

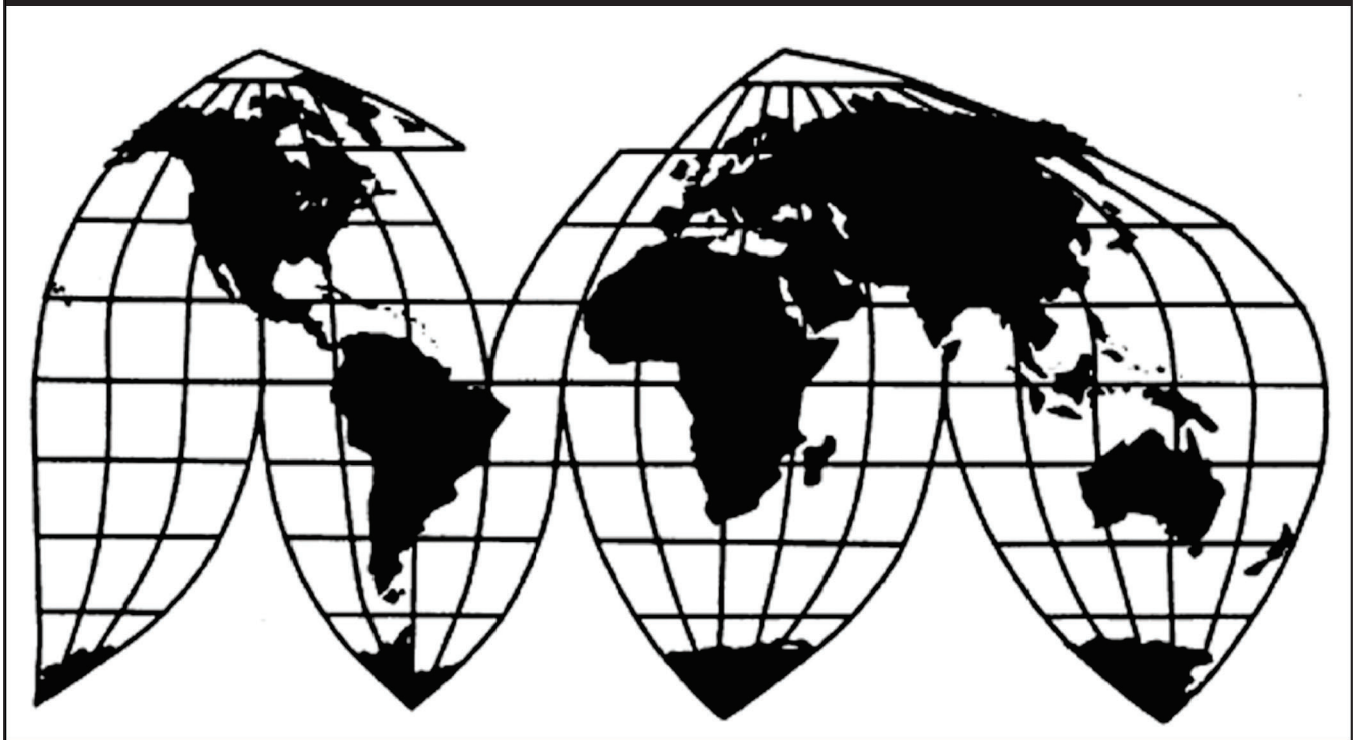
Mattresses from China

Investigation No. 731-TA-1424 (Preliminary)

Publication 4842

November 2018

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1424 (Preliminary)

Mattresses from China

DETERMINATION

On the basis of the record¹ developed in the subject investigation, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of mattresses from China, provided for in subheadings 9404.21.00, 9404.29.10, and 9404.29.90 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (“LTFV”).^{2 3}

COMMENCEMENT OF FINAL PHASE INVESTIGATION

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigation. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission’s rules, upon notice from the U.S. Department of Commerce (“Commerce”) of an affirmative preliminary determination in the investigation under section 733(b) of the Act, or, if the preliminary determination is negative, upon notice of an affirmative final determination in that investigation under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigation need not enter a separate appearance for the final phase of the investigation. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation.

BACKGROUND

On September 18, 2018, Corsicana Mattress Company, Dallas, Texas; Elite Comfort Solutions, Newnan, Georgia; Future Foam Inc., Council Bluffs, Iowa; FXI, Inc., Media, Pennsylvania; Innocor, Inc., Red Bank, New Jersey; Kolcraft Enterprises Inc., Chicago, Illinois; Leggett & Platt, Incorporated, Carthage, Missouri; Serta Simmons Bedding, LLC, Atlanta, Georgia; and Tempur Sealy International, Inc., Lexington, Kentucky filed a petition with the Commission and Commerce, alleging that an industry in the United States is materially injured

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 *Mattresses From the People’s Republic of China: Initiation of Less-Than-Fair-Value Investigation*, 83 FR 52386 (October 17, 2018).

³ Commissioners Meredith M. Broadbent and Jason E. Kearns not participating.

and threatened with material injury by reason of LTFV imports of mattresses from China. Accordingly, effective September 18, 2018, the Commission, pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)), instituted antidumping duty investigation No. 731-TA-1424 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference 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 September 24, 2015 (83 FR 48332). The conference was held in Washington, DC, on October 9, 2018, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of the investigation, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of mattresses from China that are allegedly sold in the United States at less than fair value.¹

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.² In applying this standard, the Commission weighs the evidence before it and determines whether “(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation.”³

II. Background

Corsicana Mattress Company (“Corsicana”), Elite Comfort Solutions (“Elite”), Future Foam Inc. (“Future Foam”), FXI, Inc. (“FXI”), Innocor, Inc. (“Innocor”), Kolcraft Enterprises Inc. (“Kolcraft”), Leggett & Platt, Incorporated (“Leggett & Platt”), Serta Simmons Bedding, LLC (“Serta Simmons”), and Tempur Sealy International, Inc. (“Tempur Sealy”) (collectively, “petitioners”), which produce mattresses domestically, filed the petition in this investigation on September 18, 2018. Petitioners appeared at the staff conference and submitted a postconference brief.

Several respondent entities participated in these investigations. Classic Brands, LLC (“Classic”) and CVB Inc. (“CVB”), which are importers of subject merchandise, each participated in the staff conference and filed respective postconference briefs.⁴ South Bay International, Inc. (“South Bay”), which is also an importer of subject merchandise, participated in the staff conference and filed a postconference declaration. Also participating in the staff conference and filing a joint postconference brief were Chinese producers and exporters of subject

¹ Commissioners Broadbent and Kearns did not participate in the investigation.

² 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States*, 20 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

³ *American Lamb Co.*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

⁴ In its postconference brief, CVB endorsed and adopted the arguments contained in Classic’s postconference brief by reference. CVB’s Postconference Brief at 1.

merchandise Quanzhou Hen Ang Industrial and Trade Co., Ltd (Delandis); Zhejiang Glory Home Furnishings Co., Ltd.; Guangdong Diglant Furniture Industrial Co., Ltd.; Ningbo Shuibishen Home Textile Technology Co., Ltd.; Jiangsu Wellcare Home Furnishings Products Co., Ltd.; Jinlongheng Furniture Co., Ltd.; Inno-Sports Co., Ltd.; Healthcare Co., Ltd (Mlily) and China Beds Direct; Sinomax Macao Commercial Offshore Limited and Sinomax USA, Inc. (Sinomax); and Better Zs Co., Ltd. (collectively, “Chinese respondents”).⁵ Legends Furniture, an importer of subject merchandise, participated in the staff conference.

U.S. industry data are based on the questionnaire responses of 39 domestic producers of mattresses, which accounted for 71.6 percent of U.S. production of mattresses in 2017.⁶ U.S. import data are based on questionnaire responses from 39 U.S. importers, accounting for at least 77.1 percent of subject imports from China.⁷ The Commission received responses to its questionnaires from 11 producers and exporters in China, whose exports accounted for *** percent of subject imports from China in 2017.⁸

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁹ 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.”¹⁰ 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.”¹¹

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.¹² No single factor is

⁵ In their postconference brief, the Chinese respondents endorsed and adopted the arguments contained in Classic’s postconference brief by reference. Chinese Respondents’ Postconference Brief at 1.

⁶ Confidential Report (“CR”) at I-5; Public Report (“PR”) at I-4.

⁷ CR at I-5; PR at I-4.

⁸ CR at VII-3; PR at VII-3.

⁹ 19 U.S.C. § 1677(4)(A).

¹⁰ 19 U.S.C. § 1677(4)(A).

¹¹ 19 U.S.C. § 1677(10).

¹² 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;

dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹³ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹⁴ Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,¹⁵ the Commission determines what domestic product is like the imported articles Commerce has identified.¹⁶ The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.¹⁷

In its notice of initiation, Commerce defined the imported merchandise within the scope of the investigation as:

{A}ll types of youth and adult mattresses. The term "mattress" denotes an assembly of materials that at a minimum includes a "core," which provides the main support system of the mattress, and may consist of innersprings, foam, other resilient filling, or a combination of these materials. Mattresses may also contain (1) "upholstery," the material between the core and the top panel of the ticking on a single-sided mattress, or between the core and the top and bottom panel of the ticking on a double-sided mattress; and/or (2) "ticking," the outermost layer of fabric or other material (*e.g.*, vinyl) that encloses the core and any upholstery, also known as a cover.

(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).

¹³ *See, e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

¹⁴ *See, e.g., Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; *see also* S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

¹⁵ *See, e.g., USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

¹⁶ *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 where Commerce found five classes or kinds).

¹⁷ *See, e.g., Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington*, 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

The scope of this investigation is restricted to only “adult mattresses” and “youth mattresses.” “Adult mattresses” have a width exceeding 35 inches, a length exceeding 72 inches, and a depth exceeding 3 inches on a nominal basis. Such mattresses are frequently described as “twin,” “extra-long twin,” “full,” “queen,” “king,” or “California king” mattresses. “Youth mattresses” have a width exceeding 27 inches, a length exceeding 51 inches, and a depth exceeding 1 inch (crib mattresses have a depth of 6 inches or less from edge to edge) on a nominal basis. Such mattresses are typically described as “crib,” “toddler,” or “youth” mattresses. All adult and youth mattresses are included regardless of actual size description.

The scope encompasses all types of “innerspring mattresses,” “non-innerspring mattresses,” and “hybrid mattresses.” “Innerspring mattresses” contain innersprings, a series of metal springs joined together in sizes that correspond to the dimensions of mattresses. Mattresses that contain innersprings are referred to as “innerspring mattresses” or “hybrid mattresses.” “Hybrid mattresses” contain two or more support systems as the core, such as layers of both memory foam and innerspring units.

“Non-innerspring mattresses” are those that do not contain any innerspring units. They are generally produced from foams (*e.g.*, polyurethane, memory (viscoelastic), latex foam, gel-infused viscoelastic (gel foam), thermobonded polyester, polyethylene) or other resilient filling.

Mattresses covered by the scope of this investigation may be imported independently, as part of furniture or furniture mechanisms (*e.g.*, convertible sofa bed mattresses, sofa bed mattresses imported with sofa bed mechanisms, corner group mattresses, day-bed mattresses, roll-away bed mattresses, high risers, trundle bed mattresses, crib mattresses), or as part of a set in combination with a “mattress foundation.” “Mattress foundations” are any base or support for a mattress. Mattress foundations are commonly referred to as “foundations,” “boxsprings,” “platforms,” and/or “bases.” Bases can be static, foldable, or adjustable. Only the mattress is covered by the scope if imported as part of furniture, with furniture mechanisms, or as part of a set in combination with a mattress foundation.

Excluded from the scope of this investigation are “futon” mattresses. A “futon” is a bi-fold frame made of wood, metal, or plastic material, or any combination thereof, that functions as both seating furniture (such as a couch, love seat, or sofa) and a bed. A “futon mattress” is a tufted mattress, where the top covering is secured to the bottom with thread that goes completely through the mattress from the top through to the bottom, and it does not contain innersprings or foam. A futon mattress is both the bed and seating surface for the futon.

Also excluded from the scope are airbeds (including inflatable mattresses) and waterbeds, which consist of air- or liquid-filled bladders as the core or main support system of the mattress.

Further, also excluded from the scope of this investigation are any products covered by the existing antidumping duty order on uncovered innerspring units. *See Uncovered Innerspring Units from the People's Republic of China: Notice of Antidumping Duty Order*, 74 FR 7661 (February 19, 2009).

The products subject to this investigation are currently properly classifiable under Harmonized Tariff Schedule for the United States (HTSUS) subheadings: 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087. Products subject to this investigation may also enter under HTSUS subheadings: 9404.21.0095, 9404.29.1095, 9404.29.9095, 9401.40.0000, and 9401.90.5081. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise subject to this investigation is dispositive.¹⁸

Mattresses are defined by the industry as a resilient material or combination of materials generally enclosed by ticking that is intended or promoted for sleeping upon by people.¹⁹ Adult mattresses are produced in standard lengths and widths corresponding to the size descriptors twin, twin XL, full, queen, king, and California king, and youth mattresses are produced in standard dimensions corresponding to the size descriptors crib, toddler, and youth.²⁰ Adult mattresses can be 12 to 18 inches in depth, while youth mattresses are required to be no more than 6 inches deep.²¹ In terms of construction, mattresses generally consist of 1) a core, which provides the main support system of the mattress; 2) upholstery material surrounding the core; and 3) ticking, which is the cover or outermost layer of fabric or other material enclosing the core and any upholstery.²²

The U.S. mattress market is characterized by a large variety of mattresses. Depending upon the composition of their cores, mattresses can be characterized as innerspring, non-innerspring, and hybrid mattresses.²³ Innerspring mattresses have a core made of densely packed rows of metal springs, sometimes individually wrapped, surrounded by upholstery and covered in ticking.²⁴ Non-innerspring mattresses consist of either a single slab of foam or multiple layers of foam encased in a fabric sock and covered in ticking.²⁵ Hybrid mattresses have a core combining metal springs and one or more layers of foam surrounded by upholstery

¹⁸ *Mattresses from the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*, 83 Fed. Reg. 52386, 52390 (October 17, 2018).

¹⁹ CR at I-9; PR at PR at I-8.

²⁰ CR at I-10, II-1; PR at I-8, II-1; Petition at 9, 14.

²¹ Conference Tr. at 49 (Koltun).

²² CR at I-9-10; PR at I-8.

²³ CR/PR at II-1.

²⁴ CR at I-11-12; PR at I-8-9; CR/PR at Figure I-1.

²⁵ CR at I-12-13; PR at I-9-10; CR/PR at Figure I-2.

and covered in ticking.²⁶ All three types of mattresses may be designed for display and delivery flat and uncompressed, in the configuration used for sleeping, or rolled and boxed as a mattress-in-a-box (“MiB”) or compressed mattress.²⁷ Most MiB mattresses are made of foam.²⁸ Mattresses can also vary according to spring quality, foam density and type, upholstery and ticking quality, and special design features.²⁹

A. Arguments of the Parties

Petitioners’ Argument. Petitioners argue that the Commission should define the domestic like product as all mattresses within the scope of the investigation based on an examination of the Commission’s traditional like product factors.³⁰ In addition, petitioners argue that clear dividing lines separate in-scope mattresses from out-of-scope futons, air mattresses, and waterbeds, notwithstanding some overlap in terms of uses and interchangeability.³¹

Respondents’ Argument. Respondents do not contest petitioners’ proposed definition of the domestic like product for purposes of the preliminary phase of the investigation, but reserve the right to do so in any final phase of the investigation.³²

B. Analysis

Based on the following analysis, we define a single domestic like product consisting of all mattresses coextensive with the scope of the investigation set forth in the notice of initiation.

Physical Characteristics and Uses. All mattresses consist of the same general components, including a core, upholstery (or a sock, in the case of foam mattresses), and ticking.³³ Similarly, the cores of all mattresses are made of resilient materials, whether innersprings, foam, or some combination of the two.³⁴ All mattresses have the same use, which is for people to sleep on.³⁵ Mattresses can also differ physically from one another in

²⁶ CR at I-11-12, II-1; PR at I-8-9, II-1; CR/PR at Figure I-1.

²⁷ CR at I-12-13; PR at I-9-10.

²⁸ CR at II-10; PR at II-7.

²⁹ See CR at III-17, IV-11; PR at III-11, IV-6-7; Conference Tr. at 111-12 (Anderson), 143-44 (Dietz), 265 (Dockter); Petitioners’ Responses to Staff Questions at 3.

³⁰ Petition at 13-15; see also Petitioners’ Postconference Brief at 7-13.

³¹ See Petitioners’ Postconference Brief at 7-13.

³² Conference Tr. at 219-20 (McLain); Classic Postconference Brief at 4-5; Chinese Respondents’ Postconference Brief at 5. We note that in any final phase of the investigation, parties wishing to raise domestic like product or industry issues should do so in their comments on the draft questionnaires and indicate the new information that would need to be collected for consideration of the proposed definitions. 19 C.F.R. § 207.20(b).

³³ CR at I-9; PR at I-8.

³⁴ CR at I-9-10; PR at I-8.

³⁵ CR at I-9; PR at I-8.

terms of factors including length, width, depth, core composition (*i.e.*, innerspring, foam, or hybrid), design, and quality.³⁶

Although out-of-scope futons, air mattresses, and water beds can also be used for sleeping, they differ from mattresses in several key physical respects. Futon mattresses can be used for either sitting or sleeping, depending upon how the futon frame is adjusted, and are filled with cotton or wool rather than innersprings or foam.³⁷ Air mattresses include a bladder filled with air and electronic controls that permit users to adjust the firmness of the mattress.³⁸ Waterbeds consist of a bladder filled with water that must be continually heated to forestall condensation, and also include electronic controls.³⁹

Manufacturing Facilities, Production Processes and Employees. All types of mattresses can be produced in the same facilities, and employees are often cross-trained to assemble different types of mattresses, including innerspring, non-innerspring, and hybrid mattresses.⁴⁰ Tempur Sealy, Serta Simmons, and Corsicana produce all three types of mattresses in the same facilities with some of the same employees.⁴¹

The final stages of the production process are also similar for all types of mattresses. To construct an innerspring or hybrid mattress, operators build up layers of fabric, upholstery, and/or foam around the core unit on an assembly table or production line before ticking is either sewn or zippered around the mattress.⁴² Similarly, to construct a foam mattress, operators encase either a slab of foam or layers of foam bound together with a sock before inserting the assembly into the ticking.⁴³

Different processes are used for producing the cores of innerspring (including hybrid) and foam mattresses, however. The production of innerspring units – the dense array of metal springs – requires specialized equipment, and may be produced internally or sourced from a supplier.⁴⁴ Innerspring units are then assembled with foam or other resilient fillings to produce the core for an innerspring or hybrid mattress.⁴⁵

The production of a foam core begins with foam production, which may be conducted internally or by a supplier.⁴⁶ To produce foam, precursor chemicals are combined according to the desired formulation (such as polyol, isocyanate, catalysts, and surfactants for polyurethane foam), heated and combined with carbon dioxide, and then sprayed or poured onto a plastic-covered conveyor belt on which the foam expands.⁴⁷ After being partially cured, the foam is

³⁶ See CR at II-1, III-17, IV-11; PR at II-1, III-11, IV-6-7.

³⁷ Petitioners' Postconference Brief at 9; Conference Tr. at 122-23 (Swanson), 123 (Ford).

³⁸ Petitioners' Postconference Brief at 9.

³⁹ Petitioners' Postconference Brief at 9.

⁴⁰ Petitioners' Postconference Brief at 12-13.

⁴¹ Petition at 15.

⁴² CR at I-11; PR at I-8-9; Petition at 10.

⁴³ CR at I-13; PR at I-10; Petition at 11.

⁴⁴ CR at I-11; PR at I-9; Petition at 10.

⁴⁵ CR at I-11; PR at I-9; Petition at 10.

⁴⁶ CR at I-12; PR at I-9; Petition at 11.

⁴⁷ CR at I-12; PR at I-9-10; Petition at 11.

cut into large blocks, fully cured for 72 hours, tested, and then cut into the smaller blocks or sheets that serve as the core of a foam mattress.⁴⁸

The manufacturing process for youth mattresses is similar to adult mattresses, but core and upholstery materials can be inserted into pre-sewn covers with a stuffing machine before the covers are sewn shut.⁴⁹ The ticking on youth mattresses can include vinyl materials as a barrier to wetness.⁵⁰

Futon mattresses, air mattresses, and waterbeds are produced in different manufacturing facilities with different employees using different production processes.⁵¹

Channels of Distribution. All types and sizes of domestically produced mattresses are sold through the same channels of distribution: mostly to retailers, both brick and mortar and online, but also direct-to-consumer.⁵²

Futons, air mattresses, and waterbeds are generally sold to or through specialized retailers that do not purchase or offer in-scope mattresses.⁵³

Interchangeability. Consumers may use all types of mattresses interchangeably for sleeping, and a consumer's selection of a particular mattress model can be based on subjective judgments concerning comfort and value.⁵⁴ Indeed, retail stores often carry a wide range of mattresses and display innerspring, non-innerspring, and hybrid mattresses side-by-side to facilitate consumer cross-shopping.⁵⁵ Although the interchangeability of mattresses in different sizes can be limited, most mattress models are available in the full range of sizes, and are therefore interchangeable with respect to consumers shopping for a particular size.⁵⁶

Futons, air mattresses, and waterbeds may also be used interchangeably with mattresses in that all may be used for sleeping. Certain attributes of futons, air mattresses, and water beds render them imperfect substitutes for mattresses, however. Futons, unlike mattresses, can be used for sitting depending on the position of the frame.⁵⁷ Air mattresses can be adjusted with electronic controls to make them firmer or softer, unlike mattresses.⁵⁸ Waterbeds offer an entirely different sleeping experience than in-scope mattresses, due to their being filled with water, and the water must be continually heated to avoid condensation.⁵⁹

⁴⁸ CR at I-12-13; PR at I-10; Petition at 11.

⁴⁹ CR at I-13; PR at I-10.

⁵⁰ CR at I-13; PR at I-10.

⁵¹ Petitioners' Postconference Brief at 13.

⁵² CR at II-1-2; PR at II-1.

⁵³ Petitioners' Postconference Brief at 11.

⁵⁴ CR at I-9; PR at I-8; Conference Tr. at 43 (Swanson).

⁵⁵ Conference Tr. at 43-44 (Swanson), 64 (Anderson), 65 (Baisburd), 221 (Zippelli).

⁵⁶ CR/PR at II-1. There is also some interchangeability between mattresses of different sizes, as between twin and double sizes for a single sleeper and between double, queen, and king sizes for two sleepers.

⁵⁷ Petitioners' Postconference Brief at 9; Conference Tr. at 122-23 (Swanson), 123 (Ford).

⁵⁸ Petitioners' Postconference Brief at 9.

⁵⁹ Petitioners' Postconference Brief at 10.

Producer and Customer Perceptions. Petitioners claim that consumers and domestic producers alike view mattresses as a distinct product category, and separate from futons, air mattresses, and waterbeds.⁶⁰ Consumers frequently cross-shop different types of mattresses, traditionally by laying on them one after another at retail establishments, and a consumer's preference for one mattress over another can be based on subjective judgments about comfort and value.⁶¹ Mattresses may also differ in being displayed and delivered either flat or compressed as MiBs, although MiBs resemble flat mattresses once unboxed.⁶² Notwithstanding these differences between mattress models, most retailers offer a wide range of mattresses at different price points that appeal to a broad range of consumers.⁶³

Price. The prices of mattresses vary by size and quality, although there is substantial overlap between the prices of innerspring, non-innerspring, and hybrid mattresses.⁶⁴

Conclusion. The record indicates that there are more similarities than differences between mattresses described by the scope of the investigation. Based on the record of the preliminary phase of the investigation, we find that the preponderance of similarities supports the definition of a single domestic like product comprising all mattresses coextensive with the scope. All mattresses are generally similar in terms of their physical characteristics and uses; channels of distribution; manufacturing facilities, production employees and, to some extent, production processes; and producer and customer perceptions. Furthermore, mattresses described by the scope generally differ from out-of-scope futons, air mattresses, and waterbeds in terms of their physical characteristics, manufacturing facilities, production processes, and production employees, channels of distribution, producer and customer perceptions, and price, despite some overlap with respect to uses and interchangeability.⁶⁵ We therefore define a single domestic like product consisting of all mattresses coextensive with the scope of the investigation.

IV. 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."⁶⁶ 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.

⁶⁰ Petitioners' Postconference Brief at 11-12.

⁶¹ Conference Tr. at 64 (Anderson), 142-43 (Dietz), 221 (Zippelli), 227-28 (Dockter).

⁶² CR at II-10; PR at II-7; Conference Tr. at 84 (Anderson).

⁶³ Conference Tr. at 43-44 (Swanson), 65 (Baisburd).

⁶⁴ See CR/PR at Table V-11; Petitioners' Postconference Brief at Exhibit 5.

⁶⁵ See Petitioners' Postconference Brief at 7-13.

⁶⁶ 19 U.S.C. § 1677(4)(A).

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 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.⁶⁷ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.⁶⁸

*** meet the statutory definition of a related party as importers of subject merchandise during the period of investigation, and *** also meets the definition based on its affiliation with a Chinese producer and exporter of subject merchandise.⁶⁹ We discuss below whether appropriate circumstances exist to exclude each of them from the domestic industry.

A. Arguments of the Parties

Petitioners argue that appropriate circumstances exist to exclude *** from the domestic industry as related parties because, in their view, each firm is primarily an importer.⁷⁰ As support, petitioners point to each firm's high and increasing ratio of subject imports to domestic production and their lack of support for the petition.⁷¹

⁶⁷ 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).

⁶⁸ 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.

⁶⁹ CR/PR at Tables III-2, III-11. Although *** purchased subject imports from an importer, these purchases do not qualify *** as a related party. The Commission has concluded that a domestic producer that does not itself import subject merchandise or does not share a corporate affiliation with an importer may nonetheless be deemed a related part if it controls large volumes of imports. *** purchases of subject imports increased from *** units in 2015 to *** units in 2017 and *** units in interim 2018, but never accounted for more than *** percent of total subject imports. CR/PR at Tables III-1, IV-2. We therefore find that *** does not qualify as a related party because the volumes of its subject import purchases were not substantial.

⁷⁰ Petitioners' Postconference Brief at 14-15.

⁷¹ Petitioners' Postconference Brief at 15-16.

B. Analysis

Based on our definition of the domestic like product, we find that appropriate circumstances exist to exclude *** but not *** from the domestic industry as related parties based on the following analysis.

***. *** was the *** largest domestic producer in 2017, accounting for *** percent of domestic industry production.⁷² It is a related party because it imported subject mattresses from China during the POI.⁷³ Specifically, *** imported *** units of mattresses in 2015 (the equivalent of *** percent of its domestic production), *** units in 2016 (the equivalent of *** percent of its domestic production), and *** units in 2017 (the equivalent of *** percent of its domestic production).⁷⁴ *** imported *** units of mattresses in January-June 2018 (“interim 2018”) (the equivalent of *** percent of its domestic production), compared to *** units in January-June 2017 (“interim 2017”) (the equivalent of *** percent of its domestic production).⁷⁵ *** has stated that its reason for importing is ***.⁷⁶ *** operating income and net income to net sales ratios were *** than the domestic industry average in 2017.⁷⁷

The record shows that *** primary interest increasingly is in importation rather than domestic production. In this regard, *** ratio of imports to domestic production was high and increasing during the period of investigation, while its domestic production declined *** percent between 2015 and 2017.⁷⁸ ***.⁷⁹ For all of these reasons, we find that appropriate circumstances exist to exclude *** from the domestic industry as a related party.

***. *** was the *** largest domestic producer in 2017, accounting for *** percent of domestic industry production.⁸⁰ It is a related party because it imported subject mattresses from China during the POI.⁸¹ Specifically, *** imported *** units of mattresses in 2015 (the equivalent of *** percent of its domestic production), *** units in 2016 (the equivalent of *** percent of its domestic production), and *** units in 2017 (the equivalent of *** percent of its domestic production).⁸² *** imported *** units of mattresses in interim 2018 (the equivalent of *** percent of its domestic production), compared to *** units in interim 2017 (the

⁷² CR/PR at Table III-1.

⁷³ CR/PR at Table III-11.

⁷⁴ CR/PR at Table III-7.

⁷⁵ CR/PR at Table III-7.

⁷⁶ CR/PR at Table III-11.

⁷⁷ CR/PR at Table VI-3. In 2017, *** operating income to net sales ratio was *** percent and its net income margin was *** percent. Domestic Producers’ Questionnaire Response of *** at Question III-9a.

⁷⁸ CR/PR at Tables III-1, 11. *** domestic production was *** percent higher in interim 2018 compared to interim 2017. *Id.* at Table III-11.

⁷⁹ CR/PR at Table III-1.

⁸⁰ CR/PR at Table III-1.

⁸¹ CR/PR at Table III-11.

⁸² CR/PR at Table III-7.

equivalent of *** percent of its domestic production).⁸³ *** has stated that its “***”.⁸⁴ *** operating income and net income to net sales ratios were *** than the domestic industry average in 2017.⁸⁵

The record shows that *** primary interest is in importation rather than domestic production. In this regard, *** ratio of imports to domestic production was *** high and increasing during the period of investigation, while its domestic production remained ***. ***.⁸⁶ For all of these reasons, we find that appropriate circumstances exist to exclude *** from the domestic industry as a related party.

. ***.⁸⁷ It is a related party because it imported subject mattresses from China during the POI.⁸⁸ Specifically, *** imported *** units of mattresses in 2015 (the equivalent of *** percent of its domestic production), *** units in 2016 (the equivalent of *** percent of its domestic production), and *** units in 2017 (the equivalent of *** percent of its domestic production).⁸⁹ *** imported *** units of mattresses in interim 2018 (), compared to *** units in interim 2017 (the equivalent of *** percent of its domestic production).⁹⁰ *** has stated that its reason for importing is it found “***.”⁹¹ *** operating income and net income to net sales ratios were *** than the domestic industry average in 2017.⁹²

The record shows that *** primary interest is in importation rather than domestic production. In this regard, *** ratio of imports to domestic production was *** high and increasing during the period of investigation, and its domestic production was *** and declining until ***.⁹³ ***.⁹⁴ For all of these reasons, we find that appropriate circumstances exist to exclude *** from the domestic industry as a related party.

***. *** was the *** largest domestic producer in 2017, accounting for *** percent of domestic industry production.⁹⁵ It is a related party because it imported subject mattresses from China ***.⁹⁶ Specifically, *** imported *** units of mattresses in 2017 (the equivalent of *** percent of its domestic production) and *** units of mattresses in interim 2018 (the equivalent of *** percent of its domestic production), compared to *** units in interim 2017

⁸³ CR/PR at Table III-7.

⁸⁴ CR/PR at Table III-11.

⁸⁵ CR/PR at Table VI-3. In 2017, *** operating income to net sales ratio was *** percent and its net income margin was *** percent. Domestic Producers’ Questionnaire Response of *** at Question III-9a.

⁸⁶ CR/PR at Table III-1.

⁸⁷ CR/PR at Tables III-3, 11.

⁸⁸ CR/PR at Table III-11.

⁸⁹ CR/PR at Table III-7.

⁹⁰ CR/PR at Table III-7.

⁹¹ CR/PR at Table III-11.

⁹² CR/PR at Table VI-3. In 2017, *** operating income to net sales ratio and net income margin were both negative *** percent. Domestic Producers’ Questionnaire Response of *** at Question III-9a.

⁹³ CR/PR at Table III-3, 11.

⁹⁴ CR/PR at Table III-1.

⁹⁵ CR/PR at Table III-1.

⁹⁶ CR/PR at Table III-11.

(the equivalent of *** percent of its domestic production).⁹⁷ *** has stated that it began importing mattresses from China ***.⁹⁸ *** reports that ***.⁹⁹ *** operating income and net income to net sales ratios were *** than the domestic industry average in 2017.¹⁰⁰

The record shows that *** primary interest is in domestic production rather than importation. In this regard, *** only imported subject merchandise in 2017 and interim 2018 ***. Its ratio of imports to domestic production was low in 2017 and lower in interim 2018 compared to interim 2017, before imports ***.¹⁰¹ ***, and among the largest domestic producers. For all of these reasons, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

. *** commenced domestic production in *** and accounted for only *** percent of domestic industry production in 2017.¹⁰² It is a related party because it imported subject mattresses from China during the POI and is related to a Chinese producer and exporter of subject merchandise.¹⁰³ *** imported *** units of mattresses in 2015 (), *** units in 2016 (the equivalent of *** percent of its domestic production), and *** units in 2017 (the equivalent of *** percent of its domestic production).¹⁰⁴ *** imported *** units of mattresses in interim 2018 (the equivalent of *** percent of its domestic production), compared to *** units in interim 2017 (the equivalent of *** percent of its domestic production).¹⁰⁵ *** has stated that its reason for importing is “***.”¹⁰⁶ *** operating income and net income to net sales ratios were *** than the domestic industry average in 2017.¹⁰⁷

The record shows that *** primary interest is in importation rather than domestic production. We recognize that *** ratio of imports to domestic production declined during the period of investigation as its domestic production increased, but note that the ratio remained *** percent in interim 2018.¹⁰⁸ ***.¹⁰⁹ On balance, we find that appropriate circumstances exist to exclude *** from the domestic industry as a related party.

⁹⁷ CR/PR at Table III-7.

⁹⁸ CR/PR at Table III-11.

⁹⁹ CR/PR at Table III-11.

¹⁰⁰ CR/PR at Table VI-3. In 2017, *** operating income to net sales ratio was *** percent and its net income margin was *** percent. Domestic Producers’ Questionnaire Response of *** at Question III-9a.

¹⁰¹ CR/PR at Table III-11.

¹⁰² CR/PR at Tables III-4, 11.

¹⁰³ CR/PR at Tables III-2, 11.

¹⁰⁴ CR/PR at Table III-7.

¹⁰⁵ CR/PR at Table III-7.

¹⁰⁶ CR/PR at Table III-11.

¹⁰⁷ CR/PR at Table VI-3. In 2017, *** operating income to net sales ratio was negative *** percent and its net income margin was negative *** percent. Domestic Producers’ Questionnaire Response of *** at Question III-9a.

¹⁰⁸ CR/PR at Table III-11.

¹⁰⁹ CR/PR at Table III-1.

. *** was the *** largest domestic producer in 2017, accounting for *** percent of domestic industry production.¹¹⁰ It is a related party because it imported subject mattresses from China during the POI.¹¹¹ Specifically, *** imported *** units of mattresses in 2015 (the equivalent of *** percent of its domestic production), *** units in 2016 (the equivalent of *** percent of its domestic production), and *** units in 2017 (the equivalent of *** percent of its domestic production).¹¹² *** imported *** units of mattresses in interim 2018 (the equivalent of *** percent of its domestic production), compared to *** units in interim 2017 (the equivalent of *** percent of its domestic production).¹¹³ *** has stated that its reason for importing is that “.”¹¹⁴ *** operating income to net sales ratio was *** and its net income margin was *** than the domestic industry average in 2017.¹¹⁵

The record shows that *** primary interest is in domestic production rather than importation. In this regard, *** ratio of imports to domestic production was low and generally declining during the period of investigation, reaching a low of *** percent in interim 2018.¹¹⁶ ***, and ranks among the largest domestic producers.¹¹⁷ For all of these reasons, we find that appropriate circumstances do not exist to exclude *** from the domestic industry as a related party.

In sum, we find that appropriate circumstances exist to exclude *** from the domestic industry as related parties, but not ***. Accordingly, based on our definition of the domestic like product, we define the domestic industry to include all domestic producers of mattresses, with the exception of ***.

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible.¹¹⁸ Petitioners argue that the Commission should find subject imports from China non-negligible, and respondents do not address the issue.¹¹⁹

¹¹⁰ CR/PR at Table III-1.

¹¹¹ CR/PR at Table III-11.

¹¹² CR/PR at Table III-7.

¹¹³ CR/PR at Table III-7.

¹¹⁴ CR/PR at Table III-11.

¹¹⁵ CR/PR at Table VI-3. In 2017, *** operating income to net sales ratio was *** percent and its net income margin was *** percent. Domestic Producers’ Questionnaire Response of *** at Question III-9a.

¹¹⁶ CR/PR at Table III-11.

¹¹⁷ CR/PR at Table III-1.

¹¹⁸ 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i).

¹¹⁹ Petition at 16; Petitioners’ Postconference Brief at 10.

During the most recent 12-month period in these investigations, imports from China accounted for *** percent of total imports.¹²⁰ Because subject imports from China were well above the statutory negligibility threshold, we find that such imports are not negligible.

VI. Reasonable Indication of Material Injury by Reason of Subject Imports

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.¹²¹ 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.¹²² The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”¹²³ In assessing whether there is a reasonable indication that 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.¹²⁴ 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.”¹²⁵

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is “materially injured by reason of” unfairly traded imports,¹²⁶ 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.¹²⁷ 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

¹²⁰ CR/PR at Table IV-6.

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

¹²² 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 ... {a}nd explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B).

¹²³ 19 U.S.C. § 1677(7)(A).

¹²⁴ 19 U.S.C. § 1677(7)(C)(iii).

¹²⁵ 19 U.S.C. § 1677(7)(C)(iii).

¹²⁶ 19 U.S.C. §§ 1671b(a), 1673b(a).

¹²⁷ *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’d* 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

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.¹²⁸

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.¹²⁹ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.¹³⁰ Nor does

¹²⁸ The Federal Circuit, in addressing the causation standard of the statute, has 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 re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which 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).

¹²⁹ 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.

¹³⁰ 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

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.¹³¹ It is clear that the existence of injury caused by other factors does not compel a negative determination.¹³²

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.”¹³³ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”¹³⁴

The Federal Circuit’s decisions in *Gerald Metals*, *Bratsk*, and *Mittal Steel* all involved cases in which 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.¹³⁵ 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

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.”).

¹³¹ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

¹³² See *Nippon*, 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.”).

¹³³ *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 comporting with the Court’s guidance in *Mittal*.

¹³⁴ *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.”).

¹³⁵ *Mittal Steel*, 542 F.3d at 875-79.

“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.¹³⁶ 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.¹³⁷

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.¹³⁸ Congress has delegated this factual finding to the Commission because of the agency’s institutional expertise in resolving injury issues.¹³⁹

B. Conditions of Competition and the Business Cycle

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

1. Demand Conditions

Mattress demand is driven by housing activity, including new home sales, housing starts, and home resales; interest rates; gross domestic product (“GDP”) growth; and consumer sentiment.¹⁴⁰ Driven by increasing home sales and housing starts, healthy GDP growth, and generally improving consumer sentiment, demand for mattresses increased throughout the

¹³⁶ *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).

¹³⁷ 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 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.

¹³⁸ We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

¹³⁹ *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.”).

¹⁴⁰ CR at II-11; PR at II-8.

period of investigation.¹⁴¹ Specifically, apparent U.S. consumption of mattresses increased from *** units in 2015 to *** units in 2016 and *** units in 2017, a level *** percent higher than in 2015.¹⁴² Apparent U.S. consumption of mattresses was *** units in interim 2018, compared to *** units in interim 2017.¹⁴³

Innerspring mattresses accounted for the largest share of apparent U.S. consumption throughout the period of investigation, including *** percent of apparent U.S. consumption in 2017.¹⁴⁴ That same year, non-innerspring mattresses accounted for *** percent of apparent U.S. consumption and hybrid mattresses accounted for *** percent.¹⁴⁵

Different types of mattresses exhibited different demand trends during the period of investigation. The vast majority of responding domestic producers and importers reported increasing demand for non-innerspring and hybrid mattresses in the U.S. market during the period.¹⁴⁶ Most responding domestic producers and importers also reported that sales of non-innerspring MiBs over the internet constituted the fastest-growing segment of the U.S. market.¹⁴⁷ Sales of MiBs have also increased to “omni-channel” retailers such as Costco, Target, and Sam’s Club, which sell merchandise both online and through brick and mortar stores, in part because MiBs are easy to display and stock on retail sales floors.¹⁴⁸ Consistent with these questionnaire responses, apparent U.S. consumption of non-innerspring mattresses increased *** percent between 2015 and 2017, and was *** percent higher in interim 2018 compared to interim 2017.¹⁴⁹ Similarly, apparent U.S. consumption of hybrid mattresses increased *** percent between 2015 and 2017, and was *** percent higher in interim 2018 compared to interim 2017.¹⁵⁰

By contrast, a plurality of responding domestic producers reported a declining demand for innerspring mattresses and a plurality of responding importers reported no change in demand for such mattresses.¹⁵¹ Apparent U.S. consumption of innerspring mattresses declined

¹⁴¹ CR at II-12-13; PR at II-8-10; CR/PR at Figures II-1-2. Interest rates increased during the period of investigation. CR at II-13-14; PR at II-10-11; CR/PR at Figure II-3.

¹⁴² CR/PR at Table IV-7.

¹⁴³ CR/PR at Table IV-7.

¹⁴⁴ CR/PR at Tables IV-8-9, 11. At the staff conference, a witness for Leggett & Platt, a domestic producer of innersprings and mattresses, stated that innerspring and hybrid mattresses are similar: “There’s really no difference in an inner spring and a hybrid mattress. They both have some level of foam and they both have some level of an inner spring. It’s typically a very similar product. Hybrid is more of a marketing term that’s used in the industry. There’s no true definition of those two different products.” Conference Tr. at 49 (Rhea).

¹⁴⁵ CR/PR at Tables IV-8, 10-11.

¹⁴⁶ CR/PR at Table II-5.

¹⁴⁷ CR at II-10; PR at II-7; CR/PR at Table II-4.

¹⁴⁸ Conference Tr. at 52, 61 (Chrisafides); Classic’s Postconference Brief at 6-7.

¹⁴⁹ Memorandum INV-QQ-128/PR at Table IV-11.

¹⁵⁰ Memorandum INV-QQ-128/PR at Table IV-10.

¹⁵¹ CR/PR at Table II-5.

*** percent between 2015 and 2017, and was *** percent lower in interim 2018 compared to interim 2017.¹⁵²

There was a significant increase in mattress sales over the internet during the period of investigation, consisting primarily of non-innerspring MiBs. Most responding domestic producers and importers reported that sales of non-innerspring MiBs directly to consumers over the internet have greatly increased since January 2015.¹⁵³ At the staff conference, an official from Tempur Sealy stated that “in the last two years, there has been an explosion in units sold” as MiBs “primarily from some pioneers of brands that were domestically produced . . . like Casper and Tuft and Needle.”¹⁵⁴ An official from Leggett & Platt, a domestic producer that also distributes the roll packing machines used to compress and package MiBs, stated that prominent internet retailers specializing in MiBs, including Casper and Tuft & Needle, “brought more visibility to this product, a compression product, in the last few years” and “opened it up to online purchases.”¹⁵⁵ The record also shows that responding domestic producers and importers increased the proportion of their commercial U.S. shipments sold direct-to-consumer over the internet at the retail level during the period of investigation, although the proportion of their sales to third-party internet sellers at the wholesale level declined.¹⁵⁶ In any final phase of the investigation, we intend to investigate further the evolving role of MiBs and internet sales in the U.S. mattress market.

2. Supply Conditions

The U.S. market for mattresses is served primarily by domestic producers, which accounted for *** percent of apparent U.S. consumption in 2017, and subject imports, which accounted for *** percent of apparent U.S. consumption that same year.¹⁵⁷ Nonsubject imports did not have a significant presence in the U.S. market during the period of investigation, peaking at *** percent of apparent U.S. consumption in 2015.¹⁵⁸

Although 39 responding domestic producers reported producing mattresses in the United States, petitioners (Corsicana, Elite, Future Foam, FXI, Innocor, Kolcraft, Leggett & Platt, Serta Simmons, and Tempur Sealy) accounted for *** percent of domestic production in 2017, and the two largest domestic producers, Serta Simmons and Tempur Sealy, accounted for *** percent of domestic production that year.¹⁵⁹ Domestic producers manufacture mattresses at numerous production facilities located across the country, with Serta Simmons alone producing

¹⁵² Memorandum INV-QQ-128/PR at Table IV-9.

¹⁵³ CR at II-8-10; PR at II-6-7; CR/PR at Table II-4.

¹⁵⁴ Conference Tr. at 79 (Anderson); *see also id.* at 34 (Chrisafides) (stating that “the foam mattress market is growing” because “consumers are increasingly interested in the benefits of foam” and “mattress manufacturers and retailers see the mattress in a box as a product line extension.”).

¹⁵⁵ Conference Tr. at 86 (Rhea).

¹⁵⁶ CR/PR at Table II-1.

¹⁵⁷ CR/PR at Table IV-8.

¹⁵⁸ CR/PR at Tables IV-7-8.

¹⁵⁹ CR/PR at III-1; CR/PR at Table III-1.

mattresses at 28 production facilities.¹⁶⁰ Domestic producers generally locate production facilities near customers so as to minimize transportation costs and lead times pursuant to a “just-in-time” delivery model, with the ability to produce and deliver a mattress door-to-door within 72 to 96 hours of receiving an order.¹⁶¹

The domestic industry made commercial U.S. shipments of all types of mattresses during the period of investigation, including innerspring, non-innerspring, hybrid, adult, youth, and premium mattresses.¹⁶² Furthermore, petitioners claim that the domestic industry has the capacity to produce *** units of MiBs annually, operating *** roll packing machines used to compress, roll, and box MiBs in *** states.¹⁶³ Although the domestic industry produces all types of mattresses, many domestic producers specialize in particular types of mattresses.¹⁶⁴ For example, Kolcraft specializes in youth mattresses; Elite, Future Foam, FXI, and Innocor specialize in foam mattresses; and Serta Simmons and Tempur Sealy concentrate on innerspring mattresses, while also producing non-innerspring and hybrid mattresses.¹⁶⁵

Domestic producers made numerous investments in new and expanded production facilities during the period of investigation, motivated by strong and increasing mattress demand according to petitioners.¹⁶⁶ For example, *** reported plant openings and *** reported expansions to existing production facilities.¹⁶⁷ Nevertheless, ***.¹⁶⁸ Between ***, and capacity additions by other domestic producers, the domestic industry’s capacity declined *** percent between 2015 and 2017 and was *** percent lower in interim 2018 compared to interim 2017.¹⁶⁹

The largest suppliers of subject imports to the U.S. market were ***, which together accounted for *** percent of reported exports of mattresses from China to the United States in 2017.¹⁷⁰ The largest importers of mattresses from China were ***, which together accounted for *** percent of reported subject imports in 2017.¹⁷¹ Like domestic producers, importers made commercial U.S. shipments of all types of mattresses during the period of investigation, including innerspring, non-innerspring, hybrid, adult, youth, and premium mattresses.¹⁷²

¹⁶⁰ CR/PR at Table III-1; Conference Tr. at 19 (Dascoli).

¹⁶¹ Conference Tr. at 58-59 (Dascoli), 59 (Anderson); Petitioners’ Postconference Brief at 18-19.

¹⁶² See CR/PR at Tables III-7-9.

¹⁶³ Petitioners’ Postconference Brief at 18.

¹⁶⁴ See CR/PR at Tables III-9, IV-9-13.

¹⁶⁵ Conference Tr. at 24 (Anderson), 33 (Chrisafides), 37 (Koltun); Petitioners’ Responses to Staff Questions at 3; Domestic Producers’ Questionnaire Responses of Elite, FXI, Future Foam, Innocor, Serta Simmons, and Tempur Sealy at Question II-9; Domestic Producers’ Questionnaire Response of Kolcraft at Question II-11.

¹⁶⁶ Petitioners’ Postconference Brief at 17; CR/PR at Tables III-3, VI-5.

¹⁶⁷ CR/PR at Table III-3.

¹⁶⁸ CR/PR at Tables III-3-4; Petitioners’ Responses to Staff Questions at 5.

¹⁶⁹ CR at III-8; PR at III-4; CR/PR at Table C-2.

¹⁷⁰ CR/PR at Table VII-1.

¹⁷¹ CR/PR at Table IV-1.

¹⁷² See CR/PR at Tables IV-3-5.

Respondents claim that importers hold larger inventories than domestic producers so as to better serve internet retailers, which require the rapid fulfillment of customer orders.¹⁷³

Nonsubject imports accounted for a very small percentage of imports during the period of investigation, ranging from *** percent in 2017 and *** percent in 2015.¹⁷⁴ The only country sources of nonsubject imports during the period were ***.¹⁷⁵

3. Substitutability and Other Conditions

We find that there is a high degree of substitutability between subject imports and domestically produced mattresses.¹⁷⁶ Most responding domestic producers (22 of 27) and importers (21 of 34) reported that subject imports are always or frequently interchangeable with domestically produced mattresses.¹⁷⁷ Both domestic producers and importers of subject mattresses offer a complete range of mattresses, including innerspring, non-innerspring, and hybrid mattresses, in all sizes and at all price points, and sell them flat, compressed, and rolled and folded into MiBs.¹⁷⁸

We further find that price is an important factor in purchasing decisions for mattresses, although non-price factors are also important.¹⁷⁹ Most responding domestic producers (16 of 26) reported that differences other than price are sometimes or never significant when purchasers choose between subject imports and domestically produced mattresses, although most importers (23 of 34) reported that differences other than price are always or frequently significant.¹⁸⁰ When asked to identify the main factors influencing their purchasing decisions, factors related to overall price/cost or value, overall quality, and availability/delivery time were the most commonly cited factors.¹⁸¹ At the conference, officials from domestic mattress producers emphasized that competition in the U.S. mattress market is based primarily on price.¹⁸²

Domestic producers and importers of subject merchandise also compete for sales through the same channels of distribution, with sales at the wholesale level to distributors, retailers, and third party internet sellers and sales at the retail level through brick and mortar

¹⁷³ Classic's Postconference Brief at 14, 22-24. Domestic producers reported that 84.9 percent of their commercial shipments were produced to order, with an average lead time of 23 days, while importers reported that 82.2 percent of their commercial shipments came from inventory, with an average lead time of 29 days. CR at II-17; PR at II-13.

¹⁷⁴ CR at II-7; PR at II-5.

¹⁷⁵ CR at II-7; PR at II-5.

¹⁷⁶ CR at II-16; PR at II-13.

¹⁷⁷ CR/PR at Table II-9; *see also* Conference Tr. at 162 (Serven), 256 (Dietz) (stating that established brand names, such as those used by domestic producers, are becoming less important in the U.S. market).

¹⁷⁸ CR/PR at Tables IV-8-10.

¹⁷⁹ CR/PR at Table II-6.

¹⁸⁰ CR/PR at Table II-10 (4 of 26 responding domestic producers and 10 of 34 responding importers reported that factors other than price are always important).

¹⁸¹ CR/PR at Table II-6.

¹⁸² *See* Conference Tr. at 20, 22-23, 26 (Dascoli), 30 (Fallen), 38-39 (Koltun), 40-41 (Rhea).

stores and direct-to-consumer websites.¹⁸³ Respondents argue that mattress sales over the internet depend upon large numbers of customer reviews and investments in “branding,” which drive consumer awareness and higher margins.¹⁸⁴ Respondents also claim that the rankings of mattresses yielded by consumer search results on the websites of internet retailers such as Amazon and Wayfair are determined by proprietary algorithms driven by sales velocity, quality, delivery time, and customer reviews, but not price.¹⁸⁵ By contrast, petitioners contend that the algorithms used by internet retailers use price and sales velocity as the primary drivers of mattress rankings in response to consumer searches, which has resulted in low-priced subject imports dominating internet search results.¹⁸⁶ Petitioners also claim that domestic producers compete with importers of subject merchandise for slots on retail floors on the basis of price.¹⁸⁷ Both sides agree that internet retailers compete with brick and mortar retailers for

¹⁸³ CR/PR at Table II-1. We note that the channels of distribution data on the record of the preliminary phase of the investigation do not appear to distinguish between sales to internet retailers and sales to brick and mortar retailers at the wholesale level. Responding domestic producers reported making *** percent of their commercial U.S. shipments at the “non-retail level to retailers” in 2017, whereas responding importers of subject merchandise reported making *** percent of their commercial U.S. shipments through this channel. CR/PR at Table II-1. Importers of subject merchandise reported making *** percent of their commercial U.S. shipments through the “direct-to-consumer/internet” channel at the retail level and to “third party internet sellers” at the non-retail level in 2017, whereas domestic producers reported making only *** percent of their commercial U.S. shipments through such channels. *Id.* As petitioners pointed out at the staff conference, however, responding domestic producers included shipments to internet retailers with shipments to brick and mortar retailers in reporting shipments made at the “non-retail level to retailers.” Conference Tr. at 62-64 (Baisburd). Respondents’ economist agreed that responding domestic producers and importers may have reported shipments to internet retailers as shipments made at the “non-retail level to retailers,” making the extent to which domestic producers and importers sold mattresses through online channels unclear. *Id.* at 169-70 (Dougan). Given that domestic producers supply mattresses to many of the top online retailers, including Casper, Leesa, Purple, and Tuft & Needle, the proportion of domestic industry shipments made to online retailers in 2017 is likely higher than *** percent. See Petitioners’ Responses to Staff Questions at 6-7; Conference Tr. at 32-33 (Chrisafides), 80 (Baisburd), 149 (Dietz). In any final phase of the investigation, we intend to collect data on sales of MiBs over the internet, both direct-to-consumer at the retail level and to third party internet retailers such as Casper and Tuft & Needle at the wholesale level.

¹⁸⁴ Classic’s Postconference Brief at 8-9, 15.

¹⁸⁵ Conference Tr. at 203-04 (Dietz), 204 (Malouf); Classic’s Postconference Brief at 3 n.14; South Bay’s Postconference Declaration, para. 8.

¹⁸⁶ Conference Tr. at 67, 98 (Anderson); Petitioners’ Postconference Brief at 25; Declaration of ***, appended as Exhibit 7 to Petitioners’ Postconference Brief, at paras. 6-7 (stating that *** consistently had 20 mattresses featured among the “Amazon Best Sellers” list of the top 100 mattresses during the 2015-16 period before increased sales of low-priced subject imports through Amazon reduced *** sales dramatically and squeezed all but one of its mattresses out of the top 100, leaving only a single domestically-produced mattress (from Tuft & Needle) among the top 50).

¹⁸⁷ Petitioners’ Postconference Brief at 25; Conference Tr. at 21-22 (Dascoli), 26 (Anderson), 38 (Koltun), 66-67 (Fallen, Dascoli, Anderson). Respondents claim that subject imports do not compete with domestic producers for retailer floor spots because subject imported MiBs are displayed differently

sales of mattresses to consumers, and “omni-channel” retailers sell mattresses through brick and mortar stores and the internet.¹⁸⁸ We intend to investigate further the factors that influence mattress sales over the internet and through brick and mortar retail stores in any final phase of the investigation.

Responding domestic producers and importers reported selling the plurality of their U.S. commercial shipments in 2017 pursuant to spot sales (47.2 percent and *** percent, respectively).¹⁸⁹ The balance of responding domestic producers’ U.S. commercial shipments were made pursuant to long-term contracts (26.8 percent), annual contracts (20.1 percent), and short-term contracts (5.9 percent). The balance of responding importers’ U.S. commercial shipments were made pursuant to short-term contracts (*** percent), long-term contracts (*** percent), and annual contracts (*** percent).¹⁹⁰ Respondents argue that domestic producers of foam mattresses have long term supply relationships with other domestic producers and retailers that in their view limit competition with subject imports.¹⁹¹ Petitioners counter that *** of the nine petitioners that offer private label programs for supplying online retailers, including producers of foam mattresses, place any restrictions on new customers.¹⁹² We intend to investigate further the nature of supply relationships between mattress suppliers and their customers in any final phase of the investigation.

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.”¹⁹³

than unrolled domestically produced mattresses, and because Mattress Firm does not allocate floor spots to “value” mattresses (priced less than \$500) the same way as higher-value branded mattresses. Classic’s Postconference Brief at 47, Exhibit 31 at para. 19.

¹⁸⁸ Conference Tr. at 36 (Koltun), 61, 81-82 (Chrisafides). Respondents claim that competition between internet and brick and mortar retailers for sales of mattresses is attenuated due to the importance of reviews and the greater prevalence of foam mattresses online. Classic’s Postconference Brief at 20-21. When asked at the staff conference whether “brick and mortar retailers compete with internet retailers for business,” however, the Chief Business Officer of Classic Brands testified that “{h}aving experience on both sides, both at retail and in the wholesale space, and both with the online business, they absolutely do in some sense compete with one another.” *Id.* at 192-93 (Dietz).

¹⁸⁹ CR/PR at Table V-2.

¹⁹⁰ CR/PR at Table V-2.

¹⁹¹ Classic’s Postconference Brief at 22-23, Exhibit 9. ***. *Id.* at Exhibit 9. Petitioners claim that ***. Petitioners’ Postconference Brief at 25, Exhibit 19.

¹⁹² Petitioners’ Postconference Brief at 25, Exhibit 15.

¹⁹³ 19 U.S.C. § 1677(7)(C)(i).

We find that the volume and increase in volume of subject imports from China was significant, both absolutely and relative to apparent U.S. consumption, over the period of investigation.¹⁹⁴ Subject import volume increased from 2.3 million units in 2015 to 3.7 million units in 2016 and to 7.0 million units in 2017, a level 199.0 percent higher than in 2015.¹⁹⁵ Subject import volume was 3.1 million units in interim 2018, compared to 2.9 million units in interim 2017.¹⁹⁶ U.S. shipments of subject imports increased from 2.2 million units in 2015 to 3.5 million units in 2016 and to 6.1 million units in 2017, a level 174.7 percent higher than in 2015.¹⁹⁷ U.S. shipments of subject imports were 3.6 million units in interim 2018, compared to 2.7 million units in interim 2017. Subject imports also increased their share of apparent U.S. consumption from *** percent in 2015 to *** percent in 2016 and *** percent in 2017.¹⁹⁸ Subject import market share was *** percent in interim 2018, compared to *** percent in interim 2017.¹⁹⁹

We are unpersuaded by respondents' argument that the increase in subject import volume did not displace domestic industry shipments because the increase was to satisfy booming demand for MiBs that the domestic industry was allegedly incapable of serving.²⁰⁰ The evidence in the record demonstrates that the domestic industry has sold MiBs since 2004, supplies MiBs to most of the top internet mattress retailers, and has ample capacity to produce MiBs.²⁰¹ Respondents themselves acknowledge that the earliest online retailers of MiBs were supplied by domestic producers and that such retailers continue to be largely supplied by the domestic industry.²⁰² Within the non-innerspring mattress segment, increased subject imports captured 22.9 percentage points of market share from the domestic industry between 2015 and 2017, and another 2.9 percentage points of market share in interim 2018 compared to interim 2017.²⁰³ Moreover, the increase in subject import volume and market share during the period of investigation was not confined to non-innerspring mattresses, as subject import volume and market share also increased significantly at the domestic industry's expense in the innerspring and hybrid mattress market segments.²⁰⁴

¹⁹⁴ The ratio of subject imports to domestic industry production increased from 13.2 percent in 2015 to 20.8 percent in 2016 and 41.5 percent in 2017. CR/PR at Table IV-2. The ratio of subject imports to domestic industry production was 38.0 percent in interim 2018, compared to 33.6 percent in interim 2017. *Id.*

¹⁹⁵ CR/PR at Table IV-2.

¹⁹⁶ CR/PR at Table IV-2.

¹⁹⁷ CR/PR at Table IV-3.

¹⁹⁸ CR/PR at Table IV-8.

¹⁹⁹ CR/PR at Table IV-8.

²⁰⁰ Classic's Postconference Brief at 27; *see also* CVB's Postconference Brief at 2-3, Exhibits 1-3; South Bay's Postconference Declaration, paras. 5, 10.

²⁰¹ *See* Petitioners' Postconference Brief at 20-23; Petitioners' Responses to Staff Questions at 6-9.

²⁰² *See* Classic's Postconference Brief at 12, 14.

²⁰³ Memorandum INV-QQ-128/PR at Table IV-11.

²⁰⁴ *See* Memorandum INV-QQ-128/PR at Tables IV-9-10.

We conclude that the volume of subject imports and the increase in that volume are significant both in absolute terms and relative to consumption in the United States.²⁰⁵

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of 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.²⁰⁶

As addressed in section VI.B.3 above, the record indicates that there is a high degree of substitutability between subject imports and the domestic like product and that price is an important consideration in purchasing decisions.

Twenty domestic producers and 16 importers provided usable quarterly net U.S. f.o.b. selling price data for four mattress products, although not all firms reported pricing for all products for all quarters.²⁰⁷ Reported pricing data accounted for 28.7 percent of domestic

²⁰⁵ Contrary to respondents' claims, the facts on the record of this investigation are not similar to those in *Bottom Mount Refrigerators from Korea and Mexico*. Classic's Postconference Brief at 27 (citing *Bottom Mount Refrigerators from Korea and Mexico*, Inv. Nos. 701-TA-477 and 731-TA-1180-1181 (Final), USITC Pub. 4318 (May 2012), at 28-29); see also Chinese Respondents' Postconference Brief at 7. In *Bottom Mount Refrigerators*, USITC Pub. 4318 at 28, the Commission found that "{a}n important factor behind the domestic industry's declining market share during the period examined was Whirlpool's lack of a jumbo capacity bottom mount refrigerator model and its introduction of a four door bottom mount refrigerator only in the third quarter of 2010, two years after the introduction of subject imported four door models." Noting that jumbo capacity and four door bottom mount refrigerators accounted for most of the increase in both apparent U.S. consumption and subject imports, the Commission concluded that "{s}ubject imports increased to serve demand that the domestic industry was incapable of fully satisfying." *Id.* at 28-29. The domestic industry in this investigation, by contrast, has been selling mattresses online since 2001 and producing MiBs since 2004, supplies MiBs to many of the largest online mattress retailers, and possesses substantial capacity to produce MiBs. See Petitioners' Responses to Staff Questions at 5-9; Conference Tr. at 32-33 (Chrisafides), 78-79 (Anderson), 213 (Zippelli). In addition, the increase in subject imports was not confined to the non-innerspring mattress segment. See Memorandum INV-QQ-128/PR at Tables IV-9-10.

²⁰⁶ 19 U.S.C. § 1677(7)(C)(ii).

²⁰⁷ CR at V-9; PR at V-6 (excluding pricing data reported by related parties ***). Product 1 was defined as "Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater or equal to 6.0 inches but less than 8.0 inches." CR at V-8; PR at V-5. Product 2 was defined as "Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 8.0 inches but less than or equal to 10.0 inches." *Id.* Product 3 was defined as "Innerspring

producers' U.S. shipments of mattresses and 17.5 percent of U.S. shipments of subject imports from China.²⁰⁸

Based on these pricing data and purchase cost data discussed below, we find that subject import underselling was significant during the period of investigation.²⁰⁹ Subject imports undersold the domestic like product in 52 of 56 quarterly comparisons, or 92.9 percent of the time, at margins averaging 24.7 percent, and underselling accounted for *** percent of reported subject import sales volume (** of ** units).²¹⁰

In addition, 12 importers reported purchase cost data for all four mattress products, although not all firms reported cost data for all products for all quarters.²¹¹ Import purchase cost data reported by these firms accounted for approximately 31.2 percent of U.S. shipments of imports from China sold at the retail level to consumers.²¹² The subject import purchase costs reported by responding importers were lower than the sales prices of domestically

mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 9.0 inches but less or equal to 12.0 inches." *Id.* Product 4 was defined as "Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 9.0 inches." *Id.*

We are unpersuaded by respondents' argument that the Commission's pricing comparisons are unreliable because the pricing products for which data were collected are defined too broadly for preliminary phase purposes. See Classic's Postconference Brief at 31-32. The four pricing products are specifically defined to account for several key characteristics of mattresses, including core type, size category, and height. Furthermore, respondents' specific concerns with the pricing product definitions are misplaced. Contrary to respondents' argument that combining hybrid and innerspring mattresses in products 3 and 4 somehow advantaged petitioners, the record shows that importers shipped a far higher proportion of hybrid mattresses relative to innerspring mattresses than domestic producers, meaning that any premium commanded by hybrid mattresses would have served to reduce underselling margins. See Memorandum INV-QQ-128 at Tables IV-9-10 (showing that in 2017, the ratio of hybrid to innerspring mattress shipments was *** percent for importers and *** percent for domestic producers). Similarly unpersuasive is respondents' argument that the definitions of products 1 and 2 are overbroad because they fail to account for variations in foam density. Classic's Postconference Brief at 31. Both subject imports and domestically produced non-innerspring mattresses utilize foam in a range of densities, and there is no evidence on the record that subject imports utilize foam that is any less dense on average than the foam utilized by domestic producers. See Conference Tr. at 92-93 (Chrisafides), 93 (Anderson), 14344 (Dietz), 163 (Serven); Domestic Producers' Responses to Staff Questions at 3. Nevertheless, in any final phase of the investigations, we invite parties to provide comments on the draft questionnaires regarding the appropriate pricing product definitions on which to collect sales price data.

²⁰⁸ CR at V-9; PR at V-6.

²⁰⁹ Table V-12 (supplemental), EDIS Document No. 660541.

²¹⁰ Table V-12 (supplemental), EDIS Document No. 660541.

²¹¹ CR at V-18; PR at V-11.

²¹² CR at V-18; PR at V-11.

produced mattresses in all 56 quarterly comparisons for all *** units of subject imports reported by responding direct importers, by margins averaging 42.0 percent.²¹³

We are aware that the direct import purchase costs may not account for the total costs of importing. Consequently, the questionnaires also requested that direct importers provide additional estimated costs above landed, duty-paid value associated with their importing activities. Direct import costs were far lower than domestic producer sales prices even after taking into account the additional costs associated with the direct importation of subject merchandise, which responding importers estimated to be 14.2 percent of the landed, duty-paid value of direct imports on average.²¹⁴

Based on the high degree of substitutability between subject imports and the domestic like product and the importance of price in purchasing decisions, we find that pervasive subject import underselling caused the shift in market share from the domestic industry to subject imports during the period of investigation. As further evidence, we observe that 9 of 11 responding purchasers reduced the domestic industry's share of their purchases and increased the subject import share of their purchases between 2015 and 2017, by 2.2 to 55.9 percentage points.²¹⁵ When asked whether subject import prices were lower than domestic prices, all five responding purchasers reported yes.²¹⁶

We also consider price trends during the period of investigation. Domestic producer sales prices for product 1 declined between the first quarter of 2015 and the second quarter of 2018, but domestic producer sales prices for products 2-4 increased.²¹⁷ During the same period, importer sales prices for products 1 and 4 declined, but importer sales prices for products 2 and 3 increased.²¹⁸

We find some evidence that subject imports suppressed domestic prices during the period of investigation. The domestic industry's ratio of COGS to net sales declined from *** percent in 2015 to *** percent in 2016 and *** percent in 2017, as the industry's unit COGS remained fairly stable and the unit value of its net sales increased.²¹⁹ Over the interim period, however, the domestic industry was unable to increase its prices sufficiently to cover its

²¹³ Staff Worksheet V-1 (supplemental), EDIS Document No. 660541.

²¹⁴ CR at V-18; PR at V-11.

²¹⁵ CR/PR at Table V-13.

²¹⁶ CR/PR at Table V-14. Three of six responding purchasers reported that price was a primary reason that they purchased subject imports instead of domestically produced mattresses. *Id.* Respondents argue that the responses of these purchasers are not evidence of adverse price effects because they purchased only *** units of subject imports, equivalent to *** percent of total subject imports during the 2015-17 period. Classic's Postconference Brief at 48; CR/PR at Tables IV-2, V-14. Given the high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasing decisions, however, we attach more weight to evidence that responding purchasers found subject import prices to be lower than domestic prices, and shifted a substantial proportion of their purchases from domestic producers to subject imports during the 2015-17 period.

²¹⁷ See Tables V-3-6 (Supplemental), EDIS Document No. 660541.

²¹⁸ CR/PR at Table V-11.

²¹⁹ CR/PR at Table C-2.

increased unit COGS, despite increased demand, resulting in a higher COGS to net sales ratio in interim 2018, at *** percent, than in interim 2017, at *** percent.²²⁰ Consistent with these data, *** had to either delay or retract announced price increases due to low-priced subject import competition.^{221 *** .²²²}

We consequently find, based on the record of the preliminary phase of this investigation, that subject imports had significant adverse price effects.

E. Impact of the Subject Imports²²³

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, “shall evaluate all relevant economic factors which have a bearing on the state of the industry.” 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 debt, 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.”²²⁴

During the period of investigation, the substantial increase in apparent U.S. consumption should have resulted in strengthening domestic industry performance. Apparent U.S. consumption increased *** percent between 2015 and 2017 and was *** percent higher in interim 2018 compared to interim 2017.²²⁵ Instead, as subject imports captured *** percentage points of market share from the domestic industry between 2015 and 2017 and another *** percentage points in interim 2018 relative to interim 2017, the domestic industry’s performance declined in terms of most volume-related factors and, towards the end of the period of investigation, in terms of most financial indicators.²²⁶

The domestic industry’s capacity, production, and rate of capacity utilization declined irregularly between 2015 and 2017, and the industry’s production and rate of capacity utilization were lower in interim 2018 compared to interim 2017. Specifically, the industry’s capacity declined from *** units in 2015 to *** units in 2016 and *** units in 2017, a level *** percent lower than in 2015.²²⁷ The industry’s capacity was *** units in interim 2018, compared to *** units in interim 2017.²²⁸ The industry’s production increased from *** units in 2015 to

²²⁰ CR/PR at Table C-2.

²²¹ See Petitioners’ Responses to Staff Questions at 2-3.

²²² See Petitioners’ Responses to Staff Questions at 2-3.

²²³ Commerce initiated the investigation based on estimated antidumping duty margins of 258.74 to 1,731.75 percent for imports from China. *Mattresses from the People’s Republic of China: Initiation of Less-Than-Fair-Value Investigation*, 83 Fed. Reg. 52386, 52389 (October 17, 2018).

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

²²⁵ CR/PR at Tables IV-7, C-2.

²²⁶ CR/PR at Table C-2.

²²⁷ CR/PR at Table C-2.

²²⁸ CR/PR at Table C-2.

*** units in 2016 before declining to *** units in 2017, a level *** percent lower than in 2015.²²⁹ The industry's production was *** units in interim 2018, compared to *** units in interim 2017.²³⁰ Similarly, the industry's rate of capacity utilization increased from *** percent in 2015 to *** percent in 2016 before declining to *** percent in 2017, a level *** percentage points lower than in 2015.²³¹ The industry's rate of capacity utilization was *** percent in interim 2018, compared to *** percent in interim 2017.²³² Although the industry's employment, hours worked, and wages paid increased irregularly between 2015 and 2017, each of these measures was lower in interim 2018 compared to interim 2017.²³³

The domestic industry's declining production resulted directly from the industry's declining U.S. shipments and market share. The domestic industry's U.S. shipments increased from *** units in 2015 to *** units in 2016 before declining to *** units in 2017, a level *** percent lower than in 2015.²³⁴ The industry's U.S. shipments were *** units in interim 2018, compared to *** units in interim 2017.²³⁵ The industry's share of apparent U.S. consumption declined from *** percent in 2015 to *** percent in 2016 and to *** percent in 2017, a level *** percentage points lower than in 2015.²³⁶ The industry's share of apparent U.S. consumption was *** percent in interim 2018, compared to *** percent in interim 2017.²³⁷

The domestic industry's end-of-period inventories fluctuated over the period of investigation, increasing from *** units in 2015 to *** units in 2016 before declining to *** units in 2017, a level *** percent higher than in 2015.²³⁸ The industry's end-of-period inventories were *** units in interim 2018, compared to *** units in interim 2017.²³⁹ The industry's end-of-period inventories as a share of total shipments increased from *** percent in 2015 to *** percent in 2016 before declining to *** percent in 2017.²⁴⁰ The industry's end-of-period inventories as a share of total shipments were *** percent in interim 2018, compared to *** percent in interim 2017.²⁴¹

²²⁹ CR/PR at Table C-2.

²³⁰ CR/PR at Table C-2.

²³¹ CR/PR at Table C-2.

²³² CR/PR at Table C-2.

²³³ Between 2015 and 2017, the domestic industry's number of production related workers ("PRWs") increased by *** percent, its hours worked increased by *** percent, and its wages paid increased by *** percent. CR/PR at Table C-2. Comparing interim 2018 to interim 2017, however, the industry's number of PRWs was *** percent lower, its hours worked were *** percent lower, and its wages paid were *** percent lower. *Id.* Tempur Sealy reported that it was forced to reduce the number of its mattress production facilities operating with two shifts from 11 in 2016 to one currently as subject import competition reduced its production and sales volume. Conference Tr. at 27 (Anderson).

²³⁴ CR/PR at Table C-2.

²³⁵ CR/PR at Table C-2.

²³⁶ CR/PR at Table C-2.

²³⁷ CR/PR at Table C-2.

²³⁸ CR/PR at Table C-2.

²³⁹ CR/PR at Table C-2.

²⁴⁰ CR/PR at Table C-2.

²⁴¹ CR/PR at Table C-2.

The domestic industry's financial performance strengthened irregularly between 2015 and 2017, as domestic producers reportedly maintained their prices by sacrificing sales to low-priced subject imports, but began to decline after 2016, when most of the increase in subject import volume and market share took place.²⁴² Specifically, the industry's net sales value increased from \$*** in 2015 to \$*** in 2016 and 2017, a level *** percent higher than in 2015, and was \$*** in interim 2018, compared to \$*** in interim 2017.²⁴³ The industry's operating income increased from \$*** in 2015 to \$*** in 2016 before declining to \$*** in 2017, a level *** percent higher than in 2015, and was \$*** in interim 2018, compared to \$*** in interim 2017.²⁴⁴ Similarly, the industry's operating income margin increased from *** percent in 2015 to *** percent in 2016 but declined to *** percent in 2017, and was *** percent in interim 2018, compared to *** percent in interim 2017.²⁴⁵ The domestic industry's average operating return on assets increased from *** percent in 2015 to *** percent in 2016 before declining to *** percent in 2017.²⁴⁶

The domestic industry's capital expenditures increased irregularly during the period of investigation, while its research and development ("R&D") expenses declined.²⁴⁷ Although domestic producers increased their capital expenditures in anticipation of strong demand growth, numerous responding producers reported that the financial returns on their recent investments have been disappointing due to subject import competition.²⁴⁸ For example, *** reports that production equipment acquired during the 2015-16 period in anticipation of increased sales remained idle after *** sales through Amazon were dramatically reduced by increased sales of low-priced subject imports.²⁴⁹ *** claims that subject import competition substantially extended the payback period for its investments in automation by reducing *** sales of the higher-priced mattresses that were to benefit from the automation.²⁵⁰

²⁴² See Petitioners' Postconference Brief at 40; CR/PR at Tables IV-2, 8.

²⁴³ CR/PR at Table C-2.

²⁴⁴ CR/PR at Table C-2.

²⁴⁵ CR/PR at Table C-2. The domestic industry's gross profit and net income exhibited similar declining trends. The industry's gross profit increased from \$*** in 2015 to \$*** in 2016 and 2017, and was \$*** in interim 2018, compared to \$*** in interim 2017. *Id.* The industry's net income increased from \$*** in 2015 to \$*** in 2016 but declined to \$*** in 2017 and was \$*** in interim 2018, compared to \$*** in interim 2017. *Id.* The industry's cash flow increased from \$*** in 2015 to \$*** in 2016 but declined to \$*** in 2017, and was \$*** in interim 2018, compared to \$***. EDIS Document No. 660927. Nineteen responding domestic producers reported that subject imports had negative effects on their investment and eighteen responding domestic producers reported that subject imports had negative effects on their growth and development. *Id.* at Table D-1.

²⁴⁶ EDIS Document No. 660927.

²⁴⁷ EDIS Document No. 660927. The domestic industry's capital expenditures declined slightly from \$*** in 2015 to \$*** in 2016 but increased to \$*** in 2017 and were \$*** in interim 2018, compared to \$*** in interim 2017. *Id.* The industry's R&D expenses declined from \$*** in 2015 to \$*** in 2016 and to \$*** in 2017, and were \$*** in interim 2018, compared to \$*** in interim 2017. *Id.*

²⁴⁸ See CR/PR at Table D-2; see also Petitioners' Postconference Brief at 17.

²⁴⁹ Declaration of ***, appended as Exhibit 7 to Petitioners' Postconference Brief, at paras. 5-6.

²⁵⁰ Petitioners' Responses to Staff Questions at 4.

The record of the preliminary phase investigations indicates that there is a causal nexus between subject imports and the domestic industry's declining performance during the period of investigation. Subject import volume and market share increased significantly during the period at the direct expense of the domestic industry. Low-priced subject import competition caused the shift in market share from the domestic industry to subject imports and suppressed prices for the domestic like product to some degree. Absent the significant increase in subject import volume and market share, the domestic industry's performance during the period of investigation would have been far stronger.

We are unpersuaded by respondents' argument that domestic producers are somehow insulated from subject import competition by the large proportion of subject imports consisting of MiBs sold over the internet, as respondents argue. Specifically, respondents claim that the largest domestic producers refused to participate in the online and direct-to-consumer MiB markets until recently, with Tempur Sealy entering the market with the Cocoon brand in April 2016 and Serta Simmons entering the market with the Tomorrow Sleep brand in June 2017 and merging with Tuft & Needle in September 2018.²⁵¹ In their view, the belated entry of these producers into the online, direct-to-consumer market, as well as the allegedly inferior quality, service, and capabilities of the domestic industry, has attenuated competition between subject imports and domestically produced mattresses.²⁵² Whereas most subject imports are non-innerspring MiBs sold online, they claim, most domestically produced mattresses are innerspring mattresses sold unrolled through brick and mortar retailers.²⁵³

Petitioners, however, point out that domestic producers actually invented MiBs and pioneered their sale over the internet as suppliers to innovative online retailers such as Casper, Tuft & Needle, and Leesa.²⁵⁴ According to ***, domestic producers helped him launch his company with no minimum order requirements, generous credit terms, free consultations, sample materials, and prototypes.²⁵⁵ *** petitioners offer private label programs for supplying online retailers, *** with restrictions on new customers, and *** petitioners supply MiBs to ***

²⁵¹ Classic's Postconference Brief at 16-17.

²⁵² Classic's Postconference Brief at 18. Both CVB and South Bay claim that domestic producers have been incapable of satisfying their requirements for foam mattresses. Specifically, CVB claims that its efforts to source foam mattresses domestically from *** were frustrated due to serious quality and service issues that damaged its reputation and caused financial losses. CVB's Postconference Brief at 2-3, Exhibits 1-3. ***. Petitioners' Responses to Staff Questions at 1. In a postconference declaration, the chief of operations of South Bay states that no domestic producer has the ability to produce the unique, innovative foam mattress products that it requires. South Bay's Postconference Declaration, paras. 5, 10.

²⁵³ Classic's Postconference Brief at 18; Conference Tr. at 15, 17 (McLain).

²⁵⁴ Petitioners' Postconference Brief at 24; Petitioners Responses to Staff Questions at 8 (claiming that four domestic producers began selling MiBs online prior to 2010, including Innocor in 2005, Kolcraft in 2001, Serta Simmons in 2006, and Tempur Sealy in 2004).

²⁵⁵ Petitioners' Postconference Brief at 24-25; Declaration of ***, appended as Exhibit 6 to Petitioners' Postconference Brief, at paras. 3-8.

online retailers.²⁵⁶ In petitioners' view, respondents' claim that online retailers have little choice but to source MiBs from China has no merit.²⁵⁷

Based on the record of the preliminary phase of the investigation, we find that increased sales of non-innerspring MiBs over the internet have not been the result of attenuated competition between subject imports and domestically produced mattresses. To the contrary, the record shows that subject imports substantially increased their penetration of all segments of the U.S. market, including the innerspring, non-innerspring, and hybrid mattress segments, at the domestic industry's expense. Between 2015 and 2017, subject imports captured *** percentage points of market share from the domestic industry in the innerspring mattress segment, *** percentage points of market share from the domestic industry in the hybrid mattress segment, and *** percentage points of market share from the domestic industry in the non-innerspring segment.²⁵⁸ Subject imports captured additional market share from the domestic industry in interim 2018, compared to interim 2017, in all three segments.²⁵⁹ Subject imports also competed with the domestic industry in all channels of distribution, including internet channels, with the largest proportion of both importer and domestic producer shipments made to retailers at the wholesale level.²⁶⁰

The record also shows that domestic producers competed with subject imports for sales of MiBs over the internet. Indeed, the domestic industry possessed a greater share of the non-innerspring mattress market than subject imports throughout most of the period of investigation, with the exception of 2017.²⁶¹ Far from resisting the trend toward MiBs, domestic producers have supplied MiBs for sale over the internet from the inception of such sales and continue to supply many of the top online mattress retailers, including Casper, Tuft & Needle, and Leesa, as respondents acknowledge.²⁶² ***, Elite, and Tempur Sealy reported losing internet sales of MiBs to low-priced subject imports, and internet retailers *** shifted a substantial share of their purchases from domestic producers to subject imports between 2015 and 2017.²⁶³

Nor do domestic producers lack the capacity to serve demand for MiBs. According to petitioners, domestic producers possess at least *** roll packing machines with the overall capacity to produce *** units of MiBs annually.²⁶⁴ Moreover, the four petitioners that specialize in non-innerspring mattresses, Future Foam, FXI, Innocor, and Elite, suffered a decline in their aggregate rate of capacity utilization from *** percent in 2015 to *** percent in

²⁵⁶ Petitioners' Postconference Brief at 25, Exhibit 15; Declaration of ***, appended as Exhibit 6 to Petitioners' Postconference Brief, at para. 9.

²⁵⁷ See Petitioners' Postconference Brief at 41-42.

²⁵⁸ Memorandum INV-QQ-128 at Tables IV-9-11; PR at Tables IV-9-11.

²⁵⁹ Memorandum INV-QQ-128 at Tables IV-9-11; PR at Tables IV-9-11.

²⁶⁰ CR/PR at Table II-1.

²⁶¹ Memorandum INV-QQ-128/PR at Table IV-11.

²⁶² Classic's Postconference Brief at 8, 11-12, 14; Petitioners' Postconference Brief at 22-23; see also Petitioners' Responses to Staff Questions at 6-7, 8-9.

²⁶³ See Conference Tr. at 36-37 (Chrisafides), 25-26, 67 (Anderson); Declaration of ***, appended as Exhibit 7 to Petitioners' Postconference Brief, at paras. 6-7; CR/PR at Table V-13.

²⁶⁴ Petitioners' Responses to Staff Questions at 7-9.

2017, even as apparent U.S. consumption of non-innerspring mattresses increased *** percent.²⁶⁵ Thus, the domestic industry's ability to satisfy demand for non-innerspring mattresses was limited more by the industry's loss of market share to subject imports than by any lack of capacity.

We have also considered whether there are other factors that may have had an adverse impact on the domestic industry during the period of investigation to ensure that we are not attributing injury from such other factors to the subject imports. Neither demand trends nor nonsubject imports explain the industry's declining performance. Apparent U.S. consumption increased *** percent between 2015 and 2017 and was *** percent higher in interim 2018 than in interim 2017.²⁶⁶ Nonsubject imports were not a significant factor in the U.S. market during the period of investigation, accounting for no more than *** percent of apparent U.S. consumption during the period.²⁶⁷

We also find that Mattress Firm's difficulties during the period of investigation, culminating in its bankruptcy in October 2018, do not break the causal nexus between subject imports and material injury to the domestic industry.²⁶⁸ Claiming that Mattress Firm accounted for one-third of all mattress purchases in the U.S. market, respondents argue that the domestic industry's declining performance after 2016 resulted from Tempur Sealy's termination of its master retailer agreement with Mattress Firm in April 2017 and Mattress Firm's ineffective marketing and impending bankruptcy.²⁶⁹ Contrary to respondents' argument, however, Tempur Sealy's termination of its master retailer agreement with Mattress Firm would not have reduced the domestic industry's sales to Mattress Firm because Serta Simmons replaced Tempur Sealy as Mattress Firm's primary mattress supplier in February 2017.²⁷⁰ Furthermore, Mattress Firm plans to continue paying vendors during its bankruptcy and to emerge from bankruptcy quickly, after shedding unprofitable stores.²⁷¹ Serta Simmons expects Mattress Firm to emerge from bankruptcy as a stronger company, with no reduction in mattress demand.²⁷² In any event, the financial impact of Mattress Firm's bankruptcy on the domestic industry is unknown because the bankruptcy filing occurred after the end of the period of investigation. We intend to investigate further the impact of Mattress Firm's difficulties on the domestic industry in any final phase of the investigation.

²⁶⁵ Domestic Producers' Questionnaire Responses of Elite, Future Foam, FXI, and Innocor at Question II-7; Memorandum INV-QQ-128/PR at Table IV-11. We recognize that the aggregate capacity utilization rate of these producers was *** percent in interim 2018, compared to *** percent in interim 2017. Domestic Producers' Questionnaire Responses of Elite, Future Foam, FXI, and Innocor at Question II-7. Nevertheless, the producers continued to possess *** unused capacity even though apparent U.S. consumption was *** percent higher in interim 2018 than in interim 2017. Memorandum INV-QQ-128; PR at Table IV-11.

²⁶⁶ CR/PR at Tables IV-7, C-2.

²⁶⁷ CR/PR at Table IV-8.

²⁶⁸ CR at II-15; PR at II-12.

²⁶⁹ Classic's Postconference Brief at 45-46; Conference Tr. at 172-75 (Dougan).

²⁷⁰ Petitioners' Responses to Staff Questions at 5.

²⁷¹ Petitioners' Responses to Staff Questions at 10.

²⁷² Conference Tr. at 90-91 (Anderson).

In sum, based on the record of the preliminary phase of the investigation, we conclude that subject imports had a significant adverse impact on the domestic industry.

VII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of mattresses from China that are allegedly sold in the United States at less than fair value.

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 Corsicana Mattress Company, Dallas, Texas; Elite Comfort Solutions, Newnan, Georgia; Future Foam Inc., Council Bluffs, Iowa; FXI, Inc., Media, Pennsylvania; Innocor, Inc., Red Bank, New Jersey; Kolcraft Enterprises Inc., Chicago, Illinois; Leggett & Platt, Incorporated, Carthage, Missouri; Serta Simmons Bedding, LLC, Atlanta, Georgia; and Tempur Sealy International, Inc., Lexington, Kentucky, on September 18, 2018, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value (“LTFV”) imports of mattresses¹ from China. The following tabulation provides information relating to the background of these investigations.^{2 3}

Effective date	Action
September 18, 2018	Petition filed with Commerce and the Commission; institution of Commission investigation (83 FR 48332, September 24, 2018)
October 9, 2018	Commission’s conference
October 9, 2018	Commerce’s notice of initiation (83 FR 52386, October 17, 2018)
November 1, 2018	Commission’s vote
November 2, 2018	Commission’s determination
November 9, 2018	Commission’s views

¹ 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 appearing at the conference is presented in appendix B of this report.

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

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

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

MARKET SUMMARY

Mattresses are generally is used by people for sleeping. The leading U.S. producer of mattresses is ***, while the leading producer of mattresses outside the United States is *** of China. The leading U.S. importer of mattresses from China is ***. The leading importer of mattresses from Mexico is ***. The Commission received 11 usable Lost Sales/Lost Revenue survey responses from firms that had purchased mattresses during the period of investigation, which is 2015-17 and January-June of 2017 and 2018.⁶ In general, the responding U.S.

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

⁶ Of the 11 responding purchasers, all 11 firms purchased from domestic sources and all 11 purchased and/or imported subject product from China. Five of the 11 firms purchased mattresses from firms that served as the importer of record for subject merchandise from China, while the other 5 firms – in addition to 3 of the firms that purchased from importers – also imported subject merchandise directly. One firm, ***, purchased imports from nonsubject sources, while another, ***, purchased

(continued...)

purchasers were located in all regions of the contiguous United States. The largest responding purchasers/importers of mattresses in 2017 were ***, and ***.

Apparent U.S. consumption of mattresses totaled approximately *** in 2017. Currently, 63 firms are known to produce mattresses in the United States. U.S. producers' U.S. shipments of mattresses totaled 16.8 million mattresses (\$4.5 billion) in 2017, and accounted for *** of apparent U.S. consumption by quantity and *** by value. U.S. shipments of imports from subject sources totaled 6 million mattresses (\$781 million) in 2017 and accounted for *** of apparent U.S. consumption by quantity and *** by value. U.S. shipments of imports from nonsubject sources totaled *** in 2017 and accounted for *** of apparent U.S. consumption in both quantity and value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in this investigation is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of 39 firms that accounted for 71.6 percent of U.S. production of mattresses during 2017.⁷ U.S. imports are also based on questionnaire responses of 39 firms that accounted for at least 77.1 percent of total U.S. imports from China in 2017, including products not subject to this investigation, according to data submitted in response to Commission questionnaires and official import statistics.⁸

PREVIOUS AND RELATED INVESTIGATIONS

Mattresses, as defined in this investigation, have been the subject of no prior antidumping duty investigation, but there have been three investigations of a related product in the United States. Commenced in 2008, antidumping investigations regarding uncovered innerspring units from China, South Africa, and Vietnam resulted in affirmative determinations and the imposition of antidumping orders. Table I-1 presents data on these previous related investigations.

(...continued)

imports from unknown sources. None of the responding purchasers imported from nonsubject sources during 2015-17.

⁷ ***.

⁸ The statistic of U.S. importers' responses representing 77.1 percent of U.S. imports from China was calculated using HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, 9404.29.9087, 9404.29.9095, 9404.21.0095, and 9404.29.1095, which include products not subject to this investigation, according to data submitted in response to Commission questionnaires and official import statistics. Questionnaire responses represent 150.9 percent of U.S. imports from China in 2017 under HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, which are the primary HTS statistical reporting numbers for subject products.

Table I-1
CISP fittings: Previous and related investigations, 1972 to 2003

Product	Inv. No.	Year	Country	Original determination
Uncovered Innerspring Units ¹	731-TA-1140	2008	China	Affirmative
Uncovered Innerspring Units ²	731-TA-1141	2008	South Africa	Affirmative
Uncovered Innerspring Units ³	731-TA-1142	2008	Vietnam	Affirmative

¹ *Uncovered Innerspring Units from China, Inv. Nos. 731-TA-1140 (Final)*, USITC Publication 4061, February 2009.

^{2,3} *Uncovered Innerspring Units from South Africa and Vietnam, Inv. Nos. 731-TA-1141-1142 (Final)*, USITC Publication 4051, December 2008.

NATURE AND EXTENT OF ALLEGED SALES AT LTFV

Alleged sales at LTFV

On October 17, 2018, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation of mattresses from China.⁹ Commerce has initiated the antidumping duty investigation based on estimated dumping margins of 258.74 to 1,731.75 percent for mattresses from China.

THE SUBJECT MERCHANDISE

Commerce's scope

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

The scope of this investigation covers all types of youth and adult mattresses. The term "mattress" denotes an assembly of materials that at a minimum includes a "core," which provides the main support system of the mattress, and may consist of innersprings, foam, other resilient filling, or a combination of these materials. Mattresses may also contain (1) "upholstery," the material between the core and the top panel of the ticking on a single-sided mattress, or between the core and the top and bottom panel of the ticking on a double-sided mattress; and/or (2) "ticking," the outermost layer of fabric or other material (e.g., vinyl) that encloses the core and any upholstery, also known as a cover.

⁹ *Mattresses From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*, 83 FR 52386, October 17, 2018.

The scope of this investigation is restricted to only “adult mattresses” and “youth mattresses.” “Adult mattresses” have a width exceeding 35 inches, a length exceeding 72 inches, and a depth exceeding 3 inches on a nominal basis. Such mattresses are frequently described as “twin,” “extra-long twin,” “full,” “queen,” “king,” or “California king” mattresses. “Youth mattresses” have a width exceeding 27 inches, a length exceeding 51 inches, and a depth exceeding 1 inch (crib mattresses have a depth of 6 inches or less from edge to edge) on a nominal basis. Such mattresses are typically described as “crib,” “toddler,” or “youth” mattresses. All adult and youth mattresses are included regardless of actual size description.

The scope encompasses all types of “innerspring mattresses,” “non-innerspring mattresses,” and “hybrid mattresses.” “Innerspring mattresses” contain innersprings, a series of metal springs joined together in sizes that correspond to the dimensions of mattresses. Mattresses that contain innersprings are referred to as “innerspring mattresses” or “hybrid mattresses.” “Hybrid mattresses” contain two or more support systems as the core, such as layers of both memory foam and innerspring units.

“Non-innerspring mattresses” are those that do not contain any innerspring units. They are generally produced from foams (e.g., polyurethane, memory (viscoelastic), latex foam, gel-infused viscoelastic (gel foam), thermobonded polyester, polyethylene) or other resilient filling.

Mattresses covered by the scope of this investigation may be imported independently, as part of furniture or furniture mechanisms (e.g., convertible sofa bed mattresses, sofa bed mattresses imported with sofa bed mechanisms, corner group mattresses, day-bed mattresses, roll-away bed mattresses, high risers, trundle bed mattresses, crib mattresses), or as part of a set in combination with a “mattress foundation.” “Mattress foundations” are any base or support for a mattress. Mattress foundations are commonly referred to as “foundations,” “boxsprings,” “platforms,” and/or “bases.” Bases can be static, foldable, or adjustable. Only the mattress is covered by the scope if imported as part of furniture, with furniture mechanisms, or as part of a set in combination with a mattress foundation.

Excluded from the scope of this investigation are “futon” mattresses. A “futon” is a bi-fold frame made of wood, metal, or plastic material, or any combination thereof, that functions as both seating furniture (such as a couch, love seat, or sofa) and a bed. A “futon mattress” is a tufted mattress, where the top covering is secured to the bottom with thread

that goes completely through the mattress from the top through to the bottom, and it does not contain innersprings or foam. A futon mattress is both the bed and seating surface for the futon.

Also excluded from the scope are airbeds (including inflatable mattresses) and waterbeds, which consist of air- or liquid-filled bladders as the core or main support system of the mattress.

*Further, also excluded from the scope of this investigation are any products covered by the existing antidumping duty order on uncovered innerspring units. See *Uncovered Innerspring Units from the People's Republic of China: Notice of Antidumping Duty Order*, 74 FR 7661 (February 19, 2009).*

The products subject to this investigation are currently properly classifiable under Harmonized Tariff Schedule for the United States (HTSUS) subheadings: 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087. Products subject to this investigation may also enter under HTSUS subheadings: 9404.21.0095, 9404.29.1095, 9404.29.9095, 9401.40.0000, and 9401.90.5081. Although the HTSUS subheadings are provided for convenience and Customs purposes, the written description of the merchandise subject to this investigation is dispositive.¹⁰

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to this investigation is imported under statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087 of the Harmonized Tariff Schedule of the United States ("HTS"). Products subject to this investigation may also be reported under HTS statistical reporting numbers 9404.21.0095, 9404.29.1095, 9404.29.9095, 9401.40.0000, and 9401.90.5081. The 2018 general rate of duty is 3 percent ad valorem for HTS subheadings 9404.21.00 and 9404.29.10 and 6 percent ad valorem for HTS subheading 9404.29.90. Subheadings 9404.21.00, 9404.29.10, and 9404.29.90 are included on a list of subheadings for which additional duties of 10 percent ad valorem have been imposed with respect to products of China, according to a notice issued by the United States Trade Representative and effective

¹⁰ *Mattresses From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*, 83 FR 52386, October 17, 2018.

on September 24, 2018.¹¹ On January 1, 2019, the rate of additional duty will increase to 25 percent ad valorem. The additional duties are required to be imposed in addition to the regular general duty rates specified above and any antidumping duties being collected. 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 applications¹²

In the industry, the term “mattress” generally means a resilient material or combination of materials generally enclosed by ticking that is intended or promoted for sleeping upon by people. Mattresses generally consist of (1) a core, (2) upholstery material, and (3) ticking. The core provides the main support system of the mattress. The core may consist of innersprings, non-innersprings (e.g., foam), an air or water bladder,¹³ other resilient filling, or a combination of these materials. “Upholstery” refers to the material between the core and the ticking. “Ticking” refers to the cover or the outermost layer of fabric or other material that encloses the core and any upholstery material.

A mattress may be used alone or in combination with other products, such as foundations commonly referred to as box springs, platforms, bases, and/or cribs. Mattresses may be sold independently, as part of furniture (examples are convertible sofa bed mattresses, corner group mattresses, day-bed mattresses, roll-away bed mattresses, high risers, and trundle bed mattresses), or as part of a set in combination with a mattress foundation.

“Adult mattresses” and “youth mattresses” are covered by the scope of this petition, regardless of actual size. Youth mattresses are generally grouped together in size descriptions that include “crib,” “toddler,” or “youth.”

Mattresses are covered by the scope of this petition even if imported without ticking, such as foam mattresses that are imported without ticking (i.e., the outermost cover). Products covered by this petition include mattresses packed and sold to end users in boxes, such as those marketed as “bed(s)-in-a-box,” “mattress(es)-in-a-box,” and/or “compressed mattress(es).”

Manufacturing processes¹⁴

The manufacturing process for all types of mattresses is similar in that it consists of the assembly of components into finished mattresses that are ready for use by the ultimate purchaser.

¹¹ *Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 47974, September 17, 2018.

¹² Unless otherwise noted, information is based on details provided in the petition.

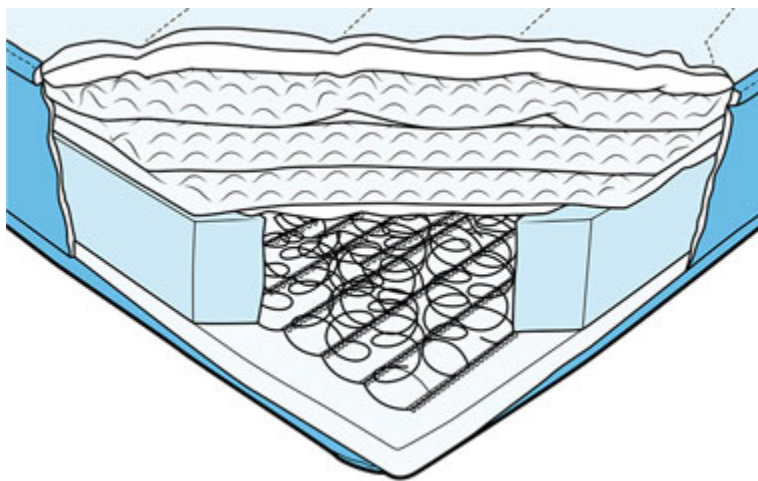
¹³ Airbeds and waterbeds are excluded from the scope of the petition.

¹⁴ Unless otherwise noted, information is based on details provided in the petition.

Innerspring and hybrid mattresses are assembled from various components that differ based on the particular mattress design. Components generally consist of the core (innerspring units, foam (e.g., polyurethane, memory (viscoelastic), latex, or gel), or other resilient fillings or a combination of the same) and the upholstery materials.

For both innerspring and hybrid mattresses, the innerspring unit may be produced internally or purchased from a supplier. Depending on the particular design, layers of fabric, upholstery, and/or foam are assembled around the core unit as operators “build-up” the mattress on an assembly table or production line. Separately, sewers run quilting machines that produce the ticking (also known as a “cover”), which may include a backing material.¹⁵ In some instances, the cover is cut into panels for the top, bottom, and sides (also referred to as “borders”) on a panel cutting machine. A flange is sewn to the edge of the cover piece(s) and can be attached using a “hog ring” to the innerspring unit to prevent the cover and filling material from shifting once the border is attached and the mattress is sewn shut. A “tape,” which is a fabric that covers the edge where the top and bottom panels are joined to the border panel, is then sewn around the top and bottom edges of the mattress. In other instances, a simple “zippered” cover is used, which does not require a flange, hog ring, or tape. Both innerspring and hybrid mattresses may be shipped compressed or uncompressed.

Figure I-1
Mattresses: Innerspring mattress construction



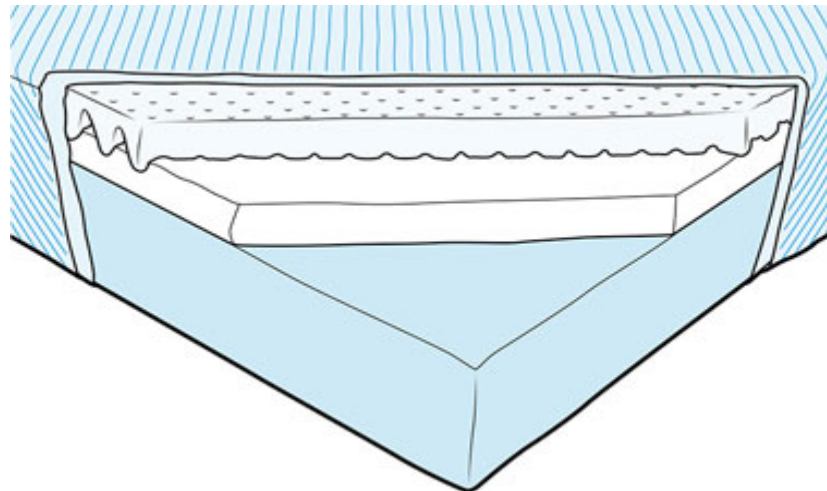
Source: *Mattress Buying Guide: How to Choose the Right Mattress*, Consumer Reports (March 2018), <https://www.consumerreports.org/cro/mattresses/buying-guide/index.htm>, retrieved October 18, 2018.

For foam mattresses, the manufacturing process begins with foam production. Foam mattress manufacturers may be vertically integrated (producing both the foam and foam mattress themselves) or they may purchase foam from unaffiliated foam suppliers. The precursor chemicals are combined based on the specific formulation for the type of foam. For

¹⁵ The borders, or vertical sides of the mattress, may be constructed on separate border machines that combine ticking, a backing material, foam and/or other upholstery.

example, polyurethane foam is generally comprised of a polyol (complex alcohol) and isocyanate that are kept in separate storage tanks. These materials are mixed with catalysts and a surfactant and heated, which then begins a reaction to form a polyurethane polymer that is combined with carbon dioxide and sprayed or “poured” onto a plastic covered conveyor belt. The reaction generates carbon dioxide gas that causes the material to expand as it moves down the conveyor belt. Once the foam has fully expanded and partially cured, it is cut into large blocks which are allowed to fully cure for up to 72 hours. After product properties are tested and confirmed to meet specifications, the cured blocks are then cut into trimmed rectangular sheets (or plates) of various thicknesses that correspond to finished mattress sizes. The foam mattress may consist of a single slab of foam or multiple layers (plates) that have been bound together. The foam mattress may then be encased in a fabric “sock” and inserted into the cover (i.e., the ticking). The final step is packaging. As with innerspring and hybrid mattresses, foam mattresses may be shipped compressed or uncompressed.

Figure I-2
Mattresses: Foam mattress construction



Source: *Mattress Buying Guide: How to Choose the Right Mattress*, Consumer Reports (March 2018), <https://www.consumerreports.org/cro/mattresses/buying-guide/index.htm>, retrieved October 18, 2018.

The manufacturing process for youth mattresses is similar to adult mattresses but can vary by not using flange material to attach the panels to the innerspring. The covers can be pre-sewn with only one open end, and the core and upholstery materials inserted into the cover with the aid of a stuffing machine. The cover opening is then sewn shut (instead of stitching around the entire perimeter of the mattress). Youth mattresses can use vinyl material in addition to cloth materials as the ticking as a barrier to wetness.

DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to domestic like product have been raised in this investigation. Petitioners propose a single domestic like product consisting of mattresses covered by the scope. These mattresses are “intended or promoted for sleeping on,” and are typically produced to similar lengths and widths corresponding to industry size descriptions.¹⁶ Respondents agree with the domestic like product definition for the purposes of the preliminary investigation.¹⁷ No other issues with respect to domestic like product have been raised in this investigation.

¹⁶ Petition, p. 14.

¹⁷ Conference transcript, pp. 219-220 (McClain).

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

U.S. MARKET CHARACTERISTICS

Mattresses are typically sold in the United States in standard sizes, such as king, queen, twin, double, full, or youth (crib), and come in a variety of thicknesses. They can be of the innerspring variety, foam only (i.e., non-innerspring, including standard polyurethane, viscoelastic (“memory foam”), or latex), or a hybrid consisting of innersprings and foam. Most innerspring mattresses also contain some foam.¹ Most mattresses in the United States are sold individually or as part of a set including a mattress foundation/box spring, but can also be sold as part of a sofa sleeper/sofa bed, roll-away bed, or for specialty markets such as recreational vehicles. In recent years, including since 2015, the mattress market has seen an increase in the popularity of mattresses sold via e-commerce and the type of product typically shipped via this method, foam mattresses. U.S. producers sell the large majority of their product to brick and mortar and online retailers, which then sell them to consumers, while importers sell most mattresses imported from China either directly in their own brick and mortar stores, via the internet directly to consumers, or to third party retailers for sale over the internet.

Apparent U.S. consumption of mattresses increased during January 2015-June 2018. Overall, apparent U.S. consumption in 2017 was 16.3 percent higher than in 2015, and it was 5.0 percent higher during January-June 2018 than January-June 2017.

CHANNELS OF DISTRIBUTION

As shown in table II-1, the vast majority of U.S.-produced mattresses are initially sold at the non-retail level, mostly to retailers (both brick and mortar and online), with a smaller percentage shipped directly to consumers (either via brick and mortar operations or direct to consumers via the internet). Importers of Chinese mattresses sold a larger and increasing portion of their product directly through their brick and mortar stores, direct to consumers via the internet, or to third parties for sale to consumers via the internet during 2015-17.²

¹ Conference transcript, pp. 34 (Christafides) and 43 (Swanson).

² At the staff conference, petitioners and respondents both testified that the mattress market was characterized by “omni-channels,” wherein suppliers ship to distributors, retailers/wholesalers, and U.S. producers, importers, and retailers also sell product through brick and mortar operations and/or direct to consumers via e-commerce. Conference transcript, pp. 61 (Christafides), 62 (Fallen, Anderson), 63 (Baisburd), and 144 and 193 (Dietz).

Both petitioners and respondents also agree that the data on channels of distribution, as collected and presented in this preliminary phase investigation, are not appropriately segregated to explain the true nature of competition in this industry. Respondents contend that the channels as defined “do not allow the Commission to get a clear picture of where there might be any meaningful competitive overlap.” Conference transcript, pp. 169-170 (Dougan). See also Chinese respondents’ postconference brief, Appendix A, Response to Commission Staff’s Questions, p. 8. Petitioners concur that “the channels of distribution should be refined... to reflect conditions of competition in this industry.” Petitioners’ postconference brief, p. 23.

Table II-1

Mattresses: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2015-17, January-June 2017, and January-June 2018

* * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling mattresses to all regions in the contiguous United States, with no notable geographic specialization by source (table II-2). For U.S. producers, 37.5 percent of sales were within 100 miles of their production facility, 58.1 percent were between 101 and 1,000 miles, and 4.5 percent were over 1,000 miles. Importers sold 34.3 percent within 100 miles of their U.S. point of shipment, 45.3 percent between 101 and 1,000 miles, and 20.3 percent over 1,000 miles.

Table II-2

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

Region	U.S. producers	Importers
Northeast	22	30
Midwest	28	31
Southeast	22	31
Central Southwest	23	30
Mountain	27	29
Pacific Coast	23	32
Other ¹	17	22
All regions (except Other)	19	28
Reporting firms	37	35

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

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Table II-3 provides a summary of the supply factors regarding mattresses from U.S. producers and from subject countries.

Table II-3

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

Country	Capacity (mattresses)		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	21,750,042	21,435,028	81.1	78.2	1.8	1.9	99.5	0.5	8 of 39
China	***	***	***	***	***	***	***	***	0 of 0 ¹

Note.--Responding U.S. producers accounted for more than half of U.S. production of mattresses in 2017.

Responding foreign producer/exporter firms also accounted for more than half of U.S. imports of mattresses from China during 2017. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

¹ Despite not directly reporting any ability to shift to alternate products using the same equipment and/or labor, 7 of the 11 responding Chinese producers reported producing out-of-scope merchandise using the same production as that to produce mattresses during 2015-17.

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

Domestic production

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

U.S. producers' overall capacity declined slightly (by 1.4 percent) from 2015 to 2017, while total production decreased by 5.0 percent, leading to a decrease in capacity utilization of 2.9 percentage points between 2015 and 2017. Compared to the first half of 2017, overall capacity was 4.5 higher, while total production was 3.9 percent lower in the first half of 2018. U.S. producers' inventories as a ratio to total shipments was between 1.8 percent (2015) and 2.2 percent (2016) during 2015-17, and their exports as a share of total shipments was very low – between 0.5 percent (2015 and 2016) and 0.7 percent (2017). Eight of the 40 responding U.S. producers reported being able to produce other products using the same equipment and/or labor as they use to produce mattresses, including washable mattress pads, mattress toppers, mattress foundations/box springs, pillows, and foam filler for furniture or rolls.³

³ Overall, production of out-of-scope products represented between 4.7 percent (2017) and 5.3 percent (2016) of the total share of production.

Subject imports from China

Based on available information, producers of mattresses in China have the ability to respond to changes in demand with large changes in the quantity of shipments of mattresses to the U.S. market. The main contributing factors to this degree of responsiveness are the availability of unused capacity, increasing overall capacity, and the ability to shift shipments from alternate markets. One factor that may potentially mitigate Chinese producers' responsiveness of supply is the limited (albeit increasing) availability of inventories.

Chinese producers' overall capacity increased by 50 percent between 2015 and 2017, and their overall production increased by 129 percent. Chinese producers' end-of-period inventories also increased by 160 percent between 2015 and 2017, though the ratio of inventories to total shipments remained relatively small during this time – between 2.9 percent (2015) and 3.8 percent (2016) – due to a large increase in total shipments. While no Chinese producers reported being able to produce other products using the same equipment and/or labor, reported out-of-scope production on the same equipment as mattresses decreased from 72.0 percent to 56.8 percent of total production during 2015-17. Conversely, Chinese producers' in-scope mattress production increased from 28.0 percent of total production in 2015 to 43.2 percent in 2017.

Imports from nonsubject sources

*** importers reported nonsubject import sources: *** reported importing mattresses from ***. According to questionnaire responses, nonsubject imports accounted for a very small percentage (between *** percent (2017) and *** percent (2015)) of imports during 2015-17.

Supply constraints

Relatively few firms (1 of 37 U.S. producers and 3 of 37 importers) reported experiencing any supply constraints since January 2015. Among the firms that did report supply constraints, *** stated that it sometimes receives purchase order requests that exceed supply at its U.S. facilities (and would require 8-9 week lead time to obtain more product), and *** reported experiencing occasional "stock outs" due to strong demand.

U.S. demand

Based on available information, the overall demand for mattresses is likely to experience small changes in response to changes in price. The main contributing factor to this degree of responsiveness is the limited range of acceptable substitutes.

End use applications and cost shares

U.S. producers and importers were asked about end-use products or applications for mattresses not sold independently (i.e., sold in combination with other items, such as a mattress foundation, sofa bed, or furniture set), as well as the percent of the total cost of that

end-use product or application that is made up of the mattress. For mattress and pillow sets, the estimated cost share of the mattress was 90 percent. For mattresses sold in combination with a foundation or box spring, cost share estimates for the mattress ranged from 60 to 80 percent. For sofa sleepers/sofa beds, the estimated cost share of the mattress was 20-50 percent. For roll-away beds, the estimated cost share of the mattress was 48 percent. For mattresses sold with adjustable bases, the estimated cost share of the mattress was 40 percent. For “upholstery sleepers,” the estimated cost share of the mattress was 15 percent. For mattresses used in RVs, the total cost share of the mattress was estimated to be 5 percent.

Business cycles and conditions of competition

Sixteen of 37 responding U.S. producers and 15 of 37 responding importers reported that the mattress market was subject to business cycles, while 6 of 37 U.S. producers and 3 of 37 importers reported that the mattress market was subject to distinct conditions of competition. Most firms reporting the presence of business cycles reported that sales are strongest during tax season, Black Friday, and federal holidays (such as Memorial Day, Labor Day, President’s Day, and Independence Day), when retailers often have sales and promotional events. Several firms reported increased sales during the summer and during back-to-school time. Some firms also stated that November-December is the busiest time of the year for online sales due to holiday shopping, while others reported that these are their slowest months of the year.

Among the firms reporting that the mattress market was subject to distinct conditions of competition, nearly all of them highlighted the growth of bed-in-a-box/direct to consumer sales via e-commerce. Sixteen of 26 U.S. producers and 9 of 19 importers also reported changes to business cycles or conditions of competition since January 2015, with most of them citing an increase in bed-in-a-box/direct to consumer sales. *** also stated that the increase in mattress sales over the internet has reduced the life cycle of a mattress from 10 years to 8 years.⁴

Product changes

U.S. producers and importers were also asked whether the mattress industry had experienced any significant changes in the following areas since 2015: direct to consumer/internet sales, branding, private label programs, floor slots, and locations on e-commerce sites. As shown in table II-4, most U.S. producers and importers reported that there have been significant changes in direct to consumer/internet sales and locations on e-commerce sites. At least half of the responding importers also reported that there have been significant changes in the areas of private label programs and branding.

⁴ Classic Brands argues that “the growing acceptance of foam mattresses and the introduction of direct to consumer/online sales of mattresses has altered consumers’ purchasing behavior and likely hastened {the 10-year average purchase cycle}... particularly for younger consumers.” Respondent Classic Brands’ postconference brief, p. 6.

**Table II-4
Mattresses: Firms' responses regarding significant changes in the mattress industry since January 2015, by number of responding firms**

Product changes	U.S. producers		Importers	
	No	Yes	No	Yes
Direct to consumer/internet sales	11	25	5	30
Location on e-commerce sites	16	17	16	17
Branding	22	11	17	17
Private label programs	21	12	15	17
Floor slots	22	10	26	5
Other	14	1	16	1

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

Regarding direct to consumer/internet (i.e., mattress-in-a-box) sales, almost all firms reported that sales of compressed mattresses via the internet that are shipped directly to consumers, mostly of the foam only (i.e., non-innerspring) variety, have greatly increased, and that this is the fastest-growing segment of the domestic mattress market.⁵ In additional comments, three importers (***) all stated that “the bed-in-a-box concept sold through e-Commerce channels is a newly created market segment, rather than a replacement for traditional brick and mortar outlets.”⁶

Regarding branding, several firms stated new brands have emerged in the past few years, and that that sellers that focus on the bed-in-a-box segment (such as Casper, Leesa, Purple, and Tuft & Needle) have increased their marketing and branding efforts, touting efficiency and consumer cost savings. *** reported that “brand significance has become less important, particularly to younger consumers who are brand agnostic and willing to try new products.” Respondent Classic Brands stated much the same, stating that “...there’s a fundamental shift... where you’re seeing folks care less and less about branded product per se...”⁷

⁵ Respondent CVB estimated that the large majority (“99 percent”) of the mattresses imported from China are of the roll-packed variety (i.e., rolled up and shipped in a box). Petitioner Elite Comfort Solutions testified that in addition to foam mattresses it also offers a bed-in-a-box product that has compressible springs. Conference transcript, pp. 87 (Christafides) and 181 (Malouf). See also Respondent Classic Brands’ postconference brief, Exhibit 16.

⁶ Respondents testified that the initial “disruptors” of the traditional business model of sales through brick and mortar stores were U.S. producers and their U.S.-directed consumer partners, such as Casper and Tuft & Needle, and that the larger domestic producers that sell via the traditional channel(s) have been slow to respond to the trend towards e-commerce. Conference transcript, pp. 15 (McLain), 154 (Dietz); Respondent Classic Brands’ postconference brief, pp. 12-24; Respondent South Bay’s Declaration in Lieu of Postconference Brief, p. 2. Petitioners stated that domestic producers were the first to sell mattresses online (such as Kolcraft in 2001) and develop mattress-in-a-box products (such as ***). Petitioners’ postconference brief, pp. 5-6, 23-25, and Exhibits 6, 7.

⁷ Conference transcript, pp. 256 (Dietz).

With respect to private label programs, most firms reported an increase in such programs, citing a desire for differentiation and exclusivity. One firm (***) reported a decrease in private label programs “due to national brands.”

Regarding floor slots, several firms reported that there are now more mattresses in a box/foam mattresses taking floor space, while others stated that more Chinese-made mattresses are displacing domestic mattresses.⁸ One firm, (***), stated that mattresses are starting to show up on more retail floors of companies that have not traditionally sold mattresses. Several firms also noted that companies will often have promotional relationships with online review and e-commerce sites. While several U.S. producers, including petitioners, stated that location on e-commerce sites is largely price driven, and that lower-priced imports from China are often placed higher in search results as a consequence, respondents stated that location is driven by algorithms that include customer reviews, sales velocity, stock rate, fill rate, and service level agreements, and that some firms can pay for prominent placements, advertisements, and “referral links.”⁹

Demand trends

According to the petition, demand for mattresses is driven by housing activity (new home sales, housing starts, and home resales), interest rates, GDP, and consumer sentiment.¹⁰ Housing activity for private residential projects increased during 2015-17 (figure II-1). Between January 2015 and December 2017, the total number of new homes sold, the number of housing starts, and the value of home resales in the United States all increased – by 15.4 percent, 10.6 percent, and 12.8 percent, respectively. Between December 2017 and June 2018, the total number of homes sold increased by 24.4 percent, while the number of housing starts and the value of home resales both decreased by 2.7 percent and 3.2 percent, respectively.

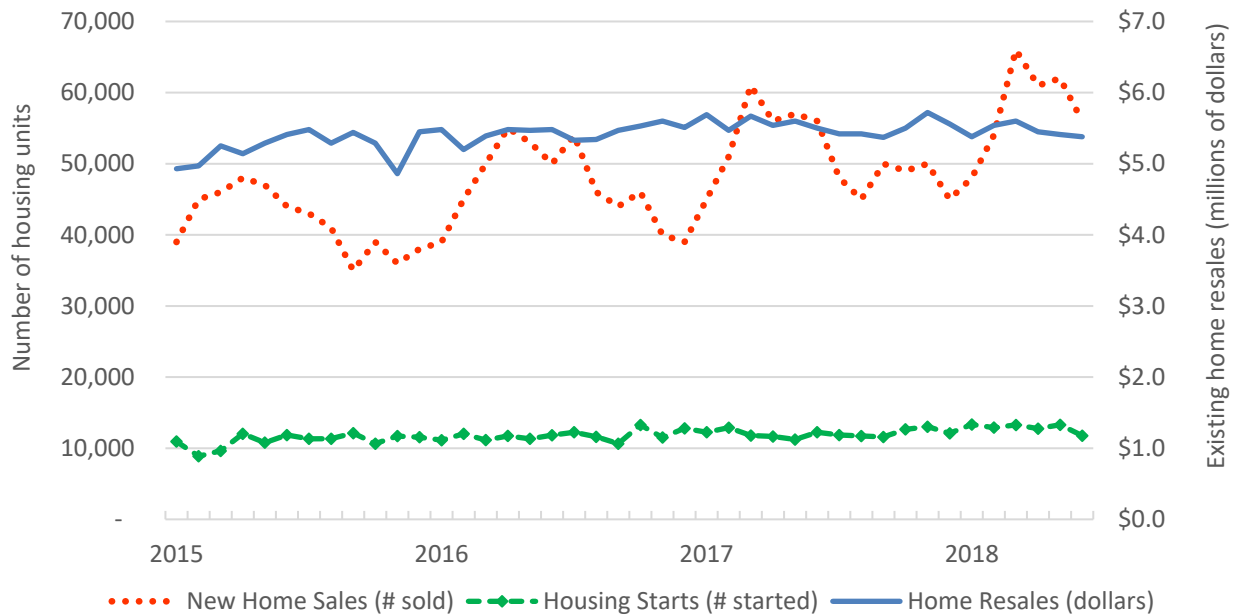
Between the first quarter of 2015 and the last quarter of 2017, real and current GDP grew by 5.9 percent and 10.0 percent, respectively, and the index of consumer sentiment was 2.9 percentage points higher (figure II-2). Between the last quarter of 2017 and the second quarter of 2018, real and current GDP grew by 1.9 percent and 3.1 percent, respectively, while the index of consumer sentiment was 0.1 percentage point lower.

⁸ Petitioners, including Tempur Sealy, Serta Simmons, and Corsicana, testified that they compete with lower-priced Chinese imports for floor slots and locations on e-commerce sites. Conference transcript, pp. 21 (Dascoli), 26 (Anderson), 66-67 (Fallen, Dascoli, Anderson) and 98 (Anderson); Petitioners’ postconference brief, pp. 25-26, Exhibit 1, Responses to Questions from Staff, p. 9.

⁹ Conference transcript, pp. 98 (Anderson), 203-204 (Dietz, Malouf), and 207 (Dietz).

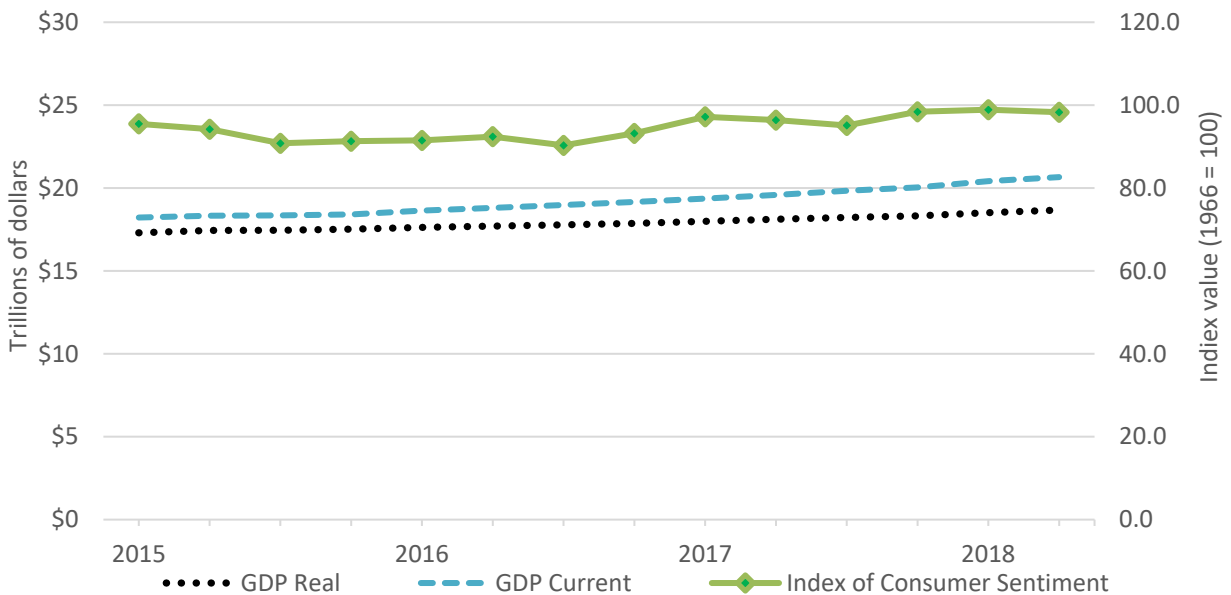
¹⁰ Petition, pp. 2 and 17.

Figure II-1
Housing activity: Number of new housing units sold (not seasonally adjusted), new privately owned housing units started (seasonally adjusted annual rate, in hundreds), and total existing home resales (millions of dollars), monthly, January 2015-June 2018



Sources: Census Bureau, Federal Reserve Bank of St. Louis (FRED economic data), and YCharts (via National Association of Realtors), retrieved September 28, 2018.

Figure II-2
GDP and consumer sentiment: Real and current GDP, seasonally adjusted, and index of consumer sentiment, quarterly, January 2015-June 2018



Sources: Federal Reserve Bank of St. Louis (FRED economic data), and University of Michigan consumer surveys, retrieved September 28, 2018 and October 26, 2018.

As shown in figure II-3, between the first week of January 2015 and the last week of December 2017, the average 30-year fixed mortgage interest rate in the United States increased by 0.07 percentage points. Between the last week of December 2017 and the last week of June 2018, the average mortgage interest rate increased by 0.14 percentage points.

Figure II-3
Interest rates: 30-year fixed rate mortgage average in the United States, weekly, January 8, 2015- June 28, 2018.



Source: Federal Reserve Bank of St. Louis (FRED economic data), retrieved September 28, 2018.

U.S. producers and importers were asked how demand in the United States as well as outside the United States for different types of mattress had changed since January 2015. As shown in table II-5, most responding firms reported that demand for non-innerspring (such as foam only) and hybrid mattresses (foam and innerspring) in the United States had increased, while at least a plurality of firms reported that demand for non-innerspring and hybrid mattresses outside the United States had also increased. Regarding demand for innerspring mattresses in the United States, a plurality of U.S. producers reported that it had decreased, while a plurality of importers reported that it had not changed. Half of the responding U.S. producers and a majority of importers reported that demand for innerspring mattresses outside the United States had not changed.

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

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers				
Innerspring	8	10	12	2
Non-innerspring	21	5	8	1
Hybrid	18	5	5	2
Other	1	2	2	0
Importers:				
Innerspring	6	13	6	7
Non-innerspring	25	4	3	4
Hybrid	24	2	1	4
Other	2	1	1	1
Demand outside the United States				
U.S. producers:				
Innerspring	4	7	2	1
Non-innerspring	6	5	2	1
Hybrid	6	4	0	1
Other	1	1	0	0
Importers:				
Innerspring	4	9	0	2
Non-innerspring	8	4	0	2
Hybrid	9	4	0	1
Other	1	1	0	1

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

On October 5, 2018, the largest U.S. specialty-mattress retailer in the United States, Mattress Firm, filed for chapter 11 bankruptcy, indicating that it planned to close up to 700 stores (nearly one-quarter of the company's U.S. footprint) before the holidays. At the staff conference, petitioner Serta Simmons – Mattress Firm's largest creditor – testified that it does not anticipate this affecting demand, and Mattress Firm should be able to recapture sales through other stores in similar geographical areas.¹¹ Petitioner Corsicana Bedding also testified that it had recently opened a new factory in Connecticut based upon its projections for strong future demand in the Northeast region.¹² In contrast, respondent Classic Brands testified that it anticipates firms with strong bed-in-a-box product offerings and e-commerce presences will "enjoy higher growth," while brick and mortar retailers like Mattress Firm that are not effectively marketing to customers online "are on the wrong side of this channel shift," as evidenced by Mattress Firm's bankruptcy.¹³

¹¹ Conference transcript, p. 91 (Dascoli); Petitioners' postconference brief, Exhibit 1, Responses to Questions from Staff, p. 10.

¹² Conference transcript, p. 32 (Fallen).

¹³ Conference transcript, p. 156 (Dietz). Classic Brands stated that it believes Mattress Firm's bankruptcy to be the result of a strategy of aggressive expansion of brick and mortar stores, while maintaining limited e-commerce sales, and a failure "to properly integrate its marketing, merchandising,

Substitute products

Only two of 36 U.S. producers (***) and two of 37 importers (***) reported substitutes for mattresses. *** reported air mattresses and water beds as substitutes, and *** reported futons as a substitute.¹⁴

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported mattresses depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), product innovations, 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 high degree of substitutability between domestically produced mattresses and mattresses imported from subject sources. While many firms discussed the significance of direct to consumer and ‘mattress-in-a-box’ sales (mostly of foam only/non-innerspring mattresses) via e-commerce sites, U.S. producers and importers both appear to sell such products through these channels.

Lead times

U.S.-produced mattresses are primarily produced-to-order, while most importers reported selling from inventory. U.S. producers reported that 84.9 percent of their commercial shipments were produced-to-order, with lead times averaging 23 days, while importers reported that 15.3 percent of their commercial shipments were produced-to-order, with lead times averaging 68 days. The remaining 15.1 percent of U.S. producers’ commercial shipments were shipped from held inventories, with lead times averaging 5 days, while 82.2 percent of importers’ commercial shipments came from inventories, with lead times averaging 29 days. Importers also reported that 2.4 percent of their commercial shipments came from the foreign manufacturers’ inventories, with lead times averaging 58 days.

and sales teams, leading to inefficiencies throughout their operations that hurt profits,” and that this “has had a significant negative impact on several major U.S. mattress producers, {including} Serta Simmons and Corsicana.” Respondent Classic Brands’ postconference brief, Annex A-8–A-10.

¹⁴ At the staff conference, respondents also mentioned the increasing popularity of Sleep Number beds, which are adjustable mattress/air bed hybrids, though not in the context of substitute products. Conference transcript, pp. 179 (Dougan) and 220 (McLain).

Factors affecting purchasing decisions

Purchasers responding to lost sales/lost revenue allegations¹⁵ were asked to identify, in order of importance, the main factors their firm considers in deciding from whom to purchase mattresses. As shown in table II-6, there was a wide variety of purchasing factors identified by responding firms, but factors related to overall price/cost or value, overall quality, and availability/delivery were the most commonly cited factors.

Table II-6
Mattresses: Changes in purchase patterns of mattresses from the United States, China, and nonsubject countries

* * * * *

Changes in purchasing patterns

As shown in table II-7, a plurality of responding purchasers (5 of 12) indicated that their domestic purchases were constant, with the next most (4 of 12) reporting that they increased. A majority of responding purchasers (8 of 11) indicated that their purchases of subject imports had increased.

Table II-7
Mattresses: Changes in purchase patterns of mattresses from the United States, China, and nonsubject countries

Source of purchases	Did not purchase	Decrease	Increase	Constant	Fluctuated
United States	---	2	4	5	1
China	---	1	8	2	---
All other sources	9	---	1	---	---
Unknown sources	9	---	1	---	---

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

Impact of Section 301 investigation and duties

U.S. producers and importers were also asked a series of questions related to the U.S. application of duties on mattresses from China pursuant to the U.S. Trade Representative's

¹⁵ This information is compiled from responses by purchasers identified by Petitioners to the lost sales/lost revenue allegations. The Commission received 11 usable Lost Sales / Lost Revenue survey responses from firms that reported purchasing mattresses since 2015. One firm, ***, submitted a Lost Sales/Lost Revenue survey response, but indicated that it did not purchase any domestic or imported product at any point since 2015. Accordingly, its response has not been included in this analysis. See Part V, "Lost Sales and Lost Revenue" for additional information.

(USTR) investigation of Chinese trade practices under Section 301 of the Trade Act of 1974.¹⁶ First, firms were asked whether their business and/or the mattress market as a whole had either already been impacted or would be impacted by the announcements and duties. A plurality of U.S. producers (17 firms) reported that they did not know, while 9 responded in the affirmative and 12 responded in the negative. Among importers, 29 responded in the affirmative, while 2 responded in the negative and 4 reported that they did not know. Next, firms were asked to assess the impact of the announcements and subsequent implementation of tariffs on mattresses from China (table II-8). Most U.S. producers estimated that they had no impact on the demand for or prices of mattresses in the U.S. market, and that they would not likely impact mattress demand or prices in the future. Most importers estimated that they had not yet had an impact on the overall demand for mattresses but anticipated that they would contribute to a decrease in demand for mattresses in the future. The large majority of importers reported that the announcements and subsequent implementation of tariffs have caused an increase in the price of mattresses, and projected that they will continue to increase.

In explaining these characterizations, several U.S. producers reported that the section 301 duties would either make their product more competitive, raise prices, and/or improve their revenue or market share, while others stated that a 10 percent tariff would not be enough to make up for the underselling margin of Chinese imports.¹⁷ Among importers, some stated that demand would go down, while other stated that it is likely to be unaffected or minimally affected. Almost all responding importers, including respondents,¹⁸ estimated that prices would increase.¹⁹

¹⁶ On June 20, 2018, USTR provided notice of initial action in the Section 301 investigation into the acts, policies, and practices of the Chinese government related to technology transfer, intellectual property, and innovation, imposing a 25 percent ad valorem duty on certain products (not including mattresses) from China. On July 17, 2018, USTR proposed a modification to the initial action by imposing an additional 10 percent ad valorem duty on products from China that included mattresses imported under HTS statistical suffix numbers 9404.21.00 (mattresses, of cellular rubber or plastics, whether or not covered), 9404.29.10 (mattresses, of cotton), and 9404.29.90 (mattresses, other than of cellular rubber or plastics or of cotton), to take effect on September 24, 2018. See <https://www.gpo.gov/fdsys/granule/FR-2018-07-17/2018-15090>, retrieved October 15, 2018. On September 17, 2018, the White House announced that on January 1, 2019, the tariffs on these additional products will rise to 25 percent. See <https://www.whitehouse.gov/briefings-statements/statement-from-the-president-4/>, retrieved October 15, 2018.

¹⁷ Petitioner Elite Comfort Solutions testified that the difference between the current prices for Chinese mattresses and domestic mattresses “is so great that the 10 percent, or even 25 percent, Section 301 duty is not going to make a difference.” Conference transcript, pp. 36 and 97 (Christafides).

¹⁸ Conference transcript, p. 209 (Dietz, Zippelli, Serven, Dockter, Malouf).

¹⁹ Chinese respondents argue that the Section 301 duties “will serve as a deterrent to Chinese producers exporting to the United States {and will} lead to a general price increase in the U.S. market.” Chinese respondents’ postconference brief, Appendix A, Response to Commission Staff’s Questions, pp. 1-3.

Table II-8**Mattresses: Firms' perceptions regarding the impact of 301 tariffs on imports from China**

Item	Increase	No change	Decrease	Fluctuate
U.S. producers				
Has impacted mattress demand	2	21	1	5
Has impacted mattress prices	9	13	3	3
Is likely to impact demand	2	21	1	4
Is likely to impact price	8	15	1	3
Importers				
Has impacted mattress demand	4	15	13	2
Has impacted mattress prices	26	7	1	0
Is likely to impact demand	3	12	16	2
Is likely to impact price	25	5	0	2

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

Comparison of U.S.-produced and imported mattresses

In order to determine whether U.S.-produced mattresses can generally be used in the same applications as imports from China, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-9, U.S. producers generally reported that mattresses from different sources were more interchangeable than importers did. Most U.S. producers reported that mattresses from the United States and China could either always or frequently be used interchangeably, while most importers reported that they could either frequently or sometimes be used interchangeably.

Table II-9**Mattresses: Interchangeability between mattresses 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			
	A	F	S	N	A	F	S	N
U.S. vs. China	12	10	3	2	8	13	13	---
U.S. vs. nonsubject	12	6	4	2	6	9	11	---
China vs. nonsubject	7	7	2	2	6	10	9	---

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

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

Some firms elaborated on characteristics that may limit interchangeability. Two U.S. producers stated that quality concerns may limit interchangeability, and three importers stated that there are products available from Chinese producers that are not available from U.S. producers. Specifically, importer *** stated that “better mattress covers” and “better and more varied foam technologies are available in China” than in the United States; *** stated that “many products we currently produce in China cannot be made in the United States;” and *** reported that “the products that we have made to our specifications in China include technologies that U.S. manufacturers do not always have the capability or the inclination to produce.” *** stated that interchangeability between the United States, China, and other

countries can be limited based on “the capabilities of the manufacturer, the cost of locally purchased raw materials, and labor capabilities.” Two firms also stated that adult and youth mattresses are not interchangeable.²⁰

In addition, producers and importers were asked to assess how often differences other than price were significant in the sales of mattresses from the United States, subject, or nonsubject countries. When comparing U.S. and Chinese product, a plurality of U.S. producers reported that differences other than price were never significant, while a plurality of importers reported that they were frequently significant (table II-10). When comparing U.S. and Chinese product to nonsubject product, pluralities of U.S. producers reported that differences other than price were sometimes significant, while pluralities of importers reported that they frequently were.

Table II-10
Mattresses: Significance of differences other than price between mattresses 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			
	A	F	S	N	A	F	S	N
U.S. vs. China	4	6	7	9	10	13	7	4
U.S. vs. nonsubject	2	5	8	7	5	10	7	3
China vs. nonsubject	1	2	7	5	5	9	8	3

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

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

Several firms also elaborated on the significance of non-price factors. Among U.S. producers, two firms stated that some prefer domestic product, two highlighted lead times as an important non-price factor, one cited minimum order quantities that non-U.S. companies may have, and another (***) stated that “support/sales training for retail sales associates and order lead times” were important non-price factors. One U.S. producer, ***, also stated that “language barriers, methods to distribute and ship, inconsistencies in quality (especially for premium mattresses), and inventory stocking requirements can make a difference on sales of products.” *** stated that most of the mattresses produced in the United States are not compressed bed-in-a-box type foam mattresses, and the domestic companies that do produce foam mattresses do not have sufficient capacity to satisfy all U.S. demand. At the staff conference, respondent parties Classic Brands and South Bay cited consumer reviews on e-

²⁰ At the staff conference, petitioner Kolcraft (a manufacturer of youth mattresses), testified that youth mattresses must be 6 inches or below in height by federal regulation, while adult mattresses can be up to 12-18 inches in height, that youth mattresses are sold through different channels of distribution, and that they are not made on the same equipment as adult mattresses. Counsel for petitioners testified, however, that youth mattresses are the smallest size designation on the continuum of mattresses sizes, have the same types of material and fundamental construction, and are sold through similar channels of distribution. Conference transcript, pp. 49-50 (Koltun, Baisburd) and 132 (Koltun).

commerce websites, third-party reviews, transparency in the buying process, and liberal return policies as important non-price factors.²¹ Among other importers, firms cited anti-odor features, availability, delivery and transportation options, ease of purchase, eco-friendly features, lead time consistency, minimum order quantities, proprietary technologies, quality, and supply and capacity capability as important non-price factors.

²¹ Conference transcript, pp. 221-224 (Zippelli, Dietz, Serven). See also Respondent Classic Brands' postconference brief, pp. 7-9, and Respondent South Bay's Declaration in Lieu of Postconference Brief, pp. 1-4.

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 alleged dumping margins was presented in Part I of this report and information on the volume and pricing of imports of the subject merchandise is presented in Part IV and Part V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of 39 firms that accounted for the vast majority of U.S. production of mattresses during 2017.

U.S. PRODUCERS

The Commission issued a U.S. producers' questionnaire to 357 firms based on information contained in the petition and staff research. Thirty-nine firms provided usable data on their productive operations.¹ Staff believes that these responses represent approximately 72 percent of U.S. production of mattresses.²

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

¹ The Commission received 23 responses (***) which were omitted due to data concerns.

² ***.

Table III-1

Mattresses: U.S. producers of mattresses, their positions on the petition, production locations, and shares of reported production, 2017

Firm	Position on petition	Production location(s)	Share of production (percent)
Ashley	***	Ecru, MS Verona, MS Advance, NC Colton, CA	***
Bemco	***	Springfield, IL	***
Blue Bell	***	East Windsor, CT Roseville, MI	***
Classic	***	Jessup, MD	***
Corsicana	Petitioner	Corsicana, TX Shelbyville, TN Aurora, IL Glendale, AZ Bartow, FL Winlock, WA	***
Easy Rest	***	Phoenix, AZ Portland, OR	***
Elite Comfort	Petitioner	Americus, GA Newnan, GA Conover, NC Fort Smith, AK Verona, MS Ontario, CA	***
England	***	New Tazewell, TN	***
Future Foam	Petitioner	Council Bluffs, IA Middleton, WI Fullerton, CA Archdale, NC Dallas, TX Newton, KS	***
FXI	Petitioner	Auburn, IN Portland, OR	***
GL Mattress	***	Orlando, FL	***
Holder	***	Kokomo, IN	***
Innocor	Petitioner	West Chicago, IL Baldwyn, MS	***
Jeffco	***	Webster, MA Millbury, MA Worcester, MA	***
Kolcraft	Petitioner	Aberdeen, NC	***
Leggett & Platt	Petitioner	Tupelo, MS	***
Leisure	***	Boise, ID	***
Lions	***	Morristown, TN	***
Lippert	***	Goshen, IN Nampa, ID	***
Mark	***	Evansville, IN	***
MBC	***	Corona, CA	***
Naturally Beds	***	Phoenix, AZ	***
Pittsburgh	***	Ellenton, FL	***
Quality Bedding	***	Phoenix, AZ	***
Royal-Pedic	***	Los Angeles, CA	***

Table continued on next page.

Table III-1—Continued

Mattresses: U.S. producers of mattresses, their positions on the petition, production locations, and shares of reported production, 2017

Firm	Position on petition	Production location(s)	Share of production (percent)
Salt Lake	***	Salt Lake City, UT	***
Serta Restokraft	***	Romulus, MI	***
Serta Simmons ¹	Petitioner	Atlanta, GA Sandy Springs, GA Peachtree Corners, GA Hoffman Estates, IL New York, NY Aurora, CO	***
Sinomax	***	Nashville TN Phoenix, AZ	***
Sleep Haven	***	Haven, KS	***
Sleepmade	***	Columbus, MS Mayhew, MS	***
Solstice	***	Columbus, OH Tampa, FL Gallatin, TN Mt. Pocono, PA Hutchins, TX	***
Sound Sleep	***	Sumner, WA	***
South State	***	Kenyon, MN	***
Southerland	***	Nashville, TN Oklahoma City, OK Phoenix, AZ	***
Tempur Sealy ²	Petitioner	Phoenix, AZ Richmond, CA Denver, CO Orlando, FL Conyers, GA Plainfield, IN	***
Ther-A-Pedic	***	North Brunswick, NJ	***
Wolf	***	Fort Wayne, IN	***
Yankee	***	Agawam, MA	***
Total			***
Support, as petitioners			***
Support, not petitioners			***
Support			***
No position			***
Oppose			***
Total			***

¹See Appendix Table E-1 for complete list of production locations.

²See Appendix Table E-2 for complete list of production locations.

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

As indicated in table III-2, two U.S. producers are related to foreign producers of the subject merchandise and three U.S. producers are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, six U.S. producers directly import the subject merchandise and nine purchase the subject merchandise from U.S. importers.

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

* * * * *

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

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

* * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization for the top five firms (Corsicana Bedding, LLC ("Corsicana"), Kolcraft Enterprises, Inc. ("Kolcraft"), Lippert Components ("Lippert"), Serta Simmons Bedding, LLC ("Serta Simmons"), and Tempur Sealy International, Inc. ("Tempur Sealy")) and all other firms for 2015-17, and the interim periods (January to June 2017 and January to June 2018). Reported capacity decreased modestly by *** during 2015-17, but was higher in interim 2018 than in interim 2017 by ***. This reduction in capacity is largely due to ***. ***.

Total production fell by *** during 2015-17, due to declining production reported by ***, which outweighed sizable increases in production between 2015 and 2017 by ***. Comparing interim 2018 with interim 2017, production was *** lower overall, driven by ***. Lower production by those firms was somewhat offset by *** which reported *** in interim 2018 compared with interim 2017.

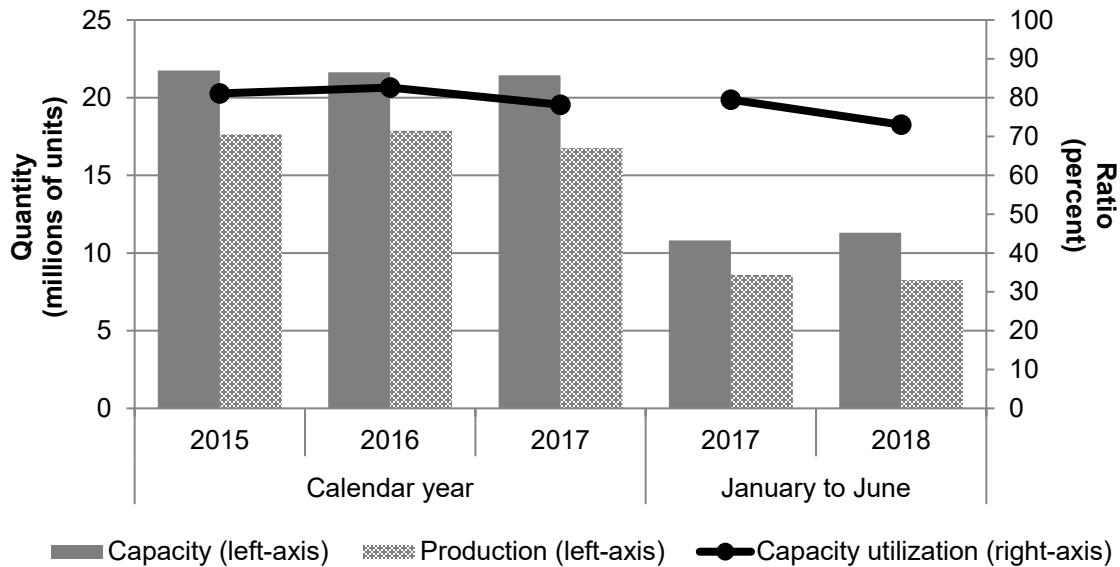
U.S. producers' average capacity utilization declined by *** during 2015-17, with large reductions reported by ***. Capacity utilization increased for *** by *** from 2015 to 2016 due to decreasing capacity, and by *** from 2016 to 2017. ***, but a decrease of *** from 2016 to 2017. Comparing interim 2018 with interim 2017, capacity utilization was lower by *** overall, driven by ***. *** reported capacity utilization that was *** higher in interim 2018 compared with interim 2017.

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

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Capacity (units)				
Corsicana	***	***	***	***	***
Kolcraft	***	***	***	***	***
Lippert	***	***	***	***	***
Serta Simmons	***	***	***	***	***
Tempur Sealy	***	***	***	***	***
All other firms	***	***	***	***	***
Total capacity	21,750,042	21,637,506	21,435,028	10,809,772	11,301,049
	Production (units)				
Corsicana	***	***	***	***	***
Kolcraft	***	***	***	***	***
Lippert	***	***	***	***	***
Serta Simmons	***	***	***	***	***
Tempur Sealy	***	***	***	***	***
All other firms	***	***	***	***	***
Total production	17,637,914	17,871,119	16,755,023	8,592,219	8,253,678
	Capacity utilization (percent)				
Corsicana	***	***	***	***	***
Kolcraft	***	***	***	***	***
Lippert	***	***	***	***	***
Serta Simmons	***	***	***	***	***
Tempur Sealy	***	***	***	***	***
All other firms	***	***	***	***	***
Average capacity utilization	81.1	82.6	78.2	79.5	73.0
	Share of production (percent)				
Corsicana	***	***	***	***	***
Kolcraft	***	***	***	***	***
Lippert	***	***	***	***	***
Serta Simmons	***	***	***	***	***
Tempur Sealy	***	***	***	***	***
All other firms	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0

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

Figure III-1
Mattresses: U.S. producers' production, capacity, and capacity utilization, 2015-17, January to June 2017, and January to June 2018



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

Alternative products

As shown in table III-5, 95.3 percent of the products produced on the same equipment and employing the same workers in 2017 by U.S. producers were subject mattresses. Four firms reported producing alternative products such as ***. The share of out-of-scope production to total production decreased from 5.5 percent in 2015 to 4.7 percent in 2017. Out-of-scope production was 25.6 percent higher in interim 2018 compared with interim 2017 resulting in the share of out-of-scope production being 1.4 percentage points higher in interim 2018 compared with interim 2017. Because many of these alternative products are smaller than mattresses, overall capacity utilization results may be understated, although trends are informative. Overall capacity utilization, including-out of-scope products, increased by less than 1 percentage point from 2015 to 2016 and decreased by 5.5 percentage points in 2017. Overall capacity utilization was lower in interim 2018 than in interim 2017 by 5.3 percentage points.

Table III-5

Mattresses: U.S. producers' overall plant capacity and production on the same equipment as mattresses, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
Overall capacity	22,897,735	23,074,005	22,743,356	11,563,731	12,123,817
Production:					
Mattresses	17,637,914	17,871,119	16,755,023	8,592,219	8,253,678
Out-of-scope products	1,020,285	1,003,028	834,485	444,783	558,447
Total production on same machinery	18,658,199	18,874,147	17,589,508	9,037,002	8,812,125
	Ratios and shares (percent)				
Overall capacity utilization	81.5	81.8	77.3	78.1	72.7
Share of production:					
Mattresses	94.5	94.7	95.3	95.1	93.7
Out-of-scope products	5.5	5.3	4.7	4.9	6.3
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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

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

Table III-6 presents data regarding U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. producers' shipments decreased from 17,530,659 mattresses in 2015 to 16,840,469 mattresses in 2017; however, the value and average unit value of U.S. shipments increased during this time by 4.1 percent and 8.1 percent, respectively. Export shipments remained low (below 1 percent). The average unit value of exported mattresses (\$352) were 31.8 percent higher than mattresses shipped domestically (\$267) in 2017.

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

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments	17,415,620	17,728,402	16,754,826	8,636,573	8,298,667
Export shipments	115,039	94,039	85,643	45,622	32,386
Total shipments	17,530,659	17,822,441	16,840,469	8,682,195	8,331,053
	Value (1,000 dollars)				
U.S. shipments	4,291,459	4,460,927	4,470,116	2,225,028	2,181,580
Export shipments	33,065	32,260	30,181	14,794	12,742
Total shipments	4,324,524	4,493,187	4,500,297	2,239,822	2,194,322
	Unit value (dollars per unit)				
U.S. shipments	246	252	267	258	263
Export shipments	287	343	352	324	393
Total shipments	247	252	267	258	263
	Share of quantity (percent)				
U.S. shipments	99.3	99.5	99.5	99.5	99.6
Export shipments	0.7	0.5	0.5	0.5	0.4
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments	99.2	99.3	99.3	99.3	99.4
Export shipments	0.8	0.7	0.7	0.7	0.6
Total shipments	100.0	100.0	100.0	100.0	100.0

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

Table III-7 presents U.S. producers' U.S. shipments by product type: innerspring only, non-innerspring (generally foam), hybrid (innerspring and foam mattress cores) and other mattress types. U.S. producers' shipments were predominately of innerspring mattresses, representing more than 70 percent of total shipments in quantity terms during 2015-17, though the proportion of shipments consisting of innerspring mattresses declined. This decline coincided with an increase in the proportion of U.S. producers' U.S. shipments consisting of non-innerspring mattresses and to a lesser extent, hybrid mattresses. Though the quantity of innerspring mattresses shipped declined by 10.1 percent between 2015 and 2017, U.S. producers reported a modest decline in the value of shipments (1.8 percent) and an increase in the average unit value of shipments of 9.1 percent in the same period. U.S. producers' shipments of innerspring mattresses were lower in quantity and value terms in interim 2018 compared with interim 2017. From 2015 to 2017, non-innerspring mattresses shipments increased in both quantity and value terms, 19.8 percent and 15.6 percent, respectively, resulting in average unit values of non-innerspring mattresses decreasing by 3.5 percent. U.S. producers' shipments of hybrid mattresses exhibited an increase as well in both quantity and value terms (8.4 percent and 9.5 percent, respectively), with average unit values increased by 1.0 percent over the same period. For both non-innerspring and hybrid mattresses, U.S. producers' shipments were higher in quantity and value terms in interim 2018 compared with interim 2017. Average unit values for innerspring mattresses and hybrid mattresses were higher

Table III-7

Mattresses: U.S. producers' U.S. shipments by product type, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments.-- Innerspring only	13,508,053	13,308,960	12,146,319	6,301,605	5,640,096
Non-innerspring only	3,099,961	3,484,953	3,714,429	1,852,590	2,159,578
Hybrid	751,600	865,604	814,669	440,410	463,951
Other	56,006	68,885	79,409	41,968	35,042
All product types	17,415,620	17,728,402	16,754,826	8,636,573	8,298,667
	Value (1,000 dollars)				
U.S. shipments.-- Innerspring only	2,663,599	2,689,905	2,616,232	1,329,958	1,238,120
Non-innerspring only	1,149,366	1,209,966	1,329,054	620,761	639,786
Hybrid	474,293	555,256	519,310	271,462	300,389
Other	4,202	5,801	5,524	2,846	3,283
All product types	4,291,460	4,460,928	4,470,120	2,225,027	2,181,578
	Unit value (dollars per unit)				
U.S. shipments.-- Innerspring only	197	202	215	211	220
Non-innerspring only	371	347	358	335	296
Hybrid	631	641	637	616	647
Other	75	84	70	68	94
All product types	246	252	267	258	263
	Share of quantity (percent)				
U.S. shipments.-- Innerspring only	77.6	75.1	72.5	73.0	68.0
Non-innerspring only	17.8	19.7	22.2	21.5	26.0
Hybrid	4.3	4.9	4.9	5.1	5.6
Other	0.3	0.4	0.5	0.5	0.4
All product types	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments.-- Innerspring only	62.1	60.3	58.5	59.8	56.8
Non-innerspring only	26.8	27.1	29.7	27.9	29.3
Hybrid	11.1	12.4	11.6	12.2	13.8
Other	0.1	0.1	0.1	0.1	0.2
All product types	100.0	100.0	100.0	100.0	100.0

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

in interim 2018 compared with interim 2017, though average unit values for non-innerspring mattresses were lower by 11.6 percent.

From 2015 to 2017, the average unit values of non-innerspring and hybrid mattresses were consistently higher than the average unit value of innerspring mattresses by at least 60 percent.³ In 2017, the average unit value of non-innerspring mattresses was \$143 higher than for innerspring mattresses and the average unit value of hybrid mattresses were \$422 higher. Non-innerspring mattress shipments increased as a share of total U.S. shipments by 4.4 percentage points in quantity terms and 2.9 percentage points in value terms during 2015-17, while hybrid and other types of mattresses maintained a relatively constant share of total shipments in quantity and value terms.

Table III-8 presents U.S. producers' U.S. shipments by adult and youth sizes.⁴ U.S. producers' shipments were overwhelmingly of adult mattresses, remaining greater than 92 percent of total shipments in both quantity and value terms during 2015-17 and increasing slightly over the period. While the quantity of adult mattresses shipped decreased by 3.1 percent between 2015 and 2017, its value (4.3 percent) and average unit value (7.7 percent) increased over the same period. Youth mattress shipments decreased in both quantity and value terms during 2015-17, by 11.5 percent and 9.8 percent, respectively, though the average unit value of youth mattress shipments increased slightly by 2 percent.

Over the interim periods, U.S. producers' shipments of both adult and youth mattresses in interim 2018 compared with interim 2017, were lower in both quantity and value terms, while the average unit value of adult mattress shipments was 2.3 percent higher. In contrast, the average unit value of youth mattress shipments was 3 percent lower in interim 2018 compared with interim 2017. Throughout the period, the average unit values of adult mattresses were consistently higher than those of youth mattresses by approximately 700 percent; in 2017, the average unit value of adult mattress shipments was \$251 more per mattress than that of youth mattress shipments. The ratio of adult mattress shipments compared to youth mattress shipments remained relatively constant during 2015-17 and the interim periods.

³ U.S. producers reported average unit values for innerspring mattresses ranging from \$32 to \$2,500 per mattress in 2017. For non-innerspring mattresses, average unit values ranged from \$50 to \$2,400 per mattress while average unit values ranged from \$130 to \$3,000 per mattress for hybrid mattresses in 2017.

⁴ Petition, p. 7.

Table III-8

Mattresses: U.S. producers' U.S. shipments by product size, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments.-- Adult	16,018,692	16,337,472	15,519,136	8,002,980	7,675,363
Youth	1,396,928	1,390,930	1,235,690	633,593	623,304
All product sizes	17,415,620	17,728,402	16,754,826	8,636,573	8,298,667
	Value (1,000 dollars)				
U.S. shipments.-- Adult	4,244,454	4,413,607	4,427,712	2,203,523	2,161,062
Youth	47,005	47,321	42,406	21,506	20,519
All product sizes	4,291,459	4,460,928	4,470,118	2,225,029	2,181,581
	Unit value (dollars per unit)				
U.S. shipments.-- Adult	265	270	285	275	282
Youth	34	34	34	34	33
All product sizes	246	252	267	258	263
	Share of quantity (percent)				
U.S. shipments.-- Adult	92.0	92.2	92.6	92.7	92.5
Youth	8.0	7.8	7.4	7.3	7.5
All product sizes	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments.-- Adult	98.9	98.9	99.1	99.0	99.1
Youth	1.1	1.1	0.9	1.0	0.9
All product sizes	100.0	100.0	100.0	100.0	100.0

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

U.S. producers were also asked to report whether their U.S. shipments were considered premium mattresses and to identify characteristics of premium mattresses presented in table III-9. These characteristics include average price per mattress, number of layers, compression type, component quality, types of foam or latex, and foam density.⁵ From 2015 to 2017, as well as in interim 2018, over 86 percent of U.S. producers' reported shipments were of mattresses identified as non-premium. During 2015-17, U.S. producers' U.S. shipments of premium mattresses increased by 37.7 percent in quantity terms, 66.0 percent in value terms, and 20.6 percent in terms of average unit values. Shipments of non-premium mattresses decreased by 3 percent in quantity, but increased by 5.6 percent in value terms and 8.8 percent in terms of average unit value. The quantity, value, and average unit value of both premium and other

⁵ Due to a lack of industry standards, firms' responses regarding what constitutes a premium mattress were varied. Consequently, the data comparing premium and non-premium mattresses provide a broad perspective. Data trends, however, are more informative.

Table III-9**Mattresses: U.S. producers' U.S. shipments by product tier, 2015-17, January to June 2017, and January to June 2018**

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments.-- Premium	377,879	441,633	520,225	246,693	292,474
Other	3,541,398	3,599,572	3,436,968	1,747,374	1,924,745
All product tiers	3,919,277	4,041,205	3,957,193	1,994,067	2,217,219
	Value (1,000 dollars)				
U.S. shipments.-- Premium	87,835	105,078	145,789	67,152	94,398
Other	296,159	324,500	312,627	157,595	181,649
All product tiers	383,994	429,578	458,416	224,747	276,047
	Unit value (dollars per unit)				
U.S. shipments.-- Premium	232	238	280	272	323
Other	84	90	91	90	94
All product tiers	98	106	116	113	125
	Share of quantity (percent)				
U.S. shipments.-- Premium	9.6	10.9	13.1	12.4	13.2
Other	90.4	89.1	86.9	87.6	86.8
All product tiers	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments.-- Premium	22.9	24.5	31.8	29.9	34.2
Other	77.1	75.5	68.2	70.1	65.8
All product tiers	100.0	100.0	100.0	100.0	100.0

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

mattresses were higher in interim 2018 compared with interim 2017. The share of premium mattresses shipped by U.S. producers increased by 3.5 percentage points in quantity terms and 8.9 percent in value terms during 2015-17.

U.S. PRODUCERS' INVENTORIES

Table III-10 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. End-of-period inventories were flat between 2015 and 2017, but 17.2 percent lower in interim 2018 compared with interim 2017. The ratio of inventories to U.S. production, shipments, and total shipments remained low throughout the period, reaching a maximum of 2.2 percent in 2016.

Table III-13**Mattresses: U.S. producers' employment-related data, 2015-17, January to June 2017, and January to June 2018**

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
Production and related workers (PRWs) (number)	12,483	12,911	12,683	11,838	11,348
Total hours worked (1,000 hours)	32,201	33,699	37,080	18,710	17,335
Hours worked per PRW (hours)	2,580	2,610	2,924	1,581	1,528
Wages paid (\$1,000)	445,893	453,764	454,934	237,369	232,015
Hourly wages (dollars per hour)	\$13.85	\$13.47	\$12.27	\$12.69	\$13.38
Productivity (units per 1,000 hours)	547.7	530.3	451.9	459.2	476.1
Unit labor costs (dollars per unit)	\$25.28	\$25.39	\$27.15	\$27.63	\$28.11

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

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 82 firms believed to be importers of subject mattresses, as well as to all U.S. producers of mattresses.¹ Usable questionnaire responses were received from 39 companies,² representing 77.1 percent of U.S. imports from China in 2017 under HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, 9404.29.9087, 9404.29.9095, 9404.21.0095, and 9404.29.1095, which include out-of-scope products according to data submitted in response to Commission questionnaires and official import statistics.³ Table IV-1 lists all responding U.S. importers of mattresses from China and other sources, their locations, and their shares of U.S. imports, in 2017.⁴

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

* * * * *

The leading importer of mattresses was ***, which accounted for *** of all imports of mattresses from China in 2017, followed by ***. The top five importers of mattresses from China accounted for 69.8 percent of subject imports according to data compiled from Commission questionnaires. ***.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of mattresses from China and all other sources for 2015-17 and interim periods, January to June 2017 and January to June 2018. Between January 2015 and June 2018, China was the largest source of imports of mattresses,

¹ The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection (“Customs”), may have accounted for more than one percent of total imports under HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087 in 2017.

² The Commission received questionnaires from four firms, ***, which were omitted due to data concerns. The Commission also received questionnaires from three firms, ***, after completing the statistical analysis of this report and were unable to be included in this report.

³ Responses represent 150.9 percent of U.S. imports from China in 2017 under HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087.

⁴ One responding importer (***) reported imports of mattresses from nonsubject sources during January 2015 to June 2018.

accounting for over *** percent of mattress imports by both quantity and value in each period. Between 2015 and 2017, U.S. imports of mattresses increased overall by ***, with imports from China increasing by nearly 200 percent and imports from nonsubject sources decreasing by more than 87 percent in both quantity and value terms. During that same period, the average unit value of mattresses from China remained stable at \$109 to \$111 per mattress, while mattresses from nonsubject sources increased in average unit value from *** in 2015 to *** in 2017.

The quantity and value of mattresses imported from China were 8.8 percent and 9.9 percent higher in interim 2018 than in interim 2017, respectively. Imports from nonsubject sources were *** higher in quantity terms and *** higher in value terms in interim 2018 compared to interim 2017. The average unit value of mattresses from nonsubject sources was *** lower in interim 2018 compared with interim 2017, while the average unit value of mattresses from China was \$1 higher per mattress.

As a ratio to U.S. production, imports from China increased by 28.3 percentage points during 2015-17. U.S. imports of mattresses from China as a ratio to U.S. production were *** percentage points higher in interim 2018 compared with interim 2017. Nonsubject import ratios remained the same in interim 2018 compared to interim 2017.

Table IV-2
Mattresses: U.S. imports, by source, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. imports from.-- China	2,325,060	3,723,973	6,950,329	2,884,718	3,138,822
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
U.S. imports from.-- China	257,586	407,391	764,293	314,155	345,256
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Unit value (dollars per unit)				
U.S. imports from.-- China	111	109	110	109	110
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of quantity (percent)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of value (percent)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Ratio to U.S. production				
U.S. imports from.-- China	13.2	20.8	41.5	33.6	38.0
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Figure IV-1
Mattresses: U.S. import volumes and prices, 2015-17, January to June 2017, and January to June 2018

* * * * *

Table IV-3 presents U.S. importers' U.S. shipments of mattresses imported from China by product type: innerspring only, non-innerspring (generally foam), hybrid (innerspring and foam mattress cores) and other mattress types. A majority of U.S. importers' shipments of mattresses consisted of non-innerspring mattresses, which increased from 52.4 percent of U.S. shipments in 2015 to 61.2 percent in 2017 and were 58.1 percent in interim 2018. Between 2015 and 2017, the quantity and value of imported Chinese innerspring mattresses shipped

Table IV-3

Mattresses: U.S. importers' U.S. shipments of subject U.S. imports, by product type, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments: China.-- Innerspring only	758,564	1,229,742	1,576,260	779,457	804,615
Non-innerspring only	1,165,839	1,936,972	3,743,773	1,595,273	2,090,388
Hybrid	191,259	234,485	711,185	259,664	680,689
Other	110,186	133,977	83,286	55,076	21,862
All product types	2,225,848	3,535,176	6,114,504	2,689,470	3,597,554
	Value (1,000 dollars)				
U.S. shipments: China.-- Innerspring only	90,887	131,133	169,125	81,624	87,257
Non-innerspring only	196,266	294,563	531,568	231,644	304,550
Hybrid	21,844	32,851	77,572	30,416	68,231
Other	3,918	5,885	2,833	1,886	732
All product types	312,915	464,432	781,098	345,570	460,770
	Unit value (dollars per unit)				
U.S. shipments: China.-- Innerspring only	120	107	107	105	108
Non-innerspring only	168	152	142	145	146
Hybrid	114	140	109	117	100
Other	36	44	34	34	33
All product types	141	131	128	128	128
	Share of quantity (percent)				
U.S. shipments: China.-- Innerspring only	34.1	34.8	25.8	29.0	22.4
Non-innerspring only	52.4	54.8	61.2	59.3	58.1
Hybrid	8.6	6.6	11.6	9.7	18.9
Other	5.0	3.8	1.4	2.0	0.6
All product types	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments: China.-- Innerspring only	29.0	28.2	21.7	23.6	18.9
Non-innerspring only	62.7	63.4	68.1	67.0	66.1
Hybrid	7.0	7.1	9.9	8.8	14.8
Other	1.3	1.3	0.4	0.5	0.2
All product types	100.0	100.0	100.0	100.0	100.0

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

increased by 107.8 percent and 86.1 percent, respectively, reflecting a decrease in average unit value of 10.4 percent. From 2015 to 2017, non-innerspring mattresses shipments also increased in both quantity and value terms—by 221.1 percent and 170.8 percent, respectively—yielding a decline in average unit value of 15.7 percent. Hybrid mattresses exhibited an even greater increase in shipments in both quantity and value terms: 271.8 percent and 255.1 percent, respectively. Since 2016, average unit values for hybrid mattress shipments first increased by \$26 per mattress and then decreased by \$31 per mattresses, declining 4.5 percent overall during 2015-17. U.S. importers' shipments of other types of mattresses imported from China, which accounted for approximately 1 percent of mattress shipments by value, declined 24.4 percent in quantity terms and 27.7 percent in value terms during 2015-17, with a decrease in average unit values by 4.3 percent.

Comparing interim 2018 with interim 2017, U.S. importers' shipments of imported Chinese innerspring, non-innerspring, and hybrid mattresses were higher, with hybrid mattress shipments by U.S. importers recording the largest gains. In contrast, U.S. shipments of imports of other mattresses were 60.3 percent lower in interim 2018 compared with interim 2017. Average unit values for innerspring and non-innerspring mattresses were slightly higher in interim 2018 compared with interim 2017, though average unit values for hybrid mattresses were lower by 14.4 percent.

From 2015 to 2017, average unit values of shipments of non-innerspring mattresses were consistently higher than innerspring by at least 40 percent. In 2017, the average unit value of non-innerspring mattresses was \$35 more than that of innerspring mattresses and \$33 more for hybrid mattresses. Despite the higher average unit values, the share of non-innerspring mattress shipments by importers increased by 8.9 percentage points in quantity terms and 5.3 percentage points in value terms during 2015-17. Conversely, during the same period, innerspring mattresses as a share of U.S. shipments decreased in both quantity and value by 8.3 percentage points and 7.4 percentage points, respectively. Hybrid mattresses increased as a share of U.S. shipments by 3 percentage points in both quantity and value terms, while the share of U.S. importers' shipments of other mattresses declined in terms of both quantity and value.

Table IV-4 presents U.S. importers' U.S. shipments of mattresses imported from China in terms of adult and youth sizes.⁵ Like U.S. producers' shipments, U.S. importers' shipments from China were overwhelmingly of adult mattresses, increasing from 92.0 percent of total shipments to 97.5 percent in quantity terms. The share of value represented by shipments of adult mattresses was even greater since adult mattresses are more expensive than youth mattresses. The quantity of U.S. shipments of adult mattresses imported from China increased by 191.2 percent between 2015 and 2017, while the average unit value decreased by 12.7 percent during the same period. Conversely, youth mattresses shipments decreased 15.2 percent in quantity terms, though the average unit value of youth mattresses increased slightly, by 2.8 percent. Comparing interim 2018 with interim 2017, U.S. importers' shipments of Chinese adult were higher in terms of both quantity and value, but the average unit value was

⁵ Petition, p. 7.

Table IV-4
Mattresses: U.S. importers' U.S. shipments of subject U.S. imports, by product size, 2015-17,
January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments: China.-- Adult	2,048,384	3,360,154	5,964,095	2,607,159	3,537,615
Youth	177,464	175,022	150,409	82,311	59,939
All product sizes	2,225,848	3,535,176	6,114,504	2,689,470	3,597,554
	Value (1,000 dollars)				
U.S. shipments: China.-- Adult	304,585	456,487	773,846	341,979	457,551
Youth	8,328	7,945	7,254	3,592	3,218
All product sizes	312,913	464,432	781,100	345,571	460,769
	Unit value (dollars per unit)				
U.S. shipments: China.-- Adult	149	136	130	131	129
Youth	47	45	48	44	54
All product sizes	141	131	128	128	128
	Share of quantity (percent)				
U.S. shipments: China.-- Adult	92.0	95.0	97.5	96.9	98.3
Youth	8.0	5.0	2.5	3.1	1.7
All product sizes	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments: China.-- Adult	97.3	98.3	99.1	99.0	99.3
Youth	2.7	1.7	0.9	1.0	0.7
All product sizes	100.0	100.0	100.0	100.0	100.0

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

lower by \$2. In contrast, U.S. importers' shipments of Chinese youth mattresses in terms of both quantity and value terms were lower, but the average unit value was higher by \$10.

From 2015 to 2017, the average unit value of adult mattresses was consistently higher than that of youth mattresses by more than 160 percent. In 2017, the average unit value of adult mattresses was \$82 more than that of youth mattresses. The ratio between the average unit values of adult and youth mattresses narrowed over the period, from 216.9 percent in 2015 to 140.9 percent in interim 2018, as the average unit value of adult mattresses declined.

U.S. importers were asked to report whether their U.S. shipments were considered premium mattresses and to identify characteristics of premium mattresses. These

characteristics include foam density, number of layers, thickness, material quality, side support, intricacy of cuts and foam assembly techniques (table IV-5).⁶

Table IV-5
Mattresses: U.S. importers' U.S. shipments of subject U.S. imports, by product tier, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. shipments: China.-- Premium	124,031	122,869	203,445	82,445	122,662
Other	2,088,200	3,396,722	5,855,183	2,587,260	3,455,678
All product tiers	2,212,231	3,519,591	6,058,628	2,669,705	3,578,340
	Value (1,000 dollars)				
U.S. shipments: China.-- Premium	28,989	24,971	40,526	17,688	24,878
Other	282,044	437,117	736,828	326,666	434,284
All product tiers	311,033	462,088	777,354	344,354	459,162
	Unit value (dollars per unit)				
U.S. shipments: China.-- Premium	234	203	199	215	203
Other	135	129	126	126	126
All product tiers	141	131	128	129	128
	Share of quantity (percent)				
U.S. shipments: China.-- Premium	5.6	3.5	3.4	3.1	3.4
Other	94.4	96.5	96.6	96.9	96.6
All product tiers	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments: China.-- Premium	9.3	5.4	5.2	5.1	5.4
Other	90.7	94.6	94.8	94.9	94.6
All product tiers	100.0	100.0	100.0	100.0	100.0

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

During 2015-17, U.S. importers' U.S. shipments of premium mattresses from China increased by 64.0 percent in quantity terms and 39.8 percent in value terms, but decreased by 14.8 percent in terms of average unit value. Shipments of non-premium mattresses also increased by 180.4 percent in quantity terms and 161.2 percent in value terms, leading to the average unit value decreasing by 6.8 percent. Comparing interim periods, U.S. importers U.S. shipments of both premium and non-premium mattresses were higher in interim 2018 than in interim 2017 in terms of quantity and value, but the average unit values were lower during that

⁶ Due to a lack of industry standards, firms' responses regarding what constitutes a premium mattress were varied. Therefore, data comparing premium versus non-premium mattresses provide a broad perspective. Data trends, however, are more instructive.

time. From 2015 to 2017, U.S. importers reported that at least 94 percent of their U.S. shipments of Chinese mattresses consisted of “non-premium” mattresses. Premium mattresses as a share of U.S. importers’ U.S. shipments of mattresses from China declined by 2.2 percentage points in quantity terms and 4.1 percent in value terms between 2015 and 2017.

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 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 Imports from China accounted for *** of total imports of mattresses by quantity from September 2017 through August 2018 according to official import statistics of primary HTS statistical reporting numbers.⁹

Table IV-6
Mattresses: U.S. imports by source, September 2017 through August 2018

Item	September 2017 through August 2018	
	Quantity (units)	Share quantity (percent)
U.S. imports from.-- China	7,237,221	***
Nonsubject sources	***	***
All import sources	***	***

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

APPARENT U.S. CONSUMPTION

Table IV-7 presents data on apparent U.S. consumption of mattresses as calculated from U.S. producers’ U.S. shipments and U.S. shipments of imports. By quantity and value, apparent U.S. consumption steadily increased between 2015 and 2017 by *** and ***, respectively.

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)).

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

⁹ According to data submitted in response to Commission questionnaires, imports from China accounted for 100 percent of total imports of mattresses by quantity during 2017.

Table IV-7**Mattresses: Apparent U.S. consumption, 2015-17, January to June 2017, and January to June 2018**

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. producers' U.S. shipments	17,415,620	17,728,402	16,754,826	8,636,573	8,298,667
U.S. importers' U.S. shipments from.-- China	2,225,848	3,535,176	6,114,504	2,689,470	3,597,554
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	4,291,459	4,460,927	4,470,116	2,225,028	2,181,580
U.S. importers' U.S. shipments from.-- China	312,914	464,432	781,099	345,572	460,769
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***

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

Apparent U.S. consumption was slightly higher in interim 2018 compared with interim 2017, as well.

From 2015 to 2016, U.S. producers and U.S. importers increased the quantity of shipments of domestic and Chinese mattresses by 1.8 percent and 57.2 percent, for domestic and respectively. However, between 2016 and 2017, the quantity of U.S. producers' shipments fell by 5.5 percent while U.S. importers' shipments of mattresses from China increased by 72.9 percent. From 2015 to 2017, the quantity of U.S. producers' shipments declined by 3.8 percent, while U.S. importers' shipments of mattresses from China increased by 174.7 percent. The quantity of U.S. importers' shipments of mattresses from nonsubject sources decreased by *** from 2015 to 2017. Both U.S. producers' shipments and U.S. importers' shipments of imports from China increased in terms of value during 2015-17, though the value of imports increased by more. Conversely, U.S. importers' shipments of nonsubject imports of mattresses decreased by *** percent in terms of value during 2015-17.

U.S. producers' U.S. shipments were lower in interim 2018 compared with interim 2017 by 3.9 percent in quantity terms and 2.0 percent in value terms. In contrast, U.S. importers' shipments of mattresses from China were higher in interim 2018 compared with interim 2017 by 33.8 percent in quantity terms and 33.3 percent in value terms. U.S. importers' shipments of mattresses from nonsubject sources were slightly higher in interim 2018 compared with interim 2017.

U.S. MARKET SHARES

Table IV-8 and figure IV-2 present data on market shares for mattresses. U.S. producers' market share decreased *** in quantity terms and *** in value terms during 2015-17 and was lower in interim 2018 compared to interim 2017 by *** in quantity terms and *** in value terms. The market share of shipments of imports from China increased from *** in 2015 to *** in 2017 in quantity terms and from *** in 2015 to *** in 2017 in value terms. With respect to the interim periods, the market share of U.S. importers' shipments of imports from China was *** higher in quantity terms and *** higher in value terms in interim 2018 compared with interim 2017. During this time, nonsubject import market share remained consistent at *** in both quantity and value terms.

Table IV-8

Mattresses: U.S. consumption and market shares, 2015-17, January to June 2017, and January to June 2018

* * * * *

Figure IV-2

Mattresses: Apparent U.S. consumption, 2015-17, January to June 2017, and January to June 2018

* * * * *

Apparent U.S. consumption and market shares by product segments

Table IV-9 presents data on apparent U.S. consumption and market shares for innerspring mattresses. Apparent U.S. consumption of innerspring mattresses decreased by *** during 2015-17 and was *** lower in interim 2018 compared with interim 2017. Although U.S. producers' shipments of innerspring mattresses declined 10.1 percent between 2015 and 2017, U.S. importers' U.S. shipments of innerspring mattresses from China increased by 107.8 percent during the same period. Consequently, U.S. producers' market share in the innerspring mattress segment decreased *** during 2015-17, declining from *** in 2015 to *** in 2017, and was *** lower in interim 2018 compared with interim 2017.

Table IV-9
Mattresses: Market for innerspring only mattresses, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. producers' U.S. shipments	13,508,053	13,308,960	12,146,319	6,301,605	5,640,096
U.S. importers' U.S. shipments from.-- China	758,564	1,229,742	1,576,260	779,457	804,615
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of overall apparent consumption (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***

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

Table IV-10 presents data on apparent U.S. consumption and market shares for hybrid mattresses. Apparent U.S. consumption of hybrid mattresses increased by *** during 2015-17 and was *** higher in interim 2018 compared with interim 2017. While the increase from 2015 to 2017 was largely driven by the 271.8 percent increase in U.S. importers' shipments of hybrid mattresses from China, U.S. producers' shipments of hybrid mattresses from China also increased by 8.4 percent. As a result, U.S. producers' market share in hybrid mattresses decreased by *** points during 2015-17, declining from *** in 2015 to *** in 2017, and was *** lower in interim 2018 compared with interim 2017.

Table IV-10

Mattresses: Market for hybrid mattresses, 2015-17, January to June 2017, and January to June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. producers' U.S. shipments	751,600	865,604	814,669	440,410	463,951
U.S. importers' U.S. shipments from.-- China	191,259	234,485	711,185	259,664	680,689
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of overall apparent consumption (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***

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

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

Table IV-11 presents data on apparent U.S. consumption and market shares of non-innerspring mattresses. Apparent U.S. consumption of non-innerspring mattresses increased by *** during 2015-17 and was *** higher in interim 2018 compared with interim 2017. While the increase from 2015 to 2017 was largely driven by the 221.1 increase in U.S. importers' shipments of non-innerspring mattresses from China, U.S. producers' shipments of non-innerspring mattresses also increased by 19.8 percent. U.S. producers' market share in non-innerspring mattresses decreased *** during 2015-17, declining from *** in 2015 to *** of in 2017, and was *** lower in interim 2018 compared with interim 2017.

Table IV-11**Mattresses: Market for non-innerspring only mattresses, 2015-17, January to June 2017, and January to June 2018**

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
U.S. producers' U.S. shipments	3,099,961	3,484,953	3,714,429	1,852,590	2,159,578
U.S. importers' U.S. shipments from.-- China	1,165,839	1,936,972	3,743,773	1,595,273	2,090,388
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of overall apparent consumption (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***

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

Table IV-12 presents data on the apparent U.S. consumption and market shares of adult mattresses and table IV-13 presents this for youth mattresses. Apparent U.S. consumption of adult mattresses increased by *** during 2015-17 and was *** higher in interim 2018 compared with interim 2017. While the increase from 2015 to 2017 was driven largely by the *** increase in U.S. importers' shipments of adult mattresses from China during 2015-17, as U.S. producers' U.S. shipments of adult mattresses decreased by ***.

Table IV-12**Mattresses: Market for adult mattresses, 2015-17, January to June 2017, and January to June 2018**

* * * * *

Apparent U.S. consumption of youth mattresses decreased by *** during 2015-17 and were *** lower in interim 2018 compared with interim 2017. Both U.S. producers' shipments and U.S. importers' shipments of mattresses from China declined by *** between 2015 and 2017. U.S. producers lost market share with respect to adult mattresses and gained market share with respect to youth mattresses during 2015-17.

Table IV-13
Mattresses: Market for youth mattresses, 2015-17, January to June 2017, and January to June 2018

* * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The major raw materials used in the production of mattresses varies depending on the type of mattress being produced. Innerspring and hybrid mattresses use springs of iron or steel, usually made of wire rod, while foam-only mattresses do not. Most of these mattress types typically use some foam in various thicknesses, densities, and in various amounts. The three primary types of foam used are polyurethane, viscoelastic (i.e., “memory foam”), and latex.

In general, the price of wire rod, which is used to produce mattress springs, decreased throughout 2015, fluctuated throughout 2016, and then increased irregularly throughout 2017 and the first half of 2018. Between January 2015 and December 2017, the price of wire rod increased slightly, by *** percent. Between December 2017 and June 2018, the price of wire rod increased by *** percent.

Figure V-1
Raw materials: Wire rod prices, monthly, January 2015-June 2018

* * * * *

The primary chemical materials used in the production of the foam for use in mattresses are polyols polyether flexible foam, isocyanates MDI, and isocyanates TDI.¹ Generally speaking, the prices of these inputs all decreased throughout 2015 and the first half of 2016, then recovered steadily throughout the second half of 2016, 2017, and the first half of 2018. Between the first week of January 2015 and the last week of December 2017, the price of polyether foam decreased ***, and the prices of MDI and TDI both increased ***. Between the last week of December 2017 and the last week of June 2018, the prices of polyether foam and TDI both increased ***, while the price of MDI ***.

¹ Polyether polyols are used in applications such as “flexible foam for bedding mattresses and upholstered furniture, multiple automotive and transportation applications from car seats to dashboards, rigid board stock in roofing, spray foam insulation in walls of buildings, homes and refrigerators, plus many types of adhesives and sealants.” See *AGC website, Polyether Polyol Applications*, <https://www.agcchem.com/products/specialty-materials/polyols-for-polyurethanes>, retrieved October 5, 2018.

Methylene diphenyl diisocyanate (MDI) and toluene diisocyanate (TDI) are part of a “family of chemical building blocks mainly used to make polyurethane products, such as rigid and flexible foams, coatings, adhesives, sealants and elastomers.” See *American Chemistry Council website, Diisocyanates Explained*, <https://dii.americanchemistry.com/Diisocyanates-Explained/>, retrieved October 5, 2018.

Figure V-2

Raw materials: Polyols polyether flexible foam (slabstock), isocyanates MDI (polymeric/crude), and isocyanates TDI (80:20), U.S. cents per pound, weekly, January 2015-June 2018

* * * * *

Among responding U.S. producers, all 37 responding firms reported that raw material prices had increased since January 2015. Several U.S. producers reported that steel, cardboard, wood, and foam or its components (MDI and TDI) have all increased in price, but that they have been unable to pass along these increases to purchasers.² Most (26 of 34) importers also reported that raw material prices have increased since January 2015, while 7 reported that they fluctuated and 1 reported that they did not change. Some importers reported that the costs of foam have risen in China as well as in the United States, with ***, as well as U.S. producer Elite Comfort Solutions, citing the explosion of a major TDI manufacturer in China as affecting the supply and price of TDI.³ Eleven importers reported that the selling prices for mattresses have increased due to the increase in raw material costs.

Transportation costs to the U.S. market

Transportation costs for mattresses shipped from China to the United States averaged 4.8 percent during 2017. This estimate was derived from official import data and represent the transportation and other charges on imports.⁴

U.S. inland transportation costs

Most responding U.S. producers (30 of 36) and importers (30 of 36) reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 1 to 15 percent, while most importers reported

² At the staff conference, Elite Comfort Solutions testified that it has seen a steady increase in the cost of polyols, MDI, and TDI since 2017. Conference transcript, p. 35 (Christafides).

³ Conference transcript, p. 73 (Christafides). In August 2015, a series of explosions near the port city of Tianjin, China destroyed several storage warehouses of TDI and other hazardous chemicals. See *CNN, Tianjin explosion: Dozens dead, areas of Chinese port city devastated*, available at <https://www.cnn.com/2015/08/13/asia/china-tianjin-explosions/index.html>, retrieved October 20, 2018.

⁴ The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2017 and then dividing by the customs value based on the HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087. Accessed October 11, 2018.

similar costs.⁵ One importer reported a cost share of 22 percent and another reported a cost share of 33 percent.

PRICING PRACTICES

Pricing methods

As presented in table V-1, most U.S. producers and importers reported using price lists to set prices.⁶ U.S. producers and importers both reported using transaction-by-transaction negotiations, but while several U.S. producers reported selling through contracts, only a few importers (3 of 36) did.⁷

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

Method	U.S. producers	Importers
Transaction-by-transaction	12	12
Contract	10	3
Set price list	25	23
Other	3	5
Responding firms	37	36

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, U.S. producers and importers reported their 2017 U.S. commercial shipments of mattresses by type of sale. U.S. producers and importers reported selling pluralities of their mattresses in the spot market. U.S. producers also reported selling under annual and long-term contracts, with a relatively small amount under short-term contract. Importers reported selling ***, with a relatively small amount under annual contract.⁸

⁵ Five U.S. producers and one importer reported cost shares of 100 percent, while one U.S. producer reported a cost share of 85 percent. These responses are likely due to a misinterpretation of the question.

⁶ Several firms, including ***, submitted price lists. See also Petitioners' postconference brief, Exhibit 1, Responses to Questions from Staff, p. 1.

⁷ Only three importers selected the box indicating that they sold via contract (***), although ten firms reported at least some percentage of their 2017 sales as short-term contract sales, three reported some percentage of their 2017 sales as annual contract sales, and one reported some percentage of its 2017 sales as long-term contract sales.

⁸ ***.

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

Type of sale	U.S. producers	Importers
Short-term contracts	5.9	***
Annual contracts	20.1	***
Long-term contracts	26.8	***
Spot sales	47.2	***
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 average short-term contract durations of 30-180 days, with most reporting a duration of 90 days. U.S. producers reported long-term contracts of 365 days to five years, while only one importer, ***, reported a long-term contract duration, stating that it “varies by vendor.” For U.S. producers’ contract sales, most reported that prices can be renegotiated during the contracts, all reported that their contracts fixed either price or both price and quantity, and most reported that they do not index to raw material prices. For importers’ short-term contracts, half (5 of 10) reported that prices can be renegotiated during the contracts, almost all reported that they fixed either price or both price and quantity, and most (7 of 9) also reported that they do not index to raw material prices. Only one importer, ***, reported its annual contract provisions, stating that ***. ***, the only importer reporting its long-term contract provisions, stated that ***.

In their lost sales/lost revenue survey responses, purchasers provided a general description of their firms’ method of purchase for mattresses. Four firms reported buying mattresses via purchase order, four reported purchasing over the internet, two reported purchasing via contract, two via individual purchases, and one firm reported purchasing via a “supplier agreement.”

Sales terms and discounts

Half of the responding U.S. producers reported typically quoting prices on a delivered basis (18 of 37 firms), while 14 reported quoting on an f.o.b. basis and 4 reported using both methods. Most importers reported typically quoting prices on an f.o.b. basis (24 of 35 firms), while 8 reported quoting on a delivered basis, and 3 reported using both methods. While a plurality of U.S. producers (16) reported having no specific discount policy, 7 reported offering quantity discounts, 11 reported offering total volume discounts, 2 reported offering discounts for sets,⁹ and 10 reported offering other types of discounts. Other discounts reported by U.S. producers included cooperative advertising programs, incentive programs, discounts for early payment, discounts for floor samples, mattress forums, new store subsidies, on-line coupons, return allowances, and sales and promotional events. While 11 importers reported having no

⁹ Sets include mattresses sold in conjunction with mattress foundations, convertible sofa beds, corner groups, day-beds, roll-away beds, high risers, trundle beds, and/or cribs.

specific discount policy, 8 reported offering quantity discounts, 4 reported offering total volume discounts, 2 reported offering discounts for sets, and 17 reported offering other types of discounts. In describing these other policies, two importers reported using a cost plus margin formula, one reported using price negotiations with customers, one reported issuing 30-60 day price change notices, one reported using a pricing benchmark based on its competition, and one reported selling at a “fixed retail price.”

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 mattresses products shipped to unrelated U.S. customers during January 2015-June 2018.¹⁰

Product 1--Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 8.0 inches.

Product 2--Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 8.0 inches but less than or equal to 10.0 inches.

Product 3--Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 9.0 inches but less than or equal to 12.0 inches.

Product 4--Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 9.0 inches.

¹⁰ Respondents argue that “... the pricing products proposed by the petitioners are ill-constructed, combining apples and oranges and omitting key variables like foam density,” and “also allow for the inclusion of hybrid mattresses” within products 3 and 4, “so there’s no assurance the companies completing these tables are reporting the same products.” They also don’t explicitly exclude co-op fees, which is a fee sometimes appropriated back to the retailer in exchange for either special placement on the floor or in accordance with an advertising initiative. Conference transcript, pp. 17 (McLain), 176-177 (Dougan), and 236-237 (Dougan, Dietz); Respondent Classic Brands’ postconference brief, pp. 31-32; and Respondent CVB’s postconference brief, pp. 6-7.

Twenty-three U.S. producers and 16 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.^{11 12} Pricing data reported by these firms accounted for approximately 28.7 percent of U.S. producers' U.S. shipments and 17.5 percent of importers' U.S. shipments of subject imports from China in 2017 (not including retail level sales to consumers).

Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-3 to V-6.

Table V-3

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 11 and margins of underselling/(overselling), by quarter, January 2015-June 2018

Period	United States		China		
	Price (dollars per mattress)	Quantity (mattresses)	Price (dollars per mattress)	Quantity (mattresses)	Margin (percent)
2015:					
January-March	155	12,746	149	2,636	4.0
April-June	157	11,624	143	4,163	8.9
July-September	159	12,756	158	4,474	0.2
October-December	156	10,986	116	5,873	25.7
2016:					
January-March	***	***	129	5,051	***
April-June	154	12,331	127	6,615	17.4
July-September	***	***	125	10,100	***
October-December	***	***	116	7,277	***
2017:					
January-March	***	***	107	8,871	***
April-June	147	14,115	103	7,165	30.1
July-September	147	16,450	98	16,894	33.6
October-December	141	17,261	102	8,161	27.8
2018:					
January-March	135	24,023	100	9,749	25.6
April-June	138	22,013	103	13,521	25.8

¹ Product 1: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 8.0 inches.

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

¹¹ 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.

¹² ***. Accordingly, these data have been removed from this pricing analysis.

Table V-4

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2¹ and margins of underselling/(overselling), by quarter, January 2015-June 2018

Period	United States		China		
	Price (dollars per mattress)	Quantity (mattresses)	Price (dollars per mattress)	Quantity (mattresses)	Margin (percent)
2015:					
January-March	210	66,202	189	17,444	10.0
April-June	212	78,332	185	30,215	12.6
July-September	211	92,159	186	27,507	12.0
October-December	230	90,868	190	34,057	17.5
2016:					
January-March	231	95,685	189	41,160	18.5
April-June	214	115,830	179	47,726	16.2
July-September	224	132,360	176	51,127	21.6
October-December	225	118,381	176	58,528	21.5
2017:					
January-March	245	119,103	173	51,935	29.4
April-June	245	146,226	168	68,930	31.3
July-September	247	140,296	170	75,086	31.0
October-December	245	158,963	170	58,458	30.6
2018:					
January-March	254	145,445	195	78,910	23.1
April-June	231	170,435	198	102,130	14.3

¹ Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 8.0 inches but less than or equal to 10.0 inches.

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

Table V-5

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 3¹ and margins of underselling/(overselling), by quarter, January 2015-June 2018

Period	United States		China		
	Price (dollars per mattress)	Quantity (mattresses)	Price (dollars per mattress)	Quantity (mattresses)	Margin (percent)
2015:					
January-March	263	924,367	***	***	***
April-June	274	875,668	***	***	***
July-September	277	928,425	208	12,184	24.9
October-December	273	831,691	***	***	***
2016:					
January-March	270	874,580	199	21,936	26.4
April-June	277	863,763	196	18,490	29.1
July-September	275	894,404	193	27,018	29.8
October-December	270	824,383	186	28,350	30.9
2017:					
January-March	266	846,114	198	31,644	25.4
April-June	278	771,746	197	47,525	29.4
July-September	280	757,095	190	55,690	32.0
October-December	284	716,208	194	56,687	31.6
2018:					
January-March	269	759,708	190	65,861	29.4
April-June	287	720,963	205	88,468	28.6

¹ Product 3: Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 9.0 inches but less than or equal to 12.0 inches.

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

Table V-6

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 4¹ and margins of underselling/(overselling), by quarter, January 2015-June 2018

Period	United States		China		
	Price (dollars per mattress)	Quantity (mattresses)	Price (dollars per mattress)	Quantity (mattresses)	Margin (percent)
2015:					
January-March	160	303,715	***	***	***
April-June	161	281,090	***	***	***
July-September	161	308,516	166	3,473	(3.0)
October-December	158	273,672	137	2,866	13.0
2016:					
January-March	158	310,494	114	12,526	28.0
April-June	160	292,211	***	***	***
July-September	162	277,561	116	11,121	28.2
October-December	165	256,565	115	13,860	30.1
2017:					
January-March	158	259,878	110	16,406	30.5
April-June	160	233,302	112	17,163	30.0
July-September	159	225,670	118	24,931	25.8
October-December	167	222,928	118	23,426	29.4
2018:					
January-March	162	234,449	114	19,032	29.5
April-June	176	210,542	117	25,503	33.2

¹ Product 4: Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 9.0 inches.

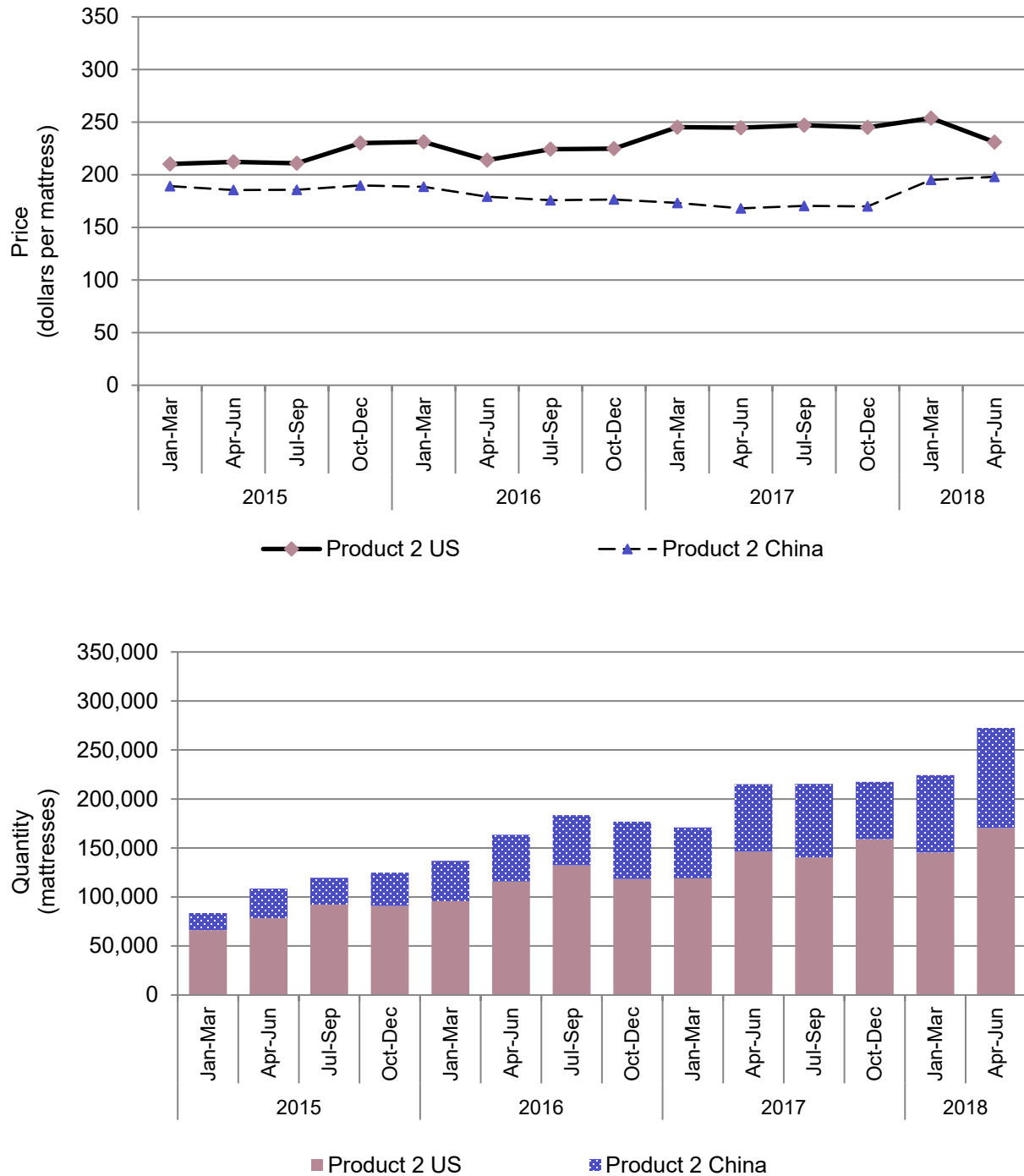
Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-3

Mattresses: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2015-June 2018

* * * * *

Figure V-4
Mattresses: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2015-June 2018



Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 8.0 inches but less than or equal to 10.0 inches.

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

Figure V-5
Mattresses: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2015-June 2018

* * * * *

Figure V-6
Mattresses: Weighted-average prices and quantities of domestic and imported product 4, by quarter, January 2015-June 2018

* * * * *

Import purchase cost data

Twelve importers provided usable purchase cost data for products 1-4 imported from China for their internal use, repackaging, or retail sales, although not all firms reported cost data for all products for all quarters. Import purchase cost data reported by these firms accounted for approximately 40.5 percent of U.S. shipments of imports from China sold at the retail level to consumers (either through brick and mortar stores or via the internet), internally consumed, and/or transferred to related parties in 2017. Import purchase cost data are presented in tables V-7 to V-10 and figures V-7 to V-10.

In addition to the import purchase cost data, firms were asked to estimate a variety of costs associated with their imports for internal use, including inland transportation costs, logistical or supply chain management costs, warehousing/inventory carrying costs, and insurance costs. Firms reported the following estimates (as a share of landed duty-paid value) for the following factors: inland transportation costs, 1 to 10 percent (for an average of 2.9 percent); logistical or supply chain costs, 0.2 to 8.4 percent (for an average of 4.3 percent); warehousing/inventory carrying costs, 0.8 to 10 percent (for an average of 5.1 percent); and insurance costs, 0.2 to 4 percent (for an average of 1.9 percent).

When asked to which source(s) they compare costs in determining their additional transaction costs of directly importing mattresses, 3 importers reported that they compare import purchase costs to other importers' prices, 2 reported comparing these costs to U.S. producers' prices, 4 reported that they compare these costs to both U.S. producers' and other importers' prices, and 7 firms don't compare to either. When firms were asked whether they also purchase mattresses from a U.S. producer, 9 of 25 reported that they do.

Table V-7

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 1,¹ by quarter, January 2015-June 2018

Period	United States (price)		China (cost)	
	Price (dollars per mattress)	Quantity (mattresses)	LDP value (dollars per mattress)	Quantity (mattresses)
2015:				
January-March	155	12,746	***	***
April-June	157	11,624	***	***
July-September	159	12,756	***	***
October-December	156	10,986	***	***
2016:				
January-March	***	***	***	***
April-June	154	12,331	***	***
July-September	***	***	***	***
October-December	***	***	***	***
2017:				
January-March	***	***	***	***
April-June	147	14,115	***	***
July-September	147	16,450	***	***
October-December	141	17,261	***	***
2018:				
January-March	135	24,023	***	***
April-June	138	22,013	***	***

¹ Product 1: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 8.0 inches.

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

Table V-8

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 2,¹ by quarter, January 2015-June 2018

Period	United States (price)		China (cost)	
	Price (dollars per mattress)	Quantity (mattresses)	LDP value (dollars per mattress)	Quantity (mattresses)
2015:				
January-March	210	66,202	***	***
April-June	212	78,332	***	***
July-September	211	92,159	138	30,687
October-December	230	90,868	133	23,118
2016:				
January-March	231	95,685	140	23,049
April-June	214	115,830	129	50,522
July-September	224	132,360	137	51,326
October-December	225	118,381	131	62,466
2017:				
January-March	245	119,103	128	82,341
April-June	245	146,226	***	***
July-September	247	140,296	***	***
October-December	245	158,963	124	199,365
2018:				
January-March	254	145,445	125	167,923
April-June	231	170,435	126	176,057

¹ Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 8.0 inches but less than or equal to 10.0 inches.

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

Table V-9

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 3,¹ by quarter, January 2015-June 2018

Period	United States (price)		China (cost)	
	Price (dollars per mattress)	Quantity (mattresses)	LDP value (dollars per mattress)	Quantity (mattresses)
2015:				
January-March	263	924,367	***	***
April-June	274	875,668	***	***
July-September	277	928,425	***	***
October-December	273	831,691	***	***
2016:				
January-March	270	874,580	***	***
April-June	277	863,763	***	***
July-September	275	894,404	***	***
October-December	270	824,383	***	***
2017:				
January-March	266	846,114	***	***
April-June	278	771,746	***	***
July-September	280	757,095	***	***
October-December	284	716,208	***	***
2018:				
January-March	269	759,708	***	***
April-June	287	720,963	***	***

¹ Product 3: Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 9.0 inches but less than or equal to 12.0 inches.

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

Table V-10

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 4,¹ by quarter, January 2015-June 2018

Period	United States (price)		China (cost)	
	Price (dollars per mattress)	Quantity (mattresses)	LDP value (dollars per mattress)	Quantity (mattresses)
2015:				
January-March	160	303,715	***	***
April-June	161	281,090	***	***
July-September	161	308,516	***	***
October-December	158	273,672	***	***
2016:				
January-March	158	310,494	***	***
April-June	160	292,211	***	***
July-September	162	277,561	***	***
October-December	165	256,565	***	***
2017:				
January-March	158	259,878	***	***
April-June	160	233,302	***	***
July-September	159	225,670	***	***
October-December	167	222,928	***	***
2018:				
January-March	162	234,449	***	***
April-June	176	210,542	***	***

¹ Product 4: Innerspring mattress (including mattresses with multiple cores and/or foam in addition to the innerspring), queen size, height (edge to edge) greater than or equal to 6.0 inches but less than 9.0 inches.

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

Figure V-7

Mattresses: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 1, by quarter, January 2015-June 2018

* * * * *

Figure V-8

Mattresses: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 2, by quarter, January 2015-June 2018

* * * * *

Figure V-9

Mattresses: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 3, by quarter, January 2015-June 2018

* * * * *

Figure V-10

Mattresses: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 4, by quarter, January 2015-June 2018

* * * * *

In general, firms stated that the benefits of importing mattresses for their internal use, repackaging, or retail sales included the following: compression and packaging technology, freight cost savings, and reduced costs and/or more cost control (3 firms each); capacity, material technology, warehousing, and quality (2 firms each); and availability of product, better payment conditions, environmental friendliness, fulfillment, innovation, inventory management, lead time consistency, logistics, more favorable pricing, overall value to customer, shipment tracking and visibility, supply chain control, and supply chain efficiency (1 firm each). Firms estimated that the margin saved by directly importing mattresses ranged from 1 to 35 percent (for an average of 12.3 percent).

Price trends

Table V-11 summarizes the price trends during January 2015-June 2018, by country and by product. U.S. producers' prices increased for products 2, 3, and 4, and decreased for product 1.¹³ Domestic price increases ranged from 9.1 percent to 9.9 percent, while the price decrease for product 1 was 11.0 percent. Prices for products 2 and 3 imported from China increased, by 4.7 and *** percent, respectively, while prices for products 1 and 4 decreased, by 31.2 and *** percent, respectively. Import purchase costs for product from China decreased for all four pricing products, with decreases ranging from *** to ***.

¹³ Several petitioning firms stated that they announced price increases that had to be subsequently retracted due to lower-priced imports from China. Petitioners' postconference brief, Exhibit 1, Responses to Questions from Staff, pp. 2-3.

Table V-11**Mattresses: Summary of weighted-average f.o.b. prices and landed duty paid costs for products 1-4 from the United States and China**

Item	Number of quarters	Low price (per mattress)	High price (per mattress)	Change in price ¹ (percent)
Product 1				
United States	14	135	***	(11.0)
China	14	98	158	(31.2)
China (cost)	14	***	***	***
Product 2				
United States	14	210	254	9.9
China	14	168	198	4.7
China (cost)	14	***	***	***
Product 3				
United States	14	263	287	9.1
China	14	186	208	***
China (cost)	14	***	***	***
Product 4				
United States	14	158	176	9.8
China	14	110	***	***
China (cost)	14	***	***	***

¹ Percentage change from the first quarter of 2015 to the second quarter of 2018.

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

Price comparisons

As shown in table V-12, prices for product imported from China were below those for U.S.-produced product in 53 of 56 instances (1.5 million mattresses); margins of underselling ranged from 0.2 to 33.6 percent. In the remaining 3 instances (***) mattresses), prices for product from China were between *** and *** percent above prices for the domestic product.

Table V-12
Mattresses: Instances of underselling/overselling and the range and average of margins, by product, January 2015-June 2018

Source	Underselling				
	Number of quarters	Quantity ¹ (mattresses)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	14	743,213	20.7	10.0	31.3
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total	53	1,522,034	24.1	0.2	33.6
Source	(Overselling)				
	Number of quarters	Quantity ¹ (mattresses)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	0	0	---	---	---
Product 2	0	0	---	---	---
Product 3	0	0	---	---	---
Product 4	3	***	***	***	***
Total	3	***	***	***	***

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.

When comparing direct import purchase costs with domestic prices, the cost of imports from China were lower than domestic prices in all 56 quarterly instances, for a total of approximately ***.

Lost sales and lost revenue

The Commission requested that U.S. producers of mattresses report purchasers where they experienced instances of lost sales or revenue due to competition from imports of mattresses from China during January 2015-June 2018. Twenty of 37 responding U.S. producers reported that they had to reduce prices (17 reported that they did not), and 15 of 35 responding U.S. producers reported that they had to roll back announced price increases (20 reported that they did not). Twenty-three of 37 responding U.S. producers reported that they had lost sales of mattresses to imports from China, while 14 reported that they had not. Five U.S. producers (***) submitted lost sales and lost revenue allegations. The five responding U.S. producers identified 14 firms with which they lost sales or revenue (15 consisting of lost sales allegations only, and 2 consisting of both lost sales and lost revenue allegations).

Staff contacted these 14 purchasers and received responses from 11 of them. Responding purchasers reported purchasing and/or importing approximately 19 million mattresses during 2015-17 (table V-13).

Table V-13
Mattresses: Purchasers' responses to purchasing patterns

Purchaser	Purchases and imports in 2015-17 (mattresses)			Change in domestic share ² (pp, 2015-17)	Change in subject country share ² (pp, 2015-17)
	Domestic	Subject	All other ¹		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Totals	9,229,504	8,185,772	1,585,320	(31.4)	30.9

¹ Includes all other sources and unknown sources.

² Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

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

Of the 11 responding purchasers, five reported that they had purchased mattresses imported from China instead of U.S.-produced product since 2015, although three firms (***) stated that they did not purchase mattresses from China “instead of” but rather “in addition to” domestic product (table V-14). All five of these purchasers reported that the prices of subject mattresses imported from China were lower than U.S.-produced mattresses, and three of these purchasers reported that price was a primary reason for the decision to purchase imported mattresses rather than U.S.-produced mattresses. Two purchasers (***) estimated the quantity of mattresses from China purchased instead of domestic product totaling 213,586 mattresses.

Firms identified several non-price reasons for purchasing imported rather than U.S.-produced product: *** cited ability to scale, a corporate strategy of maintaining a diverse supply chain, dependability/trust, a long-standing relationships with its Chinese suppliers, and value; *** stated that due to poor service and fulfillment capabilities from domestic producers, even at equal prices it would “still choose reliable overseas partners” for its production needs over U.S. producers; and *** stated that domestic suppliers “could not produce at capacity nor deliver in time to meet and satisfy customer demand” for bed-in-a-box products.

Table V-14

Mattresses: Purchasers' responses to purchasing subject imports instead of domestic product

Purchaser	Purchased imports instead of domestic (Y/N)	Chinese product priced lower? (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (mattresses)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Totals	Yes-5; No-5	Yes-5; No-0	Yes-3; No-4	213,586	

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

None of the 11 responding purchasers reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China; while 5 reported that U.S. producers had not reduced prices, 6 reported that they did not know (table V-15). One firm stated that it had been quoted a lower price for a similarly sized product four years after an original quote, but that the lower price was for a lower-density foam, and so the decrease was only associated with product innovations and not necessarily lower-priced Chinese product.

Table V-15

Mattresses: Purchasers' responses to U.S. producer price reductions

Purchaser	U.S. producers reduced priced to compete with subject imports (Y/N)	If U.S. producers reduced prices	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Totals	Yes-0; No-5; Don't Know-6	---	

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

In responding to the lost sales/lost revenue survey, *** provided additional information on market dynamics. Both firms stated that there has been an increase in “bed-in-a-box” sales, and stated that direct-to-consumer sales of such mattresses are driving the increase in imports from China. *** stated that *** has become extremely popular with its customers due to its “price point, product design, and smaller packaging” and that it has “replaced some of the traditional product lines *** previously sourced in the U.S.” It added that its domestic suppliers “could not produce at capacity nor deliver in time to meet and satisfy customer demand.” *** stated that the bed-in-a-box innovation has changed the mattress industry landscape “over the last several years” and has led to product quality improvements, lower transportation costs (by up to 70 percent), and quicker delivery times (3-5 days via parcel compared to 14 days via delivery truck). It added that “domestic mattress manufacturers have been unwilling to invest in the necessary areas of this quickly evolving industry” by offering only a limited assortment of bed-in-a-box products, not meeting the supply demands, and not sufficiently investing in supply chain technology such as drop-shipping.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Thirty-nine U.S. producers provided usable financial data. Most of the reporting firms have a fiscal year that ends on December 31 and reported on the basis of GAAP; others reported on a tax or cash basis.¹ ***, **, accounted for approximately *** percent of total reported sales, by quantity, and *** percent by value in 2017.

OPERATIONS ON MATTRESSES

Table VI-1 presents aggregated data on U.S. producers' operations in relation to mattresses over the period examined. Table VI-2 shows the changes in average unit values of sales and costs. Table VI-3 presents selected company-specific financial data.

¹ There are small differences between the trade and financial sections of the Commission's questionnaire due to timing differences. Except as noted, responding firms had a fiscal year ending on or about December 31. These firms were: Ashley, Bemco, Blue Bell, Classic, Comfort Holding, Corsicana, Easy Rest, Elite Comfort (***), England (***), Future Foam (***), FXI, GL Mattress, Holder, Jeffco, Kolcraft, Leggett & Platt, Leisure, Lions (***), Lippert, Mark, MBC (***), Naturally Beds, Pittsburgh, Quality Bedding, Royal-Pedic, Salt Lake, Serta Restokraft, Serta Simmons, Sinomax, Sleep Haven, Sleepmade, Solstice, Sound Sleep, South State (***), Southerland, Tempur Sealy, Ther-A-Pedic, Wolf, and Yankee. Partial period data were reported by: ***.

Table VI-1
Mattresses: Results of operations of U.S. producers, 2015-17, January-June 2017, and January-June 2018

Item	Fiscal year			January-June	
	2015	2016	2017	2017	2018
	Quantity (units)				
Total net sales	17,544,862	17,816,246	16,837,338	8,614,313	8,267,561
	Value (1,000 dollars)				
Total net sales	4,331,729	4,499,728	4,506,339	2,235,443	2,188,800
Cost of goods sold:					
Raw materials	2,011,739	1,983,472	2,009,807	1,006,602	1,029,304
Direct labor	273,170	324,561	319,154	163,480	148,671
Other factory costs	419,560	375,025	362,415	177,989	195,692
Total COGS	2,704,469	2,683,058	2,691,376	1,348,071	1,373,667
Gross profit	1,627,260	1,816,670	1,814,963	887,372	815,133
SG&A expense	1,020,778	1,075,861	1,131,006	584,435	528,641
Operating income or (loss)	606,482	740,809	683,957	302,937	286,492
Interest expense	***	***	***	***	***
All other expenses	***	***	***	***	***
All other income	***	***	***	***	***
Net income or (loss)	348,316	414,107	391,963	169,828	129,595
Depreciation/amortization	142,340	157,238	178,754	91,032	106,447
Cash flow	490,656	571,345	570,717	260,860	236,042
	Ratio to net sales (percent)				
Cost of goods sold:					
Raw materials	46.4	44.1	44.6	45.0	47.0
Direct labor	6.3	7.2	7.1	7.3	6.8
Other factory costs	9.7	8.3	8.0	8.0	8.9
Total COGS	62.4	59.6	59.7	60.3	62.8
Gross profit	37.6	40.4	40.3	39.7	37.2
SG&A expense	23.6	23.9	25.1	26.1	24.2
Operating income or (loss)	14.0	16.5	15.2	13.6	13.1
Net income or (loss)	8.0	9.2	8.7	7.6	5.9

Table continued on next page.

Table VI-1—Continued

Mattresses: Results of operations of U.S. producers, 2015-17, January-June 2017, and January-June 2018

Item	Fiscal year			January-June	
	2015	2016	2017	2017	2018
	Ratio to total COGS (percent)				
Cost of goods sold.--					
Raw materials	74.4	73.9	74.7	74.7	74.9
Direct labor	10.1	12.1	11.9	12.1	10.8
Other factory costs	15.5	14.0	13.5	13.2	14.2
Average COGS	100.0	100.0	100.0	100.0	100.0
	Unit value (dollars per unit)				
Total net sales	247	253	268	260	265
Cost of goods sold:					
Raw materials	115	111	119	117	124
Direct labor	16	18	19	19	18
Other factory costs	24	21	22	21	24
Total COGS	154	151	160	156	166
Gross profit	93	102	108	103	99
SG&A expense	58	60	67	68	64
Operating income or (loss)	35	42	41	35	35
Net income or (loss)	20	23	23	20	16
	Number of firms reporting				
Operating losses	5	5	9	5	7
Net losses	8	6	10	6	8
Data	37	38	39	37	36

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

Table VI-2

Mattresses: Changes in average unit values between fiscal years and partial year periods

Item	Between fiscal years			Between partial year periods
	2015-17	2015-16	2016-17	2017-18
	Change in AUVs (dollars per unit)			
Total net sales	20.75	5.67	15.08	5.24
Cost of goods sold:				
Raw materials	4.70	(3.33)	8.04	7.65
Direct labor	3.39	2.65	0.74	(1.00)
Other factory costs	(2.39)	(2.86)	0.47	3.01
Total COGS	5.70	(3.55)	9.25	9.66
Gross profit	15.05	9.22	5.83	(4.42)
SG&A expense	8.99	2.21	6.79	(3.90)
Operating income or (loss)	6.05	7.01	(0.96)	(0.51)
Net income or (loss)	3.43	3.39	0.04	(4.04)

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

**Table VI-3
Mattresses: Results of operations of U.S. producers, by firm, 2015-17, January-June 2017, and January-June 2018**

* * * * *

Total net sales

Total net sales value increased from 2015 to 2016 and 2016 to 2017. The increase in value was due to higher unit sales values even as sales quantity declined irregularly from 2015 to 2017. Sales value was lower between January-June 2017 (“interim 2017”) and January-June 2018 (“interim 2018”), however. Sales unit values were higher in interim 2018 than in interim 2017 but sales quantity was lower, which led to a lower total net sales value in interim 2018. As depicted in table VI-3, the data of several firms ***.^{2 3}

Cost of goods sold and gross profit

Total cost of good sold (“COGS”) declined from 2015 to 2016 but rose *** in 2017; total COGS was higher in interim 2018 than in interim 2017. As shown in table VI-3, ***. Most of the reduction in total COGS was reflected in raw material costs and other factory costs. Each of the components of COGS – raw materials,⁴ direct labor, and other factory costs – varied within a relatively narrow band, and *** increases in raw materials and direct labor were offset by a decline in other factory costs between 2015 and 2017. These changes were less than the changes in sales values and the ratio of total COGS to net sales declined from 2015 to 2017; however, the ratio was higher in interim 2018 compared with interim 2017 due to a greater

² ***.

³ U.S. shipments to retailers fell irregularly from 2015 to 2017 and were lower in interim 2018 than in the prior year; Internet sales direct to consumers increased but represented less than 1 percent of U.S. shipments. Direct shipments to end users via third party Internet, which represented 2.3 percent of total U.S. shipments in 2017, but increased as a share of total non-retail level sales. See Part II, table II-1, presented earlier. As shown in Part III, table III-7, total U.S. shipments fell as the type of mattresses sold shifted: shipments of non-innerspring and hybrid mattresses increased between 2015 and 2017 (from 22.1 to 27.1 percent by quantity and 37.9 to 41.3 percent by value) while shipments of innerspring only mattresses declined. The average unit values in 2017 of non-innerspring (\$358 per unit) and hybrid mattresses (\$637 per unit) were considerably higher than innerspring only mattresses (\$215 per unit).

⁴ Petitioners stated that there have been no shortages of steel or foam. Steel is the principal raw material for the production of innersprings and steel prices have increased due to market conditions and the imposition of Section 232 duties. Foam costs also have increased as isocyanates markets have been tight globally. Petitioners’ postconference brief, exh. 1, p. 11. According to questionnaire data, innersprings accounted for approximately 19 percent of raw material costs; foam or other resilient material accounted for 6 percent, upholstery materials and ticking accounted for 25 percent, and other material inputs (packaging materials, adhesives, film, and labels) accounted for 16 percent. U.S. producers’ questionnaire responses, section III-9c.

increase in COGS than in net sales value. Gross profit rose from 2015 to 2016 and declined *** in 2017; it was lower in interim 2018 than in interim 2017.

SG&A expenses and operating income

Total SG&A expenses rose from 2015 to 2017, increasing as a share of sales and on a per-unit basis between the annual periods, but were lower in value, as a share of sales, and on a per-unit basis in interim 2018 than in interim 2017. Given the changes in sales and costs, operating income rose noticeably from 2015 to 2016, declined in 2017 to a level that exceeded that in 2015, and was lower in interim 2018 than in interim 2017. The changes in dollar value were reflected in the ratio of operating income to sales.

Other expenses, net income, and cash flow

Interest expense and other expense were two major cost categories for reporting firms. ***.⁵ Other income ***.⁶ Each of the three items increased irregularly from 2015 to 2017 and was higher in interim 2018 than in interim 2017. Similar to operating income, net income rose irregularly from 2015 to 2017 and was lower in interim 2018 than in 2017. Depreciation rose steadily during the periods investigated; cash flows (net income plus depreciation) followed the trend of net income.

Variance analysis

A variance analysis is most useful for products that do not have substantial changes in product mix over the period investigated and the methodology is most sensitive at the plant or firm level, rather than the aggregated industry level. Because of the wide variation in product mix and unit values between firms in this investigation, a variance analysis is not presented. The discussion of COGS, gross profit, SG&A expenses, and operating income, which reflects differences in cost structures among the firms, as shown in tables VI-1, VI-2, and VI-3 mirrors the results of a variance analysis in this investigation. That is, the increase in operating income from 2015 to 2017 reflects a larger increase in average revenue compared to average operating costs and expenses, even as volume declined, while the decrease in operating income between January-June 2017 and January-June 2018 reflects a greater increase in costs and expenses compared to revenues and a further decrease in volume.

⁵ ***. Questionnaire response of ***, section III-10.

⁶ ***. Questionnaire response of ***, section III-10.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-4 presents capital expenditures and research and development (“R&D”) expenses by firm.⁷ ⁸ Table VI-5 provides the firms’ narrative responses regarding the nature and focus of their capital expenditures and R&D expenses.

Table VI-4
Mattresses: Capital expenditures and R&D expenses of U.S. producers, 2015-17, January-June 2017, and January-June 2018

Item	Fiscal year			January-June	
	2015	2016	2017	2017	2018
	Capital expenditures (1,000 dollars)				
Corsicana	***	***	***	***	***
Kolcraft	***	***	***	***	***
Lippert	***	***	***	***	***
Serta Simmons	***	***	***	***	***
Tempur Sealy	***	***	***	***	***
All other firms	***	***	***	***	***
Total	77,391	90,927	86,300	36,469	42,424
	R&D expenses (1,000 dollars)				
Corsicana	***	***	***	***	***
Kolcraft	***	***	***	***	***
Lippert	***	***	***	***	***
Serta Simmons	***	***	***	***	***
Tempur Sealy	***	***	***	***	***
All other firms	***	***	***	***	***
Total	***	***	***	***	***

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

Table VI-5
Mattresses: Firms’ narrative responses relating to capital expenditures and R&D expenses since January 1, 2015

* * * * *

ASSETS AND RETURN ON ASSETS

Table VI-6 presents data on the U.S. producers’ total assets and their return on assets (“ROA”).

⁷ In its postconference brief, Kolcraft stated ***. Postconference brief of petitioners, exh. 1, p. 4.

⁸ Serta Simmons ***. Questionnaire response of ***, sections II-2 and III-10, and petitioners’ postconference brief, exh. 1, p. 5

**Table VI-6
Mattresses: U.S. producers' total assets and return on assets, 2015-17**

Firm	Fiscal years		
	2015	2016	2017
	Total net assets (1,000 dollars)		
Corsicana	***	***	***
Kolcraft	***	***	***
Lippert ¹	***	***	***
Serta Simmons	***	***	***
Tempur Sealy	***	***	***
All other firms	***	***	***
Total	854,101	945,807	962,028
	Operating return on assets (percent)		
Corsicana	***	***	***
Kolcraft	***	***	***
Lippert ¹	***	***	***
Serta Simmons	***	***	***
Tempur Sealy	***	***	***
All other firms	***	***	***
Average	71.0	78.3	71.1

¹ ***.

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

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of mattresses to describe any actual or potential negative effects of imports of mattresses from China on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Appendix D presents U.S. producers' responses.⁹

⁹ See also comments on the industry's ability to raise capital and service debt in postconference brief of Classic Brands, p. 41.

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

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

THE INDUSTRY IN CHINA

The Commission issued foreign producers' or exporters' questionnaires to 51 firms believed to produce and/or export mattresses from China.³ Usable responses to the Commission's questionnaire were received from 11 firms:⁴ Relux Mattress Co., Ltd. ("Relux"), Ningbo Shuibishen Home Textile Technology Co.,Ltd. ("Shuibishen"), Jinlongheng Furniture Co., Ltd. ("Jinlongheng"), Healthcare Co., Ltd. ("Healthcare"), Zhejiang Glory Home Furnishings Co., Ltd. ("Glory"), Sinomax Macao Commerical Offshore Limited ("Sinomax"), Huizhou Lemeijia Household Products Limited. ("Huizhou"), Jiangsu Wellcare Household Articles Co., Ltd. ("Jiangsu"), Guangdong Diglant Furniture Industrial Co., Ltd. ("Diglant"), Inno Sports Co., Ltd. ("Inno Sports"), and Zinus (Xiamen) Inc. ("Zinus"). These firms' exports to the United States accounted for approximately 62.4 percent of U.S. imports of mattresses from China in 2017.⁵ According to estimates requested of the responding Chinese producers, the production of mattresses in China reported in questionnaires accounts for approximately 1.3 percent of overall production of mattresses in China and reported exported to the United States accounted for 31.3 percent of total Chinese exports of mattresses to the United States.

Table VII-1 presents information on the mattresses operations of the responding producers and exporters in China and table VII-4 presents information on Chinese resellers.

Table VII-1
Mattresses: Summary data for producers in China, 2017

* * * * *

Table VII-2
Mattresses: Summary data on reseller exporting to the United States from China, 2017

* * * * *

Changes in operations

As presented in table VII-3 producers in China reported several operational and organizational changes since January 1, 2015.

³ These firms were identified through a review of information submitted in the petition and contained in *** records.

⁴ The Commission also received questionnaires from one firm, ***, after completing the statistical analysis of this report and it was unable to be included in this report.

⁵ Calculated based on data from Commission questionnaire responses.

Table VII-3
Mattresses: China producers' reported changes in operations, since January 1, 2015

* * * * *

Operations on mattresses

Table VII-4 presents information on mattress manufacturing operations of the responding producers and exporters in China for 2015-17 and interim periods, January to June 2017 and January to June 2018, as well as projections for 2018-19 based on questionnaire responses. Chinese producers' capacity, production, and end-of-period inventories all increased between 2015 and 2017, by 50.5 percent, 129.2 percent, and 159.6 percent, respectively. Reported shipments also increased during 2015-17, with commercial home market shipments increasing by 231.6 percent and export shipments increasing by 122.5 percent over the period. Their capacity and end-of-period inventories were higher in interim 2018 than in interim 2017, while production, commercial home market shipments, exports to the United States and capacity utilization was lower.

Chinese foreign producers reported an increase in capacity utilization from 31.0 percent in 2015 to 35.9 percent in 2016 and 47.1 percent in 2017. Their capacity utilization was lower in interim 2018 at 40.1 percent than in interim 2017, at 42.9 percent. Inventories as a ratio to production and total shipments remained relatively stable between 2015 and 2017, as the large increase in inventories was concurrent with similarly large increases in production and total shipments. During 2015-17, the share of commercial home market shipments and export shipments to the United States compared with total shipments increased modestly, while the share of exports to all other markets decreased.

The share of responding Chinese producers' total shipments exported to the United States increased from 70.4 percent in 2015 to 72.5 percent in 2016 and 77.7 percent in 2016, and was 72.9 percent in interim 2018, compared with 79.3 percent in interim 2017. Approximately 200,000 fewer mattresses were exported to the United States in interim 2018 compared with interim 2017, while more than 150,000 more mattresses were exported to other markets.

Relative to 2017, the responding Chinese producers' capacity, end-of-period inventories, and commercial home market shipments are projected to increase by 104.3 percent, 4.7 percent, 30.0 percent, and 18.2 percent, respectively, while production and exports to the United States are projected to decline by 1.3 percent and 124.6 percent, respectively. In 2019, the responding Chinese producers projected that their capacity, production, end-of-period inventories, and export shipments to the United States will decrease from 2018 levels by at least 6 percent. Commercial home market shipments and export shipments to all other markets are projected to increase by 16.7 percent and 22.7 percent, respectively, in 2019. In contrast, responding Chinese producers projected that their capacity utilization will decrease, to 44.1 percent in full-year 2018 and 42.5 percent in 2019.

Table VII-4

Mattresses: Data on the industry in China, 2015-17, January to June 2017, January to June 2018, and projected calendar years 2018 and 2019

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2015	2016	2017	2017	2018	2018	2019
	Quantity (units)						
Capacity	7,943,537	9,852,124	11,958,357	5,952,398	6,183,961	12,635,480	11,806,549
Production	2,459,195	3,534,552	5,636,840	2,552,570	2,476,955	5,566,112	5,014,905
End-of-period inventories	70,230	133,621	182,324	210,567	215,171	236,977	209,357
Shipments: Home market shipments: Internal consumption/transfers	---	---	---	---	---	---	---
Commercial home market shipments	126,409	271,381	419,141	193,782	180,367	495,349	578,264
Total home market shipments	126,409	271,381	419,141	193,782	180,367	495,349	578,264
Export shipments to:							
United States	1,723,864	2,517,848	4,339,712	1,977,391	1,776,634	3,991,950	3,194,741
All other markets	599,383	681,932	829,714	323,661	480,926	1,036,427	1,271,820
Total exports	2,323,247	3,199,780	5,169,426	2,301,052	2,257,560	5,028,377	4,466,561
Total shipments	2,449,656	3,471,161	5,588,567	2,494,834	2,437,927	5,523,726	5,044,825
	Ratios and shares (percent)						
Capacity utilization	31.0	35.9	47.1	42.9	40.1	44.1	42.5
Inventories/production	2.9	3.8	3.2	4.1	4.3	4.3	4.2
Inventories/total shipments	2.9	3.8	3.3	4.2	4.4	4.3	4.1
Share of shipments: Home market shipments: Internal consumption/transfers	---	---	---	---	---	---	---
Commercial home market shipments	5.2	7.8	7.5	7.8	7.4	9.0	11.5
Total home market shipments	5.2	7.8	7.5	7.8	7.4	9.0	11.5
Export shipments to:							
United States	70.4	72.5	77.7	79.3	72.9	72.3	63.3
All other markets	24.5	19.6	14.8	13.0	19.7	18.8	25.2
Total exports	94.8	92.2	92.5	92.2	92.6	91.0	88.5
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table VII-4—Continued

Mattresses: Data on industry in China, 2015-17, January to June 2017, January to June 2018, and projection calendar years 2018 and 2019

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2015	2016	2017	2017	2018	2018	2019
	Quantity (units)						
Resales exported to the United States	860	1,950	2,320	1,196	1,085	1,600	252
Total exports to the United States	1,724,724	2,519,798	4,342,032	1,978,587	1,777,719	3,993,550	3,194,993
	Ratios and shares (percent)						
Share of total exports to the United States.-- Exported by producers	100.0	99.9	99.9	99.9	99.9	100.0	100.0
Exported by resellers	0.0	0.1	0.1	0.1	0.1	0.0	0.0
Adjusted share of total shipments exported to the United States	70.4	72.6	77.7	79.3	72.9	72.3	63.3

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.

Alternative products

As shown in table VII-5, responding Chinese producers manufactured other products on the same equipment and machinery used to produce mattresses.⁶ Overall capacity increased by 37.4 percent during 2015-17 and was 6.3 percent higher interim 2018 compared with interim 2017. Seven firms reported producing alternative products such as ***. The share of out-of-scope production to total production decreased from 72.0 percent in 2015 to 56.8 percent in 2017. Because many of these alternative products are relatively smaller than mattresses, overall capacity utilization results are likely understated, though trends are informative. Capacity utilization increased by 6.1 percent from 2015 to 2017, but was 4.5 percent lower in interim 2018 compared with interim 2017.

⁶ Despite reporting out-of-scope production, no Chinese producers' responded when asked about their ability to switch production. As a result, no Chinese producers' reported any factors impacting their ability to switch.

Table VII-5**Mattresses: Overall capacity and production on the same equipment as in-scope production by producers in China, 2015-17, January to June 2017, and January to June 2018**

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (units)				
Overall capacity	11,545,703	14,102,511	15,859,140	7,794,956	8,283,284
Production:					
Mattresses	2,459,195	3,534,552	5,636,840	2,552,570	2,476,955
Out-of-scope products	6,327,561	7,877,766	7,405,287	3,606,675	3,691,700
Total production on same machinery	8,786,756	11,412,318	13,042,127	6,159,245	6,168,655
	Ratios and shares (percent)				
Overall capacity utilization	76.1	79.8	82.2	79.0	74.5
Share of production:					
Mattresses	28.0	31.0	43.2	41.4	40.2
Out-of-scope products	72.0	69.0	56.8	58.6	59.8
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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

Exports

According to GTA data, the leading export market for bedding products from China, including mattresses and products other than mattresses, is the United States (table VII-6). During 2017, the United States was the top export market for bedding products from China, accounting for 33.6 percent of its exports in quantity terms, followed by Japan, accounting for 18.6 percent. Average unit value data suggests that most Chinese exports of articles of bedding are products other than mattresses.

Table VII-6
Articles of bedding: Exports from China by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Quantity (units)		
Exports from China to the United States	23,584,629	22,853,108	26,852,188
Exports from China to other major destination markets.--			
Japan	15,905,015	16,137,966	14,826,945
Australia	1,961,539	1,802,220	1,828,701
United Kingdom	3,854,241	5,702,729	5,791,491
Thailand	397,763	454,530	601,448
Korea South	3,165,641	2,636,102	1,907,454
Poland	958,286	1,262,548	1,447,258
Hong Kong	1,484,641	839,004	766,251
Canada	1,818,891	2,129,143	2,282,553
Vietnam	267,397	634,603	926,648
Germany	2,403,896	2,935,607	1,984,202
All other destination markets	12,431,273	17,859,035	23,526,479
Total exports from China	65,561,919	71,676,385	79,830,768
	Value (1,000 dollars)		
Exports from China to the United States	413,785	440,811	667,085
Exports from China to other major destination markets.--			
Japan	170,198	175,646	154,156
Australia	63,679	60,369	60,743
United Kingdom	34,555	34,522	33,297
Thailand	20,887	22,063	30,456
Korea South	39,375	40,097	28,700
Poland	26,705	28,197	28,076
Hong Kong	30,382	24,781	26,679
Canada	26,193	20,317	24,340
Vietnam	3,153	5,826	13,376
Germany	11,801	11,843	13,180
All other destination markets	186,084	159,657	173,979
Total exports from China	1,011,843	1,006,460	1,227,511

Table continued on next page.

Table VII-6—Continued
Articles of bedding: Exports from China by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Unit value (dollars per unit)		
Exports from China to the United States	17.54	19.29	24.84
Exports from China to other major destination markets.--			
Japan	10.70	10.88	10.40
Australia	32.46	33.50	33.22
United Kingdom	8.97	6.05	5.75
Thailand	52.51	48.54	50.64
Korea South	12.44	15.21	15.05
Poland	27.87	22.33	19.40
Hong Kong	20.46	29.54	34.82
Canada	14.40	9.54	10.66
Vietnam	11.79	9.18	14.44
Germany	4.91	4.03	6.64
All other destination markets	14.97	8.94	7.40
Total exports from China	15.43	14.04	15.38
	Share of value (percent)		
Exports from China to the United States	40.9	43.8	54.3
China exports to other major destination markets.--			
Japan	16.8	17.5	12.6
Australia	6.3	6.0	4.9
United Kingdom	3.4	3.4	2.7
Thailand	2.1	2.2	2.5
Korea South	3.9	4.0	2.3
Poland	2.6	2.8	2.3
Hong Kong	3.0	2.5	2.2
Canada	2.6	2.0	2.0
Vietnam	0.3	0.6	1.1
Germany	1.2	1.2	1.1
All other destination markets	18.4	15.9	14.2
Total exports from China	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 9404.21 and 9404.29 as reported by China Customs in the Global Trade Atlas database, accessed October 12, 2018.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-7 presents data on U.S. importers' reported inventories of mattresses. End-of-period inventories of imports from China increased by 219.2 percent during 2015-17 and were 14.1 percent higher in interim 2018 compared with interim 2017. As a ratio to U.S. imports and U.S. shipments of imports, U.S. importers' end-of-period inventories of mattresses from all import sources declined from 2015 to 2016, but increased from 2016 to 2017. In interim 2018, U.S. importers' end-of-period inventories as a ratio to U.S. imports were *** higher than in interim 2017, but were *** lower in ratio to U.S. shipments of imports in the same period.

Table VII-7

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

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Inventories (units); Ratios (percent)				
Imports from China Inventories	458,933	646,372	1,465,068	815,235	930,230
Ratio to U.S. imports	19.7	17.4	21.1	14.1	14.8
Ratio to U.S. shipments of imports	20.6	18.3	24.0	15.2	12.9
Ratio to total shipments of imports	20.6	18.2	23.8	15.1	12.9
Imports from nonsubject sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

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.

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of mattresses from China after June 30, 2018 (table VII-8).

Table VII-8
Mattresses: Arranged imports, July 2018 through June 2019

Item	Period				
	Jul-Sept 2018	Oct-Dec 2018	Jan-Mar 2019	Apr-Jun 2019	Total
	Quantity (units)				
Arranged U.S. imports from.-- China	2,010,837	2,541,715	237,973	67,388	4,857,913
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no known trade remedy actions on mattresses from China in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

Table VII-9 reports data on global exports of bedding products, including mattresses and products other than mattresses. China's share of global exports of bedding products by value was the largest, 27.2 percent, in 2017. Poland's share of global exports by value was the second largest, 16.4 percent, followed by Denmark at 4.8 percent. Global exports of bedding products from China increased by 21.3 percent, by value, and its share of global exports, by value, increased from 25.4 to 27.2 percent from 2015 to 2017. The value of global exports of bedding products from Poland increased by 14.7 percent, and its share of exports, increased from 16.2 to 16.4 percent in value terms from 2015 to 2017. Total value of global exports of bedding products increased by 13.1 percent from 2015 to 2017.

Table VII-9

Articles of bedding: Global exports by source, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Value (1,000 dollars)		
United States	150,250	161,730	175,686
China	1,011,843	1,006,460	1,227,511
All other major reporting exporters.--			
Poland	645,801	635,910	740,435
Denmark	217,421	209,303	218,562
Belgium	172,852	178,118	209,134
Netherlands	122,016	155,608	179,049
Italy	171,108	172,692	177,600
Germany	139,981	141,508	155,819
Mexico	141,442	140,477	144,262
Portugal	103,966	121,777	134,597
Turkey	65,623	64,368	83,557
Romania	35,005	58,517	78,641
All other exporters	1,008,417	1,034,439	982,115
Total global exports	3,985,725	4,080,908	4,506,967
	Share of value (percent)		
United States	3.8	4.0	3.9
China	25.4	24.7	27.2
All other major reporting exporters.--			
Poland	16.2	15.6	16.4
Denmark	5.5	5.1	4.8
Belgium	4.3	4.4	4.6
Netherlands	3.1	3.8	4.0
Italy	4.3	4.2	3.9
Germany	3.5	3.5	3.5
Mexico	3.5	3.4	3.2
Portugal	2.6	3.0	3.0
Turkey	1.6	1.6	1.9
Romania	0.9	1.4	1.7
All other exporters	25.3	25.3	21.8
Total global exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 9404.21 and 9404.29 reported by various national statistical authorities in the Global Trade Atlas database, accessed October 12, 2018.

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 48332, September 24, 2018	<i>Mattresses From China; Institution of Antidumping Duty Investigation and Scheduling of Preliminary Phase Investigation</i>	https://www.gpo.gov/fdsys/pkg/FR-2018-09-24/pdf/2018-20655.pdf
83 FR 52386, October 17, 2018	<i>Mattresses From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation</i>	https://www.gpo.gov/fdsys/pkg/FR-2018-10-17/pdf/2018-22577.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

Subject: Mattresses from China
Inv. No.: 731-TA-1424 (Preliminary)
Date and Time: October 9, 2018 - 9:30 a.m.

Sessions were held in connection with this preliminary phase investigation in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

In Support of Imposition (**Yohai Baisburd**, Cassidy Levy Kent (USA) LLP)
In Opposition to Imposition (**Patrick McLain**, WilmerHale)

In Support of the Imposition of Antidumping Duty Order

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of

Corsicana Mattress Company; Elite Comfort Solutions
Future Foam Inc.; FXI, Inc.; Innocor, Inc.; Kolcraft Enterprises Inc.
Leggett & Platt, Incorporated; Serta Simmons Bedding, LLC and
Tempur Sealy International, Inc.
(collectively "Mattress Petitioners")

D. Paul Dascoli, Chief Financial Officer, Serta Simmons Bedding, LLC

Richard Anderson, Executive Vice President and President,
North America, Tempur Sealy International

Stuart Fallen, Vice President, Corsicana Bedding, LLC

Andrew Prusky, Senior Vice President, General Counsel *and* Secretary,
FXI, Inc.

**In Support of the Imposition of
Antidumping Order (continued):**

Eric Rhea, Vice President, President - Bedding Group,
Leggett & Platt, Incorporated

Randy Ford, Vice President, President - Home Furniture Components Unit,
Leggett & Platt, Incorporated

Leigh Salyer, Group Vice President - Bedding Components,
Leggett & Platt, Incorporated

Thomas Koltun, President, Kolcraft Enterprises Inc.

Christos Chrisafides, Chief Executive Officer, Elite Comfort Solutions

Deirdre Maloney, Senior International Trade Advisor, Cassidy Levy
Kent (USA) LLP

Yohai Baisburd)
Mary Jane Alves) – OF COUNSEL
Ulrika K. Swanson)

**In Opposition to the Imposition of
Antidumping Order:**

Mowry & Grimson, PLLC
Washington, DC
on behalf of

South Bay International, Inc.

Daniella Serven, Chief Operating Officer, South Bay International

Toby Konetzny, Sr. Vice President of Business Development,
South Bay International

Jill A. Cramer) – OF COUNSEL

**In Opposition to the Imposition of
Antidumping Order (continued):**

WilmerHale
Washington, DC
on behalf of

Classic Brands, LLC

Michael Zippelli, Chief Executive Officer, Classic Brands, LLC

Daniel Dietz, Chief Business Officer, Classic Brands, LLC

Thomas Rogers, Principal, Capital Trade Inc.

Patrick McLain)
) – OF COUNSEL
Stephanie Hartmann)

Step toe & Johnson LLP
Washington, DC
on behalf of

Quanzhou Hen Ang Industrial and Trade Co., Ltd (“Delandis”)
Zhejiang Glory Home Furnishings Co., Ltd.
Guangdong Diglant Furniture Industrial Co., Ltd.
Ningbo Shuibishen Home Textile Technology Co., Ltd.
Jiangsu Wellcare Home Furnishing Products Co., Ltd.
Jinlongheng Furniture Co, Ltd.
Inno-Sports Co., Ltd.
Healthcare Co., Ltd. (“Mlily”) and China Beds Direct
Sinomax Macao Commercial Offshore Limited and Sinomax USA, Inc. (“Sinomax”)
Better Zs Co., Ltd.

James Dougan, Vice President, Economic Consulting Services

Thomas J. Trendl)
) – OF COUNSEL
Hui (“Henry”) Cao)

INTERESTED PARTIES IN OPPOSITION:

Soft-Tex International
Waterford, NY

Jeffrey Chilton, Chief Executive Officer, Soft-Tex International

Legends Furniture
Tolleson, AZ

Chris Dockter, Owner, Legends Furniture

CVB, Inc.
Logan, UT

Sam Malouf, President, CVB, Inc.

Kyle Robertson, Sales, CVB, Inc.

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Yohai Baisburd**, Cassidy Levy Kent (USA) LLP)

In Opposition to Imposition (**Patrick McLain**, WilmerHale; and
Thomas J. Trendl, Steptoe & Johnson LLP)

-END-

APPENDIX C
SUMMARY DATA

Table C-1: Mattresses: Summary data concerning the total U.S. market C-3
Table C-2: Mattresses: Summary data concerning the U.S. market excluding four U.S. producers
*** C-5

All U.S. producers

Table C-1

Mattresses: Summary data concerning the U.S. market, 2015-17, January to June 2017, and January to June 2018

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

	Reported data					Period changes			
	Calendar year		2017	January to June		Comparison years			Jan-Jun 2017-18
	2015	2016		2017	2018	2015-17	2015-16	2016-17	
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	***	***	***	***
U.S. shipments of imports from:									
China:									
Quantity.....	2,225,848	3,535,176	6,114,504	2,689,470	3,597,554	174.7	58.8	73.0	33.8
Value.....	312,914	464,432	781,099	345,572	460,769	149.6	48.4	68.2	33.3
Unit value.....	\$141	\$131	\$128	\$128	\$128	(9.1)	(6.5)	(2.8)	(0.3)
Ending inventory quantity.....	458,933	646,372	1,465,068	815,235	930,230	219.2	40.8	126.7	14.1
Nonsubject sources:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity.....	21,750,042	21,637,506	21,435,028	10,809,772	11,301,049	(1.4)	(0.5)	(0.9)	4.5
Production quantity.....	17,637,914	17,871,119	16,755,023	8,592,219	8,253,678	(5.0)	1.3	(6.2)	(3.9)
Capacity utilization (fn1).....	81.1	82.6	78.2	79.5	73.0	(2.9)	1.5	(4.4)	(6.5)
U.S. shipments:									
Quantity.....	17,415,620	17,728,402	16,754,826	8,636,573	8,298,667	(3.8)	1.8	(5.5)	(3.9)
Value.....	4,291,459	4,460,927	4,470,116	2,225,028	2,181,580	4.2	3.9	0.2	(2.0)
Unit value.....	\$246	\$252	\$267	\$258	\$263	8.3	2.1	6.0	2.0
Export shipments:									
Quantity.....	115,039	94,039	85,643	45,622	32,386	(25.6)	(18.3)	(8.9)	(29.0)
Value.....	33,065	32,260	30,181	14,794	12,742	(8.7)	(2.4)	(6.4)	(13.9)
Unit value.....	\$287	\$343	\$352	\$324	\$393	22.6	19.4	2.7	21.3
Ending inventory quantity.....	321,644	387,496	321,046	305,982	253,396	(0.2)	20.5	(17.1)	(17.2)
Inventories/total shipments (fn1).....	1.8	2.2	1.9	1.8	1.5	0.1	0.3	(0.3)	(0.2)
Production workers.....	12,483	12,911	12,683	11,838	11,348	1.6	3.4	(1.8)	(4.1)
Hours worked (1,000s).....	32,201	33,699	37,080	18,710	17,335	15.2	4.7	10.0	(7.3)
Wages paid (\$1,000).....	445,893	453,764	454,934	237,369	232,015	2.0	1.8	0.3	(2.3)
Hourly wages (dollars per hour).....	\$13.85	\$13.47	\$12.27	\$12.69	\$13.38	(11.4)	(2.8)	(8.9)	5.5
Productivity (units per 1,000 hours).....	547.7	530.3	451.9	459.2	476.1	(17.5)	(3.2)	(14.8)	3.7
Unit labor costs.....	\$25.28	\$25.39	\$27.15	\$27.63	\$28.11	7.4	0.4	6.9	1.8
Net sales:									
Quantity.....	17,544,862	17,816,246	16,837,338	8,614,313	8,267,561	(4.0)	1.5	(5.5)	(4.0)
Value.....	4,331,729	4,499,728	4,506,339	2,235,443	2,188,800	4.0	3.9	0.1	(2.1)
Unit value.....	\$247	\$253	\$268	\$260	\$265	8.4	2.3	6.0	2.0
Cost of goods sold (COGS).....	2,704,469	2,683,058	2,691,376	1,348,071	1,373,667	(0.5)	(0.8)	0.3	1.9
Gross profit or (loss).....	1,627,260	1,816,670	1,814,963	887,372	815,133	11.5	11.6	(0.1)	(8.1)
SG&A expenses.....	1,020,778	1,075,861	1,131,006	584,435	528,641	10.8	5.4	5.1	(9.5)
Operating income or (loss).....	606,482	740,809	683,957	302,937	286,492	12.8	22.1	(7.7)	(5.4)
Net income or (loss).....	348,316	414,107	391,963	169,828	129,595	12.5	18.9	(5.3)	(23.7)
Capital expenditures.....	77,391	90,927	86,300	36,469	42,424	11.5	17.5	(5.1)	16.3
Unit COGS.....	\$154	\$151	\$160	\$156	\$166	3.7	(2.3)	6.1	6.2
Unit SG&A expenses.....	\$58	\$60	\$67	\$68	\$64	15.5	3.8	11.2	(5.8)
Unit operating income or (loss).....	\$35	\$42	\$41	\$35	\$35	17.5	20.3	(2.3)	(1.5)
Unit net income or (loss).....	\$20	\$23	\$23	\$20	\$16	17.3	17.1	0.2	(20.5)
COGS/sales (fn1).....	62.4	59.6	59.7	60.3	62.8	(2.7)	(2.8)	0.1	2.5
Operating income or (loss)/sales (fn1).....	14.0	16.5	15.2	13.6	13.1	1.2	2.5	(1.3)	(0.5)
Net income or (loss)/sales (fn1).....	8.0	9.2	8.7	7.6	5.9	0.7	1.2	(0.5)	(1.7)

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.

Related party exclusion

Table C-2

Mattresses: Summary data concerning the U.S. market excluding four U.S. producers ***, ***, ***, and ***, 2015-17, January to June 2017, and January to June 2018

* * * * *

APPENDIX D
CAPITAL AND INVESTMENT

This section presents information on U.S. producers' responses describing any actual or potential negative effects of imports of mattresses from China on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table D-1 presents a tally of U.S. producers' responses and table D-2 provides the narrative responses.

Table D-1

Mattresses: Actual and anticipated negative effects of imports from China since January 1, 2015 on investment and growth and development

Item	No	Yes
Negative effects on investment	19	19
Cancellation, postponement, or rejection of expansion projects		6
Denial or rejection of investment proposal		3
Reduction in the size of capital investments		10
Return on specific investments negatively impacted		13
Other		6
Negative effects on growth and development	19	18
Rejection of bank loans		2
Lowering of credit rating		5
Problem related to the issue of stocks or bonds		0
Ability to service debt		5
Other		12
Anticipated negative effects of imports	11	26

Note: Companies responding "no" included: ***.

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

Table D-2

Mattresses: Narrative responses relating to actual and anticipated negative effects of imports from China on investment and growth and development since January 1, 2015

* * * * *

APPENDIX E

PRODUCTION LOCATIONS FOR SERTA SIMMONS AND TEMPUR SEALY

Table E-1
Mattresses: Serta Simmons's production locations

City, State
Atlanta, GA
Aurora, CO
Batesville, MS
Beloit, WI
Charlotte, NC
Clear Lake, IA
Coxsackie, NY
Cullman, AL
Dallas, TX
Fredericksburg, VA
Glendale, AZ
Grovetown, GA
Hazleton, PA
Hoffman Estates, IL
Houston, TX
Jamestown, NY
Janesville, WI
Kapolei, HI
Lancaster, PA
Monroe, OH
Moreno Valley, CA
New York, NY
Peachtree Corners, GA
Riviera Beach, FL
Sandy Springs, GA
Shawnee Mission, KS
Sumner, WA
Tolleson, AZ
Trujillo Alto, Puerto Rico
Waipahu, HI
Waycross, GA
Windsor Locks, CT

Source: Serta Simmons's response to Commission's questionnaire.

Table E-2
Mattresses: Tempur Sealy's production locations

City, State
Albuquerque, NM
Brenham, TX
Carolina, Puerto Rico
Conyers, GA
Denver, CO
Duffield, VA
Green Island, NY
Hagerstown, MD
Kansas City, KS
Lacey, WA
Medina, OH
Orlando, FL
Phoenix, AZ
Plainfield, IN
Richmond, CA
South Gate, CA
St. Paul, MN
Trinity, NC

Source: Tempur Sealy's response to Commission's questionnaire.