

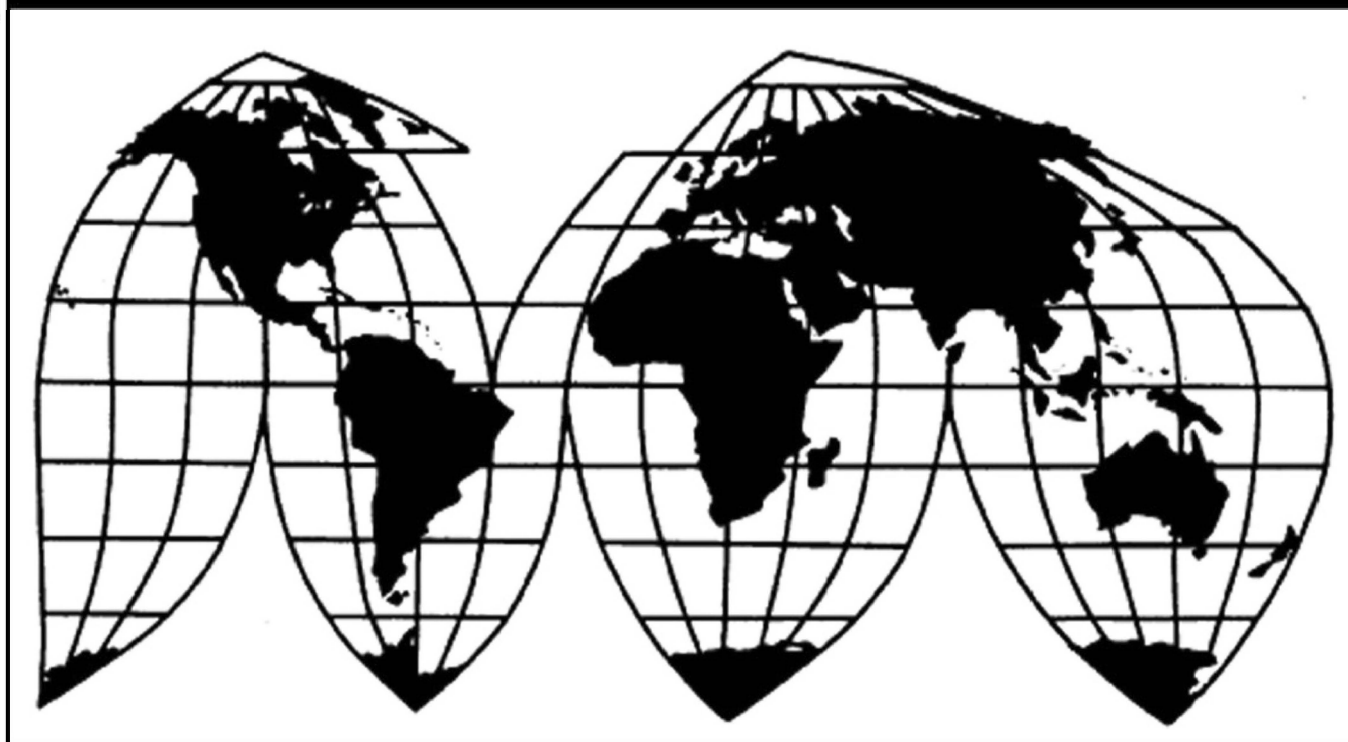
Laminated Woven Sacks from Vietnam

Investigation Nos. 701-TA-601 and 731-TA-1411 (Final)

Publication 4893

May 2019

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-601 and 731-TA-1411 (Final)

Laminated Woven Sacks from Vietnam

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that an industry in the United States is materially injured by reason of imports of laminated woven sacks from Vietnam, provided for in subheading 6305.33.00 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value (“LTFV”), and to be subsidized by the government of Vietnam.

BACKGROUND

The Commission, pursuant to sections 705(b) and 735(b) of the Act (19 U.S.C. 1671d(b) and 19 U.S.C. 1673d(b)), instituted these investigations effective March 7, 2018, following receipt of a petition filed with the Commission and Commerce by Polytex Fibers Corporation (“Polytex”), Houston, Texas; and ProAmpac, LLC (“ProAmpac”), Cincinnati, Ohio; combined as Laminated Woven Sacks Fair Trade Coalition. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of laminated woven sacks from Vietnam were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)) and sold at LTFV 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 October 29, 2018 (83 FR 54373).² The hearing was held in Washington, DC, on April 4, 2019, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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 Due to the lapse in appropriations and ensuing cessation of government operations, all import injury investigations conducted under authority of Title VII of the Tariff Act of 1930 accordingly were tolled pursuant to 19 U.S.C. §§ 1671d(b)(2), 1673d(b)(2).

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of laminated woven sacks from Vietnam found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value (“LTFV”) and to be subsidized by the government of Vietnam.¹

I. Background

The Laminated Woven Sacks Fair Trade Coalition and its individual members Polytex Fibers Corporation (“Polytex”) and ProAmpac Holdings, Inc. (“ProAmpac”), domestic producers of laminated woven sacks (collectively, “petitioners”), filed the petitions in these investigations on March 7, 2018. Representatives of Polytex and ProAmpac appeared with counsel at the hearing and jointly submitted prehearing and posthearing briefs and final comments.²

The sole respondent to actively participate in the final phase of these investigations was Central Bag Company, a U.S. producer and importer of laminated woven sacks from Vietnam (“Central Bag”). It was represented at the hearing by counsel and submitted prehearing and posthearing briefs.³

U.S. industry data are based on questionnaire responses from nine firms, which accounted for *** percent of U.S. production of laminated woven sacks in 2017.⁴ U.S. import data are based on Commerce’s official import statistics and from questionnaire responses of 39 U.S. importers of laminated woven sacks, which accounted for virtually all U.S. imports from Vietnam and from nonsubject countries in 2017.⁵ Data concerning the subject industry are based on questionnaire responses from six foreign producers whose reported exports to the United States were equivalent to 74.0 percent of imports of laminated woven sacks from

¹ Due to the lapse in appropriations and ensuing cessation of partial government operations, all import injury investigations conducted under authority of Title VII of the Tariff Act of 1930 have been tolled pursuant to 19 U.S.C. §§ 1671d(b)(2), 1673d(b)(2).

² Petitioners’ Prehearing Brief, March 27, 2019 (“Petitioners’ Prehear. Br.”); Petitioners’ Posthearing Brief, April 11, 2019 (“Petitioners’ Posthear. Br.”); Petitioners’ Final Comments, April 29, 2019.

³ Central Bag’s Prehearing Brief, March 27, 2019 (“Central Bag’s Prehear. Br.”); Central Bag’s Posthearing Brief, April 11, 2019 (“Central Bag’s Posthear. Br.”).

⁴ Confidential Report, Memorandum INV-RR-031 (Apr. 22, 2019) (“CR”) at III-1, as revised by Memorandum INV-RR-037 (Apr. 25, 2019); Public Report, *Laminated Woven Sacks from Vietnam*, Inv. Nos. 701-TA-601 and 731-TA-1411 (Final), USITC Pub. 4893 (May 2019) (“PR”) at III-1.

One of the nine firms, ***, only provided trade and employment data in its questionnaire response. CR at III-1 n.1, PR at III-1 n.1. U.S. producer ***. See CR at I-5 n.6, PR at I-4 n.6.

⁵ CR/PR at IV-1.

Vietnam in 2017.⁶ According to the responding foreign producers, they cumulatively accounted for approximately 44 percent of overall production of laminated woven sacks in Vietnam.⁷

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.”⁸ 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.”⁹ 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.”¹⁰

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.¹¹ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹² The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹³ Although the Commission must accept

⁶ CR at VII-3, PR at VII-3.

⁷ CR at VII-3, PR at VII-3. This production estimate is somewhat unreliable because ***, the largest responding producer, did not provide an estimate of its share of total production in Vietnam. CR at VII-3 n.5, PR at VII-3 n.5.

⁸ 19 U.S.C. § 1677(4)(A).

⁹ 19 U.S.C. § 1677(4)(A).

¹⁰ 19 U.S.C. § 1677(10).

¹¹ 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).

¹² See, e.g., S. Rep. No. 96-249 at 90–91 (1979).

¹³ *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 (Continued...)

Commerce's determination as to the scope of the imported merchandise that is subsidized or sold at LTFV,¹⁴ the Commission determines what domestic product is like the imported articles Commerce has identified.¹⁵

B. Product Description

In its final determinations, Commerce defined the imported merchandise within the scope of these investigations as follows:

The merchandise covered by this investigation is laminated woven sacks. Laminated woven sacks are bags consisting of one or more plies of fabric consisting of woven polypropylene strip and/or woven polyethylene strip, regardless of the width of the strip; with or without an extrusion coating of polypropylene and/or polyethylene on one or both sides of the fabric; laminated by any method either to an exterior ply of plastic film such as biaxially-oriented polypropylene (BOPP), polyester (PET), polyethylene (PE), nylon, or any film suitable for printing, or to an exterior ply of paper; printed; displaying, containing, or comprising three or more visible colors (e.g., laminated woven sacks printed with three different shades of blue would be covered by the scope), not including the color of the woven fabric; regardless of the type of printing process used; with or without lining; with or without handles; with or without special closing features (including, but not limited to, closures that are sewn, glued, easy-open (e.g., tape or thread), re-closable (e.g., slider, hook and loop, zipper), hot-welded, adhesive-welded, or press-to-close); whether finished or unfinished (e.g., whether or not closed on one end and whether or not in roll form, including, but not limited to, sheets, lay-flat, or formed in tubes); not exceeding one kilogram in actual weight. Laminated woven sacks produced in the Socialist Republic of Vietnam are subject to the scope regardless of the country of origin of the fabric used to make the sack.

The scope of this investigation excludes laminated woven sacks having each of the following physical characteristics: (1) No side greater than 24 inches, (2) weight less than 100 grams, (3) an open top that is neither sealable nor closable, the rim of which is

(...Continued)

interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

¹⁴ 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).

¹⁵ *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).

hemmed or sewn around the entire circumference, (4) carry handles sewn on the open end, (5) side gussets, and (6) either a bottom gusset or a square or rectangular bottom. The excluded items with the above-mentioned physical characteristics may be referred to as reusable shopping bags.

Subject laminated woven sacks are currently classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheadings 6305.33.0040 and 6305.33.0080. If entered with plastic coating on both sides of the fabric consisting of woven polypropylene strip and/or woven polyethylene strip, laminated woven sacks may be classifiable under HTSUS subheadings 3923.21.0080, 3923.21.0095, and 3923.29.0000. If entered not closed on one end or in roll form (including, but not limited to, sheets, lay-flat tubing, and sleeves), laminated woven sacks may be classifiable under other HTSUS subheadings, including 3917.39.0050, 3921.90.1100, 3921.90.1500, and 5903.90.2500. If the polypropylene strips and/or polyethylene strips making up the fabric measure more than 5 millimeters in width, laminated woven sacks may be classifiable under other HTSUS subheadings including 4601.99.0500, 4601.99.9000, and 4602.90.0000. Although HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope is dispositive.¹⁶

Laminated woven sacks consist of one or more plies of fabric of woven polypropylene strip and/or polyethylene strip that are laminated¹⁷ or bonded to an exterior ply of plastic film such as biaxially-oriented polypropylene (“BOPP”),¹⁸ polyester (PET), polyethylene (PE), nylon, or any film suitable for printing, or to an exterior ply of paper.¹⁹ The exterior ply is printed in three or more colors; it is usually aligned and printed at three or more separate print stations, each containing a different color, creating multicolor, high-quality print graphics. The printed outer ply serves as the point of sale advertising for packaged consumer goods.²⁰

Laminated woven sacks come in various sizes, but are generally used for products that weigh over 12 pounds. They have resistance capabilities that make them suitable for various types and quantities of packaged products. Their dimensions, number of plies, size, strength,

¹⁶ Laminated Woven Sacks From the Socialist Republic of Vietnam: Final Determination of Sales at Less Than Fair Value, 84 Fed. Reg. 14651 (Apr. 11, 2019); Laminated Woven Sacks From the Socialist Republic of Vietnam: Final Affirmative Countervailing Duty Determination, 84 Fed. Reg. 14647 (Apr. 11, 2019). In setting forth the scope, Commerce also noted that variations introduced at various steps of the manufacturing process may result in the classification of the laminated woven sacks under other HTS headings. See CR at I-9 n.13, PR at I-7 n.13.

¹⁷ “Laminated fabric” is two or more layers of cloth joined together with rubber, resin, or an adhesive plastic to form one ply; or a fabric backed and bonded to a plastic sheet. In-scope merchandise is made from a man-made fiber woven fabric joined by a layer of adhesive plastic to an outer layer of either plastic film, or paper, to form one ply of “laminated fabric.” CR at I-10, PR at I-8.

¹⁸ BOPP is a multilayered polypropylene film that has been stretched in two different directions. It has become more popular in the world market due to its unusual combination of properties, such as better shrinkage and seals, twist retention and barrier, transparency, and stiffness. CR at I-10, PR at I-8.

¹⁹ CR at I-10, PR at I-8.

²⁰ CR at I-10 to I-11, PR at I-8.

closure, color, coating, and printing are specified by manufacturers of packaged consumer goods as needed to serve their retail customers. Laminated woven sacks are sold and used primarily as packaging for retail products such as pet food, animal feed, and dry or semi-dry food items.²¹

C. Analysis

In its preliminary determinations, the Commission defined a single domestic like product consisting of laminated woven sacks coextensive with the scope.²² The Commission found that the scope of the investigation was substantially similar to that of prior investigations and reviews of laminated woven sacks from China, in which the Commission defined a single domestic like product coextensive with the scope.²³ It further found that no party objected to defining a single domestic like product, and that there was no information in the record indicating that a different definition was warranted.²⁴

In the final phase of these investigations, no party has contested the Commission's preliminary phase definition of the domestic like product, and there is no new information on the record to suggest that a different definition would be warranted.²⁵ In light of the foregoing, and in the absence of any contrary argument, we again define a single domestic like product to include all laminated woven sacks, coextensive with the scope of these 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."²⁶ In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

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

²¹ CR at I-11, PR at I-9.

²² *Laminated Woven Sacks from Vietnam*, Inv. Nos. 701-TA-601 and 731-TA-1411 (Preliminary), USITC Pub. 4779 at 8 (April 2018) ("Preliminary Determinations").

²³ Preliminary Determinations, USITC Pub. 4779 at 8, *citing Laminated Woven Sacks from China*, Inv. Nos. 701-TA-450 and 731-TA-1122 (Final), USITC Pub. 4025 at 5-6 (Aug. 2008).

²⁴ Preliminary Determinations, USITC Pub. 4779 at 8. In the preliminary phase of these investigations, the Commission collected information regarding the comparability of laminated woven sacks to both non-laminated woven sacks and multi-walled paper sacks, but no party argued that the Commission should include either of these products in the domestic like product.

²⁵ See CR at I-18 to I-19, PR at I-14 to I-15. In their comments on draft questionnaires for the final phase of these investigations, no party proposed collecting data on alternative domestic like products. CR at I-18, PR at I-14.

²⁶ 19 U.S.C. § 1677(4)(A).

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.²⁷ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.²⁸ As explained further below, two domestic producers, Central Bag and ***, are related parties, and we examine for each whether appropriate circumstances exist to exclude it from the domestic industry.

*Central Bag.*²⁹ Central Bag is a related party because it imported *** sacks from Vietnam in 2015 (equivalent to *** percent of its domestic production), *** sacks in 2016 (equivalent to *** percent of its domestic production), *** sacks in 2017 and January-September (interim) 2017 (equivalent to *** percent of its domestic production), and *** sacks in interim 2018 (equivalent to *** percent of its domestic production).³⁰ It accounted for *** percent of domestic industry production in 2017.³¹ Central Bag stated that its reason for importing is that "****."³² Its operating income and net profit to net sales ratios were *** than the industry average in 2015 and *** than the industry average during the remainder of the period of investigation.³³ Central Bag opposes the petition.³⁴

We recognize that Central Bag's subject imports were large relative to its domestic production throughout the period of investigation. However, Central Bag increased its

²⁷ 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).

²⁸ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);
- (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;
- (4) the ratio of import shipments to U.S. production for the imported product; and
- (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); see also *Torrington Co. v. United States*, 790 F. Supp. at 1168.

²⁹ During the hearing, Central Bag publicly acknowledged that it is both a U.S. producer and an importer of subject merchandise. See *Laminated Woven Sacks from Vietnam*, Hearing Transcript (Apr. 5, 2019) ("Hearing Tr.") at 134 (Goldberg).

³⁰ CR/PR at Table III-8. Central Bag reported *** production and import data for full year 2017 and interim 2017.

³¹ CR/PR at Table III-1.

³² CR/PR at Table III-8.

³³ CR/PR at Table VI-3. Central Bag's operating income to net sales ratio was *** percent in 2015, *** percent in 2016, *** percent in 2017 and interim 2017, and *** percent in interim 2018. *Id.*

³⁴ Central Bag appeared on the respondent's panel in opposition to the petitions at the hearing. See CR/PR at App. B.

domestic production of laminated woven sacks from *** sacks in 2015 to *** sacks in 2017, and the ratio of its subject imports to its domestic production declined.³⁵ Consistent with its increasing domestic production, Central Bag reported the *** highest level of capital expenditures in 2017 among domestic producers, and the *** level of capital expenditures for any domestic producer in interim 2018.³⁶ Thus, the record suggests that this producer has an appreciable and growing interest in domestic production. Moreover, there is no evidence that its domestic production operations benefitted from its importation of subject merchandise.³⁷ While Central Bag opposes the petition, no party has argued that it should be excluded from the definition of the domestic industry (petitioners argue that Central Bag should not be excluded from the domestic industry).³⁸ For all of these reasons, we find that appropriate circumstances do not exist to exclude Central Bag from the domestic industry as a related party.

. *** is a related party because it imported *** sacks from Vietnam in 2015 (equivalent to *** percent of its domestic production), *** sacks in 2016 (equivalent to *** percent of its domestic production), *** sacks in 2017 (equivalent to *** percent of its domestic production), *** sacks in interim 2017 (equivalent to *** percent of its domestic production), and *** sacks in interim 2018 (equivalent to *** percent of its domestic production).³⁹ It was the *** largest domestic producer in 2017, accounting for *** percent of domestic industry production.⁴⁰ *** stated that it imported to meet “.”⁴¹ Its operating income and net income to net sales ratios were *** the industry average during the period of investigation.⁴² *** the petition.⁴³

While *** level of subject imports during the period of investigation are ***, the firm increased its domestic production from *** bags in 2015 to *** bags in 2017, and the ratio of its subject imports to domestic production declined.⁴⁴ *** increased domestic production of laminated woven sacks coincided with a *** of its production capacity during the period of investigation, as it reportedly “***.”⁴⁵ *** reported the *** highest level of capital expenditures among domestic producers in both 2017 and interim 2018.⁴⁶ Moreover, there is no indication that *** domestic production operations benefitted from its importation of

³⁵ CR/PR at Table III-8.

³⁶ CR/PR at Table VI-5. *** reported that it “***” and the “***.” CR/PR at Table III-3, CR/PR at VI-21.

³⁷ CR/PR at Table III-1.

³⁸ Petitioners’ Prehear. Br. at 8-11.

³⁹ CR/PR at Table III-8.

⁴⁰ CR/PR at Table III-1.

⁴¹ CR/PR at Table III-8.

⁴² CR/PR at Table VI-3. *** operating income to net sales ratio was *** percent in 2015, *** percent in 2016, *** percent in 2017, *** percent in interim 2017, and *** percent in interim 2018. *Id.*

⁴³ CR/PR at Table III-2.

⁴⁴ CR/PR at Table III-8.

⁴⁵ CR/PR at Tables III-3 and III-4.

⁴⁶ CR/PR at Table VI-5.

subject merchandise. In fact, its financial performance was *** than the other domestic producers.⁴⁷

No party has argued that *** should be excluded from the definition of the domestic industry (petitioners explicitly argue that *** should not be excluded from the domestic industry).⁴⁸ On balance, taking into account its relatively substantial and increasing U.S. production operations, the declining ratio of its subject imports to domestic production, and the effect that its exclusion may have on overall industry data, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

In light of our findings with regard to domestic like product and related parties, we define the domestic industry to consist of all U.S. producers of laminated woven sacks.⁴⁹

IV. Material Injury by Reason of Subject Imports⁵⁰

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of laminated woven sacks from Vietnam that Commerce has found to be sold in the United States at LTFV and to be subsidized by the government of Vietnam.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or

⁴⁷ CR/PR at Table VI-3.

⁴⁸ Petitioners' Prehear. Br. at 8-11.

⁴⁹ Commissioner Broadbent finds that, on balance, the evidence weighs in favor of excluding both Central Bag and *** as related parties. Both companies were primarily importers throughout the period of investigation, with their reported subject imports far exceeding their domestic production in each year. Both companies reported increasing production from 2015 to 2017; however, they also both reported decreasing their production between interim 2017 and interim 2018 even as the rest of the domestic industry increased production. CR/PR at Table III-8 and Table C-1. As a result, neither producer demonstrated a sustained shift away from importation as their primary method for serving the U.S. market during the period of investigation. Despite evidence supporting exclusion of these related parties, she finds that given the small size of these producers, their inclusion within the domestic industry does not materially affect her analysis of volume, price effects, or impact. Therefore, she joins the remaining analysis of these views concerning the domestic industry comprised of all U.S. producers, including the two related parties.

⁵⁰ Section 771(24) of the Tariff Act, which defines "negligibility," provides, with exceptions not pertinent here, that imports from a subject country that are 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 self-initiation, as the case may be, shall be deemed negligible. 19 U.S.C. § 1677(24)(A)(i).

Negligibility is not an issue in these investigations. Subject imports from Vietnam accounted for 71.6 percent of total U.S. imports of laminated woven sacks in the 12-month period (March 2017 through February 2018) preceding the filing of the petition. CR/PR at Table IV-4.

threatened with material injury by reason of the imports under investigation.⁵¹ 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.⁵² The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”⁵³ 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.⁵⁴ 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.”⁵⁵

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,⁵⁶ 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.⁵⁷ 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.⁵⁸

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

⁵¹ 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects.

⁵² 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).

⁵³ 19 U.S.C. § 1677(7)(A).

⁵⁴ 19 U.S.C. § 1677(7)(C)(iii).

⁵⁵ 19 U.S.C. § 1677(7)(C)(iii).

⁵⁶ 19 U.S.C. §§ 1671d(a), 1673d(a).

⁵⁷ *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).

⁵⁸ 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).

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.⁵⁹ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.⁶⁰ 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.⁶¹ It is clear that the existence of injury caused by other factors does not compel a negative determination.⁶²

⁵⁹ Uruguay Round Agreements Act Statement of Administrative Action (SAA), H.R. Rep. 103-316, vol. I at 851–52 (1994) (“{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.”); S. Rep. 96-249 at 75 (1979) (the Commission “will consider information which indicates that harm is caused by factors other than less-than-fair-value imports.”); H.R. Rep. 96-317 at 47 (1979) (“in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;” those factors include “the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry”); *accord Mittal Steel*, 542 F.3d at 877.

⁶⁰ 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.”).

⁶¹ S. Rep. 96-249 at 74–75; H.R. Rep. 96-317 at 47.

⁶² *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.”).

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.”⁶³ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”⁶⁴

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.⁶⁵ 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.⁶⁶ 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 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.⁶⁷

⁶³ *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. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission’s causation analysis as comports with the Court’s guidance in *Mittal*.

⁶⁴ *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.”).

⁶⁵ *Mittal Steel*, 542 F.3d at 875–79.

⁶⁶ *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).

⁶⁷ 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 the final phase of investigations to (Continued...)

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.⁶⁸ Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.⁶⁹

B. Conditions of Competition and the Business Cycle

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

1. Demand Considerations

Demand for laminated woven sacks is derived from demand for the end-use products packaged in laminated woven sacks, such as pet food, animal feed, and bird seed.⁷⁰ Petitioners contend that demand for laminated woven sacks is concentrated at a small number of high-volume customers.⁷¹ The largest responding purchasers of laminated woven sacks, ***, accounted for the majority of reported purchases in these investigations and also the majority of U.S. consumption.⁷²

Majorities of responding U.S. producers, importers, and purchasers reported an increase in U.S. demand for laminated woven sacks in all end-use markets during the period of investigation.⁷³ Apparent U.S. consumption was 587.1 million sacks in 2015, 653.3 million sacks in 2016, and 658.0 million sacks in 2017, an increase of 12.1 percent from 2015 to 2017; it was 485.6 million sacks in interim 2017 and 475.6 million sacks in interim 2018.⁷⁴

(...Continued)

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 the final phase of investigations in which there are substantial levels of nonsubject imports.

⁶⁸ We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

⁶⁹ *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.").

⁷⁰ CR at II-10, PR at II-7.

⁷¹ Petitioners Prehear. Br. at 25-26; Conference Transcript at 39 (Szamosszegi).

⁷² CR at II-2, PR at II-1.

⁷³ CR/PR at Table II-4.

⁷⁴ CR/PR at Table IV-6.

2. Supply Considerations

The domestic industry was the largest supplier of laminated woven sacks to the U.S. market during the period of investigation. U.S. producers' share of apparent U.S. consumption by quantity decreased by 8.2 percentage points between 2015 and 2017, from 55.6 percent in 2015 to 48.7 percent in 2016 and 47.4 percent in 2017; it was higher in interim 2018 (48.9 percent) than in interim 2017 (47.9 percent).⁷⁵ In 2017, nine domestic producers accounted for *** percent of U.S. production of laminated woven sacks.⁷⁶ Their capacity utilization declined from 73.3 percent in 2015 to 58.6 percent in 2017.⁷⁷ Fifteen purchasers did not report any supply constraints, while two purchasers indicated that they experienced supply difficulties from the domestic industry.⁷⁸

Subject imports were the second largest source of supply to the U.S. market and the predominant source of imports during the period of investigation. Their share of apparent U.S. consumption increased from 28.1 percent in 2015 to 33.8 percent in 2016 and 37.3 percent in 2017; it was lower in interim 2018 (32.7 percent) than in interim 2017 (37.3 percent).⁷⁹

The parties disagree about whether the domestic producers and subject imports primarily supply different market segments.⁸⁰ However, the record indicates that they are both present in all channels of distribution. U.S. producers sold mainly to end users, particularly pet food end users; subject imports were *** sold to animal feed end users and distributors.⁸¹

Nonsubject imports, which are from several countries,⁸² accounted for a relatively stable share of the U.S. market throughout the period of investigation. Their share of apparent U.S. consumption was 16.3 percent in 2015, 17.5 percent in 2016, 15.3 percent in 2017, 14.9 percent in interim 2017, and 18.3 percent in interim 2018.⁸³

⁷⁵ CR/PR at Table IV-7.

⁷⁶ CR at I-5, PR at I-4. Three domestic producers (***) reported expansions, two firms (***) completed acquisitions, and two firms (***) reported consolidations. CR at III-4, PR at III-3.

⁷⁷ CR/PR at Table II-3. Domestic producers reported that they seek to maximize production and operate at high capacity utilization levels in order to minimize fixed costs per unit and generate profits. Petitioners' Prehear. Br. at 25-26; Hearing Tr. at 37-38 (Szamosszegi); *see also* Central Bag's Prehear. Br. at 6; Preliminary Determinations, USITC Pub. 4779 at 18.

⁷⁸ CR at II-8, PR at II-4 to II-5. Purchaser *** stated that ***. *** stated that when ***. *Id.*

⁷⁹ CR/PR at Table IV-7.

⁸⁰ Petitioners' Posthear. Br., Answers to Questions at 4-6; Petitioners' Prehear. Br. at 18-23; Central Bag's Prehear. Br. at 5; Hearing Tr. at 114-15 (Goldberg). We have addressed Central Bag's argument on this issue in greater detail below in section IV.E in our analysis of impact.

⁸¹ CR/PR at Table II-1.

⁸² CR/PR at Table IV-3. Laminated woven sacks imported from China have been subject to antidumping and countervailing duty orders since 2008. *See* CR at I-6, PR at I-6.

⁸³ CR/PR at Table IV-7.

3. Substitutability and Other Conditions

We find that there is a moderate-to-high degree of substitutability between subject imports and domestically produced laminated woven sacks.⁸⁴ All reporting U.S. producers indicated that the domestic like product and the subject imports are always or frequently interchangeable, and a majority of importers (18 of 28) and purchasers (9 of 11) also reported that domestically produced and subject laminated woven sacks are always or frequently interchangeable.⁸⁵

Purchasers reported that both price and non-price factors, including quality (*e.g.*, print quality, product consistency, product durability) and conditions of sale (*e.g.*, availability, delivery time, reliability of supply), are important in purchasing decisions for laminated woven sacks.⁸⁶ Majorities of purchasers found the domestic like product and subject imports comparable in quality, availability, and all other non-price factors other than delivery time.⁸⁷ Majorities of responding purchasers also reported that domestically produced product, subject imports, and nonsubject imports always or usually met minimum quality specifications.⁸⁸

The primary raw material used in the production of laminated woven sacks is polypropylene resin, and raw material costs accounted for *** of the domestic industry's total cost of goods sold.⁸⁹ The price of polypropylene fluctuated over the period of investigation, declining by 43 percent between January 2015 and January 2017 before rising through September 2018 for an overall decline of 12.6 percent.⁹⁰

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."⁹¹

⁸⁴ CR at II-16; PR at II-9.

⁸⁵ CR/PR at Table II-10.

⁸⁶ CR/PR at Table II-7. The most often cited top three factors firms consider in their purchasing decisions for laminated woven sacks were quality (16 firms), price (15 firms), and availability (7 firms); quality was the most frequently cited first-most important factor (cited by 13 firms), followed by price (2 firms). CR/PR at Table II-6.

⁸⁷ CR/PR at Table II-9. A majority of purchasers described domestically produced laminated woven sacks as superior to the subject imports with respect to delivery time. *Id.*

⁸⁸ CR/PR at Table II-11.

⁸⁹ CR/PR at V-1.

⁹⁰ CR/PR at V-1 and Figure V-1. U.S. producers and importers generally described raw material prices as increasing (six U.S. producers and 16 importers) or fluctuating (2 U.S. producers and 16 importers). CR/PR at V-2. Petitioners submitted additional data on the historical price of polypropylene, which has minor variations from the data presented in the Commission's staff report. The overall trends of the data are the same, however, irrespective of source. See Petitioners' Posthear. Br. at 10-11 and Exhibit 2; CR/PR at Figure V-1.

⁹¹ 19 U.S.C. § 1677(7)(C)(i).

Subject imports maintained a substantial and increasing presence in the U.S. market during the period of investigation. The volume of subject imports increased from 165.0 million sacks in 2015 to 221.1 million sacks in 2016 and 245.4 million sacks in 2017.⁹² Subject imports' share of apparent U.S. consumption increased from 28.1 percent in 2015 to 33.8 percent in 2016 and 37.3 percent in 2017.⁹³ Subject imports captured market share directly at the expense of the domestic industry between 2015 and 2017; subject imports' market share increased by 9.2 percentage points and the domestic industry's market share declined by 8.2 percentage points.⁹⁴ Similarly, the ratio of subject imports to domestic industry production increased from 52.2 percent in 2015 to 63.2 percent in 2016 and 80.0 percent in 2017.⁹⁵

While subject imports' volume and market share both were lower in interim 2018 than in interim 2017,⁹⁶ the parties agree that these declines were a function of the pendency of these investigations.⁹⁷ Thus, pursuant to the statutory provision on post-petition data,⁹⁸ we have given principal weight to the full-year data for 2015 through 2017 for purposes of our analysis and have accorded reduced weight to the interim 2018 data.

In light of the foregoing, we find that the volume of subject imports and the increase in that volume are significant, in both absolute terms and relative to apparent U.S. consumption, over the period of investigation.

D. Price Effects of the Subject Imports

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

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

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.⁹⁹

⁹² CR/PR at Table IV-6.

⁹³ CR/PR at Table IV-7.

⁹⁴ CR at IV-15, PR at IV-13.

⁹⁵ CR/PR at Table IV-2.

⁹⁶ CR/PR at Tables IV-6 and IV-7. The volume of subject imports was 181.0 million sacks in interim 2017 and 155.6 million sacks in interim 2018; subject imports' share of apparent U.S. consumption was 37.3 percent in interim 2017 and 32.7 percent in interim 2018. *Id.*

⁹⁷ Petitioners' Prehear. Br. at 24; Petitioners' Posthear. Br., Answers to Questions at 4-5; Hearing Tr. at 92 (Reynolds) and 140-41, 148-49 (Goldberg).

⁹⁸ 19 U.S.C. §1677(7)(I).

⁹⁹ 19 U.S.C. § 1677(7)(C)(ii).

As explained above in section IV.B.3, there is a moderate-to-high degree of substitutability between subject imports and the domestic like product and price is one of several important purchasing factors.

The Commission collected quarterly pricing data on five pricing products.¹⁰⁰ Seven U.S. producers and 19 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁰¹ Pricing data reported by these firms accounted for approximately 48.5 percent of U.S. producers' shipments of laminated woven sacks and 32.6 percent of U.S. shipments of subject imports from Vietnam in 2017.¹⁰²

The pricing data show that subject imports undersold the domestic like product in all 73 quarterly comparisons, at margins ranging from 4.1 percent to 44.5 percent.¹⁰³ The volume of subject imports that undersold the domestic like product was 245.3 million sacks.¹⁰⁴

Thus, we find that there was significant underselling of the domestic like product by the subject imports. Additionally, given the substitutability of the domestic like product and the subject imports and the importance of price in purchasing decisions, we find that significant underselling caused the domestic industry to lose market share to subject imports.

Lost sales data also provide evidence that subject imports gained sales and market share from the domestic industry as a result of the lower prices. Of 18 responding purchasers, 13

¹⁰⁰ The five pricing products are:

Product 1.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 15" x 3.5" x 27" (plus or minus 1 inch in any or all directions), fabric 70 g/m² (plus or minus 6 g/m²), coating 20 g/m², (plus or minus 5 g/m²), film 22 g/m² (plus or minus 6 g/m²) with a pinched bottom stepped end closure.

Product 2.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 15" x 3.5" x 27" (plus or minus 1 inch in any or all directions), fabric 70 g/m² (plus or minus 6 g/m²), coating 20 g/m², (plus or minus 5 g/m²), film 22 g/m² (plus or minus 6 g/m²) without a pinched bottom stepped end closure.

Product 3.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 16" x 6" x 39" (plus or minus 1 inch in any or all directions), fabric 80 g/m² (plus or minus 8 g/m²), coating 20 g/m² (plus or minus 5 g/m²), film 22 g/m² (plus or minus 6 g/m²).

Product 4.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 13" x 2" x 24" (plus or minus 1 inch in any or all directions), fabric 75 g/m² (plus or minus 6 g/m²), coating 20 g/m² (plus or minus 5 g/m²), film 25 g/m² (plus or minus 6 g/m²).

Product 5.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 15" x 5" x 32" (plus or minus 1 inch in any or all directions), fabric 70 g/m² (plus or minus 6 g/m²), coating 20 g/m², (plus or minus 5 g/m²), film 12 g/m² (plus or minus 6 g/m²).

CR at V-8, PR at V-5 to V-6.

¹⁰¹ CR at V-9, PR at V-6.

¹⁰² CR at V-9, PR at V-6.

¹⁰³ CR at V-21, PR at V-9.

¹⁰⁴ CR/PR at Table V-9.

reported that they had purchased subject imports instead of the domestic like product since 2015; 12 reported that subject imports were priced lower than the domestic like product, and six reported that price was a primary reason for the decision to purchase subject imports rather than the domestically produced product.¹⁰⁵

We have also considered price trends during the period of investigation.¹⁰⁶ Pricing data indicate that domestically produced laminated woven sacks experienced a mix of price increases and price decreases. For the period from January 2015 to December 2017, prices decreased between 6.1 and 14.4 percent for domestically produced products 2, 3, 4, and 5, and increased by 3.0 percent for domestically produced product 1.¹⁰⁷ Because prices generally moved in the same direction as costs,¹⁰⁸ it is unclear on this record to what extent price declines were a function of subject imports as opposed to raw material cost trends.¹⁰⁹ Thus, we

¹⁰⁵ CR at V-21 to V-22, PR at V-10.

¹⁰⁶ Commissioner Schmidlein does not join the discussion with respect to price depression and price suppression. Commissioner Schmidlein finds that the pervasive underselling by a significant and growing volume of subject imports led to declining prices for the domestic like product and therefore caused significant price depression. Between January 2015 and December 2017, quarterly pricing data shows price declines of *** percent for product 2, *** percent for product 3, *** percent for product 4, and *** percent for product 5. CR/PR at Tables V-4 to V-7. Demand trends cannot explain the domestic industry's declining prices because apparent U.S. consumption increased 12.1 percent during the same time period. CR/PR at Tables IV-6, C-1. While the price of polypropylene resin, which declined by 22.4 percent between January 2015 and December 2017, may have affected the prices of the domestic producers to some degree, it does not explain the full extent of the price declines. The domestic industry's unit average raw material costs declined *** or 10.8 percent and its unit average cost of goods sold declined *** or 4.8 percent between 2015 and 2017. However, the industry's unit value of net sales and unit value of U.S. shipments both declined *** or 8.0 percent and 7.6 percent, respectively, over the same period, consistent with its declining sales prices. CR/PR at Tables VI-3 and C-1. The fact that the domestic industry's decline in net sales values exceeded its decline in costs during a period of strong demand growth is further evidence that subject imports adversely affected prices for the domestic like product. Furthermore, the record shows that most U.S. producers and importers did not have contracts indexed to raw material prices. CR/PR at V-6. And most purchasers stated that information on the price of raw materials had not affected their negotiations to purchase LW sacks since January 2015. CR/PR at V-3 (Ten purchasers stated that the price of raw materials did not affect their price negotiations while six purchasers indicated that such prices did affect their negotiations). Consequently, I find that the significant and growing volume of subject imports and the degree of substitutability between subject imports and the domestic like product were a significant factor to these price declines.

¹⁰⁷ CR/PR at Tables V-3 to V-7. During the period from January 2015 to September 2018, prices decreased by between 0.4 and 11.4 percent for domestically produced products 2, 3, and 5 during January 2015 to September 2018, and increased by 1.0 and 0.6 percent for domestically produced products 1 and 4. CR/PR at Table V-8.

¹⁰⁸ From January 2015 to December 2017, the average cost of polypropylene declined by 22.4 percent. See Raw Material Worksheet, EDIS Doc. 673944 (Apr. 24, 2019); CR/PR at Figure V-1; see also CR/PR at Table VI-1.

¹⁰⁹ CR V-1 to V-9, PR at V-1 to V-6. In general, responding U.S. producers and importers also described the prices of laminated woven sacks as being affected by movements in raw material costs, (Continued...)

do not find that subject imports depressed prices of the domestic like product to a significant degree.¹¹⁰

The domestic industry's ratio of cost of goods sold ("COGS") to net sales showed fluctuations, increasing from *** percent in 2015 to *** percent in 2016, and then declining to *** percent in 2017.¹¹¹ Petitioners argue that the industry suffered a cost-price squeeze.¹¹² While several firms reported that they had to roll back announced price increases, the purchaser data in the record do not corroborate the producers' assertions of lost revenues.¹¹³ Moreover, the record does not indicate that price increases were likely in light of domestic producers' falling unit COGS.¹¹⁴ Consequently, we do not find that subject imports prevented price increases for the domestic like product that otherwise would have occurred to a significant degree.

In light of these considerations, we find that underselling by the subject imports was significant, leading to lost sales and market share.

E. Impact of the Subject Imports¹¹⁵

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

(...Continued)

including in a few instances (*e.g.*, ***) because laminated woven sacks prices are indexed to raw material prices. CR at V-2, PR at V-2.

¹¹⁰ Information from purchasers does not confirm lost revenues or price declines by the domestic industry. CR at V-21 to V-22, PR at V-10. Of the 17 purchasers that responded to the relevant question, nine reported that U.S. producers had not reduced prices in order to compete with lower-priced imports from Vietnam, while eight reported that they did not know. CR/PR at Table V-12.

¹¹¹ CR/PR at Table VI-3. The ratio of COGS to net sales was *** percent in interim 2017 and *** percent in interim 2018. *Id.*

¹¹² Petitioners' Prehear. Br. at 42-43.

¹¹³ In their questionnaire responses, five domestic producers reported that they had to either reduce prices or roll back announced price increases, while three indicated that they did not. CR at V-22, PR at V-11. However, the record contains no other evidence (*e.g.*, documentation by petitioners) of any unsuccessful attempts by domestic producers to increase prices. As previously discussed, no purchaser reported price reductions by U.S. producers. CR/PR at Table V-12.

¹¹⁴ See CR/PR at Table VI-1.

¹¹⁵ 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 LTFV, Commerce found dumping margins of 109.46 to 292.61 percent for imports from Vietnam. 84 Fed. Reg. 14651. We take into account in our analysis the fact that Commerce has made final findings that all subject producers in Vietnam are selling subject imports in the United States at LTFV. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

the state of the industry.”¹¹⁶ These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”¹¹⁷

The domestic industry’s output, employment, and financial indicators all declined from 2015 to 2017, notwithstanding the increasing apparent U.S. consumption of laminated woven sacks during this period.¹¹⁸ The domestic industry’s production declined from 349.9 million sacks in 2015 to 335.5 million sacks in 2016 and 317.1 million sacks in 2017.¹¹⁹ By contrast, its capacity increased from 477.2 million sacks in 2015 to 500.1 million sacks in 2016 and 541.3 million sacks in 2017.¹²⁰ As a result, capacity utilization decreased by 14.7 percentage points from 2015 to 2017; it was 73.3 percent in 2015, 67.1 percent in 2016, and 58.6 percent in 2017.¹²¹ The domestic industry’s U.S. shipments declined from 326.5 million sacks in 2015 to 317.9 million sacks in 2016 and 312.1 million sacks in 2017.¹²² Its market share, as discussed above, declined from 55.6 percent in 2015 to 47.4 percent in 2017.¹²³ The industry’s end-of-period inventories increased from 35.8 million sacks in 2015 to 39.6 million sacks in 2016 before decreasing to 31.5 million sacks in 2017.¹²⁴

¹¹⁶ 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.”).

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

¹¹⁸ As previously discussed, because the pendency of these investigations caused subject imports to decline in interim 2018, we have focused primarily on the period from 2015 to 2017 in our analysis of impact.

¹¹⁹ CR/PR at Table III-4. The domestic industry’s production was 236.6 million sacks in interim 2017 and 256.2 million sacks in interim 2018. *Id.*

¹²⁰ CR/PR at Table III-4. The domestic industry’s production capacity was 406.8 million sacks in interim 2017 and 436.6 million sacks in interim 2018. *Id.*

¹²¹ CR/PR at Table III-4. The domestic industry’s capacity utilization was 58.2 percent in interim 2017 and 58.7 percent in interim 2018. *Id.*

¹²² CR/PR at Table III-6. The domestic industry’s U.S. shipments were 232.4 million sacks in interim 2017 and 232.8 million sacks in interim 2018. *Id.*

¹²³ CR/PR at Table IV-7. Domestic producers’ share of apparent U.S. consumption was 47.9 percent in interim 2017 and 48.9 percent in interim 2018. *Id.*

¹²⁴ CR/PR at Table III-7. The domestic industry’s end-of-period inventories were 33.6 million sacks in interim 2017 and 45.5 million sacks in interim 2018. *Id.*

Employment-related indicators for the domestic industry largely declined irregularly from 2015 to 2017. In particular, the indicators for production-related workers (“PRWs”), total hours worked, and wages paid each followed this pattern.¹²⁵

The domestic industry’s financial indicators deteriorated steadily throughout the period of investigation. Revenues,¹²⁶ gross profit,¹²⁷ operating income,¹²⁸ operating income ratio,¹²⁹ and net income¹³⁰ all declined from 2015 to 2017. Domestic producers’ capital expenditures and research and development expenses decreased irregularly from 2015 to 2017.¹³¹

As discussed above, significant volumes of low-priced subject imports undersold the domestic like product and increased market share at the direct expense of the domestic industry. Consequently, the domestic industry’s market share declined and its production, shipments, and revenues were lower than they would have been otherwise.¹³² Moreover, the domestic industry’s financial indicators declined throughout the period of investigation. Although most of the domestic industry’s performance indicators showed some improvement in interim 2018, we deem these improvements as related to the pendency of these investigations. We accordingly find that the subject imports had a significant impact on the domestic industry.

¹²⁵ CR/PR at Table III-9. The domestic industry’s number of PRWs decreased steadily from 762 in 2015 to 736 in 2016 and 733 in 2017; it was 729 in interim 2017 and 820 in interim 2018. Total hours worked decreased irregularly from 2.0 million in 2015 to 1.8 million in 2017; they were 1.3 million in interim 2017 and 1.5 million in interim 2018. Wages paid decreased irregularly from \$27.9 million in 2015 to \$27.3 million in 2017; they were \$20.5 million in interim 2017 and \$24.0 million in interim 2018. Productivity in sacks per hour increased from 171.4 in 2015 to 202.1 in 2016 before declining to 180.0 in 2017; it was 178.3 in interim 2017 and 166.7 in interim 2018. Unit labor costs per sack were \$*** in 2015, \$*** in 2016, and \$*** in 2017; they were \$*** in both interim 2017 and interim 2018. Hourly wages increased steadily from \$13.67 in 2015 to \$15.03 in 2016 and \$15.51 in 2017; they were \$15.45 in interim 2017 and \$15.62 in interim 2018. *Id.*

¹²⁶ CR/PR at Table VI-1. The domestic industry’s net sales revenues decreased from \$*** in 2015 to \$*** in 2016 and \$*** in 2017; they were \$*** in interim 2017 and \$*** in interim 2018. *Id.*

¹²⁷ CR/PR at Table VI-1. The domestic industry’s gross profit decreased irregularly from \$*** in 2015 to \$*** in 2017; it was \$*** in interim 2017 and \$*** in interim 2018. *Id.*

¹²⁸ CR/PR at Table VI-1. The domestic industry’s operating income was \$*** in 2015, *** in 2016, and *** in 2017; it was *** in interim 2017 and *** in interim 2018. *Id.*

¹²⁹ CR/PR at Table VI-1. The ratio of operating income to net sales was *** percent in 2015, *** percent in 2016, and *** percent in 2017; it was *** percent in interim 2017 and *** percent in interim 2018. *Id.*

¹³⁰ CR/PR at Table VI-1. The domestic industry’s net income decreased from \$*** in 2015 to *** in 2016 to *** in 2017; it was *** in interim 2017 and *** in interim 2018. *Id.*

¹³¹ CR/PR at Table VI-5. Domestic producers’ capital expenditures increased from \$*** in 2015 to \$*** in 2016, before *** decreasing to \$*** in 2017; they were \$*** in interim 2017 and \$*** in interim 2018. Their total research and development expenses were \$*** in 2015, \$*** in 2016, and \$*** in 2017; they were \$*** in interim 2017 and \$*** in interim 2018. *Id.*

¹³² Having determined that low-priced subject imports depressed prices for domestic like product to a significant degree, Commissioner Schmidlein finds that the domestic industry’s financial performance was also adversely affected by the declining prices for the domestic like product.

We have considered whether there are other factors that may have had an impact on the domestic industry during the period of investigation to ensure that we are not attributing injury from such other factor to subject imports. Nonsubject imports maintained an appreciable share of the market over the period of investigation. However, their share of apparent U.S. consumption decreased from 16.3 percent in 2015 to 15.3 percent in 2017.¹³³ In light of their declining market share from 2015 to 2017, nonsubject imports cannot explain the domestic industry's loss of market share over the same period.

We are unpersuaded by Central Bag's argument that competition between subject imports and the domestic like product is attenuated because subject imports primarily serve the animal feed segment while domestic producers primarily serve the pet food segment.¹³⁴ This argument is belied by the factual record. Not only does the domestic industry compete in all segments of the laminated woven sacks market, it lost market share to the subject imports in both the pet food and animal feed segments of the U.S. market over the period of investigation.¹³⁵

Similarly, we disagree with Central Bag's argument that non-price factors, such as quality and availability, limit the ability of domestic producers to compete with subject imports.¹³⁶ This assertion is unsupported by questionnaire data. The vast majority of purchasers found domestic like product to be comparable to subject imports in quality, availability, and all other non-price factors other than delivery time.¹³⁷ With regard to delivery time, the majority of purchasers described domestically produced laminated woven sacks as superior to subject imports.¹³⁸

Finally, Central Bag argues that any declines in the domestic industry's performance during the period of investigation did not result from subject imports, but rather reflect an unwarranted decision to spend millions of dollars on new equipment for a pinch-style bag closure technology that was never embraced by the market.¹³⁹ There is no factual basis for this argument. The record indicates that the domestic industry's cost structure did not materially change over the period of investigation.¹⁴⁰ Moreover, petitioners submit that *** capital

¹³³ CR/PR at Table IV-7.

¹³⁴ Central Bag's Prehear. Br. at 5-6; *see also* Hearing Tr. at 114-15 (Goldberg).

¹³⁵ Market share shifts from the domestic industry to subject imports within these segments were particularly noticeable from 2015 to 2017. CR/PR at Tables D-2-3.

¹³⁶ Central Bag's Prehear. Br. at 3-6.

¹³⁷ CR/PR at Table II-9.

¹³⁸ CR/PR at Table II-9.

¹³⁹ *See, e.g.*, Central Bag's Prehear. Br. at 13.

¹⁴⁰ *See* CR/PR at Tables VI-2 and VI-3. The domestic industry's average unit other factory costs moved within a relatively narrow range from \$*** (in 2015 and interim 2017) to \$*** (in 2016, 2017, and interim 2018). CR/PR at Table VI-3.

expenditures related to pinch bottom technology.¹⁴¹ Finally, this argument cannot explain the domestic industry's reduced production and market share loss to subject imports.¹⁴²

V. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of laminated woven sacks that are sold in the United States at less than fair value and subsidized by the government of Vietnam.

¹⁴¹ Petitioners' Final Comments at 5. For example, ***. *Id.*; CR/PR at VI-21.

¹⁴² Central Bag also argues that competition from quad seal bags adversely affected the domestic industry's sales to pet food end-users, constituting an alternate cause of injury. Central Bag's Posthear. Br. at 9 and 13. As we explained in the preliminary investigation, any competition from quad seal bags did not preclude apparent U.S. consumption of laminated woven sacks from increasing. Preliminary Determinations, USITC Pub. 4479 at 25. In these final investigations, apparent U.S. consumption grew by 12.1 percent from 2015 to 2017. CR/PR at Table C-1.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Polytex Fibers Corporation (“Polytex”), Houston, Texas; and ProAmpac, LLC (“ProAmpac”), Cincinnati, Ohio; combined as Laminated Woven Sacks Fair Trade Coalition, on March 7, 2018, 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 laminated woven sacks (“LW sacks”)¹ from Vietnam. The following tabulation provides information relating to the background of these investigations.^{2 3}

¹ Laminated woven sacks may also be referred to as laminated woven polypropylene (“WPP”) sacks or laminated woven polyethylene sacks (“WPE”). They may also be referred to as bags instead of sacks. Petitioners’ postconference brief, p. 5. See the section entitled “The Subject Merchandise” in *Part I* of this report for a complete description of the merchandise subject in this proceeding.

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

³ A list of witnesses that appeared at the hearing is presented in appendix B of this report.

Effective date	Action
March 7, 2018	Petition filed with Commerce and the Commission; institution of the Commission's investigations (83 FR 10875, March 13, 2018)
March 27, 2018	Commerce's Initiation of Less-Than-Fair-Value Investigation (83 FR 14257, April 3, 2018)
April 3, 2018	Commerce's Initiation of Countervailing Duty Investigation (83 FR 14253, April 3, 2018)
April 23, 2018	Commission's preliminary determinations (83 FR 18589, April 27, 2018)
August 13, 2018; October 11, 2018	Commerce's preliminary countervailing duty determination and alignment of final determination with final antidumping duty determination (83 FR 39983, August 13, 2018) and preliminary antidumping duty determination (83 FR 51436, October 11, 2018)
October 17, 2018	Scheduling of the final phase of Commission investigations (83 FR 54373, October 29, 2018)
October 23, 2018	Commerce's postponement of final determinations (83 FR 53452, October 23, 2018)
February 6, 2019	Revised scheduling of final phase of Commission investigations (84 FR 3486, February 12, 2019)
April 4, 2019	Commission's hearing
April 11, 2019	Commerce's final countervailing duty determination (84 FR 14647) and final antidumping duty determination (84 FR 14651)
May 1, 2019	Commission's vote
May 23, 2019	Commission's views

Note.-- Due to the lapse in appropriations and ensuing cessation of Commission operations, all import injury investigations conducted under authority of Title VII of the Tariff Act of 1930 accordingly have been tolled pursuant to 19 U.S.C. §§ 1671d(b)(2), 1673d(b)(2).

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--⁴
In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant. . . In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . . (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

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

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

Organization of report

Part I of this report presents information on the subject merchandise, subsidy and dumping margins, and domestic like product. *Part II* of this report presents information on

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

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

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

LW sacks are generally used in the packaging of consumer goods such as pet food, animal feed, and bird seed. The leading U.S. producers of LW sacks are ***, while leading producers of LW sacks in Vietnam include ***. The leading U.S. importers of LW sacks from Vietnam are ***. Leading importers of product from nonsubject countries (primarily Thailand, Honduras, and China) include ***. U.S. purchasers of LW sacks include firms that supply pet food and animal feed in LW sacks; leading purchasers include ***.

Apparent U.S. consumption of LW sacks totaled approximately 658.0 million (\$313.8 million) in 2017. Currently, ten firms are known to produce LW sacks in the United States. U.S. producers' U.S. shipments of LW sacks totaled 312.1 million (\$172.4 million) in 2017, and accounted for 47.4 percent of apparent U.S. consumption by quantity and 55.0 percent by value. U.S. imports from Vietnam totaled 245.4 million (\$99.9 million) in 2017 and accounted for 37.3 percent of apparent U.S. consumption by quantity and 31.8 percent by value. U.S. imports from nonsubject sources totaled 100.5 million (\$41.4) in 2017 and accounted for 15.3 percent of apparent U.S. consumption by quantity and 13.2 percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. U.S. industry data are based on the questionnaire responses of nine firms that accounted for *** percent of U.S. production of LW sacks during 2017.⁶ U.S. imports are based on the questionnaire responses of 39 firms that accounted for virtually all U.S. imports from Vietnam and from nonsubject countries in 2017,⁷ as well as official U.S. imports statistics using HTS statistical reporting number 6305.33.0040.

⁶ U.S. producer ***.

⁷ Because LW sacks may be imported under a variety of HTS statistical reporting numbers, including various "basket categories," there exists no representative estimate of the total U.S. import volume of LW sacks. According to petitioners, LW sacks should be entering under HTS statistical reporting number 6305.33.0040, which was added to the HTSUS, effective July 1, 2014, at the request of the domestic LW sacks industry (Petition, p. 4). However, during the preliminary investigations, less than half (***) percent) of all imports from 2015 to 2017 reported by responding importers were imported under 6305.33.0040. *Laminated Woven Sacks from Vietnam*, Inv. Nos. 701-TA-601 and 731-TA-1411 (Preliminary), USITC Pub. 4779, p. IV-3. Nevertheless, 28 of the 32 firms identified by Petitioners as potential importers (see Petition, exhibit I-6) either submitted questionnaire responses or certified that

(continued...)

PREVIOUS AND RELATED INVESTIGATIONS

LW sacks have been the subject of two prior Commission proceedings. In 2008, the Commission conducted antidumping and countervailing duty investigations on *Laminated Woven Sacks from China* (Inv. Nos. 701-TA-450 and 731-TA-1122). In these original investigations, the Commission determined that an industry in the United States was materially injured by reason of imports from China.⁸ In 2014, the Commission conducted expedited first reviews of the antidumping and countervailing duty orders stemming from the 2008 investigations of laminated woven sacks from China. In these reviews, the Commission determined that revocation of the antidumping and countervailing duty orders on laminated woven sacks from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.⁹ On February 6, 2019, the Commission gave notice that it had instituted a second review to determine whether revocation of antidumping and countervailing duty orders on laminated woven from China would likely lead to the continuation or recurrence of material injury to a domestic industry.¹⁰

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On April 11, 2019, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of LW sacks from Vietnam.¹¹ Table I-1 presents Commerce's findings of subsidization of LW sacks from Vietnam.

(...continued)

they had not imported the subject product since January 1, 2015, and staff believes that the 39 importer questionnaire responses received represent virtually all U.S. imports of laminated woven sacks from 2015 to 2017.

⁸ *Laminated Woven Sacks from China, Inv. Nos. 701-TA-450 and 731-TA-1122 (Final)*, USITC Publication 4025, July 2008, p. 1.

⁹ *Laminated Woven Sacks from China, Inv. Nos. 701-TA-450 and 731-TA-1122 (Review)*, USITC Publication 4457, March 2014, p. 1.

¹⁰ *Laminated Woven Sacks from China; Institution of Five-Year Reviews*, 84 FR 2249, February 6, 2019.

¹¹ *Laminated Woven Sacks From the Socialist Republic of Vietnam: Final Affirmative Countervailing Duty Determination*, 84 FR 14647, April 11, 2019. A full description of the programs found by Commerce to be countervailable can be found in Appendix I of the Issues and Decision Memorandum issued with Commerce's final countervailing duty determination.

Table I-1**LW sacks: Commerce's final subsidy determination with respect to imports from Vietnam**

Entity	Final countervailable subsidy margin (percent)
Duong Vinh Hoa Packaging Company Limited	3.02
Xinsheng Plastic Industry Co., Ltd.	198.87
All others	3.02

Source: 84 FR 14647, April 11, 2019

Sales at LTFV

On April 11, 2018, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports from Vietnam.¹² Tables I-2 presents Commerce's dumping margins with respect to imports of LW sacks from Vietnam.

Table I-2**LW sacks: Commerce's final weighted-average LTFV margins and cash deposit rate with respect to imports from Vietnam**

Exporter	Producer	Final estimated weighted-average dumping margin (percent)	Cash deposit rate (adjusted for subsidy offsets) (percent)
Duong Vinh Hoa Packaging Company Limited	Duong Vinh Hoa Packaging Company Limited	109.46	108.33
C.P. Packaging (Vietnam) Industry Co., Ltd.	C.P. Packaging (Vietnam) Industry Co., Ltd.	109.46	108.33
Tan Dai Hung d.b.a. Tan Dai Dung Joint Stock Co. and Tan Dai Hung Plastic Joint Stock Company	Tan Dai Hung d.b.a. Tan Dai Dung Joint Stock Co. and Tan Dai Hung Plastic Joint Stock Company	109.46	108.33
TKMB Joint Stock Company	TKMB Joint Stock Company	109.46	108.33
Trung Dong Corporation	Trung Dong Corporation	109.46	108.33
All others		292.61	291.48

Source: 84 FR 14651, April 11, 2019.

THE SUBJECT MERCHANDISE**Commerce's scope**

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

The merchandise covered by this investigation is laminated woven sacks. Laminated woven sacks are bags consisting of one or more plies of fabric consisting of woven polypropylene strip and/or woven polyethylene strip, regardless of the width of the

¹² *Laminated Woven Sacks From the Socialist Republic of Vietnam: Final Determination of Sales at Less Than Fair Value*, 84 FR 14651, April 11, 2019.

strip; with or without an extrusion coating of polypropylene and/or polyethylene on one or both sides of the fabric; laminated by any method either to an exterior ply of plastic film such as biaxially-oriented polypropylene (BOPP), polyester (PET), polyethylene (PE), nylon, or any film suitable for printing, or to an exterior ply of paper; printed; displaying, containing, or comprising three or more visible colors (e.g., laminated woven sacks printed with three different shades of blue would be covered by the scope), not including the color of the woven fabric; regardless of the type of printing process used; with or without lining; with or without handles; with or without special closing features (including, but not limited to, closures that are sewn, glued, easy-open (e.g., tape or thread), re-closable (e.g., slider, hook and loop, zipper), hot-welded, adhesive-welded, or press- to-close); whether finished or unfinished (e.g., whether or not closed on one end and whether or not in roll form, including, but not limited to, sheets, lay-flat, or formed in tubes); not exceeding one kilogram in actual weight. Laminated woven sacks produced in the Socialist Republic of Vietnam are subject to the scope regardless of the country of origin of the fabric used to make the sack.

The scope of this investigation excludes laminated woven sacks having each of the following physical characteristics: (1) No side greater than 24 inches, (2) weight less than 100 grams, (3) an open top that is neither sealable nor closable, the rim of which is hemmed or sewn around the entire circumference, (4) carry handles sewn on the open end, (5) side gussets, and (6) either a bottom gusset or a square or rectangular bottom. The excluded items with the above-mentioned physical characteristics may be referred to as reusable shopping bags.

Subject laminated woven sacks are currently classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheadings 6305.33.0040 and 6305.33.0080. If entered with plastic coating on both sides of the fabric consisting of woven polypropylene strip and/or woven polyethylene strip, laminated woven sacks may be classifiable under HTSUS subheadings 3923.21.0080, 3923.21.0095, and 3923.29.0000. If entered not closed on one end or in roll form (including, but not limited to, sheets, lay-flat tubing, and sleeves), laminated woven sacks may be classifiable under other HTSUS subheadings, including 3917.39.0050, 3921.90.1100, 3921.90.1500, and 5903.90.2500. If the polypropylene strips and/or polyethylene strips making up the fabric measure more than 5 millimeters in width, laminated woven sacks may be classifiable under other HTSUS subheadings including 4601.99.0500, 4601.99.9000, and 4602.90.0000. Although HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope is dispositive.¹³

¹³ *Laminated Woven Sacks From the Socialist Republic of Vietnam: Final Determination of Sales at Less Than Fair Value*, 84 FR 14651, April 11, 2019. *Laminated Woven Sacks From the Socialist Republic of Vietnam: Final Affirmative Countervailing Duty Determination*, 84 FR 14647, April 11, 2019.

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations are provided for in subheading 6305.33.00 (statistical reporting numbers 6305.33.0040 and 6305.33.0080) of the Harmonized Tariff Schedule of the United States (“HTS”).¹⁴ Laminated woven sacks that are produced in Vietnam are assessed a column 1-general duty rate of 8.4 percent *ad valorem* under this subheading. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Description and applications

The merchandise covered by these investigations are LW sacks, which are bags consisting of one or more plies of fabric of woven polypropylene strip and/or polyethylene strip that are laminated¹⁵ or bonded to an exterior ply of plastic film such as biaxially-oriented polypropylene (“BOPP”)¹⁶, polyester (PET), polyethylene (PE), nylon, or any film suitable for printing, or to an exterior ply of paper.¹⁷ The exterior ply is printed in three or more colors; it is usually aligned and printed at three or more separate print stations, each containing a different color, creating multicolor, high-quality print graphics. The printed outer ply serves as the point

¹⁴ As noted in the scope set forth by Commerce, variations introduced at various steps of the manufacturing process may result in the classification of the LW sacks under other HTS headings (subheadings are noted in the above scope definition): 3719 or 3921, if entered in rolls or tubes; 3923, if the fabric is coated with plastic on both sides prior to lamination to the BOPP or paper; 4601 and 4602, if the fabric is made of polypropylene or polyethylene strips that measure more than 5 mm in width; or 5903, if presented as rolls of coated fabric.

¹⁵ “Laminated fabric” is two or more layers of cloth joined together with rubber, resin, adhesive plastic, etc. to form one ply; or a fabric backed and bonded to a plastic sheet. The subject LW sacks are made from a man-made fiber woven fabric joined by a layer of adhesive plastic to an outer layer of either plastic film, or paper, to form one ply of “laminated fabric.”

¹⁶ BOPP is a film that is made of polypropylene that has been “biaxially oriented” meaning that the film has been stretched in two different directions. The film is usually a multilayer film that relates to three-layer structures: One thick layer of polypropylene sandwiched between two thin layers of polypropylene. BOPP films have become more popular in the world market because of their unusual combination of properties: better shrinkage, seals well, twist retention and barrier, transparency, and stiffness. Orientation of the polypropylene increases the strength of the film while improving barrier and optical properties. Plastic Recyclers Southeast Inc. website: <http://www.prsei.com/recycling/material/17-bopp-film> (accessed March 3, 2019); Smith, Kevin, Joel Morales Jr., and Robin Waters. Chemicals Economic Handbook, Polypropylene Resins, December 22, 2017, 44—45.

¹⁷ For sacks and bags where the woven fabric of polypropylene and/or polyethylene strip is laminated to an outer ply of paper (in the place of an outer ply of plastics sheeting), then the LW sacks would be classified under HTSUS 6305.33.0080.

of sale advertising for packaged consumer goods. LW sacks are commonly referred to as laminated woven polypropylene bags or sacks, laminated woven polyethylene bags or sacks, or laminated woven bags or sacks.

LW sacks come in various sizes, but are generally used for products that weigh over 12 pounds. They have resistance capabilities that make them suitable for various types and quantities of packaged products. Their dimensions, number of plies, size, strength, closure, color, coating, and printing are specified by manufacturers of packaged consumer goods as needed to serve their retail customers. LW sacks may be lined or unlined. LW sacks may or may not have a thin layer of plastic film over the print medium. For sewn-bottom LW sacks, the bottom is either folded over and stitched, or a separate polypropylene strip is folded over one end of the fabric and sewn to create a closure at the bottom. For pinch bottom stepped style LW sacks, the bottom is folded over and glued or heat sealed to provide a more hermetic seal without sew holes.¹⁸ LW sacks resist puncture and tearing and are resistant to moisture, grease, and oil. The subject LW sacks are sold and used primarily as packaging for retail products such as pet food, animal feed, and dry or semi-dry food items.¹⁹

Manufacturing processes

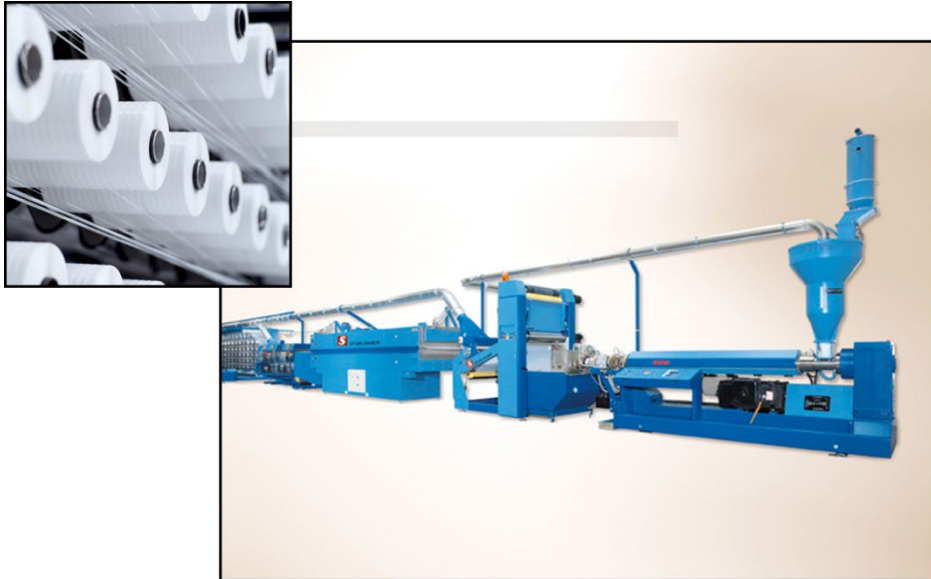
The production of LW sacks involves several separate staged operations, which allow for a producer to enter into the production scheme at a number of different steps, resulting in a variation of starting materials. For vertically integrated producers²⁰ the first step is to melt polypropylene pellets and extrude a plastic sheet of a specific thickness (see figure I-1).

¹⁸ Petitioners noted that pinch bottom style LW sacks are often used for products that lay on a store shelf and present the bottom of the bag as a “billboard effect” for product recognition. Hearing transcript, p. 56—57 (Mueller).

¹⁹ The strength, tear resistance, and light-weight quality of LW sacks combined with the high quality print graphic potential of the BOPP (or other film) make the product distinct from quad seal bags, which are made from different raw materials than LW sacks—polyethylene terephthalate (PET) and polyethylene (PE),—are not made from woven fabric, and generally have higher overall manufacturing costs. Petitioners also noted that quad seal bags are generally used for higher-end, niche pet food markets. Hearing transcript, p. 20—22 (Bazbaz).

²⁰ Polytex and, reportedly, all of the Vietnamese producers are vertically integrated producers. Conference transcript, p. 165 (Little, Schneider, and Schuler), p. 166 (Corman and Lowe).

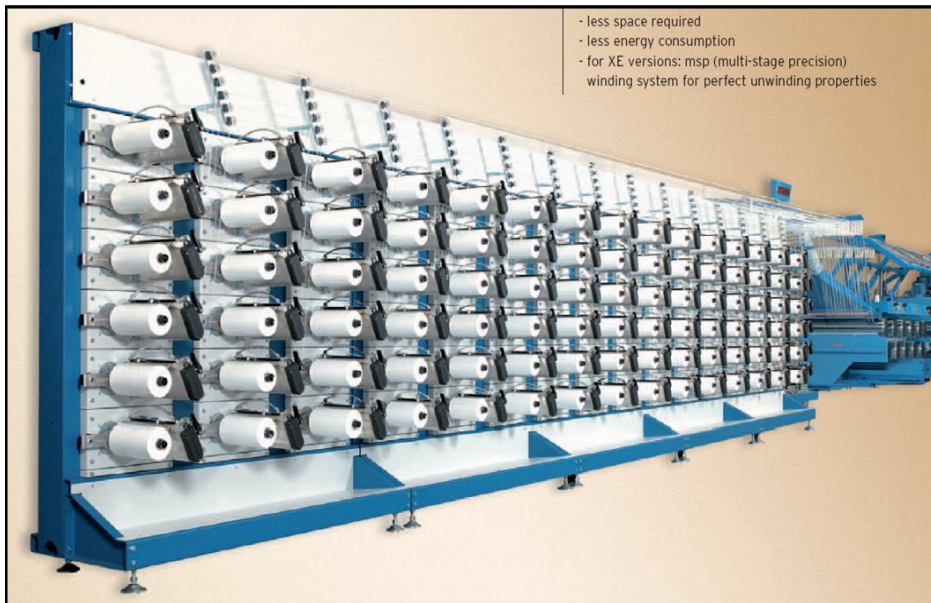
Figure I-1
LW sacks: Extrusion and slitting process



Source: Conference transcript, petitioners' presentation attachment.

The plastic sheets are then cut into thin flat strips that are spooled onto a bobbin for weaving into fabric (see figures I-2 and I-3).

Figure I-2
LW sacks: Spooling of yarn



Source: Conference transcript, petitioners' presentation attachment.

Figure I-3
LW sacks: Weaving process



Source: Conference transcript, petitioners' presentation attachment.

Non-integrated producers may purchase or import the fabric used to make LW sacks. Regardless of the origin of the fabric, all LW sacks manufacturers use a printing press²¹ to print graphics onto the outer layer or laminate, whether that is reverse-printing to BOPP film (so that the graphic will be protected once the film and the fabric are bonded together), or to a paper sheet (see figure I-4).

²¹ LW sacks produced in the United States typically use a flexographic printing process, while LW sacks produced in Vietnam typically use a roto-gravure printing process. Conference transcript, pp. 93-94 (Bazbaz), p. 123 (Snyder), and p. 176 (Jones); petitioners' postconference brief, p. 9; Commercial Packaging's postconference brief, pp. 8-9. Flexographic printing is a relief printing technique, similar to letterpress, in which ink is transferred from a raised printing plate using fast drying inks that are water-based. Rotogravure printing is an engraved printing process that uses rotary printing and solvent based ink. Each color requires its own plate or cylinder, and the individual colors can be combined to create many more colors through process printing. According to the petitioners, even though LW sacks produced in the United States and those produced in Vietnam use different printing processes, there is no difference in print quality between the two. Commercial Packaging's postconference brief, p. 9; respondent producers and exporters' postconference brief, pp. 7-8; Hearing transcript, p. 27 (Mueller).

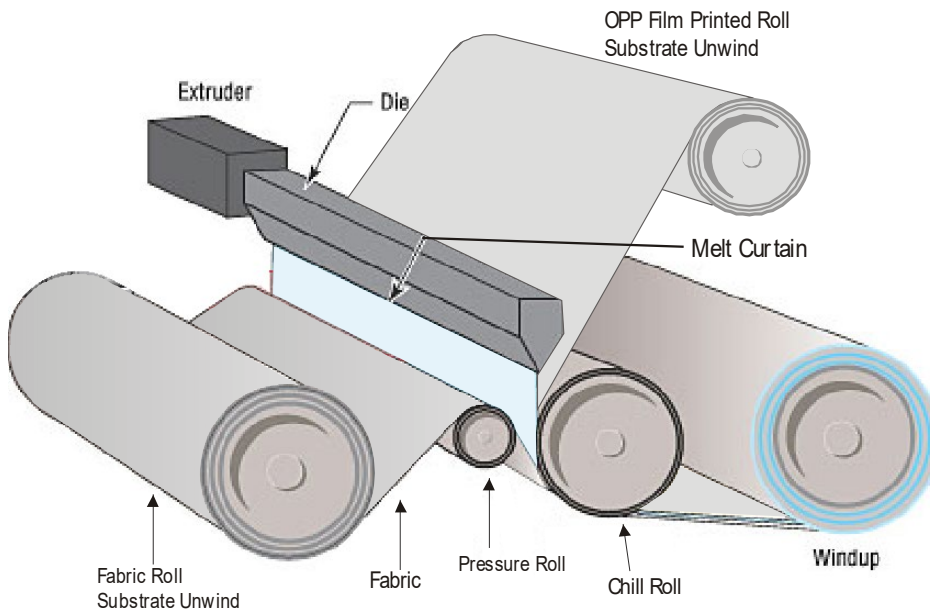
Figure I-4
LW sacks: Printing press



Source: Conference transcript, petitioners' presentation attachment.

Once printed, the roll of film or paper is laminated to the fabric with a layer of liquid polypropylene (see figure I-5).

Figure I-5
LW sacks: Lamination process



Source: Conference transcript, petitioners' presentation attachment.

The roll of laminated fabric is next sent to a tuber where it is formed into a continuous tube, the longitudinal back seam is closed with a melted resin produced by an extruder, and finally, the tube is cut into individual pieces and finished on bag conversion lines (see figure I-6).²²

Figure I-6
LW sacks: Tubing process



Source: Conference transcript, petitioners' presentation attachment.

Each sack is finished by either sewing the bottom and applying closure tape and the pull tape for easy opening (see figure I-7), or by using glue or heat to seal the end in a pinch-closure style.²³ LW sacks that are folded over and glued or heat sealed provide a more hermetic seal without sew holes.²⁴ As with the tubing equipment, the converting equipment (for closing the bottom of the bag) may vary depending on the style of closure, uses and purposes of the bag.

²² Tubing equipment may vary depending on the style of closure, uses and purposes of the bag. TBPA preconference brief, p. 4. Hearing transcript, p. 20 (Bazbaz).

²³ TBPA preconference brief, p. 5.

²⁴ One producer commented that closing LW sacks by hot air—rather than hot melt glue—is also an option for producers. This method melts the woven fabric in the pinch bottom style. Foreign Producers' Questionnaire response of ***, Question II-11a. Petitioners noted that the pinched closure is a more economical way to close LW sacks than sewn closures because it requires less material (the tape and materials used during the sewing process). Hearing transcript, p. 57 (Bazbaz).

Figure I-7
LW sacks: Sewn end closure



Note.--Not all LW sacks have sewn closures.

Source: Conference transcript, petitioners' presentation attachment.

DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) common manufacturing facilities, production processes, and production employees; (5) customer and producer perceptions; and (6) price.

Based on the Commission's 2008 investigations on imports of LW sacks from China, in the preliminary phase of these investigations, the Commission collected information regarding the comparability of LW sacks to both non-laminated woven sacks and multi-walled paper sacks.²⁵ No party has argued that the Commission should include either non-woven laminated woven sacks or multi-walled paper sacks in its definition of the domestic like product. In their comments on draft questionnaires issued for the final phase of these investigations, no party proposed questions concerning additional data for potential domestic like product issues.

²⁵ In its 2008 investigations on imports of LW sacks from China, the Commission declined to broaden its definition of the domestic like product beyond the scope to include either non-woven laminated woven sacks or multi-walled paper sacks, as argued by respondents. *Laminated Woven Sacks from China, Inv. Nos. 701-TA-450 and 731-TA-1122 (Final)*, USITC Publication 4025, July 2008, p. 6. In its 2014 expedited first five-year reviews of imports of LW sacks from China, the Commission defined the domestic like product as being coextensive with Commerce's scope description. *Laminated Woven Sacks from China, Inv. Nos. 701-TA-450 and 731-TA-1122 (Review)*, USITC Publication 4457, March 2014, p. 5.

In the preliminary and final phases of these investigations, petitioners argued that the Commission should find a single domestic like product, co-extensive with the scope of these investigations.²⁶ Respondent Commercial Packaging did not challenge the petitioners' proposed definition of the domestic like product, but reserved the right to raise like product issues in the final phase of these investigations.²⁷ The only respondent during the final phase investigations to submit a prehearing brief and participate in the hearing, Central Bag, raised no like product issues in its prehearing brief and indicated during the hearing that it did not look into like product issues for these investigations.²⁸

Respondent producers and exporters argued in the preliminary phase of these investigations that the Commission should determine reusable polypropylene shopping bags ("shopping bags") to be a separate domestic like product from LW sacks, even if Commerce were to determine that shopping bags are outside of the scope of these investigations.²⁹ In the current proceeding, Commerce has defined the scope to exclude reusable shopping bags.³⁰ Respondent producers and exporters offered no evidence that shopping bags are produced in the United States, stating that they were not aware of any domestic production of such merchandise.³¹

²⁶ Petitioners' postconference brief, p. 8; Petitioners' prehearing brief at 2-7.

²⁷ Commercial Packaging's postconference brief, p. 3.

²⁸ Hearing transcript, pp. 136-137 (Goldberg).

²⁹ Respondent producers and exporters' postconference brief, p. 14.

³⁰ *Laminated Woven Sacks From the Socialist Republic of Vietnam: Preliminary Determination of Sales at Less Than Fair Value*, 83 FR 51436, October 11, 2018.

³¹ *Ibid.*, p. 9 and exh. 4.

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

U.S. MARKET CHARACTERISTICS

LW sacks are bags consisting of woven polypropylene strip and/or polyethylene strip laminated to an exterior ply of plastic film, such as biaxially-oriented polypropylene (BOPP). LW sacks are commonly used in the packaging of consumer goods such as pet food, animal feed, and bird seed. LW sacks have several different closure types, including sewn open mouth, pinch-bottom stepped end, heat sealed and glued, and other close mouthed closures (all discussed below). LW sacks are usually made to order, with artwork from the purchaser printed on the bag.¹ The U.S. market is served by approximately ten U.S. producers, and imports primarily from Vietnam, Honduras, Korea, Colombia, India, Cambodia, and Thailand.²

Apparent U.S. consumption of LW sacks by quantity rose 11.3 percent from 2015 to 2016, and then was mostly flat from 2016 to 2017. From January-September 2018, however, consumption was 2.1 percent lower than in the same period of 2017.

Three U.S. producers and 21 importers indicated that there had been no significant changes in the product range, mix, or marketing of LW sacks since January 1, 2015. However, three producers and 12 importers stated that there had been. Most of these firms described the development of heat-sealed (instead of sewed), pinch-bottom, and/or lighter fabric LW sacks as recent changes. Additionally, importer *** described U.S. customers as demanding higher quality, better printing, and shorter lead times. Other firms described changes in demand (such as increased animal feed demand) or increased supply of Vietnamese product.

U.S. PURCHASERS

The Commission received 18 usable questionnaire responses from firms that had purchased LW sacks during January 2015-September 2018.³ Eight responding purchasers are end users in the pet food segment, seven are end users in the animal feed segment, two are distributors, and four are end users in other segments (including fertilizer and agricultural products).⁴ Purchasers represented geographically diverse states across the country.

Petitioners stated that the LW sacks market is characterized by a small number of high volume customers which includes only a few large customer product groups and co-packers.⁵ The largest responding purchasers of LW sacks are ***. These firms accounted for the majority of reported LW sacks purchases in these investigations, and also the majority of U.S. consumption.

¹ Hearing transcript, p. 31 (Bucci).

² ***. Similarly, ***.

³ Of the 18 responding purchasers, 10 purchased domestic LW sacks, 14 purchased imports of the subject merchandise from Vietnam, and 10 purchased imports of LW sacks from other sources.

⁴ Three purchasers are in both the animal feed and pet food segments. Purchaser *** is owned by ***. Purchaser *** is owned by ***. Purchasers *** are owned by parent companies in ***.

⁵ Conference transcript, p. 39 (Szamosszegi).

All ten responding distributor purchasers of LW sacks indicated that they did not compete for sales with their suppliers. These purchasers reported selling LW sacks to retail stores (especially in the pet industry), feed mills, and other end users, including ***.

CHANNELS OF DISTRIBUTION

U.S. producers sold mainly to consumer goods end users, and particularly pet food end users (table II-1). Imports of LW sacks from Vietnam were *** sold to consumer goods end users during 2015-17, although more to animal feed end users than pet food end users.

Table II-1

LW sacks: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2015-17, January to September 2017, and January to September 2018

* * * * *

GEOGRAPHIC DISTRIBUTION

Most U.S. producers reported selling to all regions of the contiguous United States, and importers as a group covered the contiguous United States, even though most importers did not sell to all individual regions (table II-2). For U.S. producers, *** percent of sales were within 100 miles of their production facilities, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent of their sales within 100 miles of their U.S. points of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.⁶

Table II-2

LW sacks: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Importers
Northeast	***	9
Midwest	***	16
Southeast	***	10
Central Southwest	***	15
Mountain	***	11
Pacific Coast	***	14
Other ¹	***	2
All regions (except Other)	***	4
Reporting firms	8	31

¹ All other U.S. markets, including AK, HI, PR, and VI.

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

⁶ Eighteen importers shipped LW sacks to U.S. purchasers from the importers' points of importation, and fifteen shipped from the importers' storage facilities.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Eight U.S. producers, 39 U.S. importers of LW sacks from Vietnam and nonsubject countries, and six Vietnamese producers reported information on their supply of LW sacks to the U.S. market. Table II-3 provides a summary of the supply factors for U.S. producers and Vietnamese producers.

Table II-3

LW sacks: Supply factors that affect the ability to increase shipments to the U.S. market

Country	Capacity (1,000 sacks)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2017 (percent)		Able to shift to alternate products
	2015	2017	2015	2017	2015	2017	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	477,205	541,250	73.3	58.6	***	***	***	***	2 of 8
Vietnam	***	***	***	***	***	***	***	***	1 of 6

Note.--Responding U.S. producers accounted for the vast majority of U.S. production of LW sacks in 2017. Responding foreign producer/exporter firms' exports to the United States were equivalent to approximately *** percent of U.S. imports of LW sacks from Vietnam during 2017. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from Vietnam, please refer to Part I, "Summary Data and Data Sources."

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

Domestic production

Based on available information, U.S. producers of LW sacks have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced LW sacks to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and some demonstrated ability to increase capacity. Factors mitigating responsiveness of supply include a limited ability to shift from alternate markets and production of other products, as well as some purchaser reports that they were unable to secure supply from U.S. producers.

Domestic capacity utilization decreased by 14.7 percentage points from 73.3 percent in 2015 to 58.6 percent in 2017, as a result of increased capacity and reduced production. Capacity utilization in January-September 2018 was almost the same (58.2 percent) as in the same period of 2017 (58.7 percent). This relatively low level of capacity utilization suggests that U.S. producers may have substantial ability to increase production of LW sacks in response to an increase in prices. U.S. producers' exports, as a percentage of total shipments, remained steady during 2015-17. *** reported that *** primary export market was Mexico, and *** reported *** primary export market was Canada.

Thirteen purchasers indicated that there had not been a change in the availability of U.S.-produced LW sacks in the U.S. market since January 1, 2015. Four indicated that there had, with *** describing increased U.S. production or solicitations. However, *** described U.S. supply as decreasing. *** described ***.

Subject imports from Vietnam

Based on available information, producers of LW sacks from Vietnam have the ability to respond to changes in demand with moderately large changes in the quantity of shipments of LW sacks to the U.S. market. The main contributing factors to this degree of responsiveness of supply are a demonstrated ability to increase capacity substantially and some ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include high capacity utilization, limited inventories, and limited ability to shift production to or from alternate products. Responding Vietnamese producers represent approximately *** percent of LW sacks from Vietnam, and non-responding Vietnamese producers may have different data. Twelve purchasers indicated that there had not been a change in the availability of Vietnamese LW sacks in the U.S. market since January 1, 2015, but two (***) had, citing increased Vietnamese capacity added to meet demand.

Imports from nonsubject sources

Nonsubject imports accounted for 15.3 percent of total U.S. consumption in 2017, and were 18.3 percent of the U.S. market in January-September 2018. According to official import statistics for HTS statistical reporting number 6305.33.0040, the largest sources of nonsubject imports during 2017 were Honduras, Korea, Colombia, India, and Cambodia. According to questionnaire data, the largest sources of nonsubject imports during 2017 were Thailand, China, and Honduras.

Thirteen purchasers indicated that there had not been a change in the availability of nonsubject-country LW sacks in the U.S. market since January 1, 2015. Two (***) did, citing increased availability of product from India and/or Thailand.

Supply constraints

Few U.S. producers, importers, or purchasers reported instances of supply constraints in the LW sacks market since January 1, 2015. Seven of eight U.S. producers indicated that they had not refused, declined, or been unable to supply LW sacks, although *** stated that it had ***. Similarly, 35 of 36 responding importers indicated that they had not been unable to supply LW sacks, although *** reported that on several occasions, ***.

Fifteen purchasers indicated that no firm had refused, declined, or been unable to supply them with LW sacks since January 1, 2015. However, three did cite such difficulties.

Purchaser *** stated that ***. *** stated that when ***. *** stated that its *** has had difficulty supplying product on time.⁷

Purchasers were also asked if certain print styles/closure types/sizes of LW sacks were only available from certain country sources. Fourteen answered no, but three indicated that there were such issues. *** stated that ***. *** stated that it has been able to source all of its standard sizes with sewn open mouth closures from both domestic and imported sources. However, it added that roto-gravure print (which it described as the best print) was only available from imports, while domestic producers used flexographic printing.⁸ *** stated that pinch and step cut LW sacks are mostly available only from U.S., Honduran, Indian, Mexican, and Thai producers.

New suppliers

Sixteen of 18 purchasers indicated that they were not aware of any new suppliers entering the U.S. market since January 1, 2015. Purchaser *** stated that Central Bag began U.S. production in 2015 (after having previously been an importer of product from India), and purchaser *** stated that Fulton-Pacific Packaging Company (***) had entered the market.

U.S. demand

Based on available information, the overall demand for LW sacks is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the somewhat limited range and nature of substitute products, and the small cost share of LW sacks in most of its end-use products.

End uses and cost share

Reported end uses for LW sacks include consumer packaged goods such as pet food, animal feed, seed, rice, and fertilizer. Among end user purchasers of LW sacks, seven reported using U.S.-produced LW sacks for pet food, while five reported using Vietnamese LW sacks. Five reported using U.S.-produced LW sacks for animal feed, and five also did so using Vietnamese LW sacks. Four reported using U.S.-produced LW sacks for other end uses, while two reported using Vietnamese LW sacks for such uses.

Notwithstanding the potentially varied uses of LW sacks, demand for LW sacks is primarily derived from the demand for pet food and industrial animal feed.⁹ The industrial production of animal food, including dog food, cat food, and livestock feed, increased by 18.8

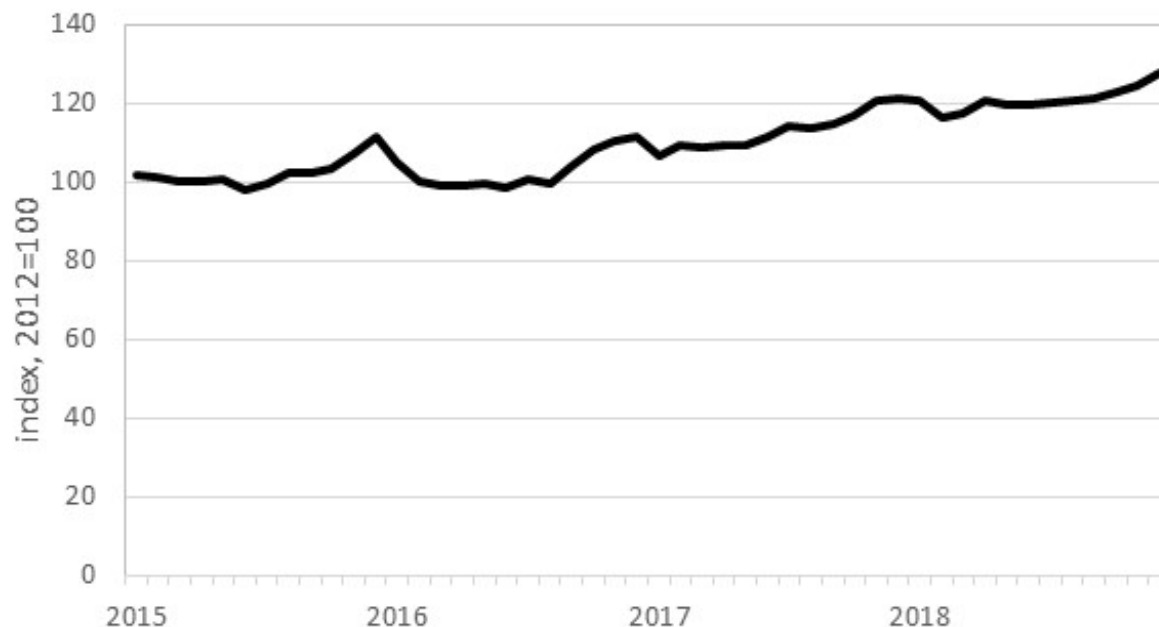
⁷ In answer to a different question, *** stated that it was not aware of a consistent U.S. source for its customers that are switching from paper bags to LW sacks.

⁸ ProAmpac stated that improvements in the printing plates used for flexographic printing had improved the quality of flexographic printing to the same as that of roto-gravure printing. Hearing transcript, p. 27 (Mueller). See part I for a discussion of printing types.

⁹ Conference transcript, p. 39 (Szamosszegi), p. 68 (Jones), and p. 149 (Corman).

percent during January 2015-September 2018, with all of the gain coming after August 2016 (figure II-1).

Figure II-1
Index of quarterly animal food production January 2015–September 2018



Source: Board of Governors of the Federal Reserve System (US), Industrial Production: Nondurable Goods: Animal food ***, retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/IPG3111N>, retrieved February 6, 2019.

LW sacks accounts for a small share of the cost of the end-use products in which they are used. Most responding U.S. producers and importers reported cost shares ranging from 1 to 9 percent of the total cost of an end use product. Similarly, most U.S. purchasers indicated that LW sacks accounted for 1 to 11 percent of the total cost of their final end use product.

Ten purchasers indicated that demand for their end use products incorporating LW sacks had increased since January 1, 2015. Three indicated that such demand had fluctuated, two indicated that it had not changed, and three indicated that it had decreased. Purchasers usually described such changes in demand for their product as having affected their demand for LW sacks, although several indicated that their demand for LW sacks had been also affected, or more affected, by moving away from paper bags.

Business cycles

Five U.S. producers, 24 importers, and 13 purchasers indicated that the U.S. LW sacks market was not subject to business cycles or other conditions of competition distinctive to LW sacks (and other than general economic conditions). However, three U.S. producers, 10 importers, and three purchasers stated that it was, often describing seasonal cycles based on animal feed. For example, importer *** indicated that animal feed and bird feed demand was

stronger in the winter and spring than in the summer and fall. It also stated that U.S. producers had been more oriented toward supplying the pet food and bird seed markets, which have fewer SKUs and longer production runs, as opposed to the animal feed market, which has more SKUs and shorter production runs. Importer *** stated that it has only worked with suppliers that require higher grade product with more certifications. U.S. producers *** stated that the LW sacks market features competition between closely substitutable U.S. and Vietnamese product, and a need for U.S. producers' production equipment to run continuously in order to minimize per-unit costs. Purchaser *** indicated that the animal feed market has heavier demand in the winter, while the pet food market has constant year-round demand. Purchaser *** indicated that its markets vary according to the animal species for which the end use product is prepared. Purchaser *** described its markets as highly seasonal, with higher demand in the winter and spring than in the summer and fall.

Four U.S. producers, eight importers, and six purchasers stated that there had not been any changes to the business cycles or changes of competition for LW sacks since January 1, 2015. Five importers, one producer, and two purchasers did, citing changes in duties, raw material costs, and customers. Importer *** stated that raw material costs have been at record lows, driving LW sacks prices lower (see Part V). Importers *** stated that the development of heat-sealed pinch bottom LW sacks has forced U.S. producers to invest over \$5 million per production line to be able to manufacture these products. Purchaser *** stated that higher prices for quad seal bags and multi-wall paper bags had increased demand for LW sacks, and purchaser *** stated that the introduction of pinch bottom bags, as well as the entry of new suppliers, had increased competition in the market. (See below, as well as parts III and IV, for more discussion of closure types.)

Demand trends

Most U.S. producers, importers, and purchasers reported an increase in U.S. demand for LW sacks since January 1, 2015, across all sectors (table II-4). Purchaser *** stated that demand for LW sacks from the pet food segment is growing both because pet food demand is growing and because LW sacks' cost, strength, weight, and graphics make them the best alternative for pet food. It added that it is seeing increased demand from other sectors, such as charcoal, sugar, rice, and seed. Purchaser *** described increased demand for LW sacks because there is increased demand for feed and because firms are moving away from paper bags due to cost. Other firms also cited increased demand for their end use products (in both pet food and animal feed, as well as rice, charcoal, and seed), or substitution away from paper bags to LW sacks. Importer *** described lower-priced LW sacks from Vietnam and Asian markets as having created a "buyers' market" in the United States, and increasing the amount of LW sacks demanded. However, purchasers and importers describing a decrease in demand cited increased substitution toward quad seal bags and/or smaller (non-LW sack) bags for pet food. Additionally, importers *** described losing market share to ***.

Two purchasers described demand increasing in Europe and Latin America for similar reasons (i.e., switching to LW sacks from paper bags). Importer *** described long lead times and lack of orders in Latin America as hindering Asian exports there.

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

Item	Increase	No change	Decrease	Fluctuate
Demand inside the United States				
U.S. producers:				
Pet food	7	---	---	---
Animal food	7	---	---	---
All other sectors	2	1	---	---
Importers:				
Pet food	8	3	3	1
Animal food	13	3	0	1
All other sectors	10	5	1	4
Purchasers:				
Pet food	5	1	2	---
Animal food	6	1	---	1
All other sectors	3	1	---	1
Demand outside the United States				
U.S. producers	2	1	1	---
Importers	5	6	---	1
Purchasers	4	---	---	1

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

Substitute products

U.S. producers, importers, and purchasers were asked about quad seal bag products and other possible substitutes for LW sacks. Eleven purchasers, 7 U.S. producers, and 23 importers reported that quad seal bag products were not substitutes for LW sacks. However, five purchasers, ***, and seven importers indicated that quad seal bag products were substitutes for LW sacks, most often in pet food applications.

Six purchasers, 5 U.S. producers, and 18 importers indicated that changes in the price of quad seal bag products had not affected the price of LW sacks. Purchaser *** described prices for quad seal bag products as much higher than those of LW sacks, limiting substitution. Similarly, importer *** described the higher price of quad seal bags as making them more appropriate for premium markets, and indicated that the closing mechanism is different. *** indicated that prices of quad seal bag products and LW sacks are based on the prices of their respective raw materials. It continued that prices of quad seal bag products are thus based on the prices of polyester and polyethylene, while prices of LW sacks are based on the prices of polypropylene. Two importers indicated that changes in the prices of quad seal bags had affected the price of LW sacks. Importer *** stated that quad seal bags had taken *** percentage points of market share from LW sacks and thus affected LW sack pricing.

Most responding purchasers and importers described quad seal bags as having a limited impact on their purchases of LW sacks since January 1, 2015. Purchasers *** stated that their equipment would not work with quad seal bags. Purchasers ***, as well as importer *** and U.S. producer ***, described quad seal bags as more expensive than LW sacks, with *** adding that quad seal bags were used for upscale pet food. Purchaser *** indicated that prices of quad seal bags had risen, prompting it to switch toward LW sacks. *** described quad seal bags as more important for pet food customers where brand is important, than for animal feed customers (mostly farmers). Purchaser *** described using quad seal bags for smaller bags, and

LW sacks for larger sizes in which there is more price sensitivity. *** described purchasing quad seal bags for *** percent of its bag purchases.

Nine purchasers, five U.S. producers, and 14 importers indicated that there were substitutes for LW sacks other than quad seal bags.¹⁰ These firms listed multi-wall paper bags and other plastic bags. However, most of these firms indicated that changes in the price of these substitutes had not affected the price of LW sacks. Importer *** described LW sacks as stronger than multi-wall paper bags, leading to substitution away from multi-wall bags toward LW sacks. It added that the prices of multi-walled paper bags and LW sacks are not linked. Purchaser *** and importer *** explained that multiwall paper bags (and, according to ***, also other plastic bags) are not as durable as LW sacks, and *** added that the multiwall paper bags have lower print quality. U.S. producer *** and importer *** described the pricing of paper bags and LW sacks as following different raw material indexes. Importer *** did note, however, that high density polyethylene bags were price competitive with LW sacks, and had many of the same features. Nine purchasers, 4 U.S. producers, and 25 importers indicated that there were no other substitutes for LW sacks.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported LW sacks depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is moderate to high degree of substitutability between domestically produced LW sacks and LW sacks imported from Vietnam. Most market participants generally indicated that U.S. and Vietnamese LW sacks were interchangeable, but a minority of market participants (including some large purchasers) emphasized differences in quality and availability.

Lead times

Five U.S. producers indicated that the majority of their sales of LW sacks were produced to order, while another *** indicated that the majority of their sales were from inventory. Twenty-three importers indicated that the majority of their firm's sales of Vietnamese LW sacks were produced to order, while nine indicated that the majority of such sales were from their U.S. inventories, and three indicated that the majority were from the foreign manufacturers' inventories. U.S. producers described sales of product produced to order as having lead times of between 20 and 90 days, while U.S. importers described such sales as usually having lead times of between 60 and 120 days. Most responding U.S. producers described sales from inventory as having lead times of between 3 and 14 days, while most responding U.S. importers

¹⁰ Petitioners described multi-walled paper sacks as not being a substitute for LW sacks because multi-walled paper sacks are not as durable, are not as easy to print on, and also weigh more, increasing transportation costs. Hearing transcript, pp. 22-3 (Bazbaz) and p. 26 (Mueller).

described such sales as usually having lead times of between 1 and 5 days (for sales from U.S. inventory) and 90 and 120 days (for sales from foreign inventory).¹¹

Knowledge of country sources

Thirteen purchasers indicated they had marketing/pricing knowledge of domestic product, 14 of Vietnamese product, and 12 of product from nonsubject countries, including Cambodia, China, Honduras, India, Mexico, and Thailand.

As shown in table II-5, most purchasers and their customers never make purchasing decisions based on the country of origin, although purchasers were evenly split between always and never purchasing based on the producer of LW sacks. Purchasers that reported at least sometimes making decisions based on producer indicated that food safety certifications, product quality, availability, defect rate, total cost of ownership, and pricing (one purchaser) played a role in these decisions. Most purchasers' customers never make decisions based on the producer of LW sacks, but *** indicated that ***.

Table II-5
LW sacks: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	6	2	3	6
Purchaser's customers make decision based on producer	3	1	---	9
Purchaser makes decision based on country	3	---	2	12
Purchaser's customers make decision based on country	---	1	1	11

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

Fifteen purchasers stated that neither they nor their customers ever specifically ordered LW sacks from one country in particular over other possible sources of supply. However, three did. *** stated that due to its ***. *** stated that *** is the most important factor in its sourcing. It continued that it preferentially purchases from Vietnam due to ***. *** stated that it purchases from Honduras because ***.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for LW sacks were quality (16 firms), price (15 firms), and availability (7 firms) as shown in table II-6. Quality¹² was the most frequently cited first-most important factor (cited by 13 firms), followed by price (2 firms).

¹¹ Eighteen importers reported shipping LW sacks to U.S. customers from their U.S. point of importation, and 15 reported doing so from a storage facility.

¹² Purchasers described quality characteristics as durability, strength, consistency, being wrinkle-free, having a low rate of defects, print quality, meeting specifications, and seal integrity.

Table II-6**LW sacks: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor**

Factor	First	Second	Third	Total
Quality	13	3	---	16
Price / Cost	2	6	7	15
Availability / Supply	---	5	2	7
All other factors ¹	3	4	9	16

¹ Other factors include meeting food safety standards, service, and availability of features.

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

The majority of purchasers (12 of 18) reported that they only sometimes purchase the lowest-priced LW sacks that are offered. Four indicated that they usually do, and two indicated that they never do.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 18 factors in their purchasing decisions (table II-7). The factors rated as very important by at least 14 responding purchasers were availability, delivery time, price, print quality, product consistency, product durability, quality meeting industry standards, and reliability of supply.

Table II-7**LW sacks: Importance of purchase factors, as reported by U.S. purchasers, by factor**

Factor	Very important	Somewhat important	Not important
Availability	14	3	1
Bag seal type	8	7	3
Delivery terms	9	7	2
Delivery time	14	3	1
Discounts offered	3	9	6
Extension of credit	3	7	7
Minimum quantity requirements	8	7	3
Packaging	11	4	3
Price	15	2	1
Print quality	17	---	1
Product consistency	17	---	1
Product durability	16	1	1
Product range	6	5	7
Quality meets industry standards	16	---	2
Quality exceeds industry standards	8	7	3
Reliability of supply	17	---	1
Technical support/service	8	7	3
U.S. transportation costs	5	9	4

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

Supplier certification

Purchasers were asked a series of questions about certifying the LW sacks they buy to various standards, including the Food Safety Modernization Act (FSMA),¹³ the Global Food Safety Initiative (GFSI),¹⁴ or other standards. Overall, 16 of 18 purchasers required certification to at least one of these certification standards, while *** did not.

Twelve of 18 responding purchasers require their suppliers to become qualified to the FSMA standard in order to sell LW sacks to their firm. Purchasers reported that the time to qualify a new supplier usually ranged from 30 to 180 days, although *** indicated longer times. Certification can involve trial periods, obtaining third-party certification, and/or audits of the supplier's facility. Six purchasers, however, did not require FSMA certification.

Nine of 17 responding purchasers require the LW sacks they purchase to be qualified to the GFSI certification level. These purchasers indicated that such qualification involved either third party certification or an audit/evaluation of a supplier's facilities and product quality. Purchasers usually indicated that the qualification process can take 30 to 180 days. Eight purchasers, however, did not require GFSI certification.

Eleven of 18 responding purchasers require the LW sacks that they purchase to be qualified under other standards. These standards include company-specific standards and other outside standards for food safety or raw material safety. However, seven purchasers did not require certification to any other standards.

Sixteen purchasers reported that no domestic or foreign supplier had failed in its attempt to qualify LW sacks since January 1, 2015. However, *** did describe suppliers failing to qualify. *** indicated that some suppliers have failed GFSI certification. *** described *** as having lost its approved status on ***.

Closure types

LW sacks can come with different closure types, including sewn open mouth, pinch bottom stepped end, heat sealed and glued, and other types. Polytex described heat-sealing as a less expensive way for purchasers to close their LW sacks when they use them.¹⁵ Counsel for Central Bag described heat-sealing as a technology that was expensive for petitioners to install, but that has since been supplanted by quad-sealed bags.¹⁶

Purchasers were asked to estimate the share of their 2017 LW sacks purchases and/or imports by closure type and source. Most purchasers reported that the overwhelming majority of their purchases were sewn open mouth, with 82 percent of purchases of U.S. LW sacks, 92

¹³ The FSMA is a 2011 law with the stated purpose of preventing food safety problems. See "Background on the FDA Food Safety Modernization Act (FSMA)," <https://www.fda.gov/newsevents/publichealthfocus/ucm239907.htm>, downloaded January 31, 2019.

¹⁴ The GFSI is a group of food industry representatives with the stated purpose of reducing food safety risks and audit duplication and costs. See "What is GFSI," <https://www.mygfsi.com/about-us/about-gfsi/what-is-gfsi.html>, downloaded January 31, 2019.

¹⁵ Hearing transcript, p. 57 (Bazbaz).

¹⁶ Hearing transcript, pp. 112-14 (Goldberg).

percent of purchases/imports of Vietnamese LW sacks, and 94 percent of purchases/imports of nonsubject-country LW sacks being sewn open mouth. Purchasers indicated that 18 percent of their purchases of U.S. LW sacks, 9 percent of their purchases/imports of Vietnamese LW sacks, and 6 percent of their purchases/imports of nonsubject country LW sacks were pinch bottom stepped end. Purchasers reported only very small purchases/imports of heat sealed and glued or other LW sacks from any source.

Purchasers were asked to describe the advantages and disadvantages of each closure type. Eight purchasers described sewn open-mouth LW sacks as having the advantages of (1) being easy to fill on their existing equipment (including equipment that had been also used for multi-wall paper bags), (2) not requiring adhesives and extra length to fold over, and/or (3) being easy to open for the consumer. Two purchasers described the advantage of pinch-bottom LW sacks as providing the brand owner the ability to showcase their brand even when the product is on the retail shelf, and/or providing a “slightly more secure” seal on the bottom of the LW sack. Four purchasers stated that their equipment or product works best, or exclusively, with sewn open mouth bags. Purchaser *** described sewn open mouth LW sacks as eliminating the need to purchase adhesives and extra length on the bags (as with pinch bottom LW sacks).

Most responding purchasers (14) indicated that there had not been a shift in the closure types of the LW sacks that they have purchased since January 1, 2015. Four described such changes, with three of those describing purchasing more pinch bottom stepped end LW sacks (although sometimes doing so slowly), and one describing purchasing more roll bottom LW sacks.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2015. As seen in table II-8, pluralities of purchasers reported increasing purchases from each source. Few purchasers reported decreasing purchases from any source. *** indicated that its *** purchases of U.S. and nonsubject product, along with *** purchases of product from Vietnam, was due to ***. *** indicated that it increased purchases of product from Vietnam and nonsubject sources ***. Other purchasers reporting changes in purchasing patterns generally ascribed such changes to shifts in demand for their end use product or the availability of LW sacks.

Table II-8
LW sacks: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	3	0	6	2	5
Vietnam	3	2	5	4	2
Other	4	3	6	2	0

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

Additionally, twelve of 18 responding purchasers reported that they had not changed suppliers since January 1, 2015. Six indicated that they had, citing issues of delivery times, customer service, demand, quality, lead times, customer mandate, cost, and service options.

Importance of purchasing domestic product

Seventeen of 18 purchasers reported that most or all of their purchases did not require purchasing U.S.-produced product. One, ***, reported it was required by their customers (for ***). *** indicated a requirement for domestic sourcing on *** percent of its purchases, for *** reasons.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing LW sacks produced in the United States, Vietnam, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 18 factors (table II-9) for which they were asked to rate the importance. Generally, purchasers described U.S., Vietnamese, and nonsubject LW sacks as comparable in most factors. However, a majority of purchasers described U.S. LW sacks as higher-priced than Vietnamese and nonsubject LW sacks, and superior in delivery time to those from Vietnam and nonsubject countries. Four purchasers described U.S. LW sacks as inferior to Vietnamese LW sacks in availability and print quality.

Table II-9

LW sacks: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. Vietnam			U.S. vs. nonsubject countries			Vietnam vs. nonsubject countries		
	S	C	I	S	C	I	S	C	I
Availability	1	7	4	1	8	2	1	8	---
Bag seal type	1	9	1	---	10	1	---	8	1
Delivery terms	2	8	1	2	8	1	1	7	1
Delivery time	10	---	1	7	3	1	---	8	1
Discounts offered	---	8	3	---	9	2	1	8	---
Extension of credit	---	10	1	---	10	1	1	8	---
Minimum quantity requirements	2	8	1	1	9	1	---	7	2
Packaging	1	8	2	---	10	1	1	8	---
Price ¹	---	2	9	1	4	6	3	6	---
Print quality	1	7	4	1	8	2	---	9	---
Product consistency	2	6	3	2	8	1	2	6	1
Product durability	1	10	---	1	10	---	---	9	---
Product range	2	8	1	2	8	1	---	8	1
Quality meets industry standards	---	10	2	---	10	1	---	9	---
Quality exceeds industry standards	2	6	3	1	8	1	1	7	1
Reliability of supply	3	6	2	2	7	2	1	7	1
Technical support/service	3	5	3	3	6	2	1	7	1
U.S. transportation costs ¹	1	8	2	1	7	3	---	9	---

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

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

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

Comparison of U.S.-produced and imported LW sacks

In order to determine whether U.S.-produced LW sacks can generally be used in the same applications as imports from Vietnam and nonsubject countries, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-10, a majority of U.S. producers, importers, and purchasers indicated that U.S. and Vietnamese LW sacks are “always” or “frequently” interchangeable.

Table II-10
LW sacks: Interchangeability between LW sacks produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting				
	A	F	S	N	A	F	S	N	A	F	S	N	
U.S. vs. subject countries:													
U.S. vs. Vietnam	4	2	---	---	10	8	10	---	3	6	2	---	
Nonsubject countries comparisons:													
U.S. vs. Cambodia	3	1	---	---	6	2	3	---	1	1	1	---	
U.S. vs. Honduras	3	1	---	---	4	4	2	---	---	5	---	---	
U.S. vs. other countries	4	2	---	---	8	8	4	---	2	4	1	---	
Vietnam vs. Cambodia	3	---	---	---	6	3	2	---	1	2	1	---	
Vietnam vs. Honduras	3	---	---	---	3	4	2	---	1	4	1	---	
Vietnam vs. other countries	4	1	---	---	7	7	2	---	1	3	1	---	

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

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

In additional comments, U.S. producer *** stated that thermoseal closing technology is currently only available from a few U.S. LW sacks producers, but added that it is not in high demand from pet food or animal feed end users. Importer *** described service and lead time as important factors affecting interchangeability. Similarly, importer *** described quality, price, availability, technical support, lead time, and customer service as important factors, and importer *** described delivery time as such.

Among purchasers, *** stated that LW sacks from different companies can vary in quality, and so need to be tested before using in place of one another. Purchaser *** stated that U.S. product can differ from Vietnamese, Chinese, and Cambodian product in terms of closure types, layers, and print quality. It also described ***. It added that Vietnamese and Chinese product can differ from Honduran product in terms of back sealing methods. Purchaser *** stated that ***.

As can be seen from table II-11, majorities of responding purchasers reported that domestically produced product, Vietnamese product, and product from nonsubject countries usually met minimum quality specifications. Most of the remainder reported that product from

all sources always met minimum quality specifications; however, *** indicated that U.S. product only sometimes met minimum quality specifications.

Table II-11
LW sacks: Ability to meet minimum quality specifications, by source¹

Source	Always	Usually	Sometimes	Rarely or never
United States	2	9	2	---
Vietnam	5	8	---	---
All other sources	4	6	---	---

¹ Purchasers were asked how often domestically produced or imported LW sacks meets minimum quality specifications for their own or their customers' uses.

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of LW sacks from the United States, Vietnam, or nonsubject countries. As seen in table II-12, a majority of purchasers indicated that differences other than price are “always” or “frequently” significant in sales of LW sacks from the United States compared to those from Vietnam. On the other hand, half of responding U.S. producers described differences other than price as “sometimes” significant, and a plurality of importers described such differences as “always” significant.

Table II-12
LW sacks: Significance of differences other than price between LW sacks produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries: U.S. vs. Vietnam	---	1	3	2	10	4	10	4	6	4	2	---
Nonsubject countries comparisons: U.S. vs. Cambodia	---	1	2	1	4	3	2	---	---	3	---	---
U.S. vs. Honduras	---	1	2	1	3	3	3	---	1	2	2	---
U.S. vs. other countries	---	2	2	2	4	5	5	5	1	3	2	---
Vietnam vs. Cambodia	---	1	1	1	2	2	1	3	---	---	3	1
Vietnam vs. Honduras	---	1	1	1	2	3	3	---	2	1	3	---
Vietnam vs. other countries	---	1	1	2	2	3	5	6	---	---	5	1

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

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

In additional comments, ten importers described factors other than price as important in comparing LW sacks from different countries. Five importers cited lead time as an important factor other than price, with *** describing timely delivery as an advantage of product from Colombia, and *** describing it as an advantage for product from Honduras. Other factors cited by importers include quality, availability, consistency, and service. Importer *** described print

quality of product from China and Vietnam as higher than that of product from other countries. *** described ***.

Among purchasers, *** stated that the LW sacks of the quality of Vietnamese product were not available from U.S. producers. Purchaser *** described delivery and time differentials as the primary difference between LW sacks from different sources. (In answering another question, it described U.S. product as superior to Vietnamese and nonsubject imports in delivery time). Similarly, purchaser *** described lead times and consistency as differentiating non-price factors between U.S. and Vietnamese product, and in answer to another question, described U.S. product as superior to Vietnamese product in these factors. On the other hand, purchaser *** described U.S. LW sacks as not providing the *** that it needs. Purchaser *** described Vietnamese, Cambodian, and Honduran product as superior to U.S. product in quality, service, innovation, and product range.

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates in their briefs; none did so.

U.S. supply elasticity

The domestic supply elasticity¹⁷ for LW sacks measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of LW sacks. 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 LW sacks. Analysis of these factors above indicates that the U.S. industry has the ability to increase shipments to the U.S. market substantially; an estimate in the range of 4 to 6 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for LW sacks measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of LW sacks. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the LW sacks in the production of any downstream products. Based on the available information, the aggregate demand for LW sacks is likely to be moderately inelastic; a range of -0.5 to -1.0 is suggested.

¹⁷ A supply function is not defined in the case of a non-competitive market.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.¹⁸ Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/ discounts/ promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced LW sacks and imported LW sacks is likely to be in the range of 3 to 6. Most market participants described U.S. and Vietnamese LW sacks as at least frequently interchangeable, but some differences in quality, availability, and delivery time were noted.

¹⁸ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins were 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 *** percent of U.S. production of LW sacks during 2017.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to 15 firms based on information contained in the petition, research, and prior related investigations. Nine firms provided usable data on their productive operations.¹ Staff believes that these responses represent *** percent of U.S. production of LW sacks.²

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

Table III-1
LW sacks: U.S. producers, their position on the petition, production locations, and shares of reported production, 2017

Firm	Position on petition	Production location(s)	Share of production (percent)
Cady Bag	***	Pearson, GA	***
Central Bag	***	Leavenworth, KS	***
Hood Packaging	***	Goose Creek, SC Anniston, AL	***
LaPac	***	Crowley, LA	***
Mondi	***	Louisville, KY	***
Polytex	Petitioner	Houston, TX	***
ProAmpac	Petitioner	Wrightstown, WI	***
Robinette	***	Bristol, TN	***
Transcontinental	***	Spartanburg, SC	***
Total			***

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

¹ One of the nine firms, ***, only provided trade and employment data in its questionnaire response, and none on conditions of competition, pricing, or financial data. As such, data in Parts II, V, and VI of this report only incorporate data from eight of the nine U.S. producers. A tenth firm, ***, verified that it is a producer of LW sacks and ***. Email from ***. Five firms (***) certified that they have not produced LW sacks in the United States since January 1, 2015.

² ***.

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms of LW sacks.¹

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

* * * * *

As indicated in table III-2, no U.S. producers are related to foreign producers of the subject merchandise or to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, three U.S. producers (***) directly import LW sacks, while no U.S. producers purchase imports of LW sacks from U.S. importers.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2015.

¹ In the preliminary phase of the investigations, U.S. producer *** reported it was ***, however, ***. *** submitted a U.S. producer questionnaire during this final phase of the investigations, and ***.

Table III-3

LW sacks: U.S. producers' reported changes in operations, since January 1, 2015

Item / Firm	Reported changes in operations
Expansions:	
***	***
***	***
***	***
Acquisitions:	
***	***
ProAmpac	Completed acquisition of Coating Excellence International in January 2016. ¹
Consolidations:	
***	***
***	***
Prolonged shutdowns or curtailments:	
***	***
***	***
***	***
Other:	
***	***
***	***
***	***
***	***

¹ ProAmpac Completes Acquisition of Coating Excellence International, Brand Packaging, <https://www.brandpackaging.com/articles/85219-proampac-completes-acquisition-of-coating-excellenceinternational>, accessed March 9, 2018.

Source: Compiled from data submitted in response to Commission questionnaires

Three companies (***) reported expansions, two companies (***) completed acquisitions, two companies (***) reported consolidations, three companies (***) reported prolonged shutdowns or curtailments, and four companies reported other types of changes in operations, including equipment updates (***) and *** (***)².

² Polytex reported in its posthearing brief that it invested over *** in plant equipment to increase its laminated woven sack capacity and efficiency, and to make continued investments in maintenance systems to support these operations. Polytex's investments have included the ***. Petitioners' posthearing brief, p. 15.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization.

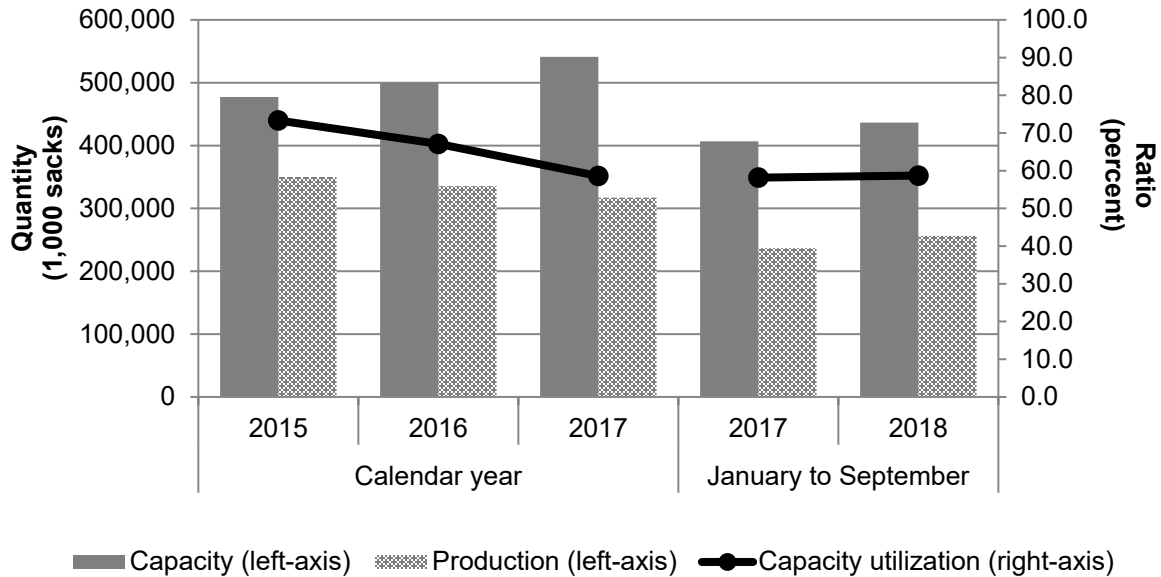
Table III-4
LW sacks: U.S. producers' production, capacity, and capacity utilization, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
Capacity (1,000 sacks)					
Cady Bag	***	***	***	***	***
Central Bag	***	***	***	***	***
Hood Packaging	***	***	***	***	***
LaPac	***	***	***	***	***
Mondi	***	***	***	***	***
Polytex	***	***	***	***	***
ProAmpac	***	***	***	***	***
Robinette	***	***	***	***	***
Transcontinental	***	***	***	***	***
Total capacity	477,205	500,098	541,250	406,770	436,562
Production (1,000 sacks)					
Cady Bag	***	***	***	***	***
Central Bag	***	***	***	***	***
Hood Packaging	***	***	***	***	***
LaPac	***	***	***	***	***
Mondi	***	***	***	***	***
Polytex	***	***	***	***	***
ProAmpac	***	***	***	***	***
Robinette	***	***	***	***	***
Transcontinental	***	***	***	***	***
Total production	349,894	335,544	317,139	236,604	256,231
Capacity utilization (percent)					
Cady Bag	***	***	***	***	***
Central Bag	***	***	***	***	***
Hood Packaging	***	***	***	***	***
LaPac	***	***	***	***	***
Mondi	***	***	***	***	***
Polytex	***	***	***	***	***
ProAmpac	***	***	***	***	***
Robinette	***	***	***	***	***
Transcontinental	***	***	***	***	***
Average capacity utilization	73.3	67.1	58.6	58.2	58.7

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

Figure III-1

LW sacks: U.S. producers' production, capacity, and capacity utilization, 2015-17, January to September 2017, and January to September 2018



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

Petitioners accounted for *** percent of U.S. capacity, and *** percent of U.S. production of laminated woven sacks between 2015 and 2017. While total capacity of LW sacks increased by 13.4 percent from 2015 to 2017, total production decreased during this same period by 9.4 percent. Both capacity and production were higher in interim 2018 than in interim 2017, by 7.3 percent and 8.3 percent, respectively. Much of the increase in capacity during this period was driven by ***.³ ***.⁴ Five of the nine U.S. producers experienced an overall decrease in production from 2015 to 2017, ***. *** production decreased the most in absolute terms, by *** sacks, and by *** percent, from 2015 to 2017, but was *** percent higher in interim 2018 than interim 2017. *** reported the biggest increases in production from 2015 to 2017. *** production increased by *** bags, or *** percent, and *** production increased by *** bags, or *** percent. With an overall increase in capacity, coupled with an overall decrease in production, average capacity utilization decreased by 14.7 percentage points from 2015 to 2017, but was 0.5 percentage points higher in interim 2018 than in interim 2017.⁵

Reported constraints on capacity included bag finishing capacity (***), extrusion laminator capacity (***), human capital availability (***), and customer demand (***).

³ U.S. producer's questionnaire response of ***, question II-4c, and ***, question II-2.

⁴ U.S. producer's questionnaire response of ***, question II-2.

Alternative products

As shown in table III-5, over *** percent of U.S. producers' production was subject product in each year from 2015 to 2017. Two firms, ***, reported producing *** on the same equipment and machinery used to produce LW sacks.

Two of the nine responding U.S. producers (***) reported being able to switch production from LW sacks to other types of product. These other products include ***. Reported factors impacting producers' ability to switch production include costs associated with changing machinery and raw materials (***), the time it takes to set up machines and change raw materials, and the equipment being designed to only produce laminated woven polypropylene ("WPP").

Table III-5
LW sacks: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
Overall capacity	500,245	522,990	564,290	424,050	453,842
Production: LW Sacks	349,894	335,544	317,139	236,604	256,231
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: LW Sacks	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments.

Table III-6
LW sacks: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
U.S. shipments	326,467	317,874	312,103	232,410	232,754
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipments	195,280	181,285	172,449	130,730	135,153
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per sacks)				
U.S. shipments	0.60	0.57	0.55	0.56	0.58
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of value (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

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

Total shipments consisted of approximately *** percent U.S. shipments and *** percent exports shipments, by quantity, in all time periods. No internal consumption or transfers to related firms were reported. U.S. shipments decreased by 4.4 percent, by quantity, and 11.7 percent, by value, from 2015 to 2017, and were 0.1 percent higher by quantity and 3.4 percent higher by value in interim 2018 than in interim 2017. Reported export shipments decreased *** percent by quantity and *** percent by value from 2015 to 2017, and were *** percent lower by quantity and *** percent lower by value in interim 2018 than in interim 2017. Given that there were greater decreases in value than in quantity, average unit values of both U.S. shipments and export shipments decreased from 2015 to 2017. Average unit values decreased from \$0.60 per sack to \$0.55 per sack for U.S. shipments, and from *** per sack to *** per sack for export shipments. However, average unit values for U.S. shipments in interim 2018 were 3.2 percent higher than interim 2017, while export shipments were *** percent lower in interim 2018 than in interim 2017.

*** of the nine U.S. producers, ***, reported export shipments. *** reported ***, and *** reported ***, as their export markets.

U.S. producers' U.S. shipments by closure type

The most common closure type of LW sacks for U.S. producers' U.S. shipments in 2017 was sewn open mouth, at *** percent, by quantity, and *** percent, by value. *** reported U.S. shipments of LW sacks with pinch bottom stepped end closures, representing *** percent, by quantity, and *** percent, by value, of total U.S. producers' U.S. shipments. *** reported U.S. shipments of LW sacks with heat sealed and glued closures, which made up *** percent, by quantity, and *** percent, by value, of total U.S. producers' U.S. shipments. U.S. producers categorized *** percent, by quantity, of their U.S. shipments as having an "other" type of closure, including *** closure (***), and *** closures (***). See also Part II and Part IV for more discussion of closure types.

U.S. PRODUCERS' INVENTORIES

Table III-7 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. Reported end-of-period inventories increased by *** percent from 2015 to 2016, before decreasing by *** percent from 2016 to 2017, for an overall decrease of *** percent from 2015 to 2017. However, end-of-period inventories were *** percent higher in interim 2018 than in interim 2017. Approximately *** percent of production, U.S. shipments, and total shipments consisted of end of period inventories from 2015 to 2017, and increased to approximately *** percent during the January to September 2018 period.

Table III-7
LW sacks: U.S. producers' inventories, 2015-17, January to September 2017, and January to September 2018

* * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers' imports and purchases of LW sacks are presented in table III-8.

Table III-8

LW sacks: U.S. producers' U.S. production and imports, 2015-17, January to September 2017, and January to September 2018

* * * * *

Two U.S. producers (***) reported importing LW sacks from Vietnam, and two (***) reported importing LW sacks from nonsubject countries. U.S. producers cited the need to meet ***, especially at requested volumes and prices, as the reason for importing. Two U.S. producers, ***, imported *** in each year from 2015 to 2017 and during the 2017 and 2018 interim periods. No responding U.S. producer reported purchasing imported LW sacks from U.S. importers.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data.

Table III-9

LW sacks: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
Production and related workers (PRWs) (number)	762	736	733	729	820
Total hours worked (1,000 hours)	2,041	1,660	1,762	1,327	1,537
Hours worked per PRW (hours)	2,678	2,255	2,404	1,820	1,874
Wages paid (\$1,000)	27,893	24,948	27,335	20,499	24,002
Hourly wages (dollars per hour)	\$13.67	\$15.03	\$15.51	\$15.45	\$15.62
Productivity (sacks per hour)	171.4	202.1	180.0	178.3	166.7
Unit labor costs (dollars per sack)	\$***	\$***	\$***	\$***	\$***

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

Production and related workers ("PRWs") decreased by 3.8 percent from 2015 to 2017, and were 12.5 percent higher in interim 2018 than in interim 2017. Total hours worked also decreased from 2015 to 2017, by 13.7 percent, contributing to a 10.3 percent decrease in hours worked per PRW. Total wages paid decreased by 2.0 percent from 2015 to 2017, and were 17.1 percent higher in interim 2018 than in interim 2017. Hourly wages and productivity increased from 2015 to 2017, by 13.5 percent and 5.0 percent, respectively, contributing to an 8.1 percent increase in unit labor costs over this period. Unit labor costs were *** percent higher in interim 2018 than in interim 2017, as hourly wages were higher, and productivity was lower, in interim 2018 than in interim 2017.

Two U.S. producers (***) reported importing LW sacks from Vietnam, and two (***) reported importing LW sacks from nonsubject countries. U.S. producers cited the need to meet ***, especially at requested volumes and prices, as the reason for importing. Two U.S. producers, ***, imported *** in each year from 2015 to 2017 and during the 2017 and 2018 interim periods. No responding U.S. producer reported purchasing imported LW sacks from U.S. importers.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

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Hours worked per PRW (hours)	2,678	2,255	2,404	1,820	1,874
Wages paid (\$1,000)	27,893	24,948	27,335	20,499	24,002
Hourly wages (dollars per hour)	\$13.67	\$15.03	\$15.51	\$15.45	\$15.62
Productivity (sacks per hour)	171.4	202.1	180.0	178.3	166.7
Unit labor costs (dollars per sack)	***	***	***	***	***

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

Production and related workers ("PRWs") decreased by 3.8 percent from 2015 to 2017, and were 12.5 percent higher in interim 2018 than in interim 2017. Total hours worked also decreased from 2015 to 2017, by 13.7 percent, contributing to a 10.3 percent decrease in hours worked per PRW. Total wages paid decreased by 2.0 percent from 2015 to 2017, and were 17.1 percent higher in interim 2018 than in interim 2017. Hourly wages and productivity increased from 2015 to 2017, by 13.5 percent and 5.0 percent, respectively, contributing to an 8.1 percent increase in unit labor costs over this period. Unit labor costs were *** percent higher in interim 2018 than in interim 2017, as hourly wages were higher, and productivity was lower, in interim 2018 than in interim 2017.

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 74 firms believed to be importers of LW sacks, as well as to all U.S. producers of LW sacks.¹ Usable questionnaire responses were received from 39 companies, representing virtually all U.S. imports from Vietnam and all other sources in 2017.² ³ Table IV-1 lists all responding U.S. importers of LW sacks from Vietnam and other sources, their locations, and their shares of U.S. imports, in 2017.

¹ The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of ***, may have accounted for more than 0.05 percent of total imports from Vietnam and from all other sources under HTS statistical reporting number 6305.33.0040 between 2015 and 2017.

² Because LW sacks may be imported under a variety of HTS statistical reporting numbers, including various “basket categories,” there exists no representative estimate of the total U.S. import volume of LW sacks. According to petitioners, LW sacks should be entering under HTS statistical reporting number 6305.33.0040, which was added to the HTSUS, effective July 1, 2014, at the request of the domestic LW sacks industry (Petition, p.4). However, during the preliminary investigations, less than half (44.2 percent) of all imports, and less than a quarter (24.3 percent) of imports from nonsubject sources, from 2015 to 2017, reported by responding importers were entered under 6305.33.0040. *Laminated Woven Sacks from Vietnam*, Inv. Nos. 701-TA-601 and 731-TA-1411 (Preliminary), USITC Pub. 4779, p. IV-3. Twenty-eight of the 32 firms identified by Petitioners as potential importers (see Petition, exhibit I-6) either submitted questionnaire responses or certified that they had not imported the subject product since January 1, 2015, and staff believes that the 39 importer questionnaire responses received represent virtually all U.S. imports of laminated woven sacks from 2015 to 2017.

³ Seven firms certified that they had not imported LW sacks since January 1, 2015. These firms include ***.

**Table IV-1
LW sacks: U.S. importers, their headquarters, and share of total imports by source, 2017**

Firm	Headquarters	Share of imports by source (percent)		
		Vietnam	Nonsubject sources	All import sources
101 Global ¹	Fremont, CA	***	***	***
Ace	Hatfield, PA	***	***	***
ABC	Cleveland, OH	***	***	***
Anduropack	Atlanta, GA	***	***	***
Anita	Solon, OH	***	***	***
Associated Feed & Supply Co.	Turlock, CA	***	***	***
Central Bag	Leavenworth, KS	***	***	***
Ciplas	Bogota,	***	***	***
Commercial Bag	Normal, IL	***	***	***
Corman	Chelsea, MA	***	***	***
CPPC	Florence, KY	***	***	***
E-Saeng	La Mirada, CA	***	***	***
Flair Flexible	Appleton, WI	***	***	***
Fritz	Mississauga, ON	***	***	***
Fulton-Denver	Vacaville, CA	***	***	***
Fusion	31Irvine, CA	***	***	***
Gelpac	Marievillle, QC	***	***	***
Hampton Bay	Florence, AL	***	***	***
Innpack	Olive Branch, MS	***	***	***
Justus	Spokane Valley, WA	***	***	***
Langston	Memphis, TN	***	***	***
LaPac	Crowley, LA	***	***	***
Lewis	Springfield, NJ	***	***	***
Lov'em Bags	Wylie, TX	***	***	***
Material Motion	Decatur, GA	***	***	***
Mondi	Louisville, KY	***	***	***
Multinet	St. Louis, MO	***	***	***
Nantong	Nantong, JS	***	***	***
Pacific Rim	Florence, KY	***	***	***
Pacsense	Edgewater, NJ	***	***	***
Poly Sac	Houston, TX	***	***	***
Smith	Halsey, OR	***	***	***
Standard Multiwall	Beaverton, OR	***	***	***
Sun Coast	Sodus, MI	***	***	***
Sunrise	Bellevue, WA	***	***	***
Warner & Warner	Plover, WI	***	***	***
White Bag	North Little Rock, AR	***	***	***
Well Luck ²	Jersey City, NJ	***	***	***
Volm	Antigo, WI	***	***	***
Total		***	***	***

¹ 101 Global ***.

² Well Luck ***.

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

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

*** is the leading importer of LW sacks, accounting for *** percent of reported imports from Vietnam, and *** percent of all imports, in 2017, by quantity. *** is the largest importer of LW sacks from nonsubject sources ***, accounting for *** percent of imports from nonsubject sources in 2017, by quantity.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of LW sacks from Vietnam and all other sources.⁴

⁴ In the preliminary phase of these investigations, the Commission stated that, in any final phase of these investigations, it intended to investigate further the impact of nonsubject imports on the domestic industry. *Laminated Woven Sacks from Vietnam, Inv. Nos. 701-TA-601 and 731-TA-1411 (Preliminary)*, USITC Publication 4779, April 2018, p. 24. As such, staff asked importers to report import data from Cambodia and Honduras separately from other nonsubject sources, as they were the two most frequently cited and largest sources of nonsubject imports, according to official import statistics under HTS statistical reporting number 6305.33.0040. Thus, import data from Honduras and Cambodia are individually presented in table IV-2. However, questionnaire data collected during these final phase investigations revealed that the largest source of nonsubject imports, by quantity, from 2015 to 2017, was Thailand, at *** percent, while imports from Honduras and Cambodia represented *** and *** percent of nonsubject imports, from 2015 to 2017, by quantity, respectively.

Table IV-2

LW sacks: U.S. imports by source, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
U.S. imports from.-- Vietnam (subject)	183,757	212,029	253,763	179,920	144,243
Cambodia	***	***	***	***	***
Honduras	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	95,423	118,773	105,055	79,185	97,590
All import sources	279,180	330,802	358,818	259,105	241,833
	Value (1,000 dollars)				
U.S. imports from.-- Vietnam (subject)	64,933	60,836	78,807	53,991	43,383
Cambodia	***	***	***	***	***
Honduras	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	34,876	40,877	36,457	26,481	31,616
All import sources	99,809	101,713	115,264	80,472	74,999
	Unit value (dollars per sack)				
U.S. imports from.-- Vietnam (subject)	0.35	0.29	0.31	0.30	0.30
Cambodia	***	***	***	***	***
Honduras	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	0.37	0.34	0.35	0.33	0.32
All import sources	0.36	0.31	0.32	0.31	0.31

Table continued on the next page.

Table IV-2 - Continued

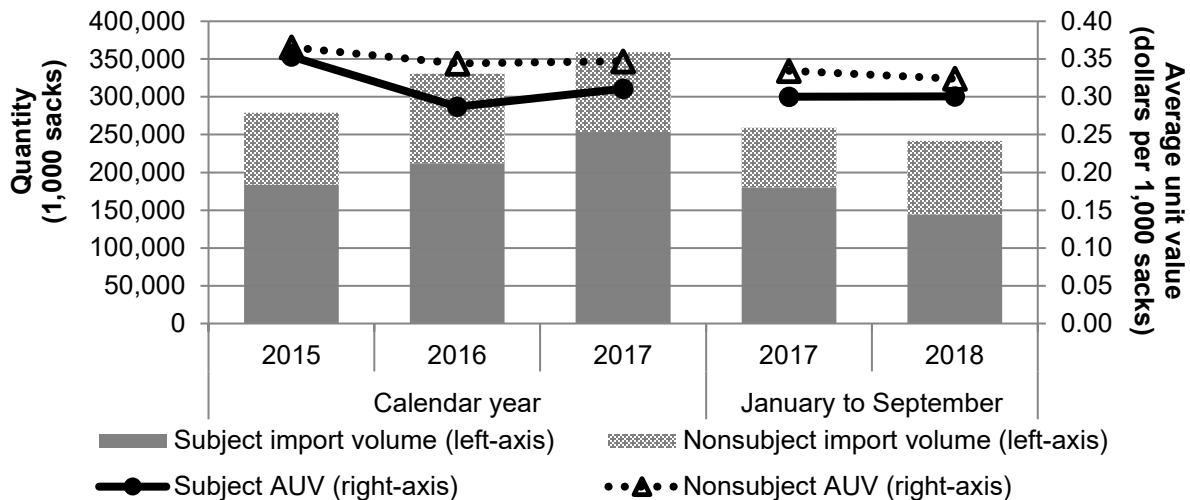
LW sacks: U.S. imports by source, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
Share of quantity (percent)					
U.S. imports from.-- Vietnam (subject)	65.8	64.1	70.7	69.4	59.6
Cambodia	***	***	***	***	***
Honduras	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	34.2	35.9	29.3	30.6	40.4
All import sources	100.0	100.0	100.0	100.0	100.0
Share of value (percent)					
U.S. imports from.-- Vietnam (subject)	65.1	59.8	68.4	67.1	57.8
Cambodia	***	***	***	***	***
Honduras	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	34.9	40.2	31.6	32.9	42.2
All import sources	100.0	100.0	100.0	100.0	100.0
Ratio to U.S. production					
U.S. imports from.-- Vietnam (subject)	52.5	63.2	80.0	76.0	56.3
Cambodia	***	***	***	***	***
Honduras	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	27.3	35.4	33.1	33.5	38.1
All import sources	79.8	98.6	113.1	109.5	94.4

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

Figure IV-1

LW sacks: U.S. import volumes and prices, 2015-17, January to September 2017, and January to September 2018



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

Reported imports from Vietnam accounted for approximately two-thirds of total imports of LW sacks by quantity and value from 2015 to 2017. Imports from Vietnam increased by 38.1 percent, by quantity, and 21.4 percent, by value, from 2015 to 2017, but were 19.8 percent lower, by quantity, and 19.6 percent lower, by value, in interim 2018 than in interim 2017.

Nonsubject imports did not increase as substantially as subject imports did from 2015 to 2017, having increased by 10.1 percent, by quantity, and 4.5 percent, by value. Unlike subject imports, nonsubject imports were higher in interim 2018 than in interim 2017, by 23.2 percent, by quantity, and 19.4 percent, by value. Nonsubject sources included Thailand, Honduras, China, India, Colombia, Cambodia, and Korea. Imports from all sources increased by 28.5 percent, by quantity, and 15.5 percent, by value, from 2015 to 2017, and were lower in interim 2018 than in interim 2017, by 6.7 percent, by quantity, and 6.8 percent, by value.

The unit value of imports from Vietnam decreased by 12.1 percent from 2015 to 2017, while the unit value of imports from nonsubject sources decreased by 5.1 percent during this same period. The unit value of imports from Vietnam remained relatively unchanged between interim 2017 and interim 2018, while it decreased for nonsubject imports by 3.1 percent. Imports from both subject and nonsubject sources experienced a decline in unit values from 2015 to 2016, by 18.8 and 5.8 percent, respectively, before increasing from 2016 to 2017, by 8.2 and 0.8 percent, respectively. This overall trend of unit values decreasing from 2015 to 2016, then increasing from 2016 to 2017, was experienced by several of the largest importers of LW sacks, including ***.

The ratio of imports from Vietnam to U.S. production increased by 27.5 percentage points from 2015 to 2017, while the ratio of imports from nonsubject imports increased by only 5.9 percentage points during this same period. However, the ratio of imports from Vietnam to U.S. production was 19.7 percentage points lower in interim 2018 than in interim 2017, while the ratio of imports from nonsubject sources to U.S. production was 4.6 percentage points higher in interim 2018 than in interim 2017.

Table IV-3 presents data for U.S. imports of LW sacks from nonsubject sources, according to official import statistics under HTS statistical reporting number 6305.33.0040.

Table IV-3
LW sacks: Nonsubject U.S. imports, by source, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
U.S. imports from.--					
Honduras	---	6,073	11,276	8,737	10,342
Korea	2,330	2,743	3,065	2,354	2,803
Colombia	724	2,306	2,566	1,481	1,397
India	6,371	3,211	2,069	1,818	2,558
Cambodia	4,212	7,549	1,957	613	1,810
Hong Kong	---	---	931	648	---
China ¹	355	840	668	435	1,472
Turkey	2,064	324	411	96	597
All other countries	---	253	4	4	4,450
Nonsubject sources – official import stats	16,056	23,299	22,947	16,186	25,429
Difference	79,367	95,474	82,108	62,999	72,161
Nonsubject sources – questionnaire data	95,423	118,773	105,055	79,185	97,590
	Share of total U.S. imports (percent)				
U.S. imports from.--					
Honduras	---	1.8	3.1	3.4	4.3
Korea	0.8	0.8	0.9	0.9	1.2
Colombia	0.3	0.7	0.7	0.6	0.6
India	2.3	1.0	0.6	0.7	1.1
Cambodia	1.5	2.3	0.5	0.2	0.7
Hong Kong	---	---	0.3	0.3	---
China	0.1	0.3	0.2	0.2	0.6
Turkey	0.7	0.1	0.1	0.0	0.2
All other countries	---	0.1	0.0	0.0	1.8
Nonsubject sources – official import stats	5.8	7.0	6.4	6.2	10.5
Difference	28.4	28.9	22.9	24.3	29.8
Nonsubject sources – questionnaire data	34.2	35.9	29.3	30.6	40.4

¹ Imports of LW sacks from China have been subject to antidumping and countervailing duty orders in the United States since 2008. Notice of Antidumping Duty Order: Laminated Woven Sacks From the People's Republic of China, 73 FR 45941, August 7, 2008; Laminated Woven Sacks From the People's Republic of China: Countervailing Duty Order, 73 FR 45955, August 7, 2008.

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. These data were converted from kilograms to individual sacks using a conversion factor of 907 kilograms being equivalent to 8,000 sacks. In addition, these data do not represent the entire universe of imports of LW sacks from nonsubject sources and thus are understated.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 6305.33.0040 accessed February 7, 2019.

In the preliminary phase of these investigations, only 24.3 percent of imports from nonsubject sources were imported by responding importers under HTS statistical reporting number 6305.33.0040, so the import data presented in Table IV-3 are understated.⁵ Some imports that are out of scope may also be entering under HTS statistical reporting number 6305.33.0040, as no importer, during the preliminary or final phases of these investigations, reported importing LW sacks from Hong Kong or Turkey. Based on questionnaire data reported by responding importers in the final phase of these investigations, imports from nonsubject sources came from the following countries between 2015 and 2017: Thailand (***) , China (between *** percent), Honduras (***) percent), Cambodia (***) percent), India (between *** percent), Colombia (***) percent), and Korea (***) percent or less).⁶

NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.⁷ Negligible imports are generally defined in the Act, as amended, as imports from a country of

⁵ Of the total imports reported by responding importers, *** percent were entered under HTS statistical reporting number 6305.33.0040. The other *** percent of total imports reported by responding importers were entered under HTS statistical reporting numbers 3923.90.0000, 4602.90.0000, and 6305.33.0080. *Laminated Woven Sacks from Vietnam Investigation Nos. 701-TA-601 and 731-TA-1411 (Preliminary)*, USITC Publication 4479, April 2018. *Laminated Woven Sacks from Vietnam, Inv. Nos. 701-TA-601 and 731-TA-1411 (Preliminary)*, USITC Publication 4779, April 2018, p. IV-3.

⁶ Percentages for China, India, and Korea have ranges because imports from these sources were reported in combination with another country under the same “all other sources” trade table. U.S. Importers’ Questionnaires, question II-9a.

⁷ 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)).

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.⁸

Table IV-4 presents imports of LW sacks by source as a share of total imports.

Table IV-4
LW sacks: U.S. imports in the twelve month period preceding the filing of the petition, March 2017 through February 2018

* * * * *

According to importer questionnaire responses, the quantity of U.S. imports of LW sacks from Vietnam accounted for *** percent of total reported U.S. imports of LW sacks from March 2017 through February 2018.

LW SACKS BY CLOSURE TYPE

Table IV-5 and Figure IV-2 present U.S. producers' and U.S. importers' 2017 U.S. shipments by closure type.

⁸ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Table IV-5
LW sacks: U.S. producers' and U.S. importers' U.S. shipments by closure type, 2017

Item	U.S. producers	U.S. importers			U.S. producers and U.S. importers
		Vietnam	Nonsubject sources	All import sources	
Quantity (1,000 sacks)					
U.S. shipments.--					
Sewn open mouth	246,693	234,785	99,851	334,636	581,329
Pinch bottom stepped end	***	***	***	***	***
Heat sealed and glued	***	***	***	***	***
Other closure methods	***	***	***	***	***
All items	312,103	245,387	100,521	345,908	658,011
Share across (percent)					
U.S. shipments.--					
Sewn open mouth	42.4	40.4	17.2	57.6	100.0
Pinch bottom stepped end	***	***	***	***	***
Heat sealed and glued	***	***	***	***	***
Other closure methods	***	***	***	***	***
All items	47.4	37.3	15.3	52.6	100.0
Share down (percent)					
U.S. shipments.--					
Sewn open mouth	79.0	95.7	99.3	96.7	88.3
Pinch bottom stepped end	***	***	***	***	***
Heat sealed and glued	***	***	***	***	***
Other closure methods	***	***	***	***	***
All items	100.0	100.0	100.0	100.0	100.0

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

Figure IV-2
LW sacks: U.S. producers' and U.S. importers' U.S. shipments by closure type, 2017

* * * * *

The most common type of closure was sewn open mouth, at 88.3 percent of total 2017 U.S. shipments. U.S. producers' and U.S. importers from subject and nonsubject sources all reported sewn open mouth as the most common type of closure for their 2017 U.S. shipments of LW sacks, at 79.0, 95.7, and 99.3 percent, respectively. The second most common closure type reported by U.S. producers was "other closure methods" at *** percent,⁹ followed by pinch bottom stepped end, at *** percent. *** 2017 U.S. producers' U.S. shipments with pinch bottom stepped end closures came from (***). The least common type of closure reported by U.S. producers was heat sealed and glued, which was only reported by ***. The second most common type of closure reported by importers of LW sacks from Vietnam was heat sealed and

⁹ Of the U.S. shipments that were reported by U.S. producers as having "other closure methods," the majority were reported by *** and described as *** closures, while the remaining U.S. shipments were reported by ***, and described as having *** closures. Only one U.S. importer, (***), reported 2017 U.S. shipments with "Other closure methods," and described the closure as a "****."

glued, at *** percent, which was reported by U.S. importer ***. See also Part II and Part III for more discussion of closure types.

APPARENT U.S. CONSUMPTION

Table IV-6 and figure IV-3 present data on apparent U.S. consumption of LW sacks.

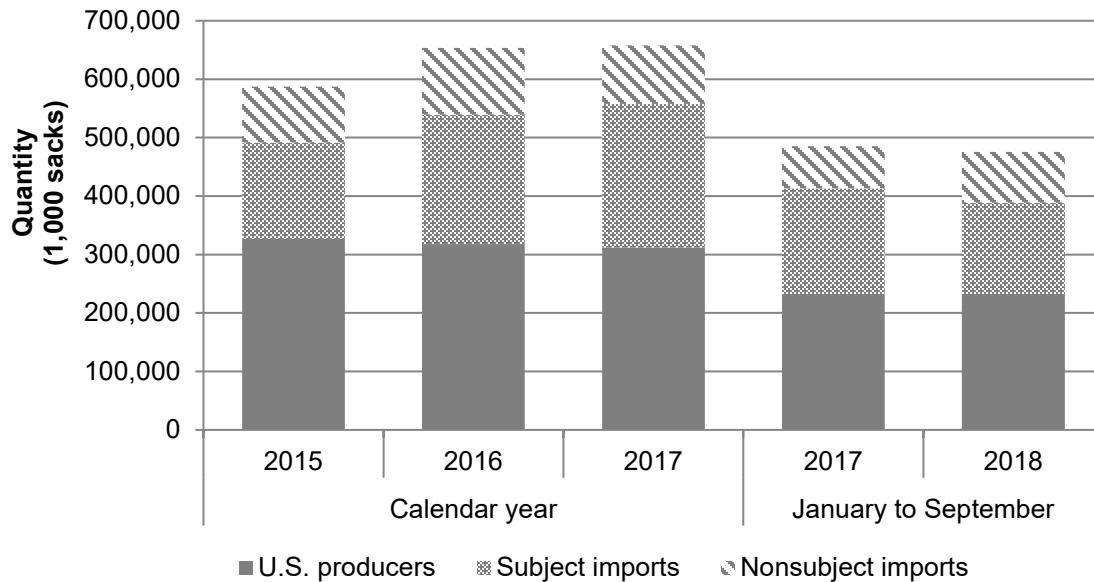
Table IV-6
LW sacks: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
U.S. producers' U.S. shipments	326,467	317,874	312,103	232,410	232,754
U.S. importers' U.S. shipments from.-- Vietnam	165,049	221,138	245,387	180,987	155,643
Nonsubject sources	95,556	114,299	100,521	72,215	87,232
All import sources	260,605	335,437	345,908	253,202	242,875
Apparent U.S. consumption	587,072	653,311	658,011	485,612	475,629
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	195,280	181,285	172,449	130,730	135,153
U.S. importers' U.S. shipments from.-- Vietnam	72,849	94,239	99,876	77,418	66,873
Nonsubject sources	41,094	46,979	41,429	29,837	34,972
All import sources	113,943	141,218	141,305	107,255	101,845
Apparent U.S. consumption	309,223	322,503	313,754	237,985	236,998

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

Figure IV-3

LW sacks: Apparent U.S. consumption, 2015-17, January to September 2017, and January to September 2018



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

Apparent U.S. consumption increased 12.1 percent by quantity, and 1.5 percent by value, from 2015 to 2017, but was 2.1 percent lower by quantity, and *** percent lower by value, in interim 2018 than interim 2017. While apparent U.S. consumption increased in quantity from 2016 to 2017 (by 0.7 percent), it decreased in value (by 2.7 percent). As shown in figure IV-3, the increase in apparent consumption over the 2015-2017 period is mostly driven by an increase in imports from Vietnam, as U.S. producers' U.S. shipments steadily declined during this time, and while U.S. shipments from nonsubject sources increased from 2015 to 2016, they returned to 2015 levels by 2017.

U.S. MARKET SHARES

U.S. market share data are presented in table IV-7.

Table IV-7

LW sacks: Market shares, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
Apparent U.S. consumption	587,072	653,311	658,011	485,612	475,629
	Share of quantity (percent)				
U.S. producers' U.S. shipments	55.6	48.7	47.4	47.9	48.9
U.S. importers' U.S. shipments from.-- Vietnam	28.1	33.8	37.3	37.3	32.7
Nonsubject sources	16.3	17.5	15.3	14.9	18.3
All import sources	44.4	51.3	52.6	52.1	51.1
	Value (1,000 dollars)				
Apparent U.S. consumption	309,223	322,503	313,754	237,985	***
	Share of value (percent)				
U.S. producers' U.S. shipments	63.2	56.2	55.0	54.9	***
U.S. importers' U.S. shipments from.-- Vietnam	23.6	29.2	31.8	32.5	***
Nonsubject sources	13.3	14.6	13.2	12.5	***
All import sources	36.8	43.8	45.0	45.1	***

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

As a share of apparent U.S. consumption, U.S. producers' U.S. shipments decreased 8.2 percentage points by quantity and value from 2015 to 2017. During this same period, market share of U.S. shipments of imports from Vietnam increased by 9.2 percentage points by quantity and 8.3 percentage points by value. Market share of U.S. shipments of imports from nonsubject sources remained relatively unchanged from 2015 to 2017, decreasing 1.0 percentage point by quantity and 0.1 percentage points by value. Market shares of U.S. producers' U.S. shipments and U.S. shipments from nonsubject sources increased in interim 2018 by quantity and value, while market share of U.S. shipments of imports from Vietnam decreased by quantity and value.

Appendix D presents apparent consumption and market shares by channels of distribution.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

Raw material costs, as a share of U.S. producers' total cost of goods sold (COGS), declined from *** percent in 2015 to *** percent in 2017, and was *** in January-September 2018, down from *** in the same period of 2017.

The primary raw material used in the integrated production of LW sacks is polypropylene resin.¹ U.S. producers' raw material differs based on the firm's level of integration. Only U.S. producer Polytex is vertically integrated and manufactures polypropylene fabric from resin, which it then weaves into LW sacks.² All other U.S. producers are non-integrated and purchase woven polypropylene fabric to convert into LW sacks.³ However, non-integrated U.S. producers use polypropylene during the lamination process to create a bonding layer between the woven polypropylene fabric and the laminated film.⁴

Polypropylene is usually made from propene, in turn a byproduct of oil and/or natural gas processing. As shown in figure V-1, prices for polypropylene declined by almost 43 percent between January 2015 and January 2017, before rising through September 2018 (and falling somewhat thereafter). The overall decline from January 2015 to September 2018 was 12.6 percent.

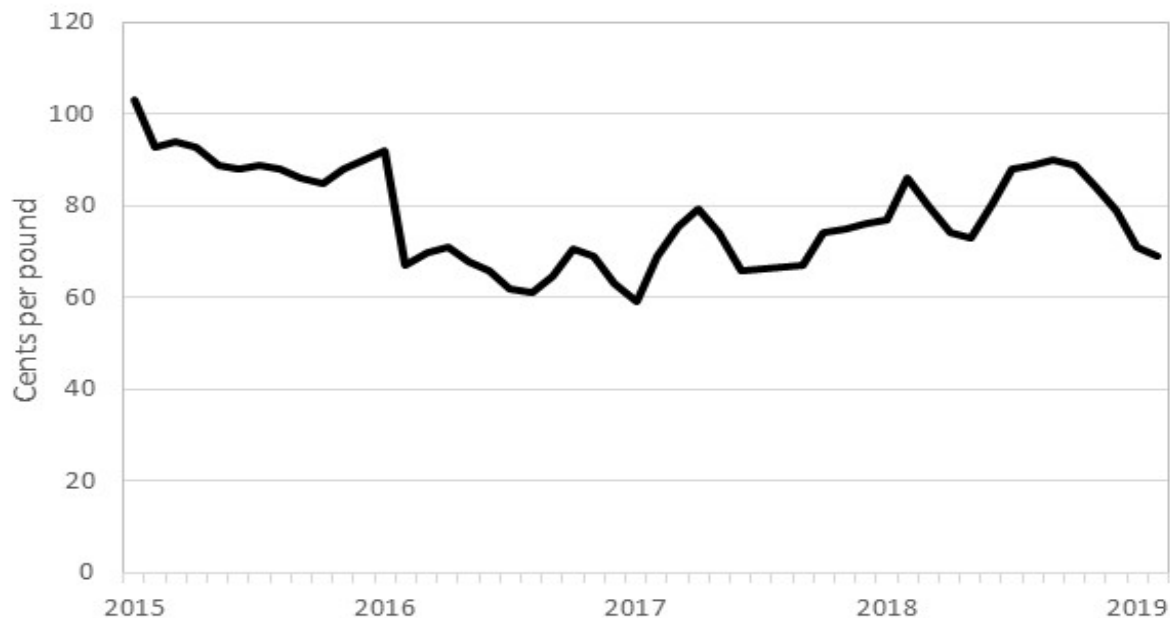
¹ Petitioner's postconference brief, exh. 1, p. 12.

² Conference transcript, p. 19 (Bazbaz), p. 59 (Jones), and p. 127 (Corman).

³ Conference transcript, p. 19 (Bazbaz), p. 59 (Jones), and p. 127 (Corman).

⁴ Conference transcript, p. 22 (Bazbaz).

Figure V-1
Polypropylene prices: Homopolymer Injection GP, by change date, January 2015-February 2019



Source: Plastics News, <http://www.plasticsnews.com>, accessed February 4, 2019.

U.S. producers and importers generally described LW sacks raw material prices as increasing (6 U.S. producers and 16 importers) or fluctuating (2 U.S. producers and 16 importers). In general, responding U.S. producers and importers also described the prices of LW sacks as being affected by movements in raw material costs, including in a few instances (e.g., ***) because LW sacks prices are indexed to raw material prices. *** added that, in general, polypropylene resin accounts for approximately 75 percent of the cost of Vietnamese LW sacks, and 50 percent of the cost of U.S. LW sacks, so that when polypropylene costs fall (as *** stated happened over 2015-2017), the prices of Vietnamese LW sacks fall more than the prices of U.S. LW sacks.⁵ Importers *** stated that ***.

Nine purchasers indicated that they were familiar with the prices for raw materials used in the production of LW sacks, but nine indicated that they were not. Ten purchasers stated that information on such raw materials prices had not affected their negotiations to purchase LW sacks since January 1, 2015. One of those firms, ***, stated that raw materials such as biaxially-oriented polypropylene (BOPP) and fabric are all sourced from Asia and/or Latin

⁵ *** also stated that U.S. polypropylene prices are higher than Asian prices because there is excess Asian capacity for polypropylene, but U.S. capacity for polypropylene is currently limited (although capacity is being added). See email from ***, March 4, 2019. Similarly, *** stated that increased polypropylene supply from Asia had made Asian prices lower recently, but that Asian prices are not always lower, and the gap between U.S. and Asian prices is currently narrowing. See email from ***, March 8, 2019.

America, whether the LW sacks are produced in the United States or Vietnam, and the costs for those materials tend to be consistent. However, six stated that raw materials prices did affect their negotiations. *** indicated that it monitored resin prices, while *** indicated that it used the known price of BOPP in its negotiations. *** indicated that their contracts often contained an adjustment mechanism for raw material prices. *** described closely monitoring raw materials costs and incorporating changes into their negotiations for LW sacks.⁶

Transportation costs to the U.S. market

Transportation costs for LW sacks shipped from Vietnam to the United States averaged 9.3 percent during October 2017-September 2018. These estimates were derived from official import data and represent the transportation and other charges on imports.⁷

U.S. inland transportation costs

*** responding U.S. producers and 27 responding U.S. importers reported that they typically arrange transportation to their customers, while *** U.S. producers and 7 importers indicated that their purchasers do so. Most responding U.S. producers and importers reported that their U.S. inland transportation costs ranged from 1 to 5 percent, although a few importers reported costs of up to 15 percent.

PRICING PRACTICES

Pricing methods

Nine purchasers indicated that they typically do not negotiate with their suppliers of LW sacks before purchasing, while nine indicated that they do. In the latter group, purchasers reported negotiating over various factors, including payment terms, price, service, and delivery. *** described a detailed process of making requests from suppliers, evaluating them, and then assessing the total cost of ownership, quality, price, capacity, and service. It stated that quality rather than price was the primary focus for its 2017 purchasing process.

Twelve purchasers indicated that they had not switched suppliers since January 1, 2015. Six indicated that they had, for a variety of reasons, including the purchaser's customer discontinuing a product, lead times, quality, and service.

While most responding U.S. producers and importers reported using transaction-by-transaction negotiations, they also sold LW sacks through contracts, price lists, and other methods (e.g. quarterly orders, and price changes based on raw material fluctuations) (table V-1).

⁶ ProAmpac indicated that, depending on the customer and deal being negotiated, there may be escalators and de-escalators in contracts based on raw material costs. Hearing transcript, p. 96 (Bucci).

⁷ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports and then dividing by the customs value based on the HTS subheading 6305.33.0040.

Table V-1**LW sacks: U.S. producers' and importers' reported price setting methods, by number of responding firms¹**

Method	U.S. producers	Importers
Transaction-by-transaction	***	30
Contract	***	9
Set price list	***	3
Other	---	4
Responding firms	***	37

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

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

As shown in table V-2, both U.S. producers and importers reported selling most of their LW sacks through either short-term contracts or spot sales.

Table V-2**LW sacks: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2017**

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

U.S. producers and importers reported a variety of answers regarding whether their contracts allowed price renegotiation, but a majority reported that contracts fixed price, or fixed both price and quantity. Most U.S. producers and importers did not have contracts indexed to raw material costs. For those that did, long term contracts were more likely to be indexed to raw material costs than short term contracts. Two importers indicated that the raw material index they used came from ICIS.⁸

Six purchasers reported that they purchase product monthly, five purchase weekly or biweekly, three purchase quarterly, three purchase daily, and one purchases annually. Thirteen of 18 responding purchasers reported that their purchasing frequency had not changed since 2015. The five that did cite changes attributed those changes to increases or decreases in demand for their product. Most (14 of 18) purchasers contact 1 to 5 suppliers before making a purchase, although several (including ***) contacted more, including as many as 12.

Purchasers were asked how often they request that suppliers change designs on LW sacks. Most purchasers described doing so at least annually, if not over longer time periods, or occurring as needed and infrequently. *** described such changes as expensive, and therefore

⁸ ICIS is a petrochemical market information service. See <https://www.icis.com/explore/about/?intcmp=explore-about> (retrieved March 12, 2019).

infrequent, except when driven by regulatory changes or competitive pressure. Other purchasers described changes as driven by changes in product specifications, or by customer request.

Purchasers were also asked how frequently they request their suppliers to change features (e.g., type of seal, handles, etc.) on LW sacks. Three purchasers answered annually, and most of the rest described either never doing so, or doing so rarely or at their customers' request.

Sales terms and discounts

Seven of 8 U.S. producers and 11 of 31 responding importers typically quote prices on an f.o.b. basis, while *** U.S. producers (including *** on an f.o.b. basis) and 20 of 31 responding importers quote prices on a delivered basis. Three of eight U.S. producers and 24 of 36 responding importers reported that they did not offer discounts. However, four U.S. producers and nine importers offered quantity and/or annual total volume discounts, with an additional U.S. producer and three importers offering other discounts. The majority of responding U.S. producers and importers reported sales terms of net 30 days.

Price leadership

When asked to identify price leaders in the U.S. LW sacks market, most purchasers did not respond or answered "unknown." *** stated that there were no price leaders because LW sacks are not commodity products. It continued that as LW sacks come with specific designs, moving a purchase from one supplier to another over small price differences will end up incurring set-up costs that offset any pricing margin gains. However, five purchasers did identify price leaders. Four of these purchasers named ProAmpac as a price leader, two named Commercial Bag, one named Polytex, and one named Mondi. *** described *** as leading by providing a lower "international" price. *** described *** as leading by being the first to offer price increases, which are then followed by other suppliers. *** described ProAmpac as being a leader ***.

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 LW sacks products shipped to unrelated U.S. customers during January 2015-September 2018.

Product 1.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 15" x 3.5" x 27" (plus or minus 1 inch in any or all directions), fabric 70 g/m² (plus or minus 6 g/m²), coating 20 g/m², (plus or minus 5 g/m²), film 22 g/m² (plus or minus 6 g/m²) with a pinched bottom stepped end closure.

Product 2.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 15" x 3.5" x 27" (plus or minus 1

inch in any or all directions), fabric 70 g/m² (plus or minus 6 g/m²), coating 20 g/m², (plus or minus 5 g/m²), film 22 g/m² (plus or minus 6 g/m²) without a pinched bottom stepped end closure.

Product 3.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 16" x 6" x 39" (plus or minus 1 inch in any or all directions), fabric 80 g/m² (plus or minus 8 g/m²), coating 20 g/m² (plus or minus 5 g/m²), film 22 g/m² (plus or minus 6 g/m²).

Product 4.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 13" x 2" x 24" (plus or minus 1 inch in any or all directions), fabric 75 g/m² (plus or minus 6 g/m²), coating 20 g/m² (plus or minus 5 g/m²), film 25 g/m² (plus or minus 6 g/m²).

Product 5.--Woven polypropylene fabric laminated to biaxially-oriented polypropylene ("BOPP") reverse printed film, ink coverage 200%, measuring 15" x 5" x 32" (plus or minus 1 inch in any or all directions), fabric 70 g/m² (plus or minus 6 g/m²), coating 20 g/m², (plus or minus 5 g/m²), film 12 g/m² (plus or minus 6 g/m²).

These are the same products as used in the preliminary phase of the investigations, except that product 1 from the preliminary phase was split into two products (products 1 and 2) for this final phase, with a distinction based on whether there is a pinched bottom stepped end closure or not. The other products were renumbered. Purchasers can use these products for different end uses; the specifications do not indicate a particular end use.⁹

Seven U.S. producers and 19 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁰ Pricing data reported by these firms accounted for approximately 48.5 percent of U.S. producers' shipments of LW sacks and 32.6 percent of U.S. shipments of subject imports from Vietnam in 2017.

Price data for products 1-5 are presented in tables V-3 to V-7 and figures V-2 to V-6. Nonsubject country prices are presented in Appendix E.

⁹ Email from ***, February 2, 2019.

¹⁰ Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates. Data from importer *** were not used as ***. Importer *** did not respond to two inquiries; its quantity data were converted to 1,000s, consistent with its other answers to its questionnaire.

Table V-3

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2015-September 2018

* * * * *

Table V-4

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2015-September 2018

* * * * *

Table V-5

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2015-September 2018

* * * * *

Table V-6

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarters, January 2015-September 2018

* * * * *

Table V-7

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarters, January 2015-September 2018

* * * * *

Figure V-2

LW sacks: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2015-September 2018

* * * * *

Figure V-3

LW sacks: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2015-September 2018

* * * * *

Figure V-4
LW sacks: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2015-September 2018

* * * * *

Figure V-5
LW sacks: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2015-September 2018

* * * * *

Figure V-6
LW sacks: Weighted-average prices and quantities of domestic and imported product 5, by quarters, January 2015-September 2018

* * * * *

Price trends

In general, price trends were mixed during January 2015-September 2018. Table V-8 summarizes the price trends, by country and by product. As shown in the table, during January 2015-September 2018, domestic prices increased slightly (by 1.0 and 0.6 percent respectively) for products 1 and 4, while decreasing by between 0.4 and 11.4 percent for products 2, 3, and 5. Prices for imported LW sacks increased for products 4 (by 19.8 percent) and 5 (by 11.8 percent), while decreasing by 10.8 percent for product 2 and 15.9 percent for product 3. For all U.S. products, and products 1, 2, and 5 from Vietnam, prices hit their lows in 2016 or 2017, and were higher in the third quarter of 2018.

Table V-8**LW sacks: Summary of weighted-average f.o.b. prices for products 1-5 from the United States and Vietnam, January 2015-September 2018**

Item	Number of quarters	Low price (per sack)	High price (per sack)	Change in price ¹ (percent)
Product 1				
United States	15	***	***	1.0
Vietnam	13	***	***	--
Product 2				
United States	15	***	***	(0.4)
Vietnam	15	***	***	(10.8)
Product 3				
United States	15	***	***	(7.2)
Vietnam	15	***	***	(15.9)
Product 4				
United States	15	***	***	0.6
Vietnam	15	***	***	19.8
Product 5				
United States	15	***	***	(11.4)
Vietnam	15	***	***	11.8

¹ Percentage change from the first quarter in which data were available to the last quarter in which price data were available.

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

Price comparisons

As shown in table V-9, prices for product imported from Vietnam were below those for U.S.-produced product in all 73 instances (245 million sacks); margins of underselling ranged from 4.1 to 44.5 percent. There were no quarterly instances of overselling.

Table V-9**LW sacks: Instances of underselling and the range and average of margins, by pricing product, January 2015-September 2018**

Pricing product	Underselling				
	Number of quarters	Quantity ¹ (1,000 sacks)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	13	***	***	***	***
Product 2	15	***	***	***	***
Product 3	15	***	***	***	***
Product 4	15	***	***	***	***
Product 5	15	***	***	***	***
Total, underselling	73	245,253	24.7	4.1	44.5

¹ These data include only quarters in which there is a comparison between the U.S. and subject product.

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

LOST SALES AND LOST REVENUE

In the preliminary phase of these investigations, the Commission requested that U.S. producers of LW sacks report purchasers with which they experienced instances of lost sales or revenue due to competition from imports of LW sacks from Vietnam during January 2015-December 2017. Of the responding U.S. producers, five reported that they had to reduce prices, four reported that they had to roll back announced price increases, and five firms reported that they lost sales. Petitioners identified nine firms with which they had lost sales or revenue (six consisting of lost sales allegations and three consisting of both types of allegations).

In the final phase of the investigations, of the eight responding U.S. producers, five (***) reported that they had to either reduce prices or roll back announced price increases, as well as having lost sales, while three (***) indicated that they did not.

Staff contacted 46 purchasers and received responses from 18 purchasers. Responding purchasers reported purchasing 1.7 billion LW sacks during January 2015-September 2018 (table V-10).

Of the 18 responding purchasers, 13 reported that, since 2015, they had purchased imported LW sacks from Vietnam instead of U.S.-produced product. Twelve of these purchasers reported that subject import prices were lower than U.S.-produced product, and six of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Four purchasers estimated the quantity of LW sacks from Vietnam purchased instead of domestic product; quantities ranged from 5,000 LW sacks to 2.2 million LW sacks, for a total of approximately 5.2 million LW sacks (table V-11).

Purchasers identified quality, service, and supplier capacity as non-price reasons for purchasing imported rather than U.S.-produced product. Among purchasers stating that price was not a primary reason for purchasing imports rather than domestic, *** stated that the quality of domestic LW sacks did not meet its standards. *** stated that it considered ***, including quality, service, innovation, and price. *** stated that, while imports cost less, its primary reason for purchasing imports is that domestic producers have had problems with quality, service, and **. *** stated that it had already had printing plates made in Vietnam, and did not wish to incur the costs of new plates. Three other purchasers cited similar reasons (including quality, availability, capacity, and qualification of Vietnamese suppliers).

Of the nine responding purchasers, all reported that U.S. producers had not reduced prices in order to compete with lower-priced imports from Vietnam, while eight reported that they did not know (table V-12).

Table V-10
LW sacks: Purchasers' responses to purchasing patterns, by firm

* * * * *

Table V-11

LW sacks: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

* * * * *

Table V-12

LW sacks: Purchasers' responses to U.S. producer price reductions, by firm

* * * * *

In addition, some purchasers provided additional information on purchases and market dynamics. Purchaser *** stated that ***. Purchaser *** stated that it has seen U.S. prices both higher and lower than prices of LW sacks from Vietnam.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

INTRODUCTION

Eight U.S. producers (***) provided usable financial data on their operations on LW sacks.¹ These data are believed to account for the vast majority of U.S. production of LW sacks during 2017. *** accounted for the majority of total net sales value in 2017 (**% percent), followed by *** (**% percent). The remaining U.S. producers ranged from **% percent (**%) to **% percent (**%) of total net sales value. No firm reported sales other than commercial sales.² Five firms reported financial data on a calendar year basis and seven firms reported their financial results based on generally accepted accounting principles.³

Staff conducted a verification of ***'s U.S. producer questionnaire. The verification adjustments were incorporated into this report. ***.⁴

With respect to their U.S. operations, *** is the only producer which reported it purchases inputs (**%) from a related party. U.S. producers reported quad seal bags, pouches, and other products such as *** that were produced in the facilities in which U.S. producers produced LW sacks. LW sacks accounted for between **% percent **% and **% percent **% of net sales from the facilities in 2017. *** reported production of quad seal bags which represented **% percent, **% percent, and **% percent of net sales from the facilities in 2017, respectively.⁵

OPERATIONS ON LAMINATED WOVEN SACKS

Table VI-1 presents aggregated data on U.S. producers' operations in relation to LW sacks. Table VI-2 shows the changes in average unit values of select financial indicators. Table VI-3 presents selected company-specific financial data.

¹ *** did not provide any financial data for these investigations. Based on reported shipment data, the firm would represent approximately **% percent of total net sales quantity in 2017. ***. Email from ***, February 28, 2019.

² ***. Email from ***, February 12, 2019.

³ The firms with fiscal year ends other than December 31 are ***. *** used international financial reporting standards as its accounting basis. U.S. producers' questionnaire responses of ***, question III-2 and ***, questions III-2 and 14.

⁴ Staff verification report, Polytex, April 8, 2019.

⁵ U.S. producers' questionnaire responses, question III-5.

Table VI-1
LW sacks: Results of operations of U.S. producers, 2015-17, January to September 2017, and January to September 2018

* * * * *

Table VI-2
LW sacks: Changes in AUVs, between fiscal years and between partial year periods

* * * * *

Table VI-3
LW sacks: Select results of operations of U.S. producers, by company, 2015-17, January to September 2017, and January to September 2018

* * * * *

Net sales

Based on table VI-1, the reported aggregate net sales quantity and value declined from 2015 to 2017. In interim 2018, net sales quantity was somewhat lower, but net sales value was higher compared to interim 2017. As shown in table VI-3, ***.⁶ The net sales trend for the aggregated U.S. industry during the reporting period primarily reflects the data of ***. Per-sack revenue decreased by *** percent from \$*** in 2015 to \$*** in 2017. While five firms reported declining per-sack revenue from 2015 to 2017 (see table VI-3), three firms *** reported increases in per-sack revenue.⁷ ***.

Cost of goods sold and gross profit or (loss)

As shown in table VI-1, the average cost of goods sold (“COGS”) to net sales ratio moved within a relatively narrow range, from *** percent (in 2015) to *** percent (in 2016). ***.⁸

Raw material costs represent the single largest component of total COGS, accounting for between *** percent (in January-September 2018) and *** percent (in 2015), of total COGS. As shown in table VI-3, the average unit raw material cost decreased by *** percent from \$*** in 2015 to \$*** in 2017, and was lower in January-September 2018 compared to January-September 2017. *** reported decreasing unit raw material costs from 2015 to 2017 except ***, and lower unit raw material costs between the comparable interim periods except ***.⁹

⁶ ***. Emails from ***, February 22, 2019. ***. Email from ***, March 13, 2019.

⁷ ***. Email from ***, February 27, 2019.

⁸ Emails from ***, April 10, 2018 and February 21, 2019.

⁹ ***. Email from ***, February 27, 2019.

***.¹⁰ ***.¹¹ Raw materials consist of woven polypropylene (“WPP”) fabrics, polypropylene, films, resin, inks, and various other raw materials such as ***. All U.S. producers purchased ***.¹² ¹³ ¹⁴

Other factory costs (“OFC”) were the second largest component of COGS, accounting for between *** percent (in 2015) and *** percent (in 2016) of total COGS, while direct labor accounted for between *** percent (in 2015) and *** percent (in January-September 2018) of total COGS. As shown in table VI-3, the average unit OFC moved within a relatively narrow range from \$*** (in 2015 and January-September 2017) to \$*** (in 2016, 2017, and January-September 2018). ***.¹⁵ ***.¹⁶ ***.¹⁷

The average unit direct labor costs irregularly increased from \$*** (in 2015 and 2016) to \$*** (in 2017), and were higher between the comparable interim periods. ***.¹⁸ ***.

The industry’s gross profit irregularly decreased from \$*** in 2015 to \$*** in 2017 as the decline in total net sales value was greater than the decline in COGS. The gross profit was higher in January-September 2018 compared to January-September 2017 as the increase in total net sales value was greater than the increase in COGS. On a company-specific basis, ***.¹⁹ ***.

SG&A expenses and operating income or (loss)

As shown in table VI-1, the industry’s SG&A expense ratio (i.e., total SG&A expenses divided by total net sales value) ranged from *** percent (in January-September 2018) to *** percent (in 2015). As shown in table VI-3, the average unit SG&A expenses stayed unchanged from 2015 to 2017 and were lower between the comparable interim periods. ***.²⁰

The industry’s operating income decreased from \$*** in 2015 to losses of \$*** in 2016 and \$*** in 2017. In interim 2018, the industry reported an operating income of \$*** compared to an operating loss of \$*** in interim 2017. On a company-specific basis, ***.

¹⁰ ***. Email from ***, February 27, 2019.

¹¹ ***. Emails from ***, February 21 and 27, 2019.

¹² ***. U.S. producers’ questionnaire responses of ***, question III-9b.

¹³ ***. U.S. producers’ questionnaire response of ***, question III-7.

¹⁴ ***. ***’s posthearing brief, pp. 10-11 and Exhibit 1, pp. 5-7. ***. ***’s posthearing brief, Exhibit 1, p. 7.

¹⁵ ***. Email from ***, February 28, 2019.

¹⁶ ***. Emails from ***, February 22, 2019.

¹⁷ Petitioners’ postconference brief, exh. 1, pp. 16 and 17. Email from ***, March 5, 2019.

¹⁸ ***. Emails from ***, February 21 and 27, 2019.

¹⁹ ***. Email from ***, February 22, 2019.

²⁰ Email from ***, February 21, 2019.

Other expenses and net income or (loss)

Classified below the operating income levels are interest expense, other expense, and other income, which are usually allocated to the product line from high levels in the corporation. Interest expenses and other income irregularly decreased from 2015 to 2017 and were higher between the comparable interim periods.^{21 22} Other expenses irregularly decreased from 2015 to 2017, and were lower between the comparable interim periods.²³

By definition, items classified at this level in the income statement only affect net income or (loss). The industry's net income decreased from \$*** in 2015 to losses of \$*** in 2016 and \$*** in 2017. In interim 2018, the industry reported a net income of \$*** compared to a net loss of \$*** in interim 2017. On a company-specific basis, ***.

Variance analysis

The variance analysis presented in table VI-4 is based on the data in table VI-1.²⁴ The analysis shows that the decline in operating income from 2015 to 2017 is primarily attributable to ***. The operating income in January-September 2018 compared to the operating loss in January-September 2017 is primarily attributable to ***.

Table VI-4
LW sacks: Variance analysis for U.S. producers, between fiscal years and between partial year periods

* * * * *

²¹ ***. Email from ***, February 25, 2019.

²² Two firms, ***, reported non-recurring charges that were included in other income and expenses. ***. U.S. producer's questionnaire responses of ***, question III-10.

²³ ***. Emails from ***, February 25, 2019 and February 28, 2019.

²⁴ 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 variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost variance is calculated as the change in unit price or unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or unit cost. 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.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-5 presents capital expenditures and research and development (“R&D”) expenses by firm. Aggregate capital expenditures decreased irregularly from 2015 to 2017, but were higher in January-September 2018 compared to January-September 2017. ***.²⁵ ***.²⁶ ***.²⁷

R&D expenses decreased irregularly from 2015 to 2017 and were higher between the comparable interim periods. Two firms (***) reported R&D expenses as shown in table VI-5. ***.²⁸

Table VI-5

LW sacks: Capital expenditures and R&D expenses for U.S. producers, by firm, 2015-17, January to September 2017, and January to September 2018

* * * * *

ASSETS AND RETURN ON ASSETS

Table VI-6 presents data on the U.S. producers’ total assets and their operating return on assets.²⁹ Total assets decreased from \$*** in 2015 to \$*** in 2017. The return on assets also decreased irregularly from *** percent in 2015 to *** percent in 2017.³⁰

Table VI-6

LW sacks: Value of assets used in production, warehousing, and sales, and return on assets for U.S. producers by firm, 2015-17

* * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of LW sacks to describe actual or potential negative effects of imports of LW sacks from the subject countries on their firms’ growth, investment, ability to raise capital, development and production efforts, or on the scale of

²⁵ Email from ***, February 25, 2019.

²⁶ U.S. producer’s questionnaire response of ***, question III-13. Email from ***, February 21, 2019.

²⁷ Emails from ***, February 22, 2019.

²⁸ U.S. producer’s questionnaire response of ***, question III-13.

²⁹ With respect to a company’s overall operations, staff notes that a total asset value (i.e., the bottom line number on the asset side of a company’s balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high-level allocation factors may have been required in order to report a total asset value for LW sacks.

³⁰ ***. Email from ***, February 22, 2019.

capital investments. Table VI-7 presents U.S. producers' responses in a tabulated format and table VI-8 provides the narrative responses.

Table VI-7
LW sacks: Actual and anticipated negative effects of imports on investment and growth and development

Item	No	Yes
Negative effects on investment	4	3
Cancellation, postponement, or rejection of expansion projects		1
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		1
Return on specific investments negatively impacted		1
Other		1
Negative effects on growth and development	6	2
Rejection of bank loans		0
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		0
Ability to service debt		0
Other		2
Anticipated negative effects of imports	3	4

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

Table VI-8
LW Sacks: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2015

* * * * *

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 factors¹--

- (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 VIETNAM

The Commission issued foreign producers' or exporters' questionnaires to 37 firms believed to produce and/or export LW sacks from Vietnam.³ Usable responses to the

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."

³ These firms were identified through a review of information submitted in the petition and contained in *** records under HTS statistical reporting number 6305.33.0040.

Commission's questionnaire were received from six firms.⁴ These firms' exports to the United States accounted for approximately 74 percent of U.S. imports of LW sacks from Vietnam in 2017. According to estimates requested of the responding Vietnamese producers, the production of LW sacks in Vietnam reported in questionnaires accounts for approximately 44 percent of overall production of LW sacks in Vietnam.⁵ Table VII- 1 presents information on the LW sacks operations of the responding producers and exporters in Vietnam.

Table VII-1
LW sacks: Summary data for producers in Vietnam, 2017

Firm	Production (1,000 sacks)	Share of reported production (percent)	Exports to the United States (1,000 sacks)	Share of reported exports to the United States (percent)	Total shipments (1,000 sacks)	Share of firm's total shipments exported to the United States (percent)
C.P. Packaging	***	***	***	***	***	***
Xinsheng	***	***	***	***	***	***
DVHP	***	***	***	***	***	***
TKMB	***	***	***	***	***	***
Trung Dong	***	***	***	***	***	***
Trung Kien	***	***	***	***	***	***
Total	299,464	100.0	188,084	100.0	***	***

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

Changes in operations

As presented in table VII-2 producers in Vietnam reported several operational and organizational changes since January 1, 2015. Two firms (***) reported plant openings. One firm, (***) reported a relocation ***. Two firms, ***, reported expansions, and two firms, ***, reported other types of changes in operations, ***.

⁴ A seventh firm, ***, submitted a questionnaire that was not used. ***.

⁵ This estimate is unreliable, as ***, the largest responding producer, did not provide an estimate. Further, when comparing producers' estimates given their reported production data, the estimates were not compatible with each other.

Table VII-2

LW sacks: Reported changes in operations by producers in Vietnam, since January 1, 2015

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

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

Operations on LW sacks

Table VII-3 presents information on the LW sacks operations of the responding producers and exporters in Vietnam.

Table VII-3

LW sacks: Data on industry in Vietnam, 2015-17, January to September 2017, and January to September 2018 and projection calendar years 2018 and 2019

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2015	2016	2017	2017	2018	2018	2019 ¹
	Quantity (1,000 sacks)						
Capacity	261,849	327,794	380,589	285,442	307,105	339,772	227,540
Production	202,850	254,259	299,464	223,064	239,020	299,596	169,558
End-of-period inventories	2,781	4,273	4,087	***	***	4,271	***
Shipments:							
Home market shipments:							
Commercial home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	127,502	165,942	188,084	151,000	142,818	152,965	21,500
All other markets	7,174	13,886	27,408	7,993	24,948	53,764	48,028
Total exports	134,676	179,828	215,492	158,993	167,766	206,729	69,528
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	77.5	77.6	78.7	78.1	77.8	88.2	74.5
Inventories/production	1.4	1.7	1.4	***	***	1.4	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Commercial home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

¹ Foreign producer *** did not provide 2019 projections, and foreign producer *** did not provide 2018 projections, so the data presented in the columns for 2018 and 2019 projections are understated.

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

*** firms reported an increase or no change in capacity and production from 2015 to 2017, for an overall increase in capacity of 45.3 percent and an increase in production of 47.6 percent. Capacity and production were both higher in interim 2018 than in interim 2017, by 7.6

and 7.2 percent, respectively. Given that both capacity and production increased from 2015 to 2017, capacity utilization remained relatively stable, increasing by 1.2 percentage points during this time period.

From 2015 to 2017, commercial home market shipments, export shipments to the United States, and export shipments to other markets all increased by *** percent, 47.5 percent, and 282.0 percent, respectively. However, export shipments to the United States were 5.4 percent lower in interim 2018 than in interim 2017, while commercial home market shipments and export shipments to all other markets were higher, by *** and 212.1 percent, respectively.

Foreign producers' shipments of LW sacks consisted of approximately *** commercial home market shipments and *** export shipments, the majority of which are exports to the United States. From 2015 to 2017, the share of commercial home market shipments to total shipments declined by *** percentage points to *** percent. The share of exports shipments to the United States increased from 2015 to 2016 to *** percent, before returning in 2017 to the 2015 share of *** percent. The share of exports to all other markets to total shipments steadily increased from 2015 to 2017 by *** percentage points to *** percent, and was at *** percent by interim 2018. End-of-period inventories as a share of production and total shipments remained relatively unchanged from 2015 to 2017, at around *** percent.

Firms in Vietnam reported operating between 40 and 50 weeks per year. The hours worked per week varied from 96 to 144 hours per week, with the majority of firms reporting 144 hours per week. Producers in Vietnam calculated production capacities based on equipment capabilities (both average and actual) multiplied by operating time. Producers in Vietnam were also asked to report constraints on their capacity to produce LW sacks. Reported constraints included sewing capacity (***), availability of skilled workers for the sewing line (***), tubing capacity (***), laminating capacity (***), printing press capacity (***), availability of raw materials and power (***), and market demand (***).

Alternative products

As shown in table VII-4, *** of the *** responding Vietnamese firms produced other products on the same equipment and machinery used to produce LW sacks. Approximately *** of the overall capacity of this equipment and machinery was used to produce LW sacks. *** reported producing ***, *** reported producing ***, and *** reported producing *** on the same equipment as LW sacks.

Table VII-4

LW sacks: Overall capacity and production on the same equipment as in-scope production by producers in Vietnam, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (1,000 sacks)				
Overall capacity	478,449	613,844	724,189	578,642	634,305
Production:					
LW Sacks	202,850	254,259	299,464	223,064	239,020
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
LW Sacks	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

One of the six responding producers in Vietnam, ***, reported being able to switch production from LW sacks to other products, explaining that ***. Factors impacting producers' ability to switch production include costs associated with changing machinery (***) and printing technology that can only be used to produce LW sacks (***) .

Exports

According to GTA,⁶ the leading export markets for LW sacks from Vietnam are the United States, Canada, and Malaysia (table IV-5). During 2017, the United States was the top export market for LW sacks from Vietnam, accounting for 28.6 percent, followed by the Canada, accounting for 8.2 percent.

⁶ The category polyethylene and polypropylene bags and sacks include out-of-scope merchandise such as laminated woven sacks weighing more than one kilogram and laminated woven sacks with less than three colors.

Table VII-5
LW sacks: Vietnam exports by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Quantity (1,000 sacks)		
Vietnam exports to the United States	95,838	110,191	125,484
Vietnam exports to other major destination markets.--			
Canada	30,159	36,129	35,876
Philippines	15,787	22,200	35,082
Malaysia	20,884	34,433	34,514
Korea	144,268	25,625	34,408
Thailand	9,992	4,554	19,174
Cambodia	9,925	14,836	15,309
Australia	5,091	12,289	14,660
Norway	11,915	13,563	13,693
All other destination markets	160,032	128,566	109,896
Total Vietnam exports	503,891	402,386	438,097
	Value (1,000 dollars)		
Vietnam exports to the United States	38,522	38,832	48,466
Vietnam exports to other major destination markets.--			
Canada	12,123	12,732	13,856
Philippines	6,346	7,823	13,550
Malaysia	8,394	12,134	13,331
Korea South	57,988	9,030	13,290
Thailand	4,016	1,605	7,405
Cambodia	3,989	5,228	5,913
Australia	2,046	4,331	5,662
Norway	4,789	4,780	5,289
All other destination markets	64,325	45,307	42,445
Total Vietnam exports	202,538	141,802	169,207

Table continued on next page.

Table VII-5 -- Continued
LW sacks: Vietnam exports by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Unit value (dollars per sack)		
Vietnam exports to the United States	0.40	0.35	0.39
Vietnam exports to other major destination markets.--			
Canada	0.40	0.35	0.39
Philippines	0.40	0.35	0.39
Malaysia	0.40	0.35	0.39
Korea South	0.40	0.35	0.39
Thailand	0.40	0.35	0.39
Cambodia	0.40	0.35	0.39
Australia	0.40	0.35	0.39
Norway	0.40	0.35	0.39
All other destination markets	0.40	0.35	0.39
Total Vietnam exports	0.40	0.35	0.39
	Share of quantity (percent)		
Vietnam exports to the United States	19.0	27.4	28.6
Vietnam exports to other major destination markets.--			
Canada	6.0	9.0	8.2
Philippines	3.1	5.5	8.0
Malaysia	4.1	8.6	7.9
Korea South	28.6	6.4	7.9
Thailand	2.0	1.1	4.4
Cambodia	2.0	3.7	3.5
Australia	1.0	3.1	3.3
Norway	2.4	3.4	3.1
All other destination markets	31.8	32.0	25.1
Total Vietnam exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 630533 as reported by UN Comtrade in the Global Trade Atlas database, accessed April 9, 2019.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-6 presents data on U.S. importers' reported inventories of LW sacks. With respect to imports from Vietnam, reported end-of-period inventories in the United States decreased by 18.9 percent from 2015 to 2016 before increasing by 23.2 percent from 2016 to 2017, thus, returning to a similar inventory level as in 2015. The ratio of these inventories to U.S. imports, U.S. shipments of imports, and total shipments of imports each fluctuated ***. Inventories of imports from nonsubject sources increased by 7.5 percent from 2015 to 2017, and were 10.7 percent higher in interim 2018 than in interim 2017. The ratio of these inventories to U.S. imports, U.S. shipments of imports, and total shipments of imports each increased ranged from *** percent throughout the 2015-17 period.

Table VII-6

LW sacks: U.S. importers' end-of-period inventories of imports by source, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Inventories (1,000 sacks); Ratios (percent)				
Imports from Vietnam: Inventories	48,535	39,364	48,483	39,486	37,268
Ratio to U.S. imports	26.4	18.6	19.1	16.5	19.4
Ratio to U.S. shipments of imports	29.4	17.8	19.8	16.4	18.0
Ratio to total shipments of imports	***	***	***	***	***
Imports from Cambodia: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Honduras: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all other sources: Inventories	14,156	15,306	14,022	17,649	19,923
Ratio to U.S. imports	18.2	17.9	16.7	21.0	19.2
Ratio to U.S. shipments of imports	18.4	18.6	17.6	23.4	22.1
Ratio to total shipments of imports	***	***	***	***	***
Imports from nonsubject sources: Inventories	15,730	18,078	16,908	20,888	23,133
Ratio to U.S. imports	16.5	15.2	16.1	19.8	17.8
Ratio to U.S. shipments of imports	16.5	15.8	16.8	21.7	19.9
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources: Inventories	64,265	57,442	65,391	60,374	60,401
Ratio to U.S. imports	23.0	17.4	18.2	17.5	18.7
Ratio to U.S. shipments of imports	24.7	17.1	18.9	17.9	18.7
Ratio to total shipments of imports	***	***	***	***	***

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

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of LW sacks from Vietnam after October 1, 2018. Table VII-7 presents data on U.S. importers' arranged imports of LW sacks from October 2018 through September 2019.

Table VII-7
LW sacks: Arranged imports, October 2018 through September 2019

* * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no known trade remedy actions on LW sacks in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

Table VII-8 presents the largest global export sources of polyethylene and polypropylene bags and sacks from 2015 to 2017 according to GTA data.⁷ China accounted for the largest share of the value of global exports of polyethylene and polypropylene bags and sacks in 2017 (48.5 percent),⁸ followed by Iran (6.7 percent), Turkey (6.2 percent), and Thailand (5.0 percent). In 2017, Vietnam was the second largest exporter, with 8.4 percent. These data further show that global exports increased by 0.6 percent from 2015 to 2017.

⁷ The category polyethylene and polypropylene bags and sacks include out-of-scope merchandise such as laminated woven sacks weighing more than one kilogram and laminated woven sacks with less than three colors.

⁸ Imports of LW sacks from China have been subject to antidumping and countervailing duty orders in the United States since 2008. Notice of Antidumping Duty Order: Laminated Woven Sacks from the People's Republic of China, 73 FR 45941, August 7, 2008; Laminated Woven Sacks from the People's Republic of China: Countervailing Duty Order, 73 FR 45955, August 7, 2008.

Table VII-8
LW sacks: Global exports by exporter, 2015-2017

Exporter	Calendar year		
	2015	2016	2017
	Value (1,000 dollars)		
United States	26,138	20,250	20,870
Vietnam	202,538	141,802	169,207
All other major reporting exporters.--			
China	1,062,745	951,732	970,910
Iran	---	101,024	134,270
Turkey	108,188	113,827	124,193
Thailand	94,140	100,178	100,484
Indonesia	55,078	44,294	46,731
Mexico	29,197	30,277	40,782
Cote d'Ivoire	24,061	26,657	25,946
Egypt	19,956	18,149	19,965
Belgium	17,294	22,293	19,912
Tanzania	18,543	20,386	17,427
All other exporters	333,514	300,337	312,181
Total global exports	1,991,390	1,891,205	2,002,878
	Share of value (percent)		
United States	1.3	1.1	1.0
Vietnam	10.2	7.5	8.4
All other major reporting exporters.--			
China	53.4	50.3	48.5
Iran	---	5.3	6.7
Turkey	5.4	6.0	6.2
Thailand	4.7	5.3	5.0
Indonesia	2.8	2.3	2.3
Mexico	1.5	1.6	2.0
Cote d'Ivoire	1.2	1.4	1.3
Egypt	1.0	1.0	1.0
Belgium	0.9	1.2	1.0
Tanzania	0.9	1.1	0.9
All other exporters	16.7	15.9	15.6
Total global exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 630533 reported by various national statistical authorities in the Global Trade Atlas database, accessed April 9, 2019.

COST DIFFERENCES BASED ON LW SACK CHARACTERISTICS

In the foreign producers' and U.S. producers' questionnaires, respondents were asked if there are any noticeable cost differences in the production of laminated woven sacks based on closure type, the use of primer/ink, printing method/technology, and other cost differences.⁹

⁹ Foreign Producers' and U.S. Producers' Questionnaire, Question II-11a.

Closure Type

Seven producers (four U.S. producers and three foreign producers) reported noticeable cost differences by closure type, and five producers (three U.S. producers and two foreign producers) reported no significant cost differences. Foreign producer *** provided the following order for closure types, from least to most expensive: (1) fold-stitched bottom, (2) sewn with tape and no EZ open feature, (3) sewn with tape with EZ open feature, (4) closure by hot-melt (Double Fold Open Mouth Bag), (5) pinch bottom style with step cut and hot-melt gluing, (6) pinch bottom style with step cut and sealed with hot air, (7) pinch bottom bag with a zipper strip and slider.¹⁰ *** reported that pinch bottom stepped end sacks cost more due to the specialized equipment required to manufacture them, which is consistent with ***'s ordering of pinch bottom bags as more expensive than stitched bottom bags. *** contradicted ***, by reporting that closures sewn with tape are most expensive, followed by hot glue melt. Finally, *** reported that adding a slider is a significant cost increase, which is consistent with *** ordering closures with sliders as the most expensive.

Primer/ink and printing methodology

Seven producers (three U.S. producers and four foreign producers) reported noticeable cost differences by the primer/ink or printing methodology used, while five producers (four U.S. producers and one foreign producer) reported no noticeable cost differences for primer/ink and printing methodology. Two producers (***) reported that flexographic printing is more expensive than rotogravure. *** explained that ***.¹¹ According to U.S. producer Polytex, rotogravure printing was more accurate and fine than flexographic printing, but over the past 15 years, changes in flexographic technology has resulted in a match between flexographic and rotogravure print quality.¹²

LW sacks produced in the United States typically use a flexographic printing process, while LW sacks produced in Vietnam typically use a rotogravure printing process.¹³ The flexographic printing process was used for 95.8 percent of responding U.S. producers' 2017

¹⁰ *** explained that LW sacks (1) to (3) are considered the most economic, and most commonly used for animal feed, deer corn, bird seeds, lumpwood, charcoal, firewood, fertilizer, and cat litter. LW sack (4) is the most common LW sack for pet food bags and requires a hot-melt glue machine that is approximately double the cost of a sewing machine (approximately \$75,000). LW sack (5) is used by premium pet food brands, and allows the filler to close the top of the bag by hot-melt glue (the top of bag #4 is closed by sewing like the previous three bags). LW sack (6) is similar to (5), and is also primarily used by premium pet food brands, but uses hot air instead of hot-melt glue, which can affect the aroma and taste of the pet food. LW sack (7) is the most expensive closure style because the slider applicator machine is very expensive and patented by a German manufacturer.

¹¹ Foreign Producers' questionnaire, *** response to Question II-11a.

¹² Hearing transcript, (Bazbaz), p. 86.

¹³ Conference transcript, pp. 93-94 (Bazbaz), p. 123 (Snyder), and p. 176 (Jones); petitioners' postconference brief, p. 9; Commercial Packaging's postconference brief, pp. 8-9.

production of LW sacks, while the rotogravure printing process was used for 91.3 percent of responding foreign producers' 2017 production of LW sacks.¹⁴

Other cost differences

U.S. producer *** reported that the order size has the most significant impact on cost. The shorter the run size, the greater the number of set-ups leading to increased down time. *** also reported sack size as a cost factor - the smaller the dimensions of the sack, the higher the cost of labor and factory overhead costs per sack.

Foreign producer *** reported noticeable cost differences by lamination method. *** ordered the following three lamination methods from least to most expensive: (1) direct extrusion coating/laminating with normal polypropylene resins, (2) direct extrusion coating/laminating with special tie resin, and (3) adhesive lamination.¹⁵

PRODUCTION CHANGEOVER

Staff asked U.S. and foreign producers to report the average run time and order size by end use (animal feed, pet feed, and other end uses) in their questionnaire responses. Foreign producers reported a significant difference in the average run time of LW sack orders for animal feed (153 hours) versus for pet food (14.3 hours), while responding U.S. producers reported a smaller difference (31.4 hours for animal feed versus 30.5 hours for pet food).¹⁶ Responding foreign producers reported a much higher average order size for animal feed (629,600) than for pet food (85,600), while responding U.S. producers reported a higher average order size for pet food (74,000) than animal feed (43,500).¹⁶

U.S. and foreign producers were asked to report the average time it takes to change over production between orders, as well as the steps involved. Foreign producers reported change times ranging from 1 to 16 hours, for an average change time of 6 hours, while U.S. producers reported change times that ranged between 1 and 13 hours, for an average of 3.7 hours. Steps identified by producers included cleaning ink stations and changing inks, preparing polypropylene film for printing, adjusting laminators, preparing cylinders, adjusting gusset plates, adjusting cut and sew equipment, adjusting heaters, moving idlers, adjusting the vision system on the back seam, changing materials, and changing tube length.¹⁷ Producers reported

¹⁴ U.S. producers' questionnaire and Foreign Producers' questionnaire, Question II-11b.

¹⁵ The main difference between lamination method (1) and (2) is that method (1) uses polypropylene resins and is suitable for small and medium orders, while method (2) uses a combination of polypropylene resins and special tie resins with a higher cost, and are suitable for higher speed printing. Method (3) uses an adhesive lamination, which makes the bag surface smoother than the other two methods. See ***.

¹⁶ Foreign producer ***'s animal feed and pet food data and U.S. producer ***'s animal feed data were excluded from average calculations because it significantly skewed the data. U.S. and Foreign Producers' Questionnaires, Question II-11c part (i).

¹⁷ Foreign and U.S. Producers' Questionnaire, Question II-11c, part (ii).

the following factors as most impacting change over efficiencies: bag size, bag style, the complexity of the printing designs, the number of colors used, the type of ink used, if resin adhesive is used, and whether the bags are coated or uncoated. Foreign producer *** reported that LW sacks for pet food tend to have longer change times than LW sacks for animal feed because of the more complicated printing, and the fact that most are closed by hot-melt, which requires more set-up time than closure by sewing, which is the more common closure method for animal feed.¹⁸

¹⁸ See ***.

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
83 FR 10875 March 13, 2018	<i>Laminated Woven Sacks From Vietnam; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations</i>	https://www.federalregister.gov/d/2018-04973
83 FR 14253 April 3, 2018	<i>Laminated Woven Sacks From the Socialist Republic of Vietnam: Initiation of Countervailing Duty Investigation</i>	https://www.federalregister.gov/d/2018-06728
83 FR 14257 April 3, 2018	<i>Laminated Woven Sacks From the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigation</i>	https://www.federalregister.gov/d/2018-06727
83 FR 18589 April 27, 2018	<i>Laminated Woven Sacks from Vietnam</i>	https://www.govinfo.gov/content/pkg/FR-2018-04-27/pdf/2018-08856.pdf
83 FR 39983 August 13, 2018	<i>Laminated Woven Sacks From the Socialist Republic of Vietnam: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination</i>	https://www.gpo.gov/fdsys/pkg/FR-2018-08-13/pdf/2018-17287.pdf
83 FR 51436 October 11, 2018	<i>Laminated Woven Sacks From the Socialist Republic of Vietnam: Preliminary Determination of Sales at Less Than Fair Value</i>	https://www.govinfo.gov/content/pkg/FR-2018-10-11/pdf/2018-22126.pdf
83 FR 53452 October 23, 2018	<i>Laminated Woven Sacks From the Socialist Republic of Vietnam: Postponement of Final Determination of Sales at Less Than Fair Value Investigation</i>	https://www.govinfo.gov/content/pkg/FR-2018-10-23/pdf/2018-23100.pdf
83 FR 54373 October 29, 2018	<i>Laminated Woven Sacks From Vietnam; Scheduling of the Final Phase of Countervailing Duty and Anti-Dumping Duty Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2018-10-29/pdf/2018-23518.pdf
84 FR 3486 February 12, 2019	<i>Laminated Woven Sacks from Vietnam; Revised Schedule of the Final Phase of Countervailing Duty and Anti-Dumping Duty Investigations</i>	https://www.govinfo.gov/content/pkg/FR-2019-02-12/pdf/2019-01986.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject: Laminated Woven Sacks from Vietnam
Inv. Nos.: 701-TA-601 and 731-TA-1411 (Final)
Date and Time: April 4, 2019 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

Petitioner (**Stephen A. Jones**, King and Spalding, LLP)
Respondent (**Roy Goldberg**, Stinson Leonard Street LLP)

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

King and Spalding
Washington, DC
on behalf of

Laminated Woven Sacks Fair Trade Coalition
Polytex Fibers Corporation and
ProAmpac Holdings Inc.

Isaac Bazbaz, President, Polytex Fibers Corporation

Louann Mueller, Vice President, Product Development,
ProAmpac Holdings, Inc.

Arthur Bucci, Executive Vice President, Sales,
U.S. Flexibles, ProAmpac Holdings, Inc.

Andrew Szamosszegi, Principal, Capital Trade, Inc.

Stephen A. Jones)
Neal J. Reynolds) – OF COUNSEL
Patrick J. Togni)

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:**

Stinson Leonard Street LLP
Washington, DC
on behalf of

Central Bag Company

Roy Goldberg

)

) – OF COUNSEL

Denyse Zosa

)

REBUTTAL/CLOSING REMARKS:

Petitioner (**Stephen A. Jones**, King and Spalding, LLP)
Respondent (**Roy Goldberg**, Stinson Leonard Street LLP)

-END-

APPENDIX C
SUMMARY DATA

Table C-1

LW Sacks: Summary data concerning the U.S. market, 2015-17, January to September 2017, and January to September 2018

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

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2015	2016	2017	2017	2018	2015-17	2015-16	2016-17	2017-18
U.S. consumption quantity:									
Amount.....	587,072	653,311	658,011	485,612	475,629	12.1	11.3	0.7	(2.1)
Producers' share (fn1).....	55.6	48.7	47.4	47.9	48.9	(8.2)	(7.0)	(1.2)	1.1
Importers' share (fn1):									
Vietnam (subject).....	28.1	33.8	37.3	37.3	32.7	9.2	5.7	3.4	(4.5)
Cambodia.....	***	***	***	***	***	***	***	***	***
Honduras.....	***	***	***	***	***	***	***	***	***
All other sources.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	16.3	17.5	15.3	14.9	18.3	(1.0)	1.2	(2.2)	3.5
All import sources.....	44.4	51.3	52.6	52.1	51.1	8.2	7.0	1.2	(1.1)
U.S. consumption value:									
Amount.....	309,223	322,503	313,754	237,985	236,998	1.5	4.3	(2.7)	(0.4)
Producers' share (fn1).....	63.2	56.2	55.0	54.9	57.0	(8.2)	(6.9)	(1.2)	2.1
Importers' share (fn1):									
Vietnam (subject).....	23.6	29.2	31.8	32.5	28.2	8.3	5.7	2.6	(4.3)
Cambodia.....	***	***	***	***	***	***	***	***	***
Honduras.....	***	***	***	***	***	***	***	***	***
All other sources.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	13.3	14.6	13.2	12.5	14.8	(0.1)	1.3	(1.4)	2.2
All import sources.....	37	44	45	45	43	8.2	6.9	1.2	(2.1)
U.S. shipments of imports from:									
Vietnam (subject):									
Quantity.....	165,049	221,138	245,387	180,987	155,643	48.7	34.0	11.0	(14.0)
Value.....	72,849	94,239	99,876	77,418	66,873	37.1	29.4	6.0	(13.6)
Unit value.....	\$0.44	\$0.43	\$0.41	\$0.43	\$0.43	(7.8)	(3.4)	(4.5)	0.4
Ending inventory quantity.....	48,535	39,364	48,483	39,486	37,268	(0.1)	(18.9)	23.2	(5.6)
Cambodia									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Honduras									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity.....	95,556	114,299	100,521	72,215	87,232	5.2	19.6	(12.1)	20.8
Value.....	41,094	46,979	41,429	29,837	34,972	0.8	14.3	(11.8)	17.2
Unit value.....	\$0.43	\$0.41	\$0.41	\$0.41	\$0.40	(4.2)	(4.4)	0.3	(3.0)
Ending inventory quantity.....	15,730	18,078	16,908	20,888	23,133	7.5	14.9	(6.5)	10.7
All import sources:									
Quantity.....	260,605	335,437	345,908	253,202	242,875	32.7	28.7	3.1	(4.1)
Value.....	113,943	141,218	141,305	107,255	101,845	24.0	23.9	0.1	(5.0)
Unit value.....	\$0.44	\$0.42	\$0.41	\$0.42	\$0.42	(6.6)	(3.7)	(3.0)	(1.0)
Ending inventory quantity.....	64,265	57,442	65,391	60,374	60,401	1.8	(10.6)	13.8	0.0

Table continued on next page

Table C-1--Continued

LW Sacks: Summary data concerning the U.S. market, 2015-17, January to September 2017, and January to September 2018

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

	Reported data					Period changes			
	Calendar year		2017	January to September		Calendar year			Jan-Sep
	2015	2016		2017	2018	2015-17	2015-16	2016-17	2017-18
U.S. producers':									
Average capacity quantity.....	477,205	500,098	541,250	406,770	436,562	13.4	4.8	8.2	7.3
Production quantity.....	349,894	335,544	317,139	236,604	256,231	(9.4)	(4.1)	(5.5)	8.3
Capacity utilization (fn1).....	73.3	67.1	58.6	58.2	58.7	(14.7)	(6.2)	(8.5)	0.5
U.S. shipments:									
Quantity.....	326,467	317,874	312,103	232,410	232,754	(4.4)	(2.6)	(1.8)	0.1
Value.....	195,280	181,285	172,449	130,730	135,153	(11.7)	(7.2)	(4.9)	3.4
Unit value.....	\$0.60	\$0.57	\$0.55	\$0.56	\$0.58	(7.6)	(4.7)	(3.1)	3.2
Export shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	35,791	39,640	31,507	33,630	45,501	(12.0)	10.8	(20.5)	35.3
Inventories/total shipments (fn1).....	***	***	***	***	***	***	***	***	***
Production workers.....	762	736	733	729	820	(3.8)	(3.4)	(0.4)	12.5
Hours worked (1,000s).....	2,041	1,660	1,762	1,327	1,537	(13.7)	(18.7)	6.1	15.8
Wages paid (\$1,000).....	27,893	24,948	27,335	20,499	24,002	(2.0)	(10.6)	9.6	17.1
Hourly wages (dollars per hour).....	\$13.67	\$15.03	\$15.51	\$15.45	\$15.62	13.5	10.0	3.2	1.1
Productivity (sacks per hour).....	171.4	202.1	180.0	178.3	166.7	5.0	17.9	(11.0)	(6.5)
Net sales:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS).....	***	***	***	***	***	***	***	***	***
Gross profit or (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Net income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***	***	***	***
Unit net income or (loss).....	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)....	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

Notes:

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

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

fn2.--Undefined.

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

APPENDIX D

APPARENT CONSUMPTION AND MARKET SHARES BY DISTRIBUTION CHANNEL

Table D-1: LW sacks: Apparent consumption and market shares for distribution channel (end use unknown).....D-3

Table D-2: LW sacks: Apparent consumption and market shares for animal feed users.....D-4

Table D-3: LW sacks: Apparent consumption and market shares for pet food usersD-5

Table D-3: LW sacks: Apparent consumption and market shares for other end usersD-6

Table D-1

LW sacks: Apparent consumption and market shares for distribution channel (end use unknown), 2015-17, January to September 2017, and January to September 2018

* * * * *

Table D-2

LW sacks: Apparent consumption and market shares for animal feed users, 2015-17, January to September 2017, and January to September 2018

* * * * *

Table D-3

LW sacks: Apparent consumption and market shares for pet food users, 2015-17, January to September 2017, and January to September 2018

* * * * *

Table D-4

LW sacks: Apparent consumption and market shares for other end users, 2015-17, January to September 2017, and January to September 2018

* * * * *

APPENDIX E
NONSUBJECT COUNTRY PRICE DATA

Two importers reported price data for Cambodia and/or Honduras for products 1-5. Price data reported by these firms accounted for *** percent of U.S. commercial shipments of product from Cambodia and *** percent of U.S. commercial shipments of product from Honduras in 2017. These price items and accompanying data are comparable to those presented in tables V-3 to V-7. Price and quantity data for Cambodia and Honduras are shown in tables E-1 to E-5 and in figures E-1 to E-5 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from Cambodia and Honduras were lower than prices for U.S.-produced product in *** instances and higher in *** instances. In comparing nonsubject country pricing data with Vietnam pricing data, prices for product imported from Cambodia and Honduras were lower than prices for product imported from Vietnams in *** instances and higher in *** instances. A summary of price differentials is presented in table E-6.

Table E-1

LW sacks: Weighted-average f.o.b. prices and quantities of imported product 1, by quarters, January 2015-September 2018

* * * * *

Table E-2

LW sacks: Weighted-average f.o.b. prices and quantities of imported product 2, by quarters, January 2015-September 2018

* * * * *

Table E-3

LW sacks: Weighted-average f.o.b. prices and quantities of imported product 3, by quarters, January 2015-September 2018

* * * * *

Table E-4

LW sacks: Weighted-average f.o.b. prices and quantities of imported product 4, by quarters, January 2015-September 2018

* * * * *

Table E-5

LW sacks: Weighted-average f.o.b. prices and quantities of imported product 5, by quarters, January 2015-September 2018

* * * * *

Figure E-1

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by quarters, January 2015-September 2018

* * * * *

Figure E-2

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by quarters, January 2015-September 2018

* * * * *

Figure E-3

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by quarters, January 2015-September 2018

* * * * *

Figure E-4

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, by quarters, January 2015-September 2018

* * * * *

Figure E-5

LW sacks: Weighted-average f.o.b. prices and quantities of domestic and imported product 5, by quarters, January 2015-September 2018

* * * * *

Table E-6

LW sacks: Summary of underselling/(overselling), by country, January 2015-September 2018

Comparison	Total number of comparisons	Nonsubject lower than the comparison source		Nonsubject higher than the comparison source	
		Number of quarters	Quantity (1,000 sacks)	Number of quarters	Quantity (1,000 sacks)
Nonsubject vs. United States:					
Cambodia vs. United States	29	***	***	***	***
Honduras vs. United States	21	***	***	***	***
Total	50	***	***	***	***
Nonsubject vs. subject:					
Cambodia vs. Vietnam	29	***	***	***	***
Honduras vs. Vietnam	21	***	***	***	***
Total	50	***	***	***	***

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

