

ELASTICITY ESTIMATES

U.S. supply elasticity

The domestic supply elasticity[34] for hardwood plywood measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of hardwood plywood. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced hardwood plywood. Analysis of these factors earlier indicates that the U.S. industry is likely to be able to somewhat increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 8 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for hardwood plywood measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of hardwood plywood. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the hardwood plywood in the

[31] AAHP postconference brief, pp. 27-28.
[32] AAHP postconference brief, p. 28.
[33] Conference transcript, p. 37 (Clausen).
[34] A supply function is not defined in the case of a non-competitive market.

production of any downstream products. Based on the available information, the aggregate demand for hardwood plywood is likely to be inelastic; a range of -0.75 to -1.25 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[35] Product differentiation, in turn, depends upon such factors as quality (*e.g.*, chemistry, appearance, *et cetera*) and conditions of sale (*e.g.*, availability, sales terms/ discounts/ promotions, *et cetera*). Petitioners suggest that the substitution elasticity should be higher, pointing to the nearly 48 percent Chinese share of apparent consumption in 2012, the decline in market share following the filing of the investigation, and the importance of price in response to purchaser questionnaires.[36]

Substitutability is enhanced by the fact that price was a very important factor in purchasing, but is constrained by quality being the most important factor for more purchasers. Also, there are clear differences in face thickness and core material between U.S.-produced product and subject imports from China. Veneer thickness is at least a somewhat important purchasing factor for all responding purchasers and a very important factor for about 60 percent of purchasers. Core material species was a very important factor to just under one-half of responding purchasers and at least a somewhat important factor to all but three purchasers. Also, over one-half of responding purchasers indicated that U.S.-produced product was superior to Chinese imports in terms of delivery time, product range, technical support/service, and veneer thickness. Therefore while the importance of price and some overlap in panel thickness does suggest substitutability between U.S.-produced product and imports from China, this is moderated by the higher importance of quality and importance and differences in veneer thickness and core material. Based on this information, the elasticity of substitution between U.S.-produced hardwood plywood and imported hardwood plywood is likely to be in the range of 2 to 4.

[35] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

[36] Petitioners' prehearing brief, pp. 39-40.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and sales at LTFV was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of nine firms that accounted for the nearly all of U.S. production of hardwood plywood during 2012.

U.S. PRODUCERS

The Commission sent U.S. producer questionnaires to 21 firms based on information contained in the petition. Eight firms provided useable data on their manufacturing operations.[1] Staff believes that these responses represent nearly all of U.S. production of hardwood plywood. No tolling or production in foreign trade zones was reported.

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

[1] ***.

As noted previously, ***. *** as a related party, but excluded no other U.S. producer as related party. Hardwood Plywood from China, Inv. Nos. 701-TA-490 and 731-TA-1204 (Preliminary), USITC Publication 4361, November 2012, p. 9

Table III-1

Hardwood plywood: U.S. producers, positions on the petition, U.S. production locations, related and/or affiliated firms, and shares of 2012 reported U.S. production

Firm	Position on petition	U.S. production location(s)	Related and/or affiliated firms	Share of reported production (*percent*)
Columbia Forest Products[1]	Petitioner	Old Fort, NC; Klamath Falls, OR; Chatham, VA; Truman, AR; Craigsville, WV	***	***
Commonwealth Plywood Co., Ltd.[2]	Petitioner	Whitehall, NY	***	***
Darlington Veneer Company, Inc.	***	Darlington, SC	***	***
Mt. Baker Products, Inc [3]	***	Bellingham, WA	***	***
Murphy Plywood	Petitioner	Eugene, OR	***	***
Owl Hardwood Lumber & Plywood Inc.[4]	***	Des Plaines, IL	***	***
Pittsburgh Forest Products, Inc.[6]	***	McMurray, PA; Vienna, OH	***	***
Roseburg Forest Products Co.[7]	Petitioner	Roseburg, OR	***	***
S.J. Morse Company	***	Capon Bridge, WV	***	***
States Industries LLC [8]	Petitioner	Eugene, OR	***	***
Timber Products Company [9]	Petitioner	Corinth, MS; Grants Pass, OR; Medford, OR	***	***

[1] "***."
[2] "***."
[3] "***."
[4] "***."
[5] Less than 0.5 percent.
[6] "***." Have not produced any hardwood plywood since early 2011. Pittsburgh's producer questionnaire response from the preliminary phase of these investigations.
[7] ***.
[8] "***."
[9] "***"

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

As indicated in table III-1, two U.S. producers are related to foreign producers of nonsubject merchandise and two are related to U.S. importers of hardwood plywood, as discussed in greater detail later in this section.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 presents U.S. producers' production, capacity, and capacity utilization. Producers were asked to comment on constraints to their capacity and production levels and their comments follow.

Table III-2
Hardwood plywood: U.S. producers' production, capacity, and capacity utilization, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
Capacity (*1,000 square feet*)	1,325,400	1,326,713	1,310,545	658,356	645,470
Production (*1,000 square feet*)	587,674	619,820	669,339	338,138	383,296
Capacity utilization (*percent*).	44.3	46.7	51.1	51.4	59.4

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

Columbia (***) stated, "***." Commonwealth (***) cited the ***. Darlington Veneer (***) stated, "***."

Mt. Baker Products (*** stated, "***." Murphy (***) stated, "***." Owl (***, cited ***. S.J. Morse (***) had ***." States (***) reported that it, "***." Roseburg *** did not list any constraints. ***. Timber Products (***) stated, "***." "***."

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Data on U.S. producers' shipments of hardwood plywood are presented in table III-3. Over the period of investigation, U.S. commercial shipments accounted for the vast majority of U.S. producers' shipments. Between 2010 and 2012, the quantity and value of U.S. producers' U.S. shipments increased.

*** reported transfers to related firms. *** reported exports to ***.

Table III-3
Hardwood plywood: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2010 2012, January-June 2012 and January-June 2013

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
	Quantity (1,000 square feet)				
Commercial shipments	551,962	577,270	615,301	312,669	345,476
Internal consumption	4,574	4,656	8,649	2,793	5,723
Transfers to related firms	8,945	12,822	18,252	8,383	14,974
U.S. shipments	565,481	594,748	642,202	323,845	366,173
Export shipments	21,961	24,040	25,245	10,722	13,741
Total	587,442	618,788	667,447	334,567	379,914
	Value ($1,000)				
Commercial shipments	614,459	651,753	690,152	353,800	402,802
Internal consumption	5,017	5,048	9,025	3,090	6,458
Transfers to related firms	9,903	14,646	20,384	9,645	17,457
U.S. shipments	629,379	671,447	719,561	366,535	426,717
Export shipments	24,327	28,180	29,160	13,802	16,010
Total	653,706	699,627	748,721	380,337	442,727
	Unit value (dollars per square foot)				
Commercial shipments	$1.11	$1.13	$1.12	$1.13	$1.17
Internal consumption	1.10	1.08	1.04	1.11	1.13
Transfers to related firms	1.11	1.14	1.12	1.15	1.17
U.S. shipments	1.11	1.13	1.12	1.13	1.17
Export shipments	1.11	1.17	1.16	1.29	1.17
Average	1.11	1.13	1.12	1.14	1.17
	Share of shipment quantity (percent)				
Commercial shipments	94.0	93.3	92.2	93.5	90.9
Internal consumption	0.8	0.8	1.3	0.8	1.5
Transfers to related firms	1.5	2.1	2.7	2.5	3.9
U.S. shipments	96.3	96.1	96.2	96.8	96.4
Export shipments	3.7	3.9	3.8	3.2	3.6
Total	100.0	100.0	100.0	100.0	100.0

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

U.S. PRODUCERS' INVENTORIES

Table III-4 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments over the period examined**.**

Table III-4
Hardwood plywood: U.S. producers' inventories, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
Inventories (*1,000 square fee*t)	34,495	35,478	37,350	39,186	41,046
Ratio to production (*percent*)	5.9	5.7	5.6	5.8	5.4
Ratio to U.S. shipments (*percent*)	6.1	6.0	5.8	6.1	5.6
Ratio to total shipments (*percent*)	5.9	5.7	5.6	5.9	5.4

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

One firm reported imports of hardwood plywood from China , five firms reported purchases of hardwood plywood from China and six reported purchases from nonsubject sources that include Canada, Chile, Indonesia, and Russia. U.S. producers' imports and purchases of hardwood plywood (as well as reasons for importing and purchasing) are presented in table III-5.

Table III-5
Hardwood plywood: U.S. producers' U.S. production, imports and purchases, 2010-2012, January-June 2012 and January-June 2013

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-6 shows U.S. producers' employment-related data during the period examined.

Table III-6
Hardwood plywood: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
PRWs (*number*)	1,753	1,799	1,868	1,829	1,944
Hours worked (*1,000*)	3,768	3,937	4,101	2,086	2,202
Wages paid (*$1,000)*	65,108	66,193	72,170	35,597	38,999
Hourly wages	$17.28	$16.81	$17.60	$17.06	$17.71
Productivity (*square feet per hour*)	156.0	157.4	163.2	162.1	174.1
Unit labor costs (*per square foot)*	$0.11	$0.11	$0.11	$0.11	$0.10

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

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

Importer questionnaires were sent to 150 firms believed to be importers of subject hardwood plywood, as well as to all identified U.S. producers of hardwood plywood. Usable questionnaire responses were received from 42 companies, representing 66.3 percent of total imports from China, as reported by official Commerce statistics, between January 2010 and June 2013; nearly 70 percent in 2012. One firm reported no imports from China, 9 firms reported imports from China alone, and the remaining 32 firms reported subject imports from China as well as the following countries: Brazil, Chile, Indonesia, Malaysia, Romania, Russia, Uruguay, and Vietnam.

U.S. IMPORTS

Table IV-1 presents data for U.S. imports of hardwood plywood from China and all other sources. During the POI, the amount of U.S. imports from China increased by nearly 300 million square feet, or about 21 percent, while U.S. imports from nonsubject countries decreased by 163 million square feet, or about 13 percent. However, the January-June 2013 period shows a decrease in imports from China by nearly 215 million square feet, and an increase in imports from nonsubject countries by nearly 89 million square feet.

Table IV-1
Hardwood plywood: U.S. imports by source, 2010-2012, January-June 2012, and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
			Quantity (*1,000 square feet*)		
China	1,376,408	1,534,788	1,671,686	749,534	535,027
All other sources	1,339,454	1,218,331	1,175,958	623,447	712,119
Total	2,715,863	2,753,119	2,847,644	1,372,982	1,247,146
			Value (*$1,000*)[1]		
China	735,648	707,283	828,974	390,662	265,003
All other sources	700,680	632,728	677,187	350,567	395,866
Total	1,436,328	1,340,011	1,506,161	741,229	660,868
			Unit value (*dollars per square foot*)		
China	0.53	0.46	0.50	0.52	0.50
All other sources	0.52	0.52	0.58	0.56	0.56
Total	0.53	0.49	0.53	0.54	0.53
			Share of quantity *(percent)*		
China	50.7	55.7	58.7	54.6	42.9
All other sources	49.3	44.3	41.3	45.4	57.1
Total	100.0	100.0	100.0	100.0	100.0
			Share of value (*percent*)		
China	51.2	52.8	55.0	52.7	40.1
All other sources	48.8	47.2	45.0	47.3	59.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official Commerce statistics.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[1] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible. Subject imports from China

[1] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

accounted for 56.5 percent of total hardwood plywood imports between September 2011 and August 2012 and 58.7 percent of total imports of hardwood plywood by quantity during 2012.

APPARENT U.S. CONSUMPTION

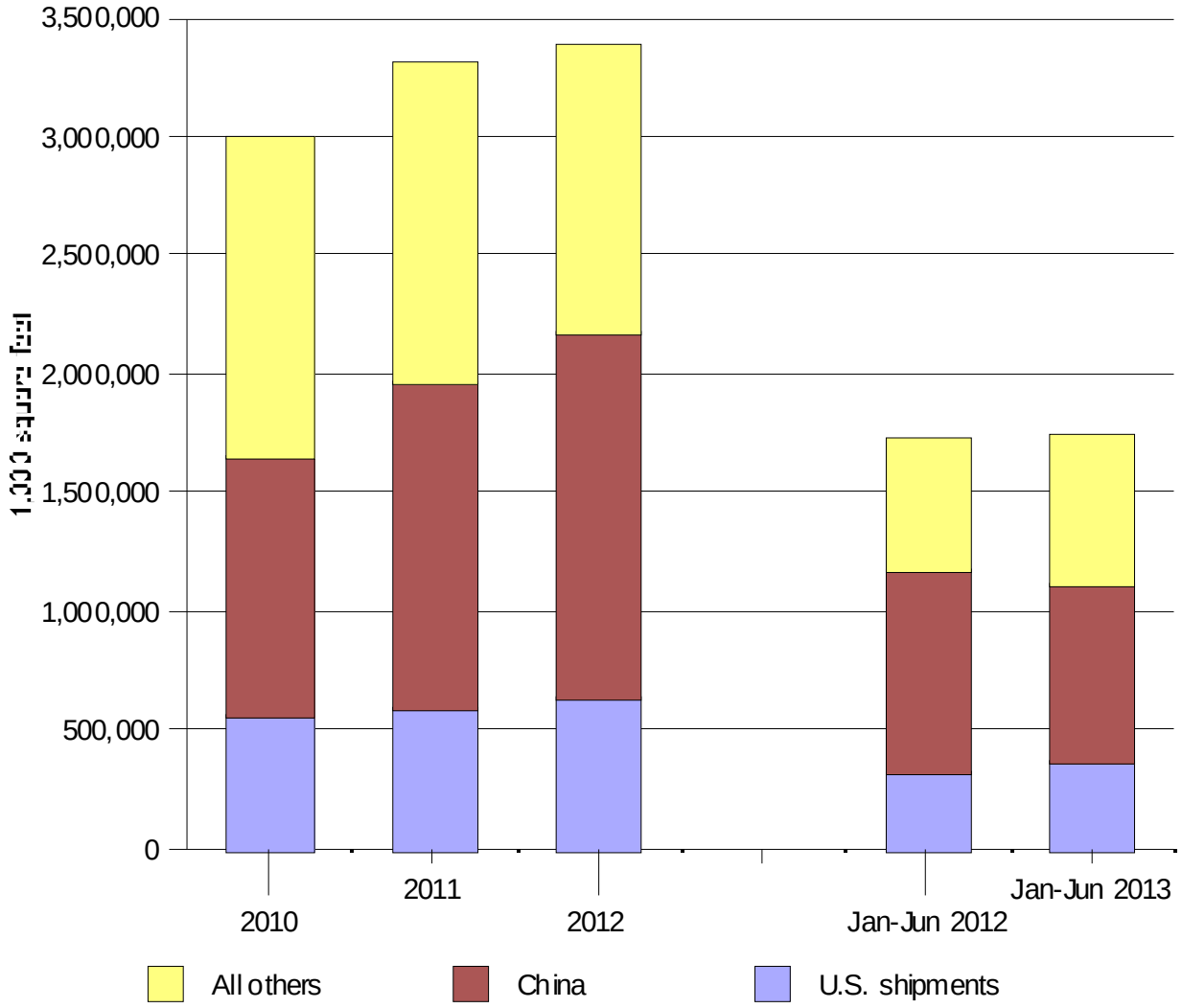
Table IV-2 and figure IV-1 presents data on apparent U.S. consumption and U.S. market shares for hardwood plywood over the period examined. Both U.S. producers' U.S. shipments and U.S. imports from China increased during the period of investigation, while imports from nonsubject countries decreased. Imports from nonsubject countries land U.S. producers' shipments increased during the January-June 2012-13 periods, while subject imports from China decreased. Apparent US consumption has increased throughout the 2010-12, but was lower in interim 2013 than interim 2012.

Table IV-2
Hardwood plywood: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2010-2012, January-June 2012, and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
U.S. producers' shipments	565,481	594,748	642,202	323,845	366,173
U.S. imports from--					
China	1,376,408	1,534,788	1,671,686	749,534	535,027
All other sources	1,339,454	1,218,331	1,175,958	623,447	712,119
Total U.S. imports	2,715,863	2,753,119	2,847,644	1,372,982	1,247,146
Apparent consumption	3,281,344	3,347,867	3,489,846	1,696,827	1,613,319
	Value (*$1,000*)[1]				
U.S. producers' shipments	629,379	671,447	719,561	366,535	426,717
U.S. imports from--					
China	735,648	707,283	828,974	390,662	265,003
All other sources	700,680	632,728	677,187	350,567	395,866
Total U.S. imports	1,436,328	1,340,011	1,506,161	741,229	660,868
Apparent consumption	2,065,707	2,011,458	2,225,722	1,107,764	1,087,585

Source: Compiled from data submitted in response to Commission questionnaires and official Commerce statistics.

Figure IV-1
Hardwood plywood: Apparent U.S. consumption, by sources, 2010-12, January-June 2012, and January-June 2013



Source: Table IV-2.

U.S. MARKET SHARES

U.S. market share data are presented in table IV-3. U.S. producers' market share increased 2010 to 2012 and then was higher in interim 2013 compared with interim 2012. The market share of imports from China increased steadily from 41.9 percent in 2010 to 47.9 percent in 2012. Interim 2013 data indicate an decrease in market share for Chinese imports compared with interim 2012, while imports from nonsubject sources show an increase in market share for interim 2013.

Table IV-3
Hardwood plywood: U.S. consumption and market shares, 2010-2012, January-June 2012, and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
Apparent consumption	3,281,344	3,347,867	3,489,846	1,696,827	1,613,319
	Value (*1,000 dollars*)				
Apparent consumption	2,065,707	2,011,458	2,225,722	1,107,764	1,087,585
	Share of quantity (*percent*)				
U.S. producers' shipments	17.2	17.8	18.4	19.1	22.7
U.S. imports from--					
China	41.9	45.8	47.9	44.2	33.2
All other sources	40.8	36.4	33.7	36.7	44.1
Total U.S. imports	82.8	82.2	81.6	80.9	77.3
	Share of value (*percent*)				
U.S. producers' shipments	30.5	33.4	32.3	33.1	39.2
U.S. imports from--					
China	35.6	35.2	37.2	35.3	24.4
All other sources	33.9	31.5	30.4	31.6	36.4
Total U.S. imports.	69.5	66.6	67.7	66.9	60.8

Source: Compiled from data submitted in response to Commission questionnaires and official Commerce statistics.

RATIO OF IMPORTS TO U.S. PRODUCTION

Table IV-4 presents data on the ratio of U.S. imports to U.S. production.

Table IV-4
Hardwood plywood: Ratio of U.S. imports to U.S. production, 2010-2012, January-June 2012, and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
U.S. production	587,674	619,820	669,339	338,138	383,296
Imports from:					
China	1,376,408	1,534,788	1,671,686	749,534	535,027
All other sources	1,339,454	1,218,331	1,175,958	623,447	712,119
Total	2,715,863	2,753,119	2,847,644	1,372,982	1,247,146
	Ratio of imports to U.S. production quantity (*percent*)				
China	234.2	247.6	249.8	221.7	139.6
All other sources	227.9	196.6	175.7	184.4	185.8
Total	462.1	444.2	425.4	406.0	325.4

Source: Compiled from data submitted in response to Commission questionnaires and official Commerce statistics.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

Raw material costs were close to 80 percent of U.S. producers' total cost of goods sold during 2010 to 2012. Logging prices increased by 16 percent over the period January 2010-August 2013, while hardwood veneer prices decreased by 1 percent (figure V-1).

U.S. producers and importers reported that increases in raw material prices were the result of various factors including increases in the prices of logs, MDF, imported platforms, composite core materials, softwood veneers, veneer cores, and resin. Firms reported that rising demand in the United States and abroad for raw materials, including increased Chinese demand for logs, and curtailments in hardwood and softwood veneer availability, contributed to increased raw material prices. Firms also reported increased costs for labor and freight.

U.S. inland transportation costs

All responding producers and most importers reported that they typically arrange transportation to their customers. U.S. producers' U.S. inland transportation costs ranged from 3 to 12 percent, while all but one importer reported costs ranging from less than one percent up to 7 percent.[1]

PRICING PRACTICES

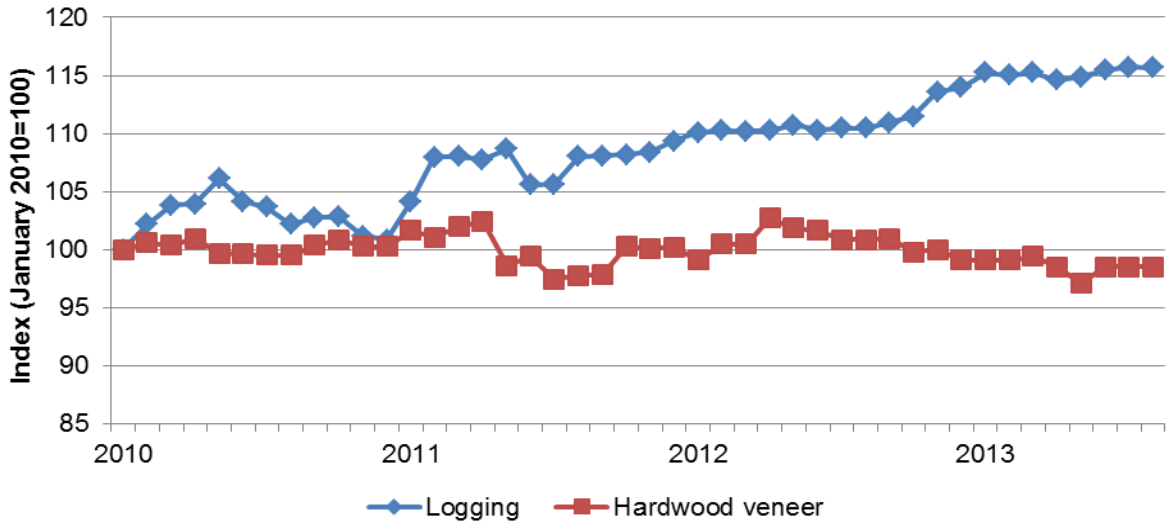
Pricing methods

All U.S. producers and most importers reported using transaction-by-transaction negotiations to determine hardwood plywood prices (table V-1). Some firms also reported using contracts and set price lists. The majority of sales by both U.S. producers and importers of Chinese product were on a spot basis (table V-2). Ten purchasers reported that they purchase product daily, 20 purchase weekly, and nine purchase monthly and one purchases quarterly.

[1] One importer reported costs of 15 percent.

Figure V-1

Logging and hardwood veneer and plywood: Producer price indices, monthly, January 2010-August 2013



Source: Bureau of Labor Statistics, http://data.bls.gov/cgi-bin/dsrv, retrieved October 23, 2013.

Table V-1

Hardwood plywood: U.S. producers and importers reported price setting methods, by number of responding firms[1]

	Number of firms[1]	
Method	**U.S. producers**	**Importers**
Transaction-by-transaction	8	34
Contract	4	14
Set price lists	3	5
Other	0	2

[1]The sum of responses down will not add up to the total number of responding firms, as each firm was instructed to check all applicable price setting methods employed.

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

Table V-2

Hardwood plywood: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2012

	Share of 2012 commercial shipment (percent)	
Item	**U.S. producers**	**Importers**
Long-term contract	1.9	***
Short-term contract	18.4	***
Spot sales	79.7	***

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

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

Sales terms and discounts

U.S. producers and importers quote prices on both an f.o.b. and a delivered basis. About one-half of responding producers (three of seven) reported no discounts, although 2 offered quantity discounts, 3 offered annual volume discounts, and two offered other discounts (for early payment). Most importers (28 of 38) reported no discounts, although two reported quantity discounts, four reported annual volume discounts, and eight reported other discounts (including early payment discounts and rebates to a single customer). About one-half or responding U.S. producers and importers reported sales terms of net 30 days. Many of the remaining U.S. producers and importers reported selling on sales terms of net 10 days, and some reported selling on other terms varying from net 15 days to net 60 days.

Price leadership

Most purchasers reported that there are price leaders in the U.S. market for hardwood plywood. Columbia Forest Products was named as a price leader most frequently by purchasers and Far East American, Liberty, Roseburg, and Timber Products were also named by several purchasers. Several purchasers distinguished between domestic and import price leader. One purchaser (***) indicated that the six large producers in North American take turns as price leaders, but that there are no price leaders among importers.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following hardwood plywood products shipped to unrelated U.S. customers during January 2010-June 2013:

Product 1.-- 12 mm (1/2") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch; whole piece), face Grade

C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, unfinished.

Product 2.-- 12 mm (1/2") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch; whole piece), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, prefinished.

Product 3.-- 18 mm (3/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, unfinished.

Product 4.-- 5.2 mm (1/4") thickness (actual or nominal), 4x8 panel size, Maple face (whether plain or rotary sliced), face Grade B or substantially equivalent, Maple back (whether plain or rotary sliced), back grade 2/3 or substantially equivalent, veneer core, unfinished.

Product 5.-- 18 mm (3/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, prefinished.

Product 6.-- 5.2 mm (1/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether plain or rotary sliced), face Grade C or substantially equivalent, back face of Birch or other, Grade 2/3 or substantially equivalent, veneer core, unfinished.

Five U.S. producers and 32 importers of Chinese hardwood plywood provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for 7 percent of U.S. producers' shipments of hardwood plywood and *** percent of U.S. shipments of subject imports from China during January 2010-June 2013.

Price data for domestic and subject import shipments of products 1-6 are presented in tables V-3 to V-8 and figure V-2. Nonsubject country prices are presented in Appendix F.

Table V-3

Hardwood plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 2010-June 2013

Period	United States		China		
	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Margin *(percent)*
2010:					
Jan.-Mar.	0.85	1,659	***	***	***
Apr.-June	0.87	1,278	***	***	***
July-Sept.	0.87	1,010	***	***	***
Oct.-Dec.	0.90	1,087	***	***	***
2011:					
Jan.-Mar.	0.88	1,348	***	***	***
Apr.-June	0.86	1,382	***	***	***
July-Sept.	0.87	1,709	***	***	***
Oct.-Dec.	***	***	***	***	***
2012:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2013:					
Jan.-Mar.	0.84	2,089	***	***	***
Apr.-June	0.88	2,012	***	***	***

[1] Product 1: 12 mm (1/2") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch; whole piece), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Table V-4

Hardwood Plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarters, January 2010-June 2013

Period	United States		China		
	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Margin *(percent)*
2010: Jan.-Mar.	1.07	111	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	1.05	85	***	***	***
2011: Jan.-Mar.	1.34	114	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	1.03	113	***	***	***
2012: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2013: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

[1] Product 2: 12 mm (1/2") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch; whole piece), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, prefinished.

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

Table V-5

Hardwood Plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 2010-June 2013

Period	United States		China		
	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Margin *(percent)*
2010:					
Jan.-Mar.	0.98	9,414	***	***	***
Apr.-June	1.00	7,678	***	***	***
July-Sept.	1.01	6,045	***	***	***
Oct.-Dec.	1.00	7,661	***	***	***
2011:					
Jan.-Mar.	1.01	8,348	***	***	***
Apr.-June	1.01	7,254	***	***	***
July-Sept.	1.00	7,906	***	***	***
Oct.-Dec.	1.00	7,489	***	***	***
2012:					
Jan.-Mar.	1.00	9,369	***	***	***
Apr.-June	1.02	8,514	***	***	***
July-Sept.	1.01	8,261	***	***	***
Oct.-Dec.	1.01	7,815	***	***	***
2013:					
Jan.-Mar.	1.03	7,524	***	***	***
Apr.-June	1.10	7,461	***	***	***

[1] Product 3: 18 mm (3/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Table V-6

Hardwood Plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarters, January 2010-June 2013

Period	United States		China		
	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Margin *(percent)*
2010:					
Jan.-Mar.	***	***	0.55	235	***
Apr.-June	0.59	637	0.58	273	2.7
July-Sept.	***	***	0.55	257	***
Oct.-Dec.	***	***	0.53	286	***
2011:					
Jan.-Mar.	***	***	0.57	203	***
Apr.-June	***	***	0.53	614	***
July-Sept.	***	***	0.54	299	***
Oct.-Dec.	0.63	415	0.55	310	12.9
2012:					
Jan.-Mar.	0.61	599	0.61	249	0.9
Apr.-June	0.65	695	0.60	224	7.9
July-Sept.	0.65	551	0.54	398	17.4
Oct.-Dec.	0.67	599	0.47	395	30.1
2013:					
Jan.-Mar.	0.66	757	0.58	150	12.6
Apr.-June	0.68	686	0.73	123	(7.9)

[1] Product 4: 5.2 mm (1/4") thickness (actual or nominal), 4x8 panel size, Maple face (whether plain or rotary sliced), face Grade B or substantially equivalent, Maple back (whether plain or rotary sliced), back grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Table V-7

Hardwood Plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by quarters, January 2010-June 2013

Period	United States		China		
	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Margin *(percent)*
2010: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2011: Jan.-Mar.	1.40	377	***	***	***
Apr.-June	1.32	582	***	***	***
July-Sept.	1.32	358	***	***	***
Oct.-Dec.	1.33	299	***	***	***
2012: Jan.-Mar.	1.23	470	***	***	***
Apr.-June	1.24	431	***	***	***
July-Sept.	1.26	431	***	***	***
Oct.-Dec.	***	***	***	***	***
2013: Jan.-Mar.	1.20	529	***	***	***
Apr.-June	1.33	387	***	***	***

[1] Product 5: 18 mm (3/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, prefinished.

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

Table V-8

Hardwood Plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarters, January 2010-June 2013

Period	United States		China		
	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Price *($ per square foot)*	Quantity *(1,000 square feet)*	Margin *(percent)*
2010:					
Jan.-Mar.	0.69	67	***	***	***
Apr.-June	0.71	81	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2011:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2012:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	0.56	693	***	***	***
July-Sept.	0.56	261	***	***	***
Oct.-Dec.	0.60	520	***	***	***
2013:					
Jan.-Mar.	0.58	582	***	***	***
Apr.-June	0.57	505	***	***	***

[1] Product 6: 5.2 mm (1/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether plain or rotary sliced), face Grade C or substantially equivalent, back face of Birch or other, Grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Figure V-2

Hardwood plywood: Weighted-average prices and quantities of domestic and imported product, by quarters, January 2010-June 2013

* * * * * * *

Price trends

Prices for products imported from China increased during 2010 through the middle of 2013, while trends for U.S. produced price products were mixed. As shown in Table V-9, domestic price increases for products 1, 3, and 4 ranged from *** percent during 2010 to the middle of 2013 while price declines for products 2, 5, and 6 ranged from *** percent. Increases for imports from China ranged from 18 to 57 percent. Product 3 was the highest volume of the six pricing products for U.S. producers and product 6 was the largest volume product for imports from China.

Price comparisons

As shown in table V-10, prices for hardwood plywood imported from China were below those for U.S.-produced hardwood plywood in 83 of 84 instances; margins of underselling ranged from 0.9 to 56.5 percent. In the remaining instance, prices for hardwood plywood from China were 7.9 percent above the price for the domestic product.

Respondents argue that the underselling margins show that U.S. sales are almost entirely isolated from movements in Chinese prices and volumes because they are almost universally higher than equivalent Chinese product yet exhibit no impact from the lower Chinese prices.[2] They attribute the price differences to physical differences in product such as thinner face veneer typically found in imports from China.[3] Respondents cite an estimate by ***.[4] They also argue that there is no impact on domestic prices since there is no "convergence" as would be expected in substitutable products exhibiting consistent pricing differences.[5]

[2] AAHP's prehearing brief, pp. 81-82.
[3] AAHP's prehearing brief, pp. 84. Hearing transcript, pp. 280-281 (Rogers).
[4] AAHP's posthearing brief, exhibit 9.
[5] AAHP's prehearing brief, pp. 78-79.

Table V-9

Hardwood plywood: Summary of weighted-average f.o.b. prices for products 1-6 from the United States and China

Item	Number of quarters	Low price (*$ per square foot*)	High price (*$ per square foot*)	Change in price[1] (*percent*)
Product 1				
United States	14	***	***	3.0
China	14	***	***	***
Product 2				
United States	14	***	***	***
China	14	***	***	***
Product 3				
United States	14	0.98	1.10	11.9
China	14	***	***	***
Product 4				
United States	14	***	***	***
China	14	0.47	0.73	34.6
Product 5				
United States	14	***	***	***
China	14	***	***	***
Product 6				
United States	14	***	***	(16.4)
China	14	***	***	***

[1] Percentage change from the first quarter in which data were available to the last quarter in which price data were available, based on rounded data.

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

Table V-10

Hardwood plywood: Instances of underselling/overselling by subject imports from China and the range and average of margins, by product, January 2010-June 2013

Source	Underselling			Overselling		
	Number of instances	Range (*percent*)	Average margin (*percent*)	Number of instances	Range (*percent*)	Average margin (*percent*)
Product 1	14	***	***	0	-	-
Product 2	14	***	***	0	-	-
Product 3	14	***	***	0	-	-
Product 4	13	***	***	1	7.9	7.9
Product 5	14	***	***	0	-	-
Product 6	14	***	***	0	-	-
Total	83	0.9 to 56.5	31.7	1	7.9	7.9

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

Petitioners indicate that there is no difference in production cost between hardwood plywood with a face veneer thickness of 0.6mm and a face veneer thickness of 0.4mm that comes close to accounting for the margins of underselling.[6] Citing data from ***.[7] Petitioners also indicate that importers reporting product with a thinner veneer in their pricing data indicate that they consider thin-veneer product to be competitive with domestic producers' merchandise that otherwise has identical (or near-identical) physical characteristics.[8] They also indicate that price competition from subject imports in lower grade hardwood plywood has forced U.S. producers to increase prices on higher graded hardwood plywood.[9] Petitioners also claim that Chinese product is gradually penetrating high value categories of the hardwood plywood market.[10]

LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of hardwood plywood to report any instances of lost sales or revenues they experienced due to competition from imports of hardwood plywood from China since January 1, 2009. Five of the eight responding U.S. producers reported that they had to reduce prices, but only one of the six responding U.S. producers reported having to roll back announced price increases. Seven of the eight responding U.S. producers reported that they lost sales to lower-priced imports from China. Three U.S. producers reported specific lost sales allegations. These lost sales allegations involved 9 purchasers and totaled $44.6 million and involved 36 million square feet of hardwood plywood.[11] No firm reported specific lost revenue allegations. Staff contacted all nine purchasers to verify the allegations; five purchasers submitted responses. The lost sales allegations and purchaser responses are shown in table V-11 (responses to specific allegations) and in table V-12 (responses to general questions).[12] In response to the general questions, all five responding purchasers reported that they had shifted purchases of hardwood plywood from U.S. producers to subject imports since 2009; three of these purchasers reported that

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[6] Petitioners' posthearing brief, Response to Commissioners' questions, p. 1

[7] Petitioners' posthearing brief, Response to Commissioners' questions, pp. 1-2 and exhibit 3. The ***.

[8] Petitioners' prehearing brief, pp. 30-31.

[9] Petitioners' prehearing brief, pp. 32-33.

[10] Petitioners' posthearing brief, Response to Commissioners' questions, p. 12, Exhibits 1 and 8. In exhibit 3, ***.

[11] There was one additional allegation involving *** square feet of hardwood plywood that could not be verified because contact information was not provided by the U.S. producer.

[12] Purchasers responding to the lost sales allegations also were asked whether they shifted their purchases of hardwood plywood from U.S. producers to suppliers of hardwood plywood from China since 2009, and whether U.S. producers had reduced their prices in order to compete with suppliers of hardwood plywood from China.

price was the reason for the shift. One of the five purchasers reported that the U.S. producers had reduced their prices in order to compete with the prices of subject imports since 2009.

***.

***.

Table V-11

Hardwood plywood: U.S. producers' lost sales allegations

* * * * * * *

Table V-12

Hardwood plywood: Purchaser responses regarding purchase shifting

* * * * * *

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***.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Eight firms provided usable financial data on their operations producing hardwood plywood.[1] These reported data are believed to represent the majority of production of hardwood plywood in the United States in 2012.[2] Reportedly the industry producing hardwood plywood is concentrated following restructuring, including bankruptcies and plant closures, in that five firms have a combined 70 percent market share.[3]

OPERATIONS ON HARDWOOD PLYWOOD

Income-and-loss data for U.S. producers of hardwood plywood are presented in table VI-1, and are briefly described here. Generally speaking, total net sales in both quantity and dollar terms rose between 2010 and 2012 and were higher in January-June 2013 than in January-June 2012.[4] Total cost of goods sold ("COGS") increased in absolute dollars, as a per-unit of sales, and as a ratio to net sales between 2010 and 2012, but was *** lower as a ratio to sales in January-June 2013 than in the same period one year earlier. Raw materials, which increased with the increase in quantity sold, was the apparent driver behind the increase in

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[1] Eight firms provided usable financial data, compared with 21 firms identified in the petition. The firms are: ***. These data are less than those presented in the preliminary phase because they do not include the data of two firms: ***, but they do include ***. Each of the firms is privately held. Each of the firms reported on a calendar year basis, including ***. ***. There are ***.

[2] The share of U.S. production accounted for by members of the petitioning coalition was estimated at approximately 80 percent in the preliminary phase of the investigation, similar to that ***. Conference transcript, p. 7 (Levin).

[3] At the staff conference in the preliminary phase of these investigations a spokesman for the Hardwood Plywood and Veneer Association stated that the industry has shrunk due to bankruptcies and plant closures. He stated that there were approximately 20 U.S. producers. Conference transcript, pp. 16 and 18 (Howlett) and table VI-1. With respect to restructuring, ***, and***. Preliminary phase questionnaire response of ***, section I-2 and of ***, section II-2. ***. Data for ***. The Commission excluded *** as a related party, but excluded no other U.S. producer as a related party. Hardwood Plywood from China, Inv. Nos. 701-TA-490 and 731-TA-1204 (Preliminary), USITC Publication 4361, November 2012, p. 9.

[4] The average unit value of sales was relatively unchanged from 2010 to 2012 even as sales volume increased. The relative lack of price change was ascribed by petitioners as a function of product mix and a reaction by U.S. firms to imports' distortion of the pricing structure. They stated that the "domestic producers increased prices in their higher-grade products to offset the price cuts necessary in the lower-grade products where they faced the most aggressive price competition from subject imports." The increase in sales volume was ascribed in part to purchasers who prefer to or are required to purchase U.S. origin as well as to U.S. producers' willingness to cut prices on lower-grade products to hold market share. Petitioners' posthearing brief, answers to Commissioners' questions, pp. 17-19.

COGS. Selling, general, and administrative ("SG&A") expenses increased in dollar terms from 2010 to 2012, stayed the same on a per-unit basis, but were slightly lower as a ratio to sales between the full yearly periods. SG&A expenses were higher in dollar terms in January-June 2013 compared with January-June 2012 but were lower when expressed as a ratio to sales. Operating income irregularly decreased from 2010 to 2012 and was much higher in January-June 2013 than in January-June 2012. Net income and cash flows declined between 2010 and 2012 and were higher in January-June 2013 compared to January-June 2012.

Table VI-1
Hardwood plywood: Results of operations of U.S. producers, 2010-12, January-June 2012, and January-June 2012

	Fiscal years			January-June	
Item	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
Net sales:					
Commercial sales	534,013	559,639	595,680	301,708	334,639
Internal consumption[1]	***	***	***	***	***
Company transfers[2]	***	***	***	***	***
Total net sales	547,532	577,117	622,581	312,884	355,336
	Value (*$1,000*)				
Net sales:					
Commercial sales	595,259	633,357	669,413	344,011	390,323
Internal consumption[1]	***	***	***	***	***
Company transfers[2]	***	***	***	***	***
Total net sales	610,179	653,051	698,822	356,746	414,238
Cost of goods sold:					
Raw materials	442,036	480,549	518,346	265,220	303,995
Direct labor	59,580	64,534	68,819	34,876	37,138
Other factory costs	48,176	46,340	46,326	23,132	26,565
Total COGS	549,792	591,423	633,491	323,228	367,698
Gross profit	60,387	61,628	65,331	33,518	46,540
SG&A expenses	47,877	51,247	54,342	25,318	26,727
Operating income or (loss)	12,510	10,381	10,989	8,200	19,813
Total other income/(expense), net[3]	(7,086)	(2,106)	(4,067)	(2,547)	(2,218)
Net income or (loss)	5,424	8,275	6,922	5,653	17,595
Depreciation/amortization	12,758	10,525	11,101	5,781	5,223
Cash flow	18,182	18,800	18,023	11,434	22,818
	Ratio to net sales (percent)				
COGS:					
Raw materials	72.4	73.6	74.2	74.3	73.4
Direct labor	9.8	9.9	9.8	9.8	9.0
Other factory costs	7.9	7.1	6.6	6.5	6.4
Total COGS	90.1	90.6	90.7	90.6	88.8
Gross profit	9.9	9.4	9.3	9.4	11.2
SG&A expenses	7.8	7.8	7.8	7.1	6.5
Operating income or (loss)	2.1	1.6	1.6	2.3	4.8

Table continued on the next page.

Table VI-1--*Continued*
Hardwood plywood: Results of operations of U.S. producers, 2010-12, January-June 2012, and January-June 2012

	Fiscal years			January-June	
Item	**2010**	**2011**	**2012**	**2012**	**2013**
	Average unit value (*dollars per square foot*) [4]				
Net sales:					
Commercial sales	1.11	1.13	1.12	1.14	1.17
Internal consumption[1]	***	***	***	***	***
Company transfers[2]	***	***	***	***	***
Total net sales	1.11	1.13	1.12	1.14	1.16
COGS:					
Raw materials	0.81	0.83	0.83	0.85	0.86
Direct labor	0.11	0.11	0.11	0.11	0.10
Other factory costs	0.09	0.08	0.07	0.07	0.07
Total COGS	1.00	1.02	1.02	1.03	1.03
Gross profit	0.11	0.11	0.10	0.11	0.13
SG&A expenses	0.09	0.09	0.09	0.08	0.08
Operating income	0.02	0.02	0.02	0.03	0.06
	Number of firms reporting:[5]				
Operating losses	***	4	***	***	***
Data	8	8	8	8	8

[1] Accounted for by ***.

[2] Accounted for by ***.

[3] Category includes interest expense, other expense, and other income. Other expense exceeded interest expense in each period, accounted for by a few firms: ***.

[4] ***.

[5] Firms reporting operating losses were: ***.

Note.--***.

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

In the preliminary phase of these investigations petitioners stated that they restructured in certain ways as a result of subject imports, including cutting costs, closing plants, curtailing production, and reducing employment or restructuring labor agreements. Petitioners also stated that data gathered by the Commission reflects the impact of survivor bias. [5] Respondents argued that questionnaire data gathered in the preliminary phase indicate that production,

[5] Petitioners' postconference brief, pp. 26-27. Petitioners stated they cut costs chiefly in the categories of labor and factory overhead because they are unable to raise prices due to underselling by imports. Also, see U.S. producers' questionnaire responses of ***, section II-2. Petitioners also indicated that sales of the lesser quality grades of hardwood plywood, which account for the majority of production volume, have been undercut because subject imports dominate in those grades.

shipments, prices (the average unit values of sales), and operating income increased;[6] that the imported subject product differs from the domestic like product;[7] and that the effect of the 2008 recession, not imports, necessitated the actions taken.[8]

Five of the U.S. domestic producers purchased imported subject product from China. These firms were ***.[9] In each instance and collectively, the purchases ***.

Selected company-specific financial data are presented in table VI-2.

Table VI-2

Hardwood plywood: Results of operations of U.S. producers, by firm, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

The cost of raw materials used in the production of hardwood plywood increased during the period for which data were gathered on a dollar-basis, as a ratio to sales (except interim 2013 was slightly lower than interim 2012), and on a per-unit basis, as depicted in table VI-1. Such costs also increased as a share of total COGS from *** percent in 2010 to *** percent in 2012, and were *** percent in January-June 2013 compared to *** percent in the same time period one year earlier. The increase in these indicators was due in large part to the higher quantity of sales between 2010 and 2012 as well as between January-June 2012 to January-June 2013. "Domestic manufacturers predominantly purchase face veneers of hardwood and softwood species either in the open market or from related parties. Some domestic manufacturers purchase logs in the open market from which they peel veneers used for core material."[10] [11] According to petitioners, the vast majority of veneer cores, representing 70 percent of total core usage, are manufactured by the firm producing the hardwood plywood panel while MDF and particleboard cores, representing 20 to 25 percent of usage, are purchased on the outside market.[12] Timber Products is integrated in that the firm harvests its own timber used in the production of hardwood plywood; a spokesman testified that Timber Products is one of the low cost producers in the industry and that the cost of manufacturing

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[6] AAHP postconference brief, p. 43. Also, see Chinese Producers' Association postconference brief, pp. 11-12.

[7] AAHP postconference brief, pp. 15-20.

[8] Respondents cited public statements regarding closures related to the 2008 recession by officials at two *** firms named; they also stated that domestic producers have achieved gains in production efficiency. AAHP postconference brief, p. 48.

[9] Questionnaire responses, section II-14 in these final phase investigations. Neither direct imports nor purchases of imports are included in either the trade data or the financial data of these firms.

[10] Petitioners' postconference brief, "Answers to Commission Staff Questions," p. 1.

[11] Among *** purchases logs as well as other upstream raw materials like hardwood veneer. *** purchases logs (for the manufacture of cores) and veneer for inner plies to supplement production; the firm also ***. *** purchases hardwood veneers as well as ***. ***. E-mail attachment from counsel to petitioners to staff, October 28, 2012. EDIS document 495769, October 31, 2012.

[12] Petitioners' postconference brief, "Answers to Commission Staff Questions," p. 1.

Hardwood plywood is primarily composed of raw materials.[13] Timber Products also purchases logs from independent sources. Questionnaire data indicate that the raw material costs ***.

Variance analysis

A variance analysis for the operations of U.S. producers of hardwood plywood is presented in table VI-3.[14] The information for this variance analysis is derived from table VI-1. This indicates that the decrease in operating income between 2010 and 2012 was attributable to an unfavorable net cost/expense variance (higher unit costs in COGS and SG&A expenses) that was greater than the favorable price variance (higher average unit prices). Operating income was higher in January-June 2013 than in January-June 2012 because each of the variances was favorable, particularly because average unit sales prices were higher in the later period.

[13] Conference transcript, p. 38 (Clausen). In an e-mail to staff, counsel to Timber Products noted ***. E-mail attachment from counsel to petitioners to staff, October 28, 2012. EDIS document 495769, October 31, 2012.

[14] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

Table VI-3
Hardwood plywood: Variance analysis on the operations of U.S. producers, between fiscaly years 2010-12, and January-June 2012-13

	Value (*$1,000*)			
	Between fiscal years			Jan.-June
Item	2010-12	2010-11	2011-12	2012-13
Net sales:				
Commercial sales:				
Price variance	5,664	9,629	(4,584)	8,790
Volume variance	68,640	28,523	40,736	37,510
Trade sales variance	74,304	38,152	36,152	46,300
Internal consumption:				
Price variance	***	***	***	***
Volume variance	***	***	***	***
Trade sales variance	***	***	***	***
Company transfers:				
Price variance	***	***	***	***
Volume variance	***	***	***	***
Transfer variance	***	***	***	***
Total net sales:				
Price variance	5,276	10,003	(5,515)	9,124
Volume variance	83,517	32,923	51,382	48,356
Total net sales variance	88,793	42,926	45,867	57,480
Cost of sales:				
Cost variance	(8,480)	(11,938)	4,399	(646)
Volume variance	(75,269)	(29,672)	(46,538)	(43,814)
Total cost variance	(83,749)	(41,610)	(42,139)	(44,460)
Gross profit variance	5,044	1,316	3,728	13,020
SG&A expenses:				
Expense variance	(3)	(783)	841	2,021
Volume variance	(6,535)	(2,576)	(4,020)	(3,428)
Total SG&A variance	(6,538)	(3,359)	(3,179)	(1,407)
Operating income variance	(1,494)	(2,043)	549	11,613
Summarized as:				
Price variance	5,276	10,003	(5,515)	9,124
Net cost/expense variance	(8,483)	(12,721)	5,240	1,374
Net volume variance	1,713	675	824	1,114

Note: Unfavorable variances are shown in parentheses; all others are favorable. The data are comparable to changes in operating income as presented in table VI-1.

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

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-4 presents capital expenditures and R&D expenses[15] by firm.

Table VI-4
Hardwood plywood: Capital expenditures and R&D expenses of U.S. producers, by firm, 2010-12, January-June 2012, and January-June 2013

	Fiscal years			January-June	
Item	2010	2011	2012	2012	2013
	Value ($1,000)				
Capital expenditures:					
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	-***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	4,129	7,325	7,435	2,669	8,770
R&D expenses:					
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	***	***	***	***	***

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

Total capital expenditures were less than total depreciation expenses reported by the industry in each period except interim 2013. Net capital expenditures (capital expenditures minus depreciation expenses) were a negative $8.6 million in 2010, negative $3.2 million in 2011, negative $3.7 million in 2012, and negative $3.1 million in January-June 2012. Capital

[15] Capital expenditures reflect the current cost incurred by a firm to acquire or upgrade physical assets such as property, plant, and equipment that have a useful life that is greater than the current fiscal year. In accounting terms, the expense is capitalized when the asset is a newly purchased capital asset or an investment that improves the useful life, productivity, or capacity of an existing asset. The cost of a capital expenditure is spread over the useful life of the asset and the periodic (noncash) expense is called depreciation in the case of fixed assets; in the case of intangible assets expensing over time is called amortization, which is a current noncash expense. Costs that are not eligible to be capitalized are expensed in the period in which they are incurred ("operating costs"). Because the future benefit of most R&D is uncertain, R&D costs are generally expensed.

expenditures exceeded depreciation expenses by $3.5 million in January-June 2013.[16] As a ratio to total sales revenue, total capital expenditures were 0.7 percent in 2010, 1.1 percent in 2011 and 2012, 0.7 percent in January-June 2012, and 2.1 percent in January-June 2013. Capital expenditures represented a much higher ratio to total operating income, ranging from 33.0 percent in 2010 to 70.6 percent in 2011, and the ratio was 44.3 percent in interim 2013.[17]

Reporting firms made capital expenditures to purchase new equipment, to refurbish existing equipment, and, in the case of Columbia, that firm ***.[18] Reported purchases by Columbia, Commonwealth and Murphy included a "***. Timber Products listed its capital expenditures by year: ***. On the other hand, Roseburg stated that ***, while States indicated that ***.

ASSETS AND RETURN ON INVESTMENT

Table VI-5 presents data on the U.S. producers' total assets and their return on investment ("ROI"). Operating income or (loss) was divided by total net assets, resulting in ROI.

[16] Calculated from the data presented in tables VI-1 and VI-4. As noted earlier, capital expenditures reflect the current cost of acquiring tangible assets, which are reflected in the firm's records at historical cost, and depreciation allocates that historical cost as an expense over the asset's useful life. Capital expenditures are unlikely to equal depreciation in an inflationary environment (the cost to replicate assets, reflected in capital expenditures, may exceed the historical cost of acquiring those assets, reflected in depreciation); in a deflationary environment (replication cost is lower than depreciation); or as replacement of a part of the plant or a selected piece of equipment (capital expenditures for a part are less than depreciation of the entirety). Also, improvements in asset productivity could result in lower asset replication costs to replace depreciating assets leading to a situation where capital expenditures are lower than depreciation expenses.

[17] Calculated from the data presented in tables VI-1 and VI-4.

[18] Columbia's ***.

Table VI-5
Hardwood plywood: U.S. producers' total assets and return on investment, by firm, 2010-12

	Fiscal years		
Item	**2010**	**2011**	**2012**
Total Assets	**Value (*$1,000*)**		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total	238,515	245,020	234,997
ROI	**Ratio of operating income to total assets (*percent*)**		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Average	5.2	4.2	4.7

Note**:** Negative ROI is indicated in parentheses.

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

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of hardwood plywood to describe any actual or potential negative effects of imports of hardwood plywood from China on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Their responses are shown as follows.

Actual Negative Effects

***: "Yes. Reduction in the size of capital investments. Other-pricing deterioration and loss of jobs."
***: "Yes. Reduction in the size of capital investments. Other-significant lower selling volumes and depressed prices."
***: "Yes. Cancellation, postponement, or rejection of expansion projects; reduction in the size of capital investments; rejection of bank loans. Other—loss of business."
***: "No."
***: "No."

***: “Yes. Other- Lost sales due to competition of low cost Chinese imported hardwood plywood panels.”
***: “Yes. Denial or rejection of investment proposal; rejection of bank loans; lowering of credit rating.” ***.
***: “Yes. Cancellation, postponement, or rejection of expansion projects; reduction in the size of capital investments.”

Anticipated Negative Effects

***: “Yes. Continued price deterioration and job reductions.”
***: “Yes. Chinese plywood is imported and sold at half of our production cost.”
***: ***.
***: “Yes. We expect that the thin panel market will be negatively impacted due to artificially lower prices and that lower-end hardwood plywood cabinet manufacturers will continue to order from Chinese exporters due to lower than market prices. We provide products in both of these spaces and anticipate lower sales returns due to the unfair competitive pricing provided by Chinese hardwood exporters.”
***: “No.”
***: “Yes. Lost sales and revenue are due to our inability to compete with Chinese imported hardwood plywood panels which were presented into the market below our costs.”
***: “Yes. Increased competition for commodity hardwood plywood will lower margin opportunities.”
***: “Yes. Continued slow business climate - contracted sales - substituted by imports.”

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

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

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

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

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the subsidies was presented earlier in this report, information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

THE INDUSTRY IN CHINA

The petition identified hundreds of alleged producers of hardwood plywood in China. The California Air Resources Board ("CARB") website identifies over 300 approved hardwood

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

plywood mills in China.[3] The Commission emailed and faxed questionnaire requests to 350 firms and 89 firms (accounting for about 52.4 percent of 2012 U.S. imports of hardwood plywood as reported by official Commerce statistics) responded. Table VII-1 presents data for these firms during 2010-12, January-June 2012, January-June 2013, and forecasts for 2013 and 2014.

The responses of the members of CNFPIA were submitted from both trading companies and Chinese producers. Each of the responses states whether the company is a producer or just a trading company. Because a great deal of the volume of the shipments of hardwood plywood to the United States comes through the trading companies, CNFPIA made diligent efforts to avoid double counting, so the Commission would have clean data for its determination. CNFPIA wanted to avoid having the producer count a shipment to a trading company as a U.S. sale and then have the trading company count that sale again as a U.S. sale. CNFPIA did the following to avoid double-counting:

> 1). Where a producer sold to trading companies, it did not report such sales as U. S. sales but rather as domestic sales since the sales were internal in China (the producers did not always know the final destination of the product); the producers did fully report capacity and production for the review periods in the normal manner.
>
> 2). The trading companies reported their shipments to various markets but did not report any production or capacity (they are not producers).
>
> 3). To the extent that producers sold directly to the United States and not through trading companies they reported their shipments as U. S. sales in their own responses.
>
> 4). To some extent, trading companies may have bought from some producers in addition to those reporting so their shipments are not going to match exactly the production being reported.

Chinese capacity and production of hardwood plywood increased from 2010 to 2012, and are projected to increase from 2013 and 2014. In terms of volume, there was an increase in exports to the United States, starting at 623.5 million square feet in 2010 and going up to 875.2 million square feet in 2012, and are projected to decrease for 2013 and 2014.

[3] Mills identified by CARB-approved Third Party Certifiers as producers of CARB compliant hardwood plywood products. List downloaded from: http://www.arb.ca.gov/toxics/compwood/tpc/listofmills.htm (accessed October 21, 2013).

Table VII-1
Hardwood plywood: Data for producers in China, 2010-12, January-June 2012, January-June 2013, and projected 2013-14

Item				January-June		Projections	
	2010	2011	2012	2012	2013	2013	2014
Quantity (*1,000 square feet*)							
Capacity	1,904,413	1,975,659	2,005,282	1,197,668	1,039,329	1,995,490	2,011,579
Production	1,582,604	1,716,102	1,761,842	844,683	833,051	1,710,966	1,787,945
End-of-period inventories	115,294	123,967	110,430	132,529	109,047	102,327	86,089
Shipments:							
Internal consumption/transfers	35,366	37,969	38,382	19,603	23,014	42,124	44,324
Home market	657,796	728,350	749,033	367,502	403,746	823,681	847,808
Exports to:							
United States	623,582	725,779	875,161	399,508	274,946	608,210	663,449
All other markets	454,762	540,122	527,960	242,246	270,935	568,913	579,075
Total exports	1,078,344	1,265,901	1,403,121	641,753	545,882	1,177,123	1,242,524
Total shipments	1,771,506	2,032,220	2,190,536	1,028,858	972,642	2,042,928	2,134,656
Ratios and shares (*percent*)							
Capacity utilization	83.1	86.9	87.9	70.5	80.2	85.7	88.9
Inventories/production	7.3	7.2	6.3	7.8	6.5	6.0	4.8
Inventories/shipments	6.5	6.1	5.0	6.4	5.6	5.0	4.0
Share of total shipments:							
Internal consumption/transfers	2.0	1.9	1.8	1.9	2.4	2.1	2.1
Home market	37.1	35.8	34.2	35.7	41.5	40.3	39.7
Exports to:							
United States	35.2	35.7	40.0	38.8	28.3	29.8	31.1
All other markets	25.7	26.6	24.1	23.5	27.9	27.8	27.1
Total exports	60.9	62.3	64.1	62.4	56.1	57.6	58.2

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

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Reported inventories of U.S. imports are presented in table VII-2. Chinese hardwood plywood inventories rose nearly 45 percent from 2010 to 2012 and inventories from all other sources dipped 4 percent. January-June 2013 inventories were nearly 9 percent lower than January-June 2012 inventories for all hardwood plywood imports.

Table VII-2
Hardwood plywood: U.S. importers' inventories, 2010-12, January-June 2012, January-June 2013, and projected 2013-14

	Year			January-June	
Item	2010	2011	2012	2012	2013
Imports from China:					
Inventories (1,000 square feet)	248,253	231,403	360,707	250,832	218,375
Ratio to imports (percent)	26.7	24.9	30.4	23.2	25.6
Ratio to U.S. shipments of imports (percent)	30.7	24.8	34.6	24.4	19.8
Imports from all other sources:					
Inventories (1,000 square feet)	286,762	252,974	275,987	268,345	251,692
Ratio to imports (percent)	23.7	25.0	25.0	22.3	19.3
Ratio to U.S. shipments of imports (percent)	26.9	24.5	25.9	23.2	18.3
Imports from all sources:					
Inventories (1,000 square feet)	535,015	484,377	636,694	519,177	470,067
Ratio to imports (percent)	25.0	24.9	27.8	22.7	21.8
Ratio to U.S. shipments of imports (percent)	28.5	24.7	30.2	23.8	19.0

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

U.S. IMPORTERS' OUTSTANDING ORDERS

Thirty U.S. importers reported that they had placed orders for subject hardwood plywood from China scheduled for entry into the United States after June 30, 2013. The quantities of these orders were reported in a variety of different ways (i.e., containers of different sizes, square feet, cubic feet, cubic meters, square meters, and a number reported by value only); hence, an exact total quantity of the orders could not be established.

ANTIDUMPING INVESTIGATIONS IN THIRD-COUNTRY MARKETS

In 2011, the Council of the European Union imposed a definitive antidumping duty on imports of okoumé plywood originating in the Peoples Republic of China.[4] The duty levels imposed ranged from 6.5 percent to 23.5 percent for four Chinese producers and 66.7 percent for all others.[5] Antidumping duties have also been imposed by Turkey and Israel on certain

[4] Regulation No. 82/2011 of January 31, 2011. The definitive anti-dumping duty on Chinese imports of okoumé plywood followed a review of the original investigation that imposed the duties in 2004. See Petition, Exhibit I-27.

[5] The duty rates on four Chinese producers were as follows: Zhejiang Deren Bamboo-Wood Technologies Co. Ltd. had a rate of duty of 23.5 percent, Zhonglin Enterprise (Dangshan) Co. Ltd. had 6.5 percent, and Jiaxing Jinlin Lumber Co. 17 percent. All other companies had a rate of duty of 66.7 percent.

Chinese imports of plywood products.[6] In 2013, South Korea reportedly imposed preliminary antidumping duties on plywood imports from China, and Argentina and Colombia initiated investigations on Chinese plywood imports.[7]

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury "by reason of subject imports," the legislative history states "that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) 'to ensure that it is not attributing injury from other sources to the subject imports.'"[8]

Global Market

With respect to foreign industry data, the Commission sought publicly available information regarding worldwide trade of hardwood plywood. The Commission obtained official Commerce data for U.S. imports by country and they are presented in table VII-3. Hardwood and decorative plywood is manufactured in many countries in addition to the United States and China. Other major producers include Malaysia, Indonesia, Russia, India, and Brazil. However, publicly available data on global production and trade of hardwood plywood are generally included in broader categories of plywood that also include nonsubject products such as structural plywood, formed plywood, and multilayered wood flooring, among others. According to FAO statistics, total global production of all types of plywood in 2012 was 86.2 million cubic meters, or approximately 90 million square feet.[9] China is the world's largest producer, accounting for over half of global production in 2012.[10] While historically a large producer for its domestic market, Chinese exports also increased significantly during the past decade. China is currently the world's largest exporter, accounting for 34.1 percent of 2012

[6] WTO, Committee on Anti-Dumping Practices, Semi-Annual Report Under Article 16.4, Turkey (G/ADP/N/223/TUR) and Israel (G/ADP/N/223/ISR), respectively. See Petition, Exhibit I-27.

[7] Petitioners' Posthearing Brief, Responses to Commissioners' Questions, Question 5, p. 14 and Exhibit 9.

[8] Mittal Steel Point Lisas Ltd. v. United States, Slip Op. 2007-1552 at 17 (Fed. Cir., Sept. 18, 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; see also Bratsk Aluminum Smelter v. United States, 444 F.3d 1369 (Fed. Cir. 2006).

[9] Cubic meters converted to square feet using a factor of 1,046 square feet per cubic meter.

[10] FAO statistics rank China as the world's largest producer, followed by the United States, Indonesia, Malaysia, and Russia. The FAO statistics do not differentiate hardwood from softwood or structural plywood. FAOSTAT, http://faostat.fao.org/site/626/default.aspx#ancor (accessed August 12, 2013).

Table VII-3
Hardwood plywood: U.S. imports, by sources, 2010-12, January-June 2012, and January-June 2013

Source	Calendar year			January-June	
	2010	2011	2012	2012	2013
			Quantity (*1,000 square feet*)		
China	1,376,408	1,534,788	1,671,686	749,534	535,027
Russia	226,405	244,308	245,055	158,429	111,634
Chile	260,093	335,849	197,758	98,460	85,297
Canada	192,369	168,908	210,171	105,785	178,022
Indonesia	243,407	177,926	207,894	109,852	109,670
Malaysia	169,682	92,749	104,021	54,660	72,602
Brazil	59,773	29,171	48,593	17,028	68,032
Ecuador	59,339	46,348	56,122	27,713	31,360
Uruguay	16,149	8,359	14,183	3,154	26,357
Italy	16,567	18,485	15,533	7,087	6,223
Subtotal	2,620,191	2,656,890	2,771,014	1,331,701	1,224,224
All other	95,671	96,229	76,630	41,280	22,922
Total	2,715,863	2,753,119	2,847,644	1,372,982	1,247,146
			Value ($*1,000*)[1]		
China	735,648	707,283	828,974	390,662	265,003
Russia	106,931	107,107	121,467	70,442	63,887
Chile	100,873	135,439	91,264	43,241	44,704
Canada	112,952	90,724	114,604	57,833	78,957
Indonesia	157,347	132,586	159,927	86,499	76,630
Malaysia	95,660	63,958	77,500	41,949	51,024
Brazil	29,054	17,276	24,043	9,827	30,205
Ecuador	29,915	24,167	29,381	14,451	16,746
Uruguay	5,524	2,879	5,044	1,177	9,635
Italy	8,237	9,499	9,709	4,654	4,407
Subtotal	1,382,142	1,290,917	1,461,913	720,734	641,197
All other	54,186	49,094	44,248	20,495	19,671
Total	1,436,328	1,340,011	1,506,161	741,229	660,868
			Unit value (*per square foot*)		
China	$0.53	$0.46	$0.50	$0.52	$0.50
Russia	0.47	0.44	0.50	0.44	0.57
Chile	0.39	0.40	0.46	0.44	0.52
Canada	0.59	0.54	0.55	0.55	0.44
Indonesia	0.65	0.75	0.77	0.79	0.70
Malaysia	0.56	0.69	0.75	0.77	0.70
Brazil	0.49	0.59	0.49	0.58	0.44
Ecuador	0.50	0.52	0.52	0.52	0.53
Uruguay	0.34	0.34	0.36	0.37	0.37
Italy	0.50	0.51	0.63	0.66	0.71
Subtotal	0.53	0.49	0.53	0.54	0.52
All other	0.57	0.51	0.58	0.50	0.86
Total	0.53	0.49	0.53	0.54	0.53

[1] *Landed, duty-paid.*

Source: Compiled from official Commerce statistics using HTS reporting lines included in the subject product scope.

global exports of Harmonized System plywood product classifications that include the subject product.[11] The next three largest exporters were Indonesia, Malaysia, and Russia which together represented 32.2 percent of world exports. Data for the major global exporters of hardwood plywood are presented in table VII-4.

Table VII-4
Hardwood plywood: Reporting countries' exports 2010-12

Source	Calendar year		
	2010	2011	2012
	Value (Dollars)		
China	3,401,235,958	4,339,424,397	4,796,825,167
Indonesia	1,638,695,231	1,953,470,098	2,010,052,865
Malaysia	1,597,569,848	1,729,594,341	1,665,278,373
Russia	696,116,101	910,246,312	858,781,594
Finland	538,013,574	620,771,814	575,400,980
United States	400,153,165	398,040,599	435,802,354
Brazil	418,294,399	370,372,551	408,106,634
Chile	332,665,049	415,037,769	282,122,869
Germany	288,399,001	338,137,567	264,747,738
Austria	248,206,709	300,466,731	263,978,993
Latvia	171,123,527	237,450,587	230,317,561
Belgium	220,537,481	231,457,841	195,675,176
Italy	201,537,819	218,220,567	191,051,387
Spain	151,469,094	204,101,536	171,727,894
Canada	182,695,926	179,300,972	171,217,712
France	169,287,629	182,123,535	158,629,463
Poland	105,796,431	130,537,196	138,794,311
New Zealand	93,237,519	111,476,758	108,012,052
Ghana	40,089,372	49,892,877	98,582,229
Czech Republic	72,223,469	111,593,965	88,051,503
Vietnam	65,394,473	82,326,327	74,000,000
All others (62 countries)	763,509,281	881,585,659	875,640,285
Total World Exports	11,796,251,056	13,995,629,999	14,062,797,140

Source: Compiled from Global Trade Information Service (4412.10, 4412.31, 4412.32, 4412.39, 4412.94, 4412.99).

[11] Table VII-4 (data sourced from GTIS).

APPENDIX A

FEDERAL REGISTER NOTICES

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

Citation	Title	Link
77 FR 71017 November 28, 2012	*Hardwood Plywood From China: Preliminary determinations*	http://www.gpo.gov/fdsys/pkg/FR-2012-11-28/pdf/2012-28818.pdf
78 FR 16250, March 14, 2013	*Hardwood and Decorative Plywood From the People's Republic of China: Amended Preliminary Countervailing Duty Determination; and Alignment of Final Determination With Final Antidumping Determination*	http://www.gpo.gov/fdsys/pkg/FR-2013-03-14/pdf/2013-05929.pdf
78 FR 25946, May 3, 2013	*Hardwood and Decorative Plywood From the People's Republic of China: Antidumping Duty Investigation*	http://www.gpo.gov/fdsys/pkg/FR-2013-05-03/pdf/2013-10532.pdf
78 FR 36791, June 19, 2013	*Hardwood Plywood From China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Final Phase Investigations*	http://www.gpo.gov/fdsys/pkg/FR-2013-06-19/pdf/2013-14525.pdf
78 FR 58273, September 23, 2013	*Hardwood and Decorative Plywood From China: Final Determination of sales at less than fair value*	http://www.gpo.gov/fdsys/pkg/FR-2013-09-23/pdf/2013-23088.pdf
78 FR 58283, September 23, 2013	*Hardwood and Decorative Plywood From China: Final Affirmative Countervailing Duty Determination*	http://www.gpo.gov/fdsys/pkg/FR-2013-09-23/pdf/2013-23077.pdf

APPENDIX B

HEARING CALENDAR

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Hardwood Plywood from China

Inv. Nos.: 701-TA-490 and 731-TA-1204 (Final)

Date and Time: September 19, 2013 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, D.C.

CONGRESSIONAL WITNESSES:

The Honorable Ron Wyden, U.S. Senator, Oregon

The Honorable Peter A. DeFazio, U.S. Representative, 4th District, Oregon

The Honorable Peter Welch, U.S. Representative, At-Large, Vermont

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Levin Trade Law, P.C.
Bethesda, MD
on behalf of

The Coalition for Fair Trade of Hardwood Plywood

Clifford T. ("Kip") Howlett, Jr., President, Hardwood Plywood and Veneer Association

Bradley Louis ("Brad") Thompson, President *and* Chief Executive Officer, Columbia Forest Products

Joseph ("Joe") Gonyea III, Chief Operating Officer, Timber Products Company

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Joseph ("Joe") Gonyea III, Chief Operating Officer, Timber Products Company

Patrick ("Pat") Lynch, Plywood Business Director, Roseburg Forest Products

Dennis Waverly ("Wave") Oglesby, Vice President for Sales and Marketing, Columbia Forest Products

Michael ("Mike") Clausen, Vice President of Sales, Domestic/International, Timber Products Company

Norman ("Norm") Roberts, President *and* Chief Executive Officer, Roberts Plywood, Inc.

Terry Awalt, President *and* Chief Executive Officer, JSI Store Fixture Incorporated

Mike Taylor, President *and* Chief Executive Officer, States Industries

Bruce Malashevich, President *and* Chief Executive Officer, Economic Consulting Services, LLC

James Dougan, Senior Economist, Economic Consulting Services, LLC

Jeffrey S. Levin) – OF COUNSEL

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Mowry & Grimson , PLLC
Washington, D.C.
on behalf of

The American Alliance of Hardwood Plywood ("AAHP")

Shawn Dougherty, Director-Asia, Northwest Hardwoods, Inc.

Greg Simon, Executive Vice President, Far East America, Inc.

Gregg Wilkinson, Senior Vice President, Liberty Woods International

Carl Spencer, Co-Owner, Spencer Cabinetry

Bill Weaver, Chief Executive Officer, Canyon Creek Cabinet Company

Peter Bendix, Vice President Operations, StarMark Cabinetry

Thomas L. Rogers, Principal, Capital Trade, Inc.

Jeffrey S. Grimson)
) – OF COUNSEL
Kristin H. Mowry)

Barnes, Richardson & Colburn, LLP
Washington, D.C.
on behalf of

China National Forest Products Industry Association ("CNFPA")

Shengfu Wu, Director, Marketing Department, CNFPA

Du Bo, Export Manager, Zhejiang Dehua TB Import & Export Co., Ltd.

Chen Hao, Officer, Ministry of Commerce of the People's Republic of China

Jeffrey S. Neeley)
) – OF COUNSEL
Stephen W. Brophy)

APPENDIX C

SUMMARY DATA

Table C-1
Hardwood plywood: Summary data concerning the U.S. market, 2010-12, January to June 2012, and January to June 2013
(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)

	Report data					Period changes			
	Calendar year			January to June		Calendar year			Jan-June
	2010	2011	2012	2012	2013	2010-12	2010-11	2011-12	2012-13
U.S. consumption quantity:									
Amount	3,281,344	3,347,867	3,489,846	1,696,827	1,613,319	6.4	2.0	4.2	(4.9)
Producers' share (fn1)	17.2	17.8	18.4	19.1	22.7	1.2	0.5	0.6	3.6
Importers' share (fn1):									
China	41.9	45.8	47.9	44.2	33.2	6.0	3.9	2.1	(11.0)
All others sources, nonsubject	40.8	36.4	33.7	36.7	44.1	(7.1)	(4.4)	(2.7)	7.4
Total imports	82.8	82.2	81.6	80.9	77.3	(1.2)	(0.5)	(0.6)	(3.6)
U.S. consumption value:									
Amount	2,065,707	2,011,458	2,225,722	1,107,764	1,087,585	7.7	(2.6)	10.7	(1.8)
Producers' share (fn1)	30.5	33.4	32.3	33.1	39.2	1.9	2.9	(1.1)	6.1
Importers' share (fn1):									
China	35.6	35.2	37.2	35.3	24.4	1.6	(0.4)	2.1	(10.9)
All others sources, nonsubject	33.9	31.5	30.4	31.6	36.4	(3.5)	(2.5)	(1.0)	4.8
Total imports	69.5	66.6	67.7	66.9	60.8	(1.9)	(2.9)	1.1	(6.1)
U.S. Imports from:									
China									
Quantity	1,376,408	1,534,788	1,671,686	749,534	535,027	21.5	11.5	8.9	(28.6)
Value	735,648	707,283	828,974	390,662	265,003	12.7	(3.9)	17.2	(32.2)
Unit value	$0.53	$0.46	$0.50	$0.52	$0.50	(7.2)	(13.8)	7.6	(5.0)
Ending inventory quantity	248,253	231,403	360,707	250,832	218,375	45.3	(6.8)	55.9	(12.9)
All other sources, non-subject:									
Quantity	1,339,454	1,218,331	1,175,958	623,447	712,119	(12.2)	(9.0)	(3.5)	14.2
Value	700,680	632,728	677,187	350,567	395,866	(3.4)	(9.7)	7.0	12.9
Unit value	$0.52	$0.52	$0.58	$0.56	$0.56	10.1	(0.7)	10.9	(1.1)
Ending inventory quantity	286,762	252,974	275,987	268,345	251,692	(3.8)	(11.8)	9.1	(6.2)
Total imports:									
Quantity	2,715,863	2,753,119	2,847,644	1,372,982	1,247,146	4.9	1.4	3.4	(9.2)
Value	1,436,328	1,340,011	1,506,161	741,229	660,868	4.9	(6.7)	12.4	(10.8)
Unit value	$0.53	$0.49	$0.53	$0.54	$0.53	0.0	(8.0)	8.7	(1.8)
Ending inventory quantity	535,015	484,377	636,694	519,177	470,067	19.0	(9.5)	31.4	(9.5)
U.S. producers':									
Average capacity quantity	1,325,400	1,326,713	1,310,545	658,356	645,470	(1.1)	0.1	(1.2)	(2.0)
Production quantity	587,674	619,820	669,339	338,138	383,296	13.9	5.5	8.0	13.4
Capacity utilization (fn1)	44.3	46.7	51.1	51.4	59.4	6.7	2.4	4.4	8.0
U.S. shipments:									
Quantity	565,481	594,748	642,202	323,845	366,173	13.6	5.2	8.0	13.1
Value	629,379	671,447	719,561	366,535	426,717	14.3	6.7	7.2	16.4
Unit value	$1.11	$1.13	$1.12	$1.13	$1.17	0.7	1.4	(0.8)	3.0
Export shipments:									
Quantity	21,961	24,040	25,245	10,722	13,741	15.0	9.5	5.0	28.2
Value	24,327	28,180	29,160	13,802	16,010	19.9	15.8	3.5	16.0
Unit value	$1.11	$1.17	$1.16	$1.29	$1.17	4.3	5.8	(1.5)	(9.5)
Ending inventory quantity	34,495	35,478	37,350	39,186	41,046	8.3	2.8	5.3	4.7
Inventories/total shipments (fn1)	5.9	5.7	5.6	5.9	5.4	(0.3)	(0.1)	(0.1)	(0.5)
Production workers	1,753	1,799	1,868	1,829	1,944	6.6	2.6	3.8	6.3
Hours worked (1,000s)	3,768	3,937	4,101	2,086	2,202	8.8	4.5	4.2	5.6
Wages paid ($1,000)	65,108	66,193	72,170	35,597	38,999	10.8	1.7	9.0	9.6
Productivity (square foot per hour)	156.0	157.4	163.2	162.1	174.1	4.6	0.9	3.7	7.4
Unit labor costs	$0.11	$0.11	$0.11	$0.11	$0.10	(2.7)	(3.6)	1.0	(3.4)
Net Sales:									
Quantity	547,532	577,117	622,581	312,882	355,336	13.7	5.4	7.9	13.6
Value	610,179	653,051	698,822	356,746	414,238	14.5	7.0	7.0	16.1
Unit value (dollars per square foot)	$1.11	$1.13	$1.12	$1.14	$1.16	0.8	1.6	(0.8)	2.3
Cost of goods sold (COGS)	549,792	591,423	633,491	323,228	367,698	15.2	7.6	7.1	13.8
Gross profit of (loss)	60,387	61,628	65,331	33,518	46,540	8.2	2.1	6.0	38.9
SG&A expenses	47,877	51,247	54,342	25,318	26,727	13.5	7.0	6.0	5.6
Operating income or (loss)	12,510	10,381	10,989	8,200	19,813	(12.2)	(17.0)	5.9	141.6
Capital expenditures	4,129	7,325	7,435	2,669	8,770	80.1	77.4	1.5	228.6
Unit COGS	$1.00	$1.02	$1.02	$1.03	$1.03	1.3	2.1	(0.7)	0.2
Unit SG&A expenses	$0.09	$0.09	$0.09	$0.08	$0.08	(0.2)	1.6	(1.7)	(7.0)
Unit operating income or (loss)	$0.02	$0.02	$0.02	$0.03	$0.06	(22.7)	(21.3)	(1.9)	112.8
COGS/sales (fn1)	90.1	90.6	90.7	90.6	88.8	0.5	0.5	0.1	(1.8)
Operating income or (loss)/sales (fn1)	2.1	1.6	1.6	2.3	4.8	(0.5)	(0.5)	(0.0)	2.5

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and official Commerce statistics

Table C-2
Hardwood plywood: Summary data concerning the U.S. market, 2010-12, January to June 2012, and January to June 2013
(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)

	Report data					Period changes			
	Calendar year			January to June		Calendar year			Jan-June
	2010	2011	2012	2012	2013	2010-12	2010-11	2011-12	2012-13
U.S. consumption quantity:									
Amount	2,440,747	2,558,996	2,749,455	1,415,504	1,604,847	12.6	4.8	7.4	13.4
Producers' share (fn1)	23.2	23.2	23.4	22.9	22.8	0.2	0.1	0.1	(0.1)
Importers' share (fn1):									
China	33.2	36.4	37.9	36.3	34.4	4.8	3.2	1.6	(1.9)
All others sources, nonsubject	43.7	40.4	38.7	40.8	42.8	(5.0)	(3.3)	(1.7)	2.0
Total imports	76.8	76.8	76.6	77.1	77.2	(0.2)	(0.1)	(0.1)	0.1
U.S. consumption value:									
Amount	1,392,779	1,490,728	1,642,792	840,246	960,035	18.0	7.0	10.2	14.3
Producers' share (fn1)	45.2	45.0	43.8	43.6	44.4	(1.4)	(0.1)	(1.2)	0.8
Importers' share (fn1):									
China	28.1	29.0	31.7	29.9	29.7	3.6	0.9	2.7	(0.2)
All others sources, nonsubject	26.7	26.0	24.5	26.5	25.9	(2.2)	(0.8)	(1.5)	(0.6)
Total imports	54.8	55.0	56.2	56.4	55.6	1.4	0.1	1.2	(0.8)
U.S. importers' U.S. shipments of Imports from:									
China									
Quantity	809,600	931,260	1,043,188	514,141	552,136	28.9	15.0	12.0	7.4
Value	391,020	432,342	520,814	251,074	284,845	33.2	10.6	20.5	13.5
Unit value	$0.48	$0.46	$0.50	$0.49	$0.52	3.4	(3.9)	7.5	5.6
Ending inventory quantity	248,253	231,403	360,707	250,832	218,375	45.3	(6.8)	55.9	(12.9)
All other sources, non-subject:									
Quantity	1,065,666	1,032,988	1,064,065	577,518	686,538	(0.2)	(3.1)	3.0	18.9
Value	372,380	386,939	402,417	222,637	248,473	8.1	3.9	4.0	11.6
Unit value	$0.35	$0.37	$0.38	$0.39	$0.36	8.2	7.2	1.0	(6.1)
Ending inventory quantity	286,762	252,974	275,987	268,345	251,692	(3.8)	(11.8)	9.1	(6.2)
Total imports:									
Quantity	1,875,266	1,964,248	2,107,253	1,091,659	1,238,674	12.4	4.7	7.3	13.5
Value	763,400	819,281	923,231	473,711	533,318	20.9	7.3	12.7	12.6
Unit value	$0.41	$0.42	$0.44	$0.43	$0.43	7.6	2.5	5.0	(0.8)
Ending inventory quantity	535,015	484,377	636,694	519,177	470,067	19.0	(9.5)	31.4	(9.5)
U.S. producers':									
Average capacity quantity	1,325,400	1,326,713	1,310,545	658,356	645,470	(1.1)	0.1	(1.2)	(2.0)
Production quantity	587,674	619,820	669,339	338,138	383,296	13.9	5.5	8.0	13.4
Capacity utilization (fn1)	44.3	46.7	51.1	51.4	59.4	6.7	2.4	4.4	8.0
U.S. shipments:									
Quantity	565,481	594,748	642,202	323,845	366,173	13.6	5.2	8.0	13.1
Value	629,379	671,447	719,561	366,535	426,717	14.3	6.7	7.2	16.4
Unit value	$1.11	$1.13	$1.12	$1.13	$1.17	0.7	1.4	(0.8)	3.0
Export shipments:									
Quantity	21,961	24,040	25,245	10,722	13,741	15.0	9.5	5.0	28.2
Value	24,327	28,180	29,160	13,802	16,010	19.9	15.8	3.5	16.0
Unit value	$1.11	$1.17	$1.16	$1.29	$1.17	4.3	5.8	(1.5)	(9.5)
Ending inventory quantity	34,495	35,478	37,350	39,186	41,046	8.3	2.8	5.3	4.7
Inventories/total shipments (fn1)	5.9	5.7	5.6	5.9	5.4	(0.3)	(0.1)	(0.1)	(0.5)
Production workers	1,753	1,799	1,868	1,829	1,944	6.6	2.6	3.8	6.3
Hours worked (1,000s)	3,768	3,937	4,101	2,086	2,202	8.8	4.5	4.2	5.6
Wages paid ($1,000)	65,108	66,193	72,170	35,597	38,999	10.8	1.7	9.0	9.6
Productivity (square foot per hour)	156.0	157.4	163.2	162.1	174.1	4.6	0.9	3.7	7.4
Unit labor costs	$0.11	$0.11	$0.11	$0.11	$0.10	(2.7)	(3.6)	1.0	(3.4)
Net Sales:									
Quantity	547,532	577,117	622,581	312,882	355,336	13.7	5.4	7.9	13.6
Value	610,179	653,051	698,822	356,746	414,238	14.5	7.0	7.0	16.1
Unit value (dollars per square foot)	$1.11	$1.13	$1.12	$1.14	$1.16	0.8	1.6	(0.8)	2.3
Cost of goods sold (COGS)	549,792	591,423	633,491	323,228	367,698	15.2	7.6	7.1	13.8
Gross profit of (loss)	60,387	61,628	65,331	33,518	46,540	8.2	2.1	6.0	38.9
SG&A expenses	47,877	51,247	54,342	25,318	26,727	13.5	7.0	6.0	5.6
Operating income or (loss)	12,510	10,381	10,989	8,200	19,813	(12.2)	(17.0)	5.9	141.6
Capital expenditures	4,129	7,325	7,435	2,669	8,770	80.1	77.4	1.5	228.6
Unit COGS	$1.00	$1.02	$1.02	$1.03	$1.03	1.3	2.1	(0.7)	0.2
Unit SG&A expenses	$0.09	$0.09	$0.09	$0.08	$0.08	(0.2)	1.6	(1.7)	(7.0)
Unit operating income or (loss)	$0.02	$0.02	$0.02	$0.03	$0.06	(22.7)	(21.3)	(1.9)	112.8
COGS/sales (fn1)	90.1	90.6	90.7	90.6	88.8	0.5	0.5	0.1	(1.8)
Operating income or (loss)/sales (fn1)	2.1	1.6	1.6	2.3	4.8	(0.5)	(0.5)	(0.0)	2.5

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

Table C-3

Hardwood plywood: Summary data concerning the U.S. market (including *), 2010-12, January to June 2012, and January to June 2013**

* * * * * * *

APPENDIX D

U.S. AND CHINESE HARDWOOD PLYWOOD BY TYPE OF MATERIAL UTILIZED IN THE CORE AND THICKNESS OF PRODUCT AND FACE VENEER

Tables D-1 and D-2 present U.S. and Chinese hardwood plywood producers' hardwood plywood production by materials used in the cores and faces of the hardwood plywood produced.

Table D-1
Hardwood plywood: U.S. producers' and Chinese producers' production by type of material utilized in core, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
U.S. producers:					
Hardwood veneer	24,961	26,418	25,312	14,704	13,683
Softwood veneer	384,620	410,029	450,146	225,816	255,506
Bamboo	0	0	0	0	0
Other Inputs	172,021	179,285	185,653	93,663	104,300
All	581,602	615,732	661,111	334,183	373,489
Chinese producers:					
Hardwood veneer	1,413,169	1,490,135	1,554,641	743,614	742,510
Softwood veneer	122,832	162,658	146,752	76,507	70,392
Bamboo	0	0	0	0	0
Other Inputs	45,712	50,206	56,811	28,164	23,894
All	1,581,713	1,702,999	1,758,204	848,285	836,796
	Share of quantity (*percent*)				
U.S. producers:					
Hardwood veneer	4.3	4.3	3.8	4.4	3.7
Softwood veneer	66.1	66.6	68.1	67.6	68.4
Bamboo	0.0	0.0	0.0	0.0	0.0
Other Inputs	29.6	29.1	28.1	28.0	27.9
All	100.0	100.0	100.0	100.0	100.0
Chinese producers:					
Hardwood veneer	89.3	87.5	88.4	87.7	88.7
Softwood veneer	7.8	9.6	8.3	9.0	8.4
Bamboo	0.0	0.0	0.0	0.0	0.0
Other Inputs	2.9	2.9	3.2	3.3	2.9
All	100.0	100.0	100.0	100.0	100.0

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

Table D-2
Hardwood plywood: U.S. producers' and Chinese producers' production by type of material utilized for face veneer, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
U.S. Producers:					
Hardwood	575,403	608,628	648,959	331,599	365,021
Softwood	5,292	5,578	7,705	3,428	9,157
Other	952	1,186	1,707	380	712
All	581,647	615,392	658,371	335,407	374,890
Chinese producers:					
Hardwood veneer	1,394,160	1,494,765	1,549,724	757,159	744,905
Softwood veneer	23,237	32,095	33,731	14,272	20,181
Bamboo	92,016	98,974	80,268	39,578	32,080
Other Inputs	1,509,413	1,625,834	1,663,723	811,009	797,166
	Share of quantity (*percent*)				
U.S. producers:					
Hardwood veneer	98.9	98.9	98.6	98.9	97.4
Softwood veneer	0.9	0.9	1.2	1.0	2.4
Other	0.2	0.2	0.3	0.1	0.2
All	100.0	100.0	100.0	100.0	100.0
Chinese producers:					
Hardwood veneer	92.4	91.9	93.1	93.4	93.4
Softwood veneer	1.5	2.0	2.0	1.8	2.5
Other	6.1	6.1	4.8	4.9	4.0
All	100.0	100.0	100.0	100.0	100.0

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

Tables D-3 and D-4 present U.S. importers' hardwood plywood commercial shipments by thickness of veneer and overall plywood thickness, respectively.

Table D-3
Hardwood plywood: U.S. producers', U.S. importers', and Chinese producers' commercial shipments by thickness of veneer, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
U.S. producers:					
0.6 mm and above	523,292	553,992	590,799	298,515	330,701
0.5 mm to 0.59 mm	31,378	30,236	31,906	17,649	16,722
0.4 mm to 0.49 mm	1,215	1,065	737	407	102
Below 0.4 mm	0	0	0	0	0
All	555,885	585,293	623,442	316,571	347,525
U.S. importers:					
0.6 mm and above	45,688	7,985	4,369	2,083	1,463
0.5 mm to 0.59 mm	8,391	5,363	5,814	2,871	5,589
0.4 mm to 0.49 mm	27,555	8,483	9,044	4,627	3,782
Below 0.4 mm	633,761	790,454	904,265	456,169	467,988
Total	715,395	812,285	923,492	465,750	478,822
Chinese producers:					
0.6 mm and above	599	2,135	3,563	2,429	2,002
0.5 mm to 0.59 mm	18,329	16,030	54,335	13,774	9,999
0.4 mm to 0.49 mm	8,719	12,685	16,977	8,447	7,404
Below 0.4 mm	585,762	687,202	808,653	371,834	251,092
Totals	613,409	718,052	883,528	396,484	270,497
	Share of quantity (*percent*)				
U.S. producers:					
0.6 mm and above	94.1	94.7	94.8	94.3	95.2
0.5 mm to 0.59 mm	5.6	5.2	5.1	5.6	4.8
0.4 mm to 0.49 mm	0.2	0.2	0.1	0.1	0.0
Below 0.4 mm	0.0	0.0	0.0	0.0	0.0
All	100.0	100.0	100.0	100.0	100.0
U.S. importers:					
0.6 mm and above	6.4	1.0	0.4	0.4	0.3
0.5 mm to 0.59 mm	1.2	0.7	0.5	0.6	1.1
0.4 mm to 0.49 mm	3.9	1.0	15.9	1.0	5.3
Below 0.4 mm	88.6	97.3	83.2	97.9	93.3
Total	100.0	100.0	100.0	100.0	100.0
Chinese producers:					
0.6 mm and above	0.1	0.3	0.4	0.6	0.7
0.5 mm to 0.59 mm	3.0	2.2	6.1	3.5	3.7
0.4 mm to 0.49 mm	1.4	1.8	1.9	2.1	2.7
Below 0.4 mm	95.5	95.7	91.5	93.8	92.8
Totals	100.0	100.0	100.0	100.0	100.0

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

Table D-4
Hardwood plywood: U.S. producers', U.S. importers, and Chinese producers' commercial shipments by thickness of overall plywood, 2010-2012, January-June 2012 and January-June 2013

Item	Year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*1,000 square feet*)				
U.S. producers:					
20.0 mm and above	10,369	11,101	10,869	5,231	5,228
16.0 mm to 19.99 mm	310,744	327,035	351,662	181,205	199,871
6.5 mm to 15.99 mm	109,849	124,484	133,370	65,066	70,646
Below 6.5 mm	124,923	122,671	127,542	65,060	71,610
All	555,885	585,291	623,443	316,562	347,355
U.S. importers:					
20.0 mm and above	2,168	2,220	3,346	1,761	1,525
16.0 mm to 19.99 mm	198,846	220,960	233,947	124,968	121,067
6.5 mm to 15.99 mm	144,792	169,841	400,996	96,114	185,359
Below 6.5 mm	352,927	440,878	521,235	252,990	274,167
Total	698,733	833,899	1,159,524	475,833	582,118
Chinese producers:					
20.0 mm and above	2,819	4,849	9,287	6,457	3,541
16.0 mm to 19.99 mm	253,672	292,594	354,923	164,452	102,023
6.5 mm to 15.99 mm	136,153	173,672	227,316	98,836	82,182
Below 6.5 mm	228,725	246,616	284,397	136,579	84,330
Total	621,368	717,731	875,922	406,324	272,075
	Share of quantity (*percent*)				
U.S. producers:					
20.0 mm and above	1.9	1.9	1.7	1.7	1.5
16.0 mm to 19.99 mm	55.9	55.9	56.4	57.2	57.5
6.5 mm to 15.99 mm	19.8	21.3	21.4	20.6	20.3
Below 6.5 mm	22.5	21.0	20.5	20.6	20.6
All	100.0	100.0	100.0	100.0	100.0
U.S. importers:					
20.0 mm and above	0.3	0.3	0.3	0.4	0.3
16.0 mm to 19.99 mm	28.5	26.5	20.2	26.3	20.8
6.5 mm to 15.99 mm	20.7	20.4	34.6	20.2	31.8
Below 6.5 mm	50.5	52.9	45.0	53.2	47.1
Total	100.0	100.0	100.0	100.0	100.0
Chinese producers:					
20.0 mm and above	0.5	0.7	1.1	1.6	1.3
16.0 mm to 19.99 mm	40.8	40.8	40.5	40.5	37.5
6.5 mm to 15.99 mm	21.9	24.2	26.0	24.3	30.2
Below 6.5 mm	36.8	34.4	32.5	33.6	31.0
Total	100.0	100.0	100.0	100.0	100.0

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

APPENDIX E

APPLICATIONS OF DOMESTIC VERSUS SUBJECT PRODUCT (Question IV-3-Purchasers' questionnaire)

Table E-1
Hardwood plywood: Applications of domestic versus subject product (Question IV-3)

* * * * * * *

APPENDIX F

NONSUBJECT COUNTRY PRICE DATA

Twelve importers reported price data for nonsubject countries Canada, Indonesia, and Russia for products 1-6. Price data reported by these firms accounted for 1 percent of U.S. imports from all nonsubject countries. These price items and accompanying data are comparable to those presented in tables V-3 to V-8. Price and quantity data for Canada, Indonesia, and Russia are shown in tables F-1 to F-5 and in figure F-1 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from Canada, Indonesia, and Russia were lower than prices for U.S.-produced product in 108 instances and higher in 16 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from Canada, Indonesia, and Russia were lower than prices for product imported from China in 25 instances and higher in 99 instances.

Table F-1

Hardwood plywood: Weighted-average f.o.b. prices and quantities of imported product 1[1], by quarters, January 2010-June 2013

Period	Canada		Indonesia		Russia	
	Price *($ per square foot)*	**Quantity *(1,000 square feet)***	**Price *($ per square foot)***	**Quantity *(1,000 square feet)***	**Price *($ per square foot)***	**Quantity *(1,000 square feet)***
2010: Jan.-Mar.	***	***	***	***	***	***
Apr.-June	***	***	--	0	***	***
July-Sept.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2011: Jan.-Mar.	***	***	--	0	***	***
Apr.-June	***	***	***	***	***	***
July-Sept.	***	***	--	0	***	***
Oct.-Dec.	***	***	--	0	***	***
2012: Jan.-Mar.	***	***	--	0	***	***
Apr.-June	***	***	--	0	***	***
July-Sept.	***	***	--	0	***	***
Oct.-Dec.	***	***	--	0	***	***
2013: Jan.-Mar.	***	***	--	0	***	***
Apr.-June	***	***	***	***	***	***

[1] Product 1: 12 mm (1/2") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch; whole piece), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Table F-2

Hardwood plywood: Weighted-average f.o.b. prices and quantities of imported product 2[1], by quarters, January 2010-June 2013

Period	Canada	
	Price *($ per square foot)*	**Quantity** *(1,000 square feet)*
2010: Jan.-Mar.	--	0
Apr.-June	***	***
July-Sept.	***	***
Oct.-Dec.	--	0
2011: Jan.-Mar.	***	***
Apr.-June	***	***
July-Sept.	***	***
Oct.-Dec.	***	***
2012: Jan.-Mar.	***	***
Apr.-June	***	***
July-Sept.	***	***
Oct.-Dec.	***	***
2013: Jan.-Mar.	***	***
Apr.-June	***	***

[1] Product 2: 12 mm (1/2") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch; whole piece), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, prefinished.

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

Table F-3

Hardwood plywood: Weighted-average f.o.b. prices and quantities of imported product 3[1], by quarters, January 2010-June 2013

Period	Canada		Indonesia		Russia	
	Price *($ per square foot)*	**Quantity *(1,000 square feet)***	**Price *($ per square foot)***	**Quantity *(1,000 square feet)***	**Price *($ per square foot)***	**Quantity *(1,000 square feet)***
2010: Jan.-Mar.	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***
July-Sept.	***	***	--	0	***	***
Oct.-Dec.	***	***	--	0	***	***
2011: Jan.-Mar.	***	***	--	0	***	***
Apr.-June	***	***	--	0	***	***
July-Sept.	***	***	--	0	***	***
Oct.-Dec.	***	***	--	0	***	***
2012: Jan.-Mar.	***	***	--	0	***	***
Apr.-June	***	***	--	0	***	***
July-Sept.	***	***	--	0	***	***
Oct.-Dec.	***	***	--	0	***	***
2013: Jan.-Mar.	***	***	--	0	***	***
Apr.-June	***	***	***	***	***	***

[1] Product 3: 18 mm (3/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Table F-4

Hardwood plywood: Weighted-average f.o.b. prices and quantities of imported products 4[1] and 5[2], by quarters, January 2010-June 2013

Period	Product 4		Product 5			
	Canada		Canada		Russia	
	Price ($ per square foot)	Quantity (1,000 square feet)	Price ($ per square foot)	Quantity (1,000 square feet)	Price ($ per square foot)	Quantity (1,000 square feet)
2010: Jan.-Mar.	--	0	--	0	--	0
Apr.-June	***	***	***	***	--	0
July-Sept.	--	0	--	0	--	0
Oct.-Dec.	--	0	--	0	--	0
2011: Jan.-Mar.	--	0	***	***	--	0
Apr.-June	--	0	***	***	--	0
July-Sept.	--	0	***	***	--	0
Oct.-Dec.	--	0	***	***	--	0
2012: Jan.-Mar.	***	***	***	***	--	0
Apr.-June	--	0	***	***	--	0
July-Sept.	--	0	***	***	--	0
Oct.-Dec.	--	0	***	***	***	***
2013: Jan.-Mar.	--	0	***	***	--	0
Apr.-June	--	0	***	***	***	***

[1] Product 4: 5.2 mm (1/4") thickness (actual or nominal), 4x8 panel size, Maple face (whether plain or rotary sliced), face Grade B or substantially equivalent, Maple back (whether plain or rotary sliced), back grade 2/3 or substantially equivalent, veneer core, unfinished.

[2] Product 5: 18 mm (3/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether white birch, natural birch or artisan birch), face Grade C/D+ or substantially equivalent, Birch back (whether white birch, natural birch or artisan birch), back grade 2/3 or substantially equivalent, veneer core, prefinished.

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

Table F-5

Hardwood plywood: Weighted-average f.o.b. prices and quantities of imported product 6[1], by quarters, January 2010-June 2013

Period	Canada		Indonesia		Russia	
	Price *($ per square foot)*	**Quantity *(1,000 square feet)***	**Price *($ per square foot)***	**Quantity *(1,000 square feet)***	**Price *($ per square foot)***	**Quantity *(1,000 square feet)***
2010: Jan.-Mar.	***	***	***	***	--	0
Apr.-June	***	***	***	***	--	0
July-Sept.	***	***	***	***	--	0
Oct.-Dec.	***	***	***	***	--	0
2011: Jan.-Mar.	***	***	***	***	***	***
Apr.-June	***	***	--	0	***	***
July-Sept.	***	***	--	0	***	***
Oct.-Dec.	***	***	--	0	***	***
2012: Jan.-Mar.	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***
2013: Jan.-Mar.	***	***	***	***	--	0
Apr.-June	***	***	***	***	--	0

[1] Product 6: 5.2 mm (1/4") thickness (actual or nominal), 4x8 panel size, Birch face (whether plain or rotary sliced), face Grade C or substantially equivalent, back face of Birch or other, Grade 2/3 or substantially equivalent, veneer core, unfinished.

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

Figure F-1

Hardwood plywood: Weighted-average f.o.b. prices and quantities of domestic and imported product, by quarters, January 2010-June 2013

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