

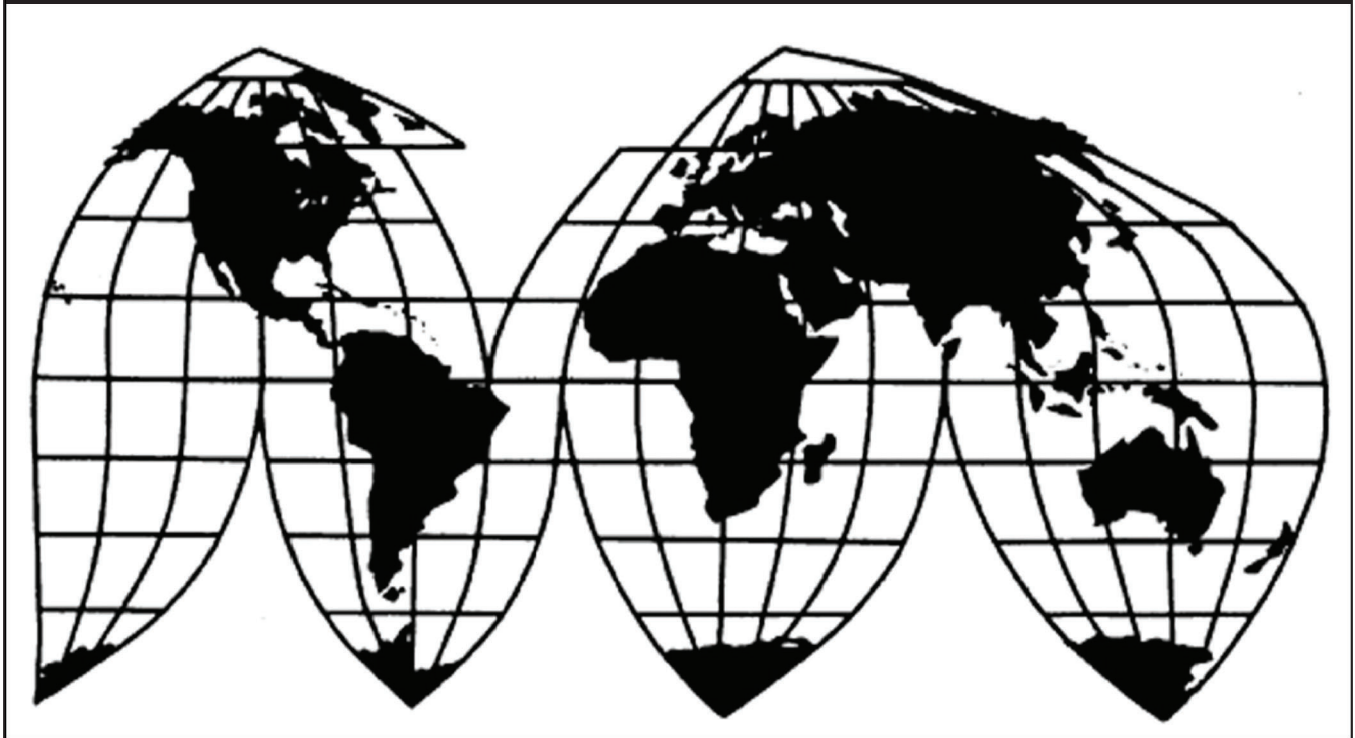
# **Mattresses from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam**

Investigation Nos. 701-TA-645 and 731-TA-1495-1501 (Preliminary)

**Publication 5059**

**May 2020**

**U.S. International Trade Commission**



Washington, DC 20436

# U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published.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



## UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-645 and 731-TA-1495-1501 (Preliminary)

Mattresses from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam

### DETERMINATIONS

On the basis of the record<sup>1</sup> developed in the subject investigations, 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 Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam, provided for in subheadings 9404.21.00, 9404.29.10, 9404.29.90, 9401.40.00, and 9401.90.50 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”) and imports of mattresses from China that are alleged to be subsidized by the government of China.<sup>2</sup>

### COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigations. 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 affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. 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 investigations.

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

<sup>2</sup> 85 FR 23002 (April 24, 2020); 85 FR 22998 (April 24, 2020).

## **BACKGROUND**

On March 31, 2020, Brooklyn Bedding (Phoenix, Arizona), Corsicana Mattress Company (Dallas, Texas), Elite Comfort Solutions (Newnan, Georgia), FXI, Inc. (Media, Pennsylvania), Innocor, Inc. (Media, Pennsylvania), Kolcraft Enterprises, Inc. (Chicago, Illinois), Leggett & Platt, Incorporated (Carthage, Missouri), the International Brotherhood of Teamsters (Washington, DC), and United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO (Washington, DC) filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of mattresses from China and LTFV imports of mattresses from Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam. Accordingly, effective March 31, 2020, the Commission instituted countervailing duty investigation No. 701-TA-645 and antidumping duty investigation Nos. 731-TA-1495-1501 (Preliminary).

Notice of the institution of the Commission's investigations and of a conference through written testimony to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of April 7, 2020 (85 FR 19503). In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its conference through written questions, submissions of opening remarks and written testimony, written responses to questions, and postconference briefs. All persons who requested the opportunity were permitted to participate.

## Views of the Commission

Based on the record in the preliminary phase of these investigations, 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 Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam that are allegedly sold in the United States at less than fair value and imports of the subject merchandise from China that are allegedly subsidized by the government of China.

### 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.<sup>1</sup> 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.”<sup>2</sup>

### II. Background

The petitions in these investigations were filed on March 31, 2020, by Brooklyn Bedding, Corsicana Mattress Company, Elite Comfort Solutions, FXI, Inc., Innocor, Inc., Kolcraft Enterprises, Inc., and Leggett & Platt, Incorporated, which are domestic producers of mattresses, and by the International Brotherhood of Teamsters, and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO (“USW”), which are unions representing workers at domestic

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<sup>1</sup> 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.

<sup>2</sup> *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).

mattress production facilities (collectively, “petitioners”). Petitioners submitted written opening remarks, witness testimony, responses to staff questions, and a postconference brief.<sup>3</sup>

Several respondent entities participated in the preliminary phase of these investigations. Submitting written witness testimony and a joint postconference brief, including responses to staff questions, were Ashley Furniture Industries, Inc. (“Ashley”), a domestic producer and importer; Classic Brands, LLC (“Classic”), a domestic producer and importer; CVB, Inc. (Malouf Sleep) (“Malouf Sleep”), an importer; Sinomax USA, Inc. (“Sinomax”), a domestic producer and importer; and Healthcare Europe DOO Duma (“Healthcare”), Saffron Living, Ltd., and Diglant Malaysia Sdn Bhd, foreign producers (collectively, the “joint respondents”). Also submitting written testimony and a postconference brief, including responses to staff questions, were H Mattress Inc. and Storkcraft Manufacturing (USA) Inc., importers (collectively, the “DBM respondents”). Submitting written testimony were Super Foam Vietnam Ltd., and Tongli Vietnam Industrial Co., Ltd., foreign producers; and the Government of Indonesia. Submitting separate postconference briefs were Cozy Comfort LLC and Walmart, Inc., importers; and the Government of Turkey. Submitting a non-party statement responding to staff questions was BRN Yatak Baza ve Ev Tekstili Insaat San. Tic. A.S. (“BRN”), a foreign producer.

U.S. industry data are based on the questionnaire responses of 52 domestic producers, accounting for most U.S. production of mattresses in 2019.<sup>4</sup> U.S. import data are based on official Commerce import statistics and from questionnaire responses from 54 U.S. importers, accounting for most U.S. imports from the subject countries.<sup>5</sup> The Commission received responses to its questionnaires from 26 foreign producers/exporters of subject merchandise; one producer/exporter in Cambodia, accounting for approximately \*\*\* percent of U.S. imports from Cambodia; one producer/exporter in China, accounting for approximately \*\*\* percent of U.S. imports from China; eight producers/exporters in Indonesia, accounting for

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<sup>3</sup> In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its conference in these investigations through opening remarks, written questions, submissions of written testimony, written responses to questions, and post-conference briefs as set forth in procedures provided to the parties.

<sup>4</sup> Confidential Report (“CR”)/Public Report (“PR”) at I-4.

<sup>5</sup> CR/PR at I-4. Based on official import statistics for the primary HTS statistical reporting numbers, 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, importer questionnaire responses represent greater than 100 percent of U.S. imports from China, Indonesia, Malaysia, Serbia, Thailand, and Vietnam, \*\*\* percent of U.S. imports from Cambodia, \*\*\* percent from Turkey, and \*\*\* percent from nonsubject sources in 2019. *Id.* at I-4 n. 7. Responding importers may have reported U.S. imports of mattresses entered under secondary HTS numbers. *Id.*

approximately \*\*\* percent of U.S. imports from Indonesia; four producers/exporters in Malaysia, accounting for approximately \*\*\* percent of U.S. imports from Malaysia; one producer/exporter in Serbia, accounting for approximately \*\*\* percent of U.S. imports from Serbia; one producer/exporter in Thailand, accounting for approximately \*\*\* percent of U.S. imports from Thailand; one producer/exporter in Turkey, accounting for \*\*\* percent of U.S. imports from Turkey; and nine producers/exporters in Vietnam, accounting for approximately \*\*\* percent of U.S. imports from Vietnam.<sup>6</sup>

### 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.”<sup>7</sup> 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.”<sup>8</sup> 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.”<sup>9</sup>

By statute, the Commission’s “domestic like product” analysis begins with the “article subject to an investigation,” *i.e.*, the subject merchandise as determined by Commerce.<sup>10</sup> Therefore, Commerce’s determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is “necessarily the starting point of the Commission’s like product analysis.”<sup>11</sup> The Commission then defines the domestic like product

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<sup>6</sup> CR/PR at VII-3, 7, 13, 19, 26, 32, 37, 42.

<sup>7</sup> 19 U.S.C. § 1677(4)(A).

<sup>8</sup> 19 U.S.C. § 1677(4)(A).

<sup>9</sup> 19 U.S.C. § 1677(10).

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

<sup>11</sup> *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Cir. Feb. 7, 2020) (the statute requires the Commission to start with Commerce’s subject merchandise in reaching its own like product determination).

in light of the imported articles Commerce has identified.<sup>12</sup> 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.<sup>13</sup> No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.<sup>14</sup> The Commission looks for clear dividing lines among possible like products and disregards minor variations.<sup>15</sup> The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.<sup>16</sup>

In its notices of initiation, Commerce defined the imported merchandise within the scope of these investigations as:

The products covered by this investigation are 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

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<sup>12</sup> *Cleo*, 501 F.3d at 1298 n.1 (“Commerce’s {scope} finding does not control the Commission’s {like product} determination.”); *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington*, 747 F. Supp. at 748–52 (affirming the Commission’s determination defining six like products in investigations where Commerce found five classes or kinds).

<sup>13</sup> *See, e.g., Cleo*, 501 F.3d at 1299; *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

<sup>14</sup> *See, e.g., S. Rep. No. 96-249* at 90–91 (1979).

<sup>15</sup> *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.”).

<sup>16</sup> *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, coextensive with the scope).



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.

The scope of this investigation is restricted to only “adult mattresses” and “youth mattresses.” “Adult mattresses” are frequently described as “twin,” “extra-long twin,” “full,” “queen,” “king,” or “California king” mattresses. “Youth mattresses” are typically described as “crib,” “toddler,” or “youth” mattresses. All adult and youth mattresses are included regardless of size or 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.

Also excluded is certain multifunctional furniture that is convertible from seating to sleeping, regardless of filler material or components, where that filler material or components are upholstered, integrated into the design and construction of, and inseparable from, the furniture framing, and the outermost layer of the multifunctional furniture converts into the sleeping surface. Such furniture may, and without limitation, be commonly referred to as “convertible sofas,” “sofa beds,” “sofa chaise sleepers,” “futons,” “ottoman sleepers” or a like description.

Also excluded from the scope of this investigation are any products covered by the existing antidumping duty orders on uncovered innerspring units from China or Vietnam. See Uncovered Innerspring Units from the People’s Republic of China: Notice of Antidumping Duty Order, 74 FR 7661 (Feb. 19, 2009); Uncovered Innerspring Units From the Socialist Republic of Vietnam, 73 FR 75391 (Dec. 11, 2008).

Also excluded from the scope of this investigation are bassinet pads with a nominal length of less than 39 inches, a nominal width less than 25 inches, and a nominal depth of less than 2 inches.

Additionally, also excluded from the scope of this investigation are “mattress toppers.” A “mattress topper” is a removable bedding accessory that supplements a mattress by providing an additional layer that is placed on top of a mattress. Excluded mattress toppers have a nominal height of four inches or less.<sup>17</sup>

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.<sup>18</sup> 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.<sup>19</sup> 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.<sup>20</sup>

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.<sup>21</sup> Innerspring mattresses have a core made of densely packed rows of metal springs, sometimes individually wrapped, surrounded by upholstery and covered in ticking.<sup>22</sup> 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.<sup>23</sup> Hybrid mattresses have a core combining metal springs and one or more layers of foam surrounded by upholstery

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<sup>17</sup> *Mattresses From the People's Republic of China: Initiation of Countervailing Duty Investigation*, 85 Fed. Reg. 22998 (April 24, 2020); *Mattresses From Cambodia, Indonesia, Malaysia, Serbia, Thailand, the Republic of Turkey, and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*, 85 Fed. Reg. 23002 (April 24, 2020).

<sup>18</sup> CR/PR at I-11.

<sup>19</sup> CR/PR at I-7, II-1.

<sup>20</sup> CR/PR at I-11.

<sup>21</sup> CR/PR at II-1.

<sup>22</sup> CR/PR at I-11, Figure I-1.

<sup>23</sup> CR/PR at I-12-13, Figure I-2.

and covered in ticking.<sup>24</sup> All three types of mattresses may be packaged for shipment flat, in the configuration used for sleeping (flat packed mattresses or (“FPM”)), or rolled and boxed as a mattress-in-a-box (“MiB”).<sup>25</sup> Most MiB mattresses are made of foam.<sup>26</sup> Mattresses can also vary according to spring quality, foam density and type, upholstery and ticking quality, and special design features.<sup>27</sup>

#### **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 investigations, as it did in *Mattresses from China*, based on an examination of the Commission’s traditional like product factors.<sup>28</sup> In their view, there is no new information on the record of these investigations that would warrant the Commission’s reconsideration of its domestic like product definition from *Mattresses from China*.<sup>29</sup>

*Respondents’ Argument.* The joint respondents do not contest petitioners’ proposed definition of the domestic like product.<sup>30</sup>

Cozy Comfort argues that the Commission should define what it characterizes as a “Seat-to-Sleep furniture component” (“STS furniture component”) as a separate like product based on an analysis of the Commission’s like product factors. Cozy Comfort argues that STS furniture components consist of a seating deck and articulation mechanism that are incorporated into sofas and chairs for sitting and, when converted into a bed, sleeping.<sup>31</sup> It argues that STS furniture components are not interchangeable with any other mattresses because they may only be used in furniture specifically engineered to accept STS furniture components, which are exclusively imported by Cozy Comfort and not produced domestically.<sup>32</sup>

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<sup>24</sup> CR/PR at I-11-12, II-1, Figure I-1.

<sup>25</sup> CR/PR at I-11-12, II-1.

<sup>26</sup> CR/PR at II-1.

<sup>27</sup> See *Mattresses from China*, Inv. No. 731-TA-1424 (Final), USITC Pub. 5000 (Dec. 2018) at 8.

<sup>28</sup> Petition at 13; see also Petitioners’ Postconference Brief at 4-6. On December 9, 2019, the Commission determined that a domestic industry was materially injured by reason of LTFV imports of mattresses from China. *Mattresses from China*, USITC Pub. 5000 at 3; CR/PR at I-5. The scope of the Commission’s prior investigation was virtually identical to the scope of these investigations. CR/PR at I-5 n.8.

<sup>29</sup> Petitioners’ Postconference Brief at 6.

<sup>30</sup> Joint Respondents’ Postconference Brief at 4.

<sup>31</sup> Cozy Comfort’s Postconference Brief at 2.

<sup>32</sup> Cozy Comfort’s Postconference Brief at 2.

## B. Analysis

Based on the record in the preliminary phase of these investigations, we define a single domestic like product that consists of mattresses, coextensive with the scope of the investigations. In *Mattresses from China*, in which the scope was virtually identical to that in these investigations, the Commission defined a single domestic like product coextensive with the scope based upon the preponderance of similarities between in-scope mattresses in terms of physical characteristics and uses; channels of distribution; manufacturing facilities, production employees and, to some extent, production processes; and producer and customer perceptions.<sup>33</sup> The Commission also found that in-scope mattresses generally differ from out-of-scope futons, air mattresses, and waterbeds.<sup>34</sup> These factors continue to support a finding that there is a single domestic like product that encompasses all mattresses within the scope.

We do not define a separate domestic like product corresponding to STS furniture components, as advocated by Cozy Comfort. Only those articles domestically produced may be defined as a separate domestic like product and there is no domestic production of STS furniture components, according to Cozy Comfort.<sup>35</sup> In the absence of domestic production of STS furniture components (and thus a domestic industry), such components are not capable of examination under the Commission's traditional domestic like product analysis, which entails comparison of products that are in fact domestically produced.<sup>36</sup> Instead, we must define a domestic like product to include the domestically produced article "most similar" to the imported STS furniture components within the scope of the investigations.<sup>37</sup> The domestically produced article most similar to imported STS furniture components would be domestically produced sleep sofa mattresses, which possess characteristics and uses most similar to those of

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<sup>33</sup> *Mattresses from China*, USITC Pub. 5000 at 9; see also *Mattresses from China*, Inv. No. 731-TA-1424 (Preliminary), USITC Pub. 4842 (Nov. 2018) at 11.

<sup>34</sup> USITC Pub. 5000 at 9; USITC Pub. 4842 at 11.

<sup>35</sup> Cozy Comfort's Postconference Brief at 2.

<sup>36</sup> See *Large Residential Washers from China*, Inv. No. 731-TA-1306 (Preliminary), USITC Pub. 4591 (Feb. 2016) at 10 ("Absent evidence of domestic production of such washers, we have no basis for determining whether a clear dividing line separates domestically produced out-of-scope low-tech and front load extra-wide washers from in-scope LRWs in terms of our like product factors . . .").

<sup>37</sup> 19 U.S.C. § 1677(10).

imported STS furniture components.<sup>38</sup> The single domestic like product that we define includes domestically produced sleep sofa mattresses.

In sum, we define a single domestic like product encompassing all mattresses within the scope of the investigations.

#### **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.”<sup>39</sup> In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

These investigations raise two separate domestic industry issues. The first concerns whether companies that develop and promote MiBs while producing no mattresses engage in sufficient production-related activities to constitute domestic producers. The second concerns whether appropriate circumstances exist to exclude any domestic producers from the domestic industry pursuant to the related parties provision.

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<sup>38</sup> Sofa bed mattresses were produced domestically during the period of investigation. See Domestic Producers’ Questionnaire Responses of \*\*\* at Question IV-12; CR/PR at Table VI-7 (\*\*\*). Cozy Comfort recognizes that STS furniture components possess characteristics and uses similar to those of domestically produced sleeper sofa mattresses in arguing that “{t}he Cozy Comfort STS furniture component provides the consumer with a significant quality upgrade” compared to “{m}ost sleeper sofas fitted with a mattress . . . .” Cozy Comfort Postconference Brief at 3. No party has argued that the Commission should define a separate domestic like product corresponding to sofa bed mattresses.

<sup>39</sup> 19 U.S.C. § 1677(4)(A).

## A. Sufficient Production-Related Activities

In deciding whether a firm qualifies as a domestic producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities, and production-related activity at minimum levels could be insufficient to constitute domestic production.<sup>40</sup>

### 1. Arguments of the Parties

*Respondents' Argument.* The joint respondents argue that the Commission should include in the domestic industry companies that develop and promote MiBs for sale over the internet ("MiB developers"), such as Casper, Nector, Leesa, and Tuft & Needle, even though they produce no mattresses.<sup>41</sup> According to the joint respondents, MiB developers should qualify as domestic producers based upon the substantial capital investment and technical expertise required to design and market MiBs, the value added to the MiBs by their advertising campaigns, their significant level of employment, and the reliance of many MiB developers on domestically-sourced MiBs.<sup>42</sup>

*Petitioners' Argument.* Petitioners do not address this issue.

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<sup>40</sup> The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *Crystalline Silica Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 12-13 (Nov. 2012).

<sup>41</sup> Joint Respondents' Postconference Brief at 7.

<sup>42</sup> Joint Respondents' Postconference Brief at 7-10.

## 2. Analysis

Based on the record of the preliminary phase of these investigations, we find that MiB developers do not engage in sufficient production-related activities to qualify as domestic producers. The Commission's production-related activities analysis focuses on "costs and activities in the United States directly leading to production of the like product."<sup>43</sup> Respondents acknowledge that MiB developers "do not produce mattresses."<sup>44</sup> Instead, they argue that MiB developers engage in activities related to developing and marketing MiBs, including substantial advertising expenditures; the design and testing of MiB products; and advertising campaigns that enhance the value of their MiBs.<sup>45</sup> None of these activities, however, "directly lead{} to production of the like product" by the MiB developers. Rather, these activities lead to the developers' purchases of MiBs from domestic producers of mattresses or importers of mattresses for resale to consumers.<sup>46</sup> Because MiB developers are not involved in the production of mattresses, by respondents' own admission, we find that they do not engage in production-related activities sufficient to qualify them as domestic producers.

### B. Related Parties

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

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<sup>43</sup> *Crystalline Silica Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 12-13 (Nov. 2012).

<sup>44</sup> Joint Respondents' Postconference Brief at 7, 9.

<sup>45</sup> See Joint Respondents' Postconference Brief at 7-10.

<sup>46</sup> See Joint Respondents' Postconference Brief at 9-10 (arguing that domestic producers are significant suppliers to MiB developers).



or which are themselves importers.<sup>47</sup> Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.<sup>48</sup>

\*\*\* meet the statutory criteria for consideration for exclusion under the related party provision as importers of subject merchandise during the period of investigation, and \*\*\* also qualify as related parties based on their affiliation with subject foreign producers and exporters and U.S. importers of subject merchandise.<sup>49</sup> \*\*\* qualifies as a related party based on its affiliation with an importer of subject merchandise.<sup>50</sup> We discuss below whether appropriate circumstances exist to exclude each of them from the domestic industry.

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<sup>47</sup> 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).

<sup>48</sup> 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.

<sup>49</sup> CR/PR at III-6 & n.4, Table III-2. Although \*\*\* purchased subject imports from an importer, we do not consider that its purchases qualify \*\*\* as a related party. *Id.* at Table III-9. 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 party if it controls large volumes of imports. 19 U.S.C. § 1677(4)(B)(ii). The Commission has found such control to exist where the domestic producer was responsible for a predominant proportion of an importer's purchases and the importer's purchases were substantial. \*\*\* purchases of subject imports from \*\*\* from importer \*\*\* were only \*\*\* units in 2019. CR/PR at Table III-9. We therefore find that \*\*\* does not qualify as a related party because the volume of its subject import purchases was not substantial.

<sup>50</sup> CR/PR at III-6, Table III-2.

## 1. Arguments of the Parties

*Petitioners' Argument.* Petitioners argue that the Commission should find that appropriate circumstances exist to exclude \*\*\* from the domestic industry as related parties.<sup>51</sup> For 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.<sup>52</sup>

*Respondents' Argument.* The joint respondents argue that the Commission should find that appropriate circumstances do not exist to exclude \*\*\*. While acknowledging that "\*\*\*\*," respondents contend that these imports allow \*\*\* to maintain its domestic production operations, \*\*\*.<sup>53</sup> Similarly, they argue that \*\*\* pursues \*\*\*.<sup>54</sup> They assert that the Commission should not exclude either \*\*\* from the domestic industry as related parties because \*\*\*.<sup>55</sup>

## 2. Analysis

We find that appropriate circumstances exist to exclude \*\*\* but not \*\*\* from the domestic industry based on the following analysis.

\*\*\*. \*\*\* was the \*\*\* largest domestic producer in 2019, accounting for \*\*\* percent of domestic industry production.<sup>56</sup> It falls under the related party provision because it imported subject mattresses during the POI and \*\*\*.<sup>57</sup> Specifically, \*\*\* imported \*\*\* units of mattresses in 2017 (the equivalent of \*\*\* percent of its domestic production), \*\*\*

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<sup>51</sup> Petition at 16; Petitioners' Postconference Brief at 8.

<sup>52</sup> See Petitioners' Postconference Brief at 8-12.

<sup>53</sup> Joint Respondents' Postconference Brief at 5-6; Burger Testimony at 6.

<sup>54</sup> Joint Respondents' Postconference Brief at 6.

<sup>55</sup> Joint Respondents' Postconference Brief at 6.

<sup>56</sup> CR/PR at Table III-1.

<sup>57</sup> CR/PR at III-6, Table III-2.

units in 2018 (the equivalent of \*\*\* percent of its domestic production), and \*\*\* units in 2019 (the equivalent of \*\*\* percent of its domestic production).<sup>58</sup> \*\*\* explains its reasons for importing as follows: “\*\*\*.”<sup>59</sup> \*\*\* operating income and net income to net sales ratios were \*\*\* than the domestic industry average in 2019.<sup>60</sup> It opposes the petitions, \*\*\*.<sup>61</sup>

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 between 2017 and 2019, as increases in its subject imports far outstripped increases in its domestic production during the period.<sup>62</sup> Consequently, we find that appropriate circumstances exist to exclude \*\*\* from the domestic industry under the related party provision.

\*\*\*. \*\*\* was \*\*\* domestic producers in 2019, accounting for \*\*\* of domestic industry production.<sup>63</sup> It falls under the related party provision because it imported subject mattresses during the POI and \*\*\*.<sup>64</sup> Specifically, \*\*\* imported \*\*\* units of mattresses in 2017 (the equivalent of \*\*\* percent of its domestic production), almost \*\*\* units in 2018 (the equivalent of \*\*\* percent of its domestic production), and \*\*\* units in 2019 (the equivalent of \*\*\* percent of its domestic production).<sup>65</sup> \*\*\* has explained its reasons for importing as follows: “\*\*\*

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<sup>58</sup> CR/PR at Table III-8. \*\*\* domestic production was \*\*\* units in 2017, \*\*\* units in 2018, and \*\*\* units in 2019. *Id.*

<sup>59</sup> CR/PR at Table III-8.

<sup>60</sup> CR/PR at Table VI-1. In 2019, \*\*\* operating income to net sales ratio was \*\*\* percent and its net income margin was \*\*\* percent. Domestic Producers’ Questionnaire Response of \*\*\* at Question III-9a.

<sup>61</sup> CR/PR at Table III-1.

<sup>62</sup> CR/PR at Table III-8.

<sup>63</sup> CR/PR at Tables III-1, III-8 (\*\*\* units in 2019).

<sup>64</sup> CR/PR at III-25, Table III-14.

<sup>65</sup> CR/PR at Table III-8.

\*\*\*.”<sup>66</sup> \*\*\* operating income to net sales ratio was \*\*\* than the domestic industry average in 2019 but its net income to net sales ratio was \*\*\*.<sup>67</sup> \*\*\* opposes the petitions.<sup>68</sup>

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 irregularly during the period of investigation, while its domestic production remained \*\*\*.<sup>69</sup> Consequently, we find that appropriate circumstances exist to exclude \*\*\* from the domestic industry under the related party provision.

\*\*\*. \*\*\* was among the smallest domestic producers that year, accounting for only \*\*\* percent of domestic industry production.<sup>70</sup> It qualifies as a related party based on its affiliation with subject producers and exporters in \*\*\* and U.S. importers of subject merchandise.<sup>71</sup> \*\*\* reported no imports or purchases of subject merchandise and its operating income and net income to net sales ratios were \*\*\* than the domestic industry average in 2019.<sup>72</sup> \*\*\* opposes the petitions.<sup>73</sup>

The record is mixed regarding \*\*\* primary interest. In this regard, \*\*\* reported no imports or purchases of subject merchandise and \*\*\* in 2019.<sup>74</sup> On the other hand, \*\*\* produced only a small volume of mattresses in 2019 \*\*\*, and is related to two U.S. importers of

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<sup>66</sup> CR/PR at Table III-8.

<sup>67</sup> CR/PR at Table VI-1. In 2019, \*\*\* operating income to net sales ratio was \*\*\* percent and its net income margin was \*\*\* percent. Domestic Producers’ Questionnaire Response of \*\*\* at Question III-9a.

<sup>68</sup> CR/PR at Table III-1.

<sup>69</sup> CR/PR at Table III-8.

<sup>70</sup> CR/PR at III-6 n.4.

<sup>71</sup> CR/PR at III-6 n.4. \*\*\* is related to \*\*\*. \*\*\* is related to \*\*\*. *Id.*

<sup>72</sup> CR/PR at III-6 n.4. In 2019, \*\*\* operating income to net sales ratio was \*\*\* percent and its net income margin was \*\*\* percent. Domestic Producers’ Questionnaire Response of \*\*\* at Question III-9a.

<sup>73</sup> CR/PR at Table III-1.

<sup>74</sup> CR/PR at III-6 n.4.

subject merchandise.<sup>75</sup> Furthermore, \*\*\*.<sup>76</sup> Based on the limited record in the preliminary phase of these investigations, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry under the related party provision but will reconsider its inclusion in any final phase of the investigations \*\*\*.

\*\*\*. \*\*\* was the \*\*\* largest domestic producer in 2019, accounting for \*\*\* percent of domestic industry production.<sup>77</sup> It falls under the related party provision because it imported subject mattresses from China in 2017 and 2018.<sup>78</sup> Specifically, \*\*\* imported \*\*\* units of mattresses in 2017 (the equivalent of \*\*\* percent of its domestic production) and \*\*\* units of mattresses in 2018 (the equivalent of \*\*\* percent of its domestic production).<sup>79</sup> In *Mattresses from China*, \*\*\* stated that it began importing mattresses from China “\*\*\*.”<sup>80</sup> \*\*\* operating income and net income to net sales ratios were \*\*\* than the domestic industry average in 2019.<sup>81</sup> \*\*\*.

The record shows that \*\*\* primary interest is in domestic production rather than importation. In this regard, \*\*\* only imported subject merchandise in 2017 and 2018 \*\*\*. Its ratio of imports to domestic production was low in 2017 and lower in 2018, before imports \*\*\*.<sup>82</sup> For all of these reasons, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry under the related party provision.

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<sup>75</sup> CR/PR at III-6 n.4. No party has argued that \*\*\*.

<sup>76</sup> CR/PR at III-6 n.4.

<sup>77</sup> CR/PR at Table III-1.

<sup>78</sup> CR/PR at Table III-8.

<sup>79</sup> *Mattresses from China*, Confidential Report at Table III-8. \*\*\* did not report its reasons for importing in these investigations. CR/PR at Table III-8. \*\*\* domestic production was \*\*\* units in 2017, and \*\*\* units in 2018. *Id.*

<sup>80</sup> CR/PR at Table III-14.

<sup>81</sup> CR/PR at Table VI-1. In 2019, \*\*\* operating income to net sales ratio was \*\*\* percent and its net income margin was \*\*\* percent. Domestic Producers’ Questionnaire Response of \*\*\* at Question III-9a.

<sup>82</sup> CR/PR at Table III-8.

\*\*\*. \*\*\* was \*\*\* in 2019, accounting for only \*\*\* percent of domestic industry production.<sup>83</sup> It qualifies as a related party based on its affiliation with a U.S. importer of subject merchandise.<sup>84</sup> \*\*\* reported no imports or purchases of subject merchandise and its operating income and net income to net sales ratios were \*\*\* than the domestic industry average in 2019.<sup>85</sup> It opposes the petitions.<sup>86</sup>

The record is mixed regarding \*\*\* primary interest. Although \*\*\* reported no imports or purchases of subject merchandise, it is related to a U.S. importer of subject merchandise.<sup>87</sup> Based on the limited record in the preliminary phase of these investigations, we find that appropriate circumstances do not exist to exclude \*\*\* from the domestic industry under the related party provision but will reconsider its inclusion in any final phase of the investigations.

\*\*\*. \*\*\* was among the smallest domestic producers in 2019, accounting for \*\*\* percent of domestic industry production that year.<sup>88</sup> It falls under the related party provision because it imported subject mattresses from China during the POI and is \*\*\*.<sup>89</sup> \*\*\* imported \*\*\* units in 2017 (the equivalent of \*\*\* percent of its domestic production), \*\*\* units in 2018 (the equivalent of \*\*\* percent of its domestic production), and \*\*\* units in 2019 (the equivalent of \*\*\* percent of its domestic production).<sup>90</sup> \*\*\* has stated that its reason for importing is “\*\*\*

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<sup>83</sup> CR/PR at III-6.

<sup>84</sup> CR/PR at III-6, Table III-2. \*\*\* is related to \*\*\*, which imported \*\*\* of subject merchandise from \*\*\*. *Id.* at Table IV-1; Importers’ Questionnaire Response of \*\*\*.

<sup>85</sup> CR/PR at Table III-8. In 2019, \*\*\* operating income to net sales ratio was \*\*\* percent and its net income margin was \*\*\* percent. Domestic Producers’ Questionnaire Response of \*\*\* at Question III-9a.

<sup>86</sup> CR/PR at Table III-1.

<sup>87</sup> CR/PR at Tables III-1-2.

<sup>88</sup> CR/PR at Table III-1; Domestic Producers’ Questionnaire of \*\*\* at Questions II-2, II-3a.

<sup>89</sup> CR/PR at Tables III-2, III-8.

<sup>90</sup> CR/PR at Table III-8. \*\*\* domestic production was \*\*\* units in 2017, \*\*\* units in 2018, and \*\*\* units in 2019. *Id.*

\*\*\*.”<sup>91</sup> \*\*\* operating income and net income to net sales ratios were \*\*\* than the domestic industry average in 2019.<sup>92</sup> \*\*\* opposes the petitions.<sup>93</sup>

The record shows that \*\*\* primary interest is in importation rather than domestic production, although record evidence on the question is mixed. In this regard, \*\*\* ratio of imports to domestic production declined during the period of investigation as its domestic production increased irregularly, but remained at \*\*\* percent in 2019.<sup>94</sup> Thus, its volume of subject imports \*\*\* exceeded its volume of domestic production throughout the POI. On balance, we find that appropriate circumstances exist to exclude \*\*\* from the domestic industry under the related party provision.

In sum, we find that appropriate circumstances exist to exclude \*\*\* from the domestic industry as related parties, but not \*\*\* for purposes of the preliminary phase determinations. 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.<sup>95</sup>

Petitioners argue that the Commission should find imports from each subject country non-negligible.<sup>96</sup> The Government of Turkey argues that the Commission should find subject imports from Turkey to be negligible because such imports accounted for only 1.9 percent of

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<sup>91</sup> CR/PR at Table III-8.

<sup>92</sup> CR/PR at Table VI-1. In 2019, \*\*\* operating income to net sales ratio was \*\*\* percent and its net income margin was \*\*\* percent. Domestic Producers’ Questionnaire Response of \*\*\* at Question III-9a.

<sup>93</sup> CR/PR at Table III-1.

<sup>94</sup> CR/PR at Table III-8.

<sup>95</sup> 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

<sup>96</sup> Petition at 17; Petitioners’ Postconference Brief at 12-14.

total imports over the March 2019-February 2020 period, according to the available quantity data from the ITC Dataweb.<sup>97</sup>

During the most recent 12-month period preceding the filing of the petitions in these investigations, March 2019-February 2020, responding importers reported subject imports from Cambodia that accounted for \*\*\* percent of total imports, subject imports from China that accounted for \*\*\* percent of total imports, subject imports from Indonesia that accounted for \*\*\* percent of total imports, subject imports from Malaysia that accounted for \*\*\* percent of total imports, subject imports from Serbia that accounted for \*\*\* percent of total imports, subject imports from Thailand that accounted for \*\*\* percent of total imports, subject imports from Turkey that accounted for \*\*\* percent of total imports, and subject imports from Vietnam that accounted for \*\*\* percent of total imports.<sup>98</sup> Because imports from each subject country were above the statutory negligibility threshold, we find that such imports from each source are not negligible.

## **VI. Cumulation**

For purposes of evaluating the volume and effects for a determination of reasonable indication of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

- (1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
- (2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

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<sup>97</sup> Government of Turkey's Postconference Brief at 2-3. Contrary to the Government of Turkey's calculations, official import statistics show that imports from Turkey accounted for 5.5 percent of total imports during the March 2019-February 2020 period. CR/PR at IV-9 n.5.

<sup>98</sup> CR/PR at Table IV-3.



- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
- (4) whether the subject imports are simultaneously present in the market.<sup>99</sup>

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.<sup>100</sup> Only a “reasonable overlap” of competition is required.<sup>101</sup>

#### **A. Arguments of the Parties**

*Petitioners’ Argument.* Petitioners argue that the Commission should cumulate imports from all subject countries because the petitions were filed on the same day, March 31, 2020, and there is a reasonable overlap of competition between and among imports from each subject country and the domestic like product. Petitioners contend that mattresses from all sources are highly fungible as they are all produced from the same materials in the same sizes, regardless of packaging, and designed to promote sleep.<sup>102</sup> Petitioners also argue that mattresses from all sources are sold through the same channels of distribution, primarily to retailers but also to distributors, end users, and direct-to-consumer.<sup>103</sup>

Petitioners further argue that mattresses from all sources were sold in the same geographic markets, throughout the United States like the domestic like product, and were simultaneously present in the U.S. market. According to them, official import statistics show that subject imports from Cambodia, China, Turkey, and Vietnam were present in the U.S. market in every year of the period of investigation and that subject imports from Indonesia,

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<sup>99</sup> See *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (Final), USITC Pub. 1845 (May 1986), *aff’d*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int’l Trade), *aff’d*, 859 F.2d 915 (Fed. Cir. 1988).

<sup>100</sup> See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

<sup>101</sup> The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy*, 678 F. Supp. at 902); see *Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int’l Trade 1998) (“cumulation does not require two products to be highly fungible”); *Wieland Werke, AG*, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”).

<sup>102</sup> Petition at 19; Petitioners’ Postconference Brief at 15-16.

<sup>103</sup> Petition at 20; Petitioners’ Postconference Brief at 16.

Malaysia, Thailand, and Serbia were present throughout much of 2019, as confirmed by pricing product data.<sup>104</sup> They claim that responding purchasers reported an even greater degree of temporal overlap, with purchases from all subject countries in each year of the period of investigation.<sup>105</sup> Furthermore, petitioners contend that the Chinese parent companies of certain producers in each of the subject countries served the U.S. market throughout the period of investigation from their facilities in China and other subject countries.<sup>106</sup>

*Respondents' Argument.* The joint respondents argue that the Commission should not cumulate subject imports from China with imports from other subject countries because there is not a reasonable overlap of competition between and among subject imports from each country and the domestic like product in two respects. First, the joint respondents argue that subject imports from China were not simultaneously present with imports from other subject countries because nearly all subject imports in 2017 and 2018 were from China, with few imports from other subject countries, while the vast majority of subject imports in the second half of 2019 were from countries other than China, as the antidumping duty order drove subject imports from China out of the U.S. market.<sup>107</sup> Contesting petitioners' argument that many subject foreign producers outside China were nevertheless controlled by Chinese companies, the joint respondents counter that only the country source of the imports is relevant to the Commission's analysis of simultaneous presence.<sup>108</sup>

Second, the joint respondents argue that subject imports are not fungible with the domestic like product because most subject imports consist of MiBs while most domestically produced mattresses consist of FPMs.<sup>109</sup> While acknowledging that MiBs and FPMs may be fungible at the consumer level, the joint respondents argue that their fungibility is limited at the

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<sup>104</sup> Petition at 20; Petitioners' Postconference Brief at 16-17.

<sup>105</sup> Petitioners' Postconference Brief at 17.

<sup>106</sup> Petition at 21-22.

<sup>107</sup> Joint Respondents' Postconference Brief at 20-22.

<sup>108</sup> Joint Respondents' Postconference Brief at 22.

<sup>109</sup> Joint Respondents' Postconference Brief at 23-24.

point of importation because the supply chain for MiBs differs fundamentally from that of FPMs.<sup>110</sup>

## B. Analysis

We consider subject imports from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam on a cumulated basis because the statutory criteria for cumulation are satisfied. As an initial matter, petitioners filed the antidumping and countervailing duty petitions with respect to all countries on the same day, March 31, 2020.<sup>111</sup>

*Fungibility.* The record indicates that there is a moderately high degree of substitutability between and among domestically produced mattresses and imports from each subject country.<sup>112</sup> Nearly all responding domestic producers and half or more responding importers reported that imports from each subject country are always or frequently interchangeable with domestically produced mattresses and imports from every other subject country.<sup>113</sup> Both domestic producers and importers of mattresses from each subject country offered a complete range of mattresses in 2019, including innerspring, foam, and hybrid

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<sup>110</sup> Joint Respondents' Postconference Brief at 23-24. Respondents argue that "Commission precedent establishes" that fungibility must be assessed at the point of importation, citing *Lightweight Thermal Paper from China and Germany*. *Id.* at 23-24. In that case, the Commission declined to cumulate subject imports from China and Germany because imports from China consisting entirely of split rolls were not fungible with imports from Germany consisting entirely of jumbo rolls, which required further processing to be used as slit rolls. Inv. Nos. 701-451 and 731-1126-1127 (Final), USITC Pub. 4043 (Nov. 2008) at 12-13. Contrary to respondents' argument, the Commission's cumulation analysis in these investigations is not bound by its analysis in *Lightweight Thermal Paper* because each determination is *sui generis*. Furthermore, the facts on the record of these investigations are distinguishable from the facts at issue in *Lightweight Thermal Paper*. In *Lightweight Thermal Paper*, the Commission found that subject imports of slit rolls from China were not "functionally interchangeable," and thus not fungible, with subject imports of jumbo rolls from Germany because jumbo rolls required further processing to be used interchangeably with slit rolls. *Id.* at 12-13. In these investigations, by contrast, all subject imported and domestically produced mattresses consist of finished mattresses that are functionally interchangeable at the time of importation, in that all can be used for sleeping.

<sup>111</sup> None of the statutory exceptions to cumulation applies.

<sup>112</sup> CR/PR at II-13.

<sup>113</sup> CR/PR at Table II-6.

mattresses in all sizes, with the exception that there were no imports of \*\*\*.<sup>114</sup>

*Channels of Distribution.* Domestically produced mattresses and imports from each subject country were sold through the same channels of distribution, primarily to retailers.<sup>115</sup>

*Geographic Overlap.* Domestically produced mattresses and imports from each subject country were sold in all geographic market areas of the United States.<sup>116</sup> In addition, with one exception, imports from each subject country entered the United States through all borders of entry in substantial volumes in 2019.<sup>117</sup>

*Simultaneous Presence in Market.* There were temporal differences between subject countries in terms of their presence in the U.S. market. According to official import statistics, subject imports from China were present in the U.S. market in every month of the period of investigation, as were domestically produced mattresses.<sup>118</sup> By contrast, during the 2017-18 period, subject imports from Serbia were absent and subject imports from Cambodia, Indonesia, Malaysia, Thailand, Turkey, and Vietnam were present in the U.S. market for only 10, 2, 1, 1, 10, and 7 months, respectively.<sup>119</sup> As subject imports from China were increasingly supplanted by subject imports from other sources in 2019, however, imports of mattresses from Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam were present in the U.S. market for 12, 9, 11, 9, 7, 11, and 12 months, respectively.<sup>120</sup> Imports from all subject countries and the domestic like product were simultaneously present in the U.S. market from

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<sup>114</sup> CR/PR at Table IV-4. While respondents claim that most subject imports consisted of MiBs, see Joint Respondents' Postconference Brief at 14-15, the domestic industry also produces substantial volumes of mattresses packaged as MiBs. See Petitioners' Postconference Brief at 35-36; Petitioners' Responses to Staff Questions at 17; Merwin Testimony at 1; Wallace Testimony at 3; see also *Mattresses from China*, USITC Pub. 5000 at 42-44 ("The domestic industry has been producing and selling MiBs since 2004 and selling mattresses over the internet since before the period of investigation."). In 2018, the domestic industry's capacity to produce MiBs was \*\*\* units and its production of MiBs was \*\*\* units. *Mattresses from China*, Confidential Staff Report at Table III-6 (EDIS Doc. No. 708105).

<sup>115</sup> CR/PR at Table II-1.

<sup>116</sup> CR/PR at Table II-2. Respondents emphasize that imports from all subject countries are sold throughout the United States. See Classic Responses to Staff Questions at 12; CVB Responses to Staff Questions at 16.

<sup>117</sup> CR/PR at Table IV-5. The only exception was that few imports from Turkey entered the United States through ports of entry in the West. *Id.*

<sup>118</sup> CR/PR at IV-16, Table IV-6.

<sup>119</sup> CR/PR at IV-16, Table IV-6.

<sup>120</sup> CR/PR at IV-16, Table IV-6.

June 2019 through December 2019.<sup>121</sup> Furthermore, responding purchasers reported purchases of imports from all subject countries in every year of the period of investigation.<sup>122</sup>

*Conclusion.* The record of the preliminary phase of the investigations indicates that there is a reasonable overlap of competition between and among domestically produced mattresses and mattresses imported from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam. Specifically, the record shows that there is a moderately high degree of substitutability between and among mattresses from the United States and each subject country. The record also shows that mattresses from all sources were sold through the same channels of distribution and in the same geographic markets. Although subject imports from country sources other than China were not present in every month of the period of investigation, as were subject imports from China and the domestic like product, imports from all subject countries were present in every year of the period and during each of the last seven months of the period. Given this, and the satisfaction of the other three cumulation factors, we find that the record shows a reasonable overlap of competition between and among domestically produced mattresses and imports from each subject country sufficient to warrant cumulation.<sup>123</sup> We therefore cumulate subject imports from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam for purposes of our material injury analysis.

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<sup>121</sup> CR/PR at Table IV-6.

<sup>122</sup> Petitioners' Postconference Brief at Exhibit 9.

<sup>123</sup> The Commission is not required to cumulate imports from subject countries that were simultaneously present in the U.S. market throughout the period of investigation separately from imports from subject countries that were not, particularly when imports from all subject countries were simultaneously present towards the end of the period and satisfy the other cumulation factors. No single factor is determinative for the Commission's cumulation analysis and only a "reasonable overlap" of competition is required. Indeed, the Commission has previously found a reasonable overlap of competition even absent the simultaneous presence of imports from all subject countries throughout the period of investigation. See *Carbon and Certain Alloy Steel Wire Rod from Belarus, Russia, and the United Arab Emirates*, Inv. Nos. 731-TA-1349, 1352, and 1357 (Final), USITC Pub. 4752 (Jan. 2018) at 19-21, IV-16 to IV-20 (cumulating where imports from certain subject countries were absent from the market earlier in the period and present only sporadically in later periods while imports from other subject countries were present throughout the period of investigation); *Hot-Rolled Steel Products from Argentina and South Africa*, Inv. Nos. 701-TA-404 (Final) and 731-TA-898 and 905 (Final), USITC Pub. 3446 (Aug. 2001) at 13-14 (in 11 country case, only imports from two countries were present throughout the period of investigation, while imports from one country were absent in the first year of the period and imports from two other countries were present only sporadically during the first two years of the period); *Certain Cold-Rolled Steel Products from China, Indonesia, Slovakia, and Taiwan*, Inv. Nos. 731-TA-831-832, 835, and 837 (Final), USITC Pub. 3320 (Jul. 2000) at 7 (cumulating where imports from one country were absent during the first two years of the period of investigation and present in only 8 months of the last year of the period and in 4 months of the nine-month interim period).

## VII. 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.<sup>124</sup> 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.<sup>125</sup> The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”<sup>126</sup> 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.<sup>127</sup> 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.”<sup>128</sup>

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is “materially injured or threatened with material injury by reason of” unfairly traded imports,<sup>129</sup> 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.<sup>130</sup> In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the “by reason of” standard must ensure that subject imports are more than a minimal or

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<sup>124</sup> 19 U.S.C. §§ 1671b(a), 1673b(a).

<sup>125</sup> 19 U.S.C. § 1677(7)(B). The Commission “may consider such other economic factors as are relevant to the determination” but shall “identify each {such} factor ... and explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B).

<sup>126</sup> 19 U.S.C. § 1677(7)(A).

<sup>127</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>128</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>129</sup> 19 U.S.C. §§ 1671b(a), 1673b(a).

<sup>130</sup> *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) (“{T}he statute does not ‘compel the commissioners’ to employ {a particular methodology}.”), *aff’g*, 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.<sup>131</sup>

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.<sup>132</sup> In performing its examination, however, the Commission need not isolate

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<sup>131</sup> The Federal Circuit, in addressing the causation standard of the statute, observed that “{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement.” *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that “this court requires evidence in the record ‘to show that the harm occurred “by reason of” the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.’” See also *Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass’n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

<sup>132</sup> SAA at 851-52 (“{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.”); S. Rep. 96-249 at 75 (1979) (the Commission “will consider information which indicates that harm is caused by factors other than less-than-fair-value imports.”); H.R. Rep. 96-317 at 47 (1979) (“in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;” those factors include “the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry”); accord *Mittal Steel*, 542 F.3d at 877.

the injury caused by other factors from injury caused by unfairly traded imports.<sup>133</sup> Nor does the “by reason of” standard require that unfairly traded imports be the “principal” cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.<sup>134</sup> It is clear that the existence of injury caused by other factors does not compel a negative determination.<sup>135</sup>

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.”<sup>136</sup> The Commission ensures that it has “evidence in the record” to “show that the harm occurred ‘by reason of’ the LTFV imports,” and that it is “not attributing injury from other

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<sup>133</sup> SAA at 851-52 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports.”); *Taiwan Semiconductor Industry Ass’n*, 266 F.3d at 1345 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.” (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int’l Trade 2002) (“{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury” or make “bright-line distinctions” between the effects of subject imports and other causes.); see also *Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that “{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an ‘other causal factor,’ then there is nothing to further examine regarding attribution to injury”), citing *Gerald Metals*, 132 F.3d at 722 (the statute “does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.”).

<sup>134</sup> S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

<sup>135</sup> See *Nippon Steel Corp.*, 345 F.3d at 1381 (“an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the ‘dumping’ need not be the sole or principal cause of injury.”).

<sup>136</sup> *Mittal Steel*, 542 F.3d at 876 & 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*.



sources to the subject imports.”<sup>137</sup> The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”<sup>138</sup>

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.<sup>139</sup> Congress has delegated this factual finding to the Commission because of the agency’s institutional expertise in resolving injury issues.<sup>140</sup>

## **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**

Demand for mattresses is driven by housing sales and economic activity, particularly new home sales, housing starts, home resales, interest rates, gross domestic (“GDP”) growth, and consumer sentiment.<sup>141</sup> As many of these factors increased during the period of investigation, demand for mattresses increased through June 2019.<sup>142</sup> Pluralities of responding domestic producers and importers reported increasing demand for mattresses in the U.S. market during the period of investigation.<sup>143</sup> Apparent U.S. consumption of mattresses increased from \*\*\* units in 2017 to \*\*\* units in 2018 and \*\*\* units in 2019, a level \*\*\* percent higher than in 2017.<sup>144</sup>

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<sup>137</sup> *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant “other factor” may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

<sup>138</sup> *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.”).

<sup>139</sup> We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

<sup>140</sup> *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.”).

<sup>141</sup> Petition at 24-25; Petitioners’ Postconference Brief at 20-21; CR/PR at II-9.

<sup>142</sup> Petition at 24-25; Petitioners’ Postconference Brief at 21; CR/PR at II-9-10.

<sup>143</sup> CR/PR at Table II-4.

<sup>144</sup> CR/PR at IV-25, Table IV-8.

## 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 2019, and subject imports, which accounted for \*\*\* percent of apparent U.S. consumption that same year.<sup>145</sup> Nonsubject imports accounted for the remainder of the U.S. market, declining as a share of apparent U.S. consumption from \*\*\* percent in 2017 to \*\*\* percent in 2018 and to \*\*\* percent in 2019.<sup>146</sup>

Fifty-two responding domestic producers reported producing mattresses in the United States.<sup>147</sup> Petitioners Corsicana, Elite, and Kolcraft, together with non-petitioning domestic producers Lippert, Serta Simmons, and Tempur Sealy, accounted for \*\*\* percent of domestic production in 2019, and \*\*\* domestic producers, Serta Simmons and Tempur Sealy, accounted for \*\*\* percent of domestic production that year.<sup>148</sup> Domestic producers supply the U.S. market from production facilities across 32 states.<sup>149</sup> 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 three to eight days of receiving an order.<sup>150</sup>

The domestic industry made commercial U.S. shipments of all types of mattresses during the period of investigation, including innerspring, foam, hybrid, adult, and youth mattresses.<sup>151</sup> Many domestic producers specialize in particular types of mattresses. For example, \*\*\*.<sup>152</sup>

The domestic industry underwent consolidation and other changes during the period of investigation. Specifically, Leggett & Platt acquired Elite in \*\*\* 2019, Tempur Sealy

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<sup>145</sup> CR/PR at Tables IV-8, C-2.

<sup>146</sup> CR/PR at Table IV-8.

<sup>147</sup> CR/PR at Table III-1.

<sup>148</sup> CR/PR at Table III-1.

<sup>149</sup> Petition at 27-28; Petitioners’ Postconference Brief at 22-23; Rhea Testimony at 2; CR/PR at Table III-1.

<sup>150</sup> *Mattresses from China*, USITC Pub. 5000 at 19; CR/PR at II-13 (average lead time for mattress produced to order by domestic producers is eight days); Petitioners’ Postconference Brief at 21.

<sup>151</sup> See CR/PR at Table IV-4.

<sup>152</sup> Domestic Producers’ Questionnaire Responses of \*\*\* at Question II-8; Domestic Producers’ Questionnaire Response of \*\*\* at Question I-2a.

acquired Sherwood in \*\*\* 2020, and FXI merged with Innocor in early 2020.<sup>153</sup> \*\*\*, while 40 domestic producers that did not complete questionnaire responses ceased operations.<sup>154</sup> Certain domestic producers also reported capacity expansions during the period of investigation; \*\*\*.<sup>155</sup> \*\*\* “\*\*\*.”<sup>156</sup> Between various capacity reductions and additions, the domestic industry’s capacity declined \*\*\* percent between 2017 and 2019.<sup>157</sup>

The country sources of subject imports changed during the period of investigation. In 2017 and 2018, subject imports from China accounted for over \*\*\* percent of cumulated subject imports.<sup>158</sup> After the imposition of section 301 duties and provisional measures followed by an antidumping duty order on imports from China, however, subject imports from China declined by \*\*\* percent between 2018 to 2019 and accounted for \*\*\* percent of cumulated subject imports.<sup>159</sup> As subject imports from China declined in the U.S. market, they were supplanted by subject imports from other country sources, which increased by \*\*\*

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<sup>153</sup> Earley Testimony at 1; Joint Respondents’ Postconference Brief at 43-45, Exhibits 15-17; CR/PR at Table III-3. \*\*\*. CR/PR at Table III-3.

<sup>154</sup> CR/PR at Table III-3; Rhea Testimony at 4; Petitioners’ Postconference Brief at Exhibit 15.

<sup>155</sup> CR/PR at Table III-3.

<sup>156</sup> CR/PR at Table III-3.

<sup>157</sup> CR/PR at Table C-2.

<sup>158</sup> CR/PR at IV-7, Table IV-2.

<sup>159</sup> CR/PR at IV-7-8, Table IV-2. Pursuant to section 301 of the Trade Act of 1974, imports of mattresses from China became subject to an additional duty of 25 percent in June 2019. CR/PR at I-10. Many responding importers reported that imposition of section 301 duties on imports from China restricted the supply of such imports and increased their raw material costs. *Id.* at II-8, V-3-4.

Commerce imposed provisional measures on imports of mattresses from China on June 4, 2019 and imposed an antidumping duty order on such imports on December 6, 2019, with final weighted-average dumping margins ranging from 57.03 to 1,731.75 percent. *Id.* at I-5; *Mattresses From the People’s Republic of China: Preliminary Determination of Sales at Less-Than-Fair-Value, Postponement of Final Determination and Affirmative Preliminary Determination of Critical Circumstances*, 84 Fed. Reg. 25732 (June 4, 2019); *Mattresses From the People’s Republic of China: Final Determination of Sales at Less-Than-Fair-Value, and Final Affirmative Determination of Critical Circumstances, in Part*, 84 Fed. Reg. 56761 (Oct. 23, 2019). The joint respondents argue that trade-preclusive cash deposit rates imposed on imports from China under the antidumping duty order caused such imports to virtually exit the U.S. market after August 2019. Joint Respondents’ Postconference Brief at 11; *see also* CR/PR at Table VI-6.

percent between 2018 and 2019 and resulted in a 24.4 percent increase in cumulated subject imports during that time.<sup>160</sup> Many of the same Chinese-based firms that had supplied the U.S. market from production facilities in China began to export mattresses to the United States from related production facilities in Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam.<sup>161</sup>

### 3. Substitutability and Other Conditions

As discussed in section VI.B above, we have found a moderately high degree of substitutability between domestically produced mattresses and subject imports.<sup>162</sup> As explained above, nearly all responding domestic producers and half or more responding importers reported that imports from each subject country are always or frequently interchangeable with domestically produced mattresses.<sup>163</sup> Both domestic producers and importers of mattresses from each subject country offered a complete range of mattresses in 2019, including innerspring, foam, and hybrid mattresses in all sizes.<sup>164</sup> Although most subject imports consisted of MiBs, the domestic industry also produces substantial volumes of mattresses packaged as MiBs.<sup>165</sup>

We further find that price is an important factor in purchasing decisions for mattresses, although non-price factors are also important.<sup>166</sup> A plurality of responding domestic producers reported that differences other than price are never important to purchasers in choosing between imports from each source and domestically produced mattresses, while a plurality of

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<sup>160</sup> CR/PR at IV-8, Table IV-2.

<sup>161</sup> See Petition at 21-22; Petitioners' Postconference Brief at 18-19, 45; CVB's Responses to Staff Questions at 34 (\*\*\*). According to \*\*\*." Petition, Exhibit I-10 at 11-12.

<sup>162</sup> CR/PR at II-13.

<sup>163</sup> CR/PR at Table II-6.

<sup>164</sup> CR/PR at Table IV-4. There were no imports of \*\*\*. *Id.*

<sup>165</sup> See Joint Respondents' Postconference Brief at 14-15; Petitioners' Postconference Brief at 35-36; Petitioners' Responses to Staff Questions at 17; Merwin Testimony at 1; Wallace Testimony at 3; see also *Mattresses from China*, USITC Pub. 5000 at 42-44. *Mattresses from China*, Confidential Staff Report at Table III-6 (EDIS Doc. No. 708105).

<sup>166</sup> CR/PR at Table II-5.

responding importers reported that such differences are sometimes important.<sup>167</sup> When asked to identify the main factors influencing their purchasing decisions, responding purchasers ranked “quality/design control/standards” and “manufacturing capability/scalability/availability/capacity” among their top three factors more than any other factors; purchasers ranked “price/value/cost” among their top factors with the third most frequency, on a par with “delivery/logistics/warehouse”.<sup>168</sup> In written statements, officials from domestic mattress producers emphasized that competition in the U.S. mattress market is based primarily on price.<sup>169</sup>

The domestic industry’s raw material costs generally increased during the period of investigation.<sup>170</sup> The vast majority of responding domestic producers (34 of 39) reported that the cost of raw materials used to make mattresses had increased since January 1, 2017.<sup>171</sup> Consistent with these responses, the record shows that the price of urethane foam used to produce mattresses increased from early 2017 through early 2019 before decreasing somewhat to levels that remain higher than in 2017.<sup>172</sup> The record also shows that the price of steel scrap used to produce wire rod for innersprings increased sharply from late 2017 to early 2018, remained elevated through early 2019, and then declined to a level slightly lower than in 2017.<sup>173</sup> The unit value of the domestic industry’s raw materials increased from \$122 per unit in 2017 to \$133 per unit in 2019, driving most of the increase in the industry’s unit cost of goods sold during the period.<sup>174</sup>

### **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.”<sup>175</sup>

We find that the volume and increase in volume of cumulated subject imports was significant, both absolutely and relative to apparent U.S. consumption and production, over the

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<sup>167</sup> CR/PR at Table II-7.

<sup>168</sup> CR/PR at Table II-5.

<sup>169</sup> See Rhea Testimony at 4; Merwin Testimony at 2; Fallen Testimony at 2; Wallace Testimony at 2; Northstrom Testimony at 1-2.

<sup>170</sup> See CR/PR at V-1-3.

<sup>171</sup> CR/PR at V-3.

<sup>172</sup> CR/PR at Figure V-2.

<sup>173</sup> CR/PR at Figure V-1.

<sup>174</sup> CR/PR at Table VI-1.

<sup>175</sup> 19 U.S.C. § 1677(7)(C)(i).

period of investigation. Subject import volume increased from 6.2 million units in 2017 to 8.2 million units in 2018 and to 10.2 million units in 2019, a level 62.2 percent higher than in 2017.<sup>176</sup> U.S. shipments of subject imports increased from \*\*\* units in 2017 to \*\*\* units in 2018 and to \*\*\* units in 2019, a level \*\*\* percent higher than in 2017.<sup>177</sup> Subject imports also increased their share of apparent U.S. consumption from \*\*\* percent in 2017 to \*\*\* percent in 2018 and \*\*\* percent in 2019.<sup>178</sup> As subject imports increased their penetration of the U.S. market by \*\*\* percentage points between 2017 and 2019, the domestic industry's market share declined by a nearly equivalent \*\*\* percentage points, from \*\*\* percent in 2017 to \*\*\* percent in 2018 and to \*\*\* percent in 2019.<sup>179</sup> The volume of subject imports also increased as a ratio to domestic industry production, increasing from \*\*\* percent of U.S. production in 2017 to \*\*\* percent in 2018 and \*\*\* percent in 2019.<sup>180</sup>

We conclude that the volume of subject imports and the increase in that volume are significant both in absolute terms and relative to U.S. consumption and production.

#### **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.<sup>181</sup>

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

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<sup>176</sup> CR/PR at IV-8, Table IV-2.

<sup>177</sup> CR/PR at Tables IV-8, C-2.

<sup>178</sup> CR/PR at Table IV-8.

<sup>179</sup> CR/PR at Table C-2.

<sup>180</sup> CR/PR at Table IV-2, as modified to exclude related parties in staff worksheet (EDIS Doc. No. 710206).

<sup>181</sup> 19 U.S.C. § 1677(7)(C)(ii).

Twenty-two domestic producers and 29 importers provided usable quarterly net U.S. f.o.b. selling price data for three mattress products, although not all firms reported pricing for all products for all quarters.<sup>182</sup> Pricing data reported by these firms accounted for approximately \*\*\* percent of U.S. producers' shipments of mattresses in 2019, \*\*\* percent of U.S. commercial shipments of subject imports from Cambodia, \*\*\* percent of such shipments from China, \*\*\* percent of such shipments from Indonesia, \*\*\* percent of such shipments from Malaysia, \*\*\* percent of such shipments from Serbia, \*\*\* percent of such shipments from Thailand, \*\*\* percent of such shipments from Turkey, and \*\*\* percent of such shipments from Vietnam.<sup>183</sup>

Based on these pricing data, as well as the purchase cost data discussed below, we find that subject import underselling was significant during the period of investigation.<sup>184</sup> Subject imports undersold the domestic like product in \*\*\* of \*\*\* quarterly comparisons, or \*\*\* percent of the time, at margins averaging \*\*\* percent, and quarters in which there was underselling accounted for \*\*\* percent of reported subject import sales volume (\*\*\* of \*\*\* units).<sup>185</sup>

The Commission also collected purchase cost data for the same three pricing products imported from all subject countries. Twelve importers reported purchase cost data for all three mattress products, although not all firms reported cost data for all products for all quarters.<sup>186</sup> Import purchase cost data reported by these firms accounted for approximately \*\*\* percent of

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<sup>182</sup> CR/PR at D-3 (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 than or equal to 8.0 inches but less than 10.0 inches." *Id.* at V-6. Product 2 was defined as "Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches." *Id.* Product 3 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 9.0 inches but less or equal to 12.0 inches." *Id.*

The joint respondents argue that the Commission should attach little weight to pricing product data because the pricing product definitions are too broad to permit informative price comparisons. Joint Respondents' Postconference Brief at 30-32. Specifically, they claim that the Commission failed to request separate pricing data for FPMs and MiBs and to include top layer foam density in the product definitions, as it did in the final phase of *Mattresses from China*, and also failed to include base layer foam density in the product definitions, which they view as critical. *Id.* 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.

<sup>183</sup> CR/PR at V-6, Tables C-2, D-1-3.

<sup>184</sup> See CR/PR at Tables D-9-10.

<sup>185</sup> CR/PR at Table D-9.

<sup>186</sup> CR/PR at V-19.

subject imports from Cambodia, \*\*\* percent of such imports from China, \*\*\* percent of such imports from Indonesia, \*\*\* percent of such imports from Malaysia, \*\*\* percent of such imports from Serbia, \*\*\* percent of such imports from Thailand, \*\*\* percent of such imports from Turkey, and \*\*\* percent of such imports from Vietnam in 2019.<sup>187</sup> Based on the purchase cost data obtained by the Commission, landed duty-paid (“LDP”) costs for subject imports were below the sales price for U.S. produced mattresses in \*\*\* of \*\*\* quarterly comparisons involving \*\*\* of \*\*\* units (\*\*\* percent), at price-cost differentials averaging \*\*\* percent.<sup>188</sup>

We recognize that the import purchase cost data may not reflect the total cost of importing and therefore requested that importers provide additional information regarding the costs and benefits of directly importing mattresses. Twelve importers providing usable cost data reported they incurred additional costs beyond the LDP cost, while 22 reported that they did not incur such additional costs.<sup>189</sup> Additional costs reported by seven responding importers averaged 9.6 percent of the LDP value of direct imports.<sup>190</sup> Fourteen importers estimated that they saved between \*\*\* percent of LDP value, with an average of \*\*\* percent, by importing directly rather than purchasing from a U.S. producer, and 14 of 27 importers reported that the cost of purchasing directly from subject producers was lower than purchasing from domestic producers or importers, even when including additional costs of importing.<sup>191</sup>

Based on the moderately high degree of substitutability between subject imports and the domestic like product and the importance of price in purchasing decisions, we find that pervasive and significant underselling by cumulated subject imports contributed to subject

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<sup>187</sup> CR/PR at V-19.

<sup>188</sup> CR/PR at Table D-10.

<sup>189</sup> CR/PR at V-19.

<sup>190</sup> CR/PR at V-19. Six of those providing answers in the range of 2 to 15 percent, and an additional importer indicated that such costs were 25 percent. Importers described warehousing, logistics, insurance, customs brokerage fees, and labor costs as additional costs. *Id.* Twelve importers indicated that they compare costs of importing both to the cost of purchasing from a U.S. producer and to that of purchasing from a U.S. importer in determining whether to import mattresses. *Id.*

<sup>191</sup> CR/PR at V-20.



imports gaining sales and market share at the domestic industry's expense during the period of investigation.<sup>192</sup>

We have also considered price trends during the period of investigation. The domestic industry's sales prices declined between the first quarter of 2017 and the last quarter of 2019 on all three pricing products by \*\*\* to \*\*\* percent.<sup>193</sup> These declines occurred as apparent U.S. consumption increased by \*\*\* percent during the period, the domestic industry experienced increasing production costs, and the volume of nonsubject imports in the market declined.<sup>194</sup> Based on the foregoing, we find that the significant and growing quantity of low-priced subject imports depressed domestic like product prices to a significant degree.<sup>195</sup>

We also consider the domestic industry's ratio of COGS to net sales, which increased from \*\*\* percent in 2017 to \*\*\* percent in 2018 and 2019.<sup>196</sup> Petitioners claim that subject imports prevented domestic producers from increasing their prices to cover increasing

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<sup>192</sup> CR/PR at Table C-2. \*\*\* of \*\*\* responding purchasers reduced the domestic industry's share of their purchases and increased the subject import share of their purchases between 2017 and 2019, by \*\*\* to \*\*\* percentage points. *Id.* at Table V-13. When asked whether subject import prices were lower than domestic prices, however, \*\*\*. *Id.* at Table V-14. Overall, responding purchasers reported that between 2016 and 2018, the domestic industry's share of their purchases declined \*\*\* percentage points while the subject import share of their purchases increased \*\*\* percentage points. *Id.* at Table V-13. Although \*\*\* of \*\*\* responding purchasers reported that subject imports were priced lower than domestically produced mattresses, \*\*\*. *Id.* at Table V-14.

<sup>193</sup> CR/PR at V-1-3, Tables IV-8, C-2, D-7. More specifically, domestic producers' prices of pricing product 1 fell \*\*\* percent, prices of pricing product 2 fell \*\*\* percent, and prices of pricing product 3 fell \*\*\* percent. *Id.* at Table D-7. During the same period, importer sales prices for cumulated subject imports declined \*\*\* percent with respect to product 1 and \*\*\* percent with respect to product 2, but increased \*\*\* percent with respect to product 3. *Id.*

<sup>194</sup> CR/PR at Tables IV-4, 8.

<sup>195</sup> We are unpersuaded by respondents' argument that there could be no price depression because the average unit value of the domestic industry's U.S. shipments increased over the period of investigation. Joint Respondents' Postconference Brief at 32; *see also* CR/PR at Table C-2. Because the U.S. mattress market is characterized by a wide range of mattress types at different price points, we find that the average unit value of the domestic industry's U.S. shipments would be influenced by changes in product mix over time. In fact, Petitioners claim that the domestic industry shifted its product mix towards higher-end mattresses as subject imports made inroads at the lower end of the market. Petitioners' Postconference Brief at 30. Consequently, we do not rely on the average unit value of the domestic industry's U.S. shipments. *See* CR/PR at II-1, Tables D-1-3.

<sup>196</sup> CR/PR at Table C-2.

production costs, despite growing demand.<sup>197</sup> However, having found price depression above, we do not reach the issue of price suppression.

In sum, based on the record of the preliminary phase of these investigations, we find that cumulated subject imports had significant adverse price effects.

#### **E. Impact of the Subject Imports<sup>198</sup>**

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.”<sup>199</sup>

Apparent U.S. consumption increased \*\*\* percent between 2017 and 2019.<sup>200</sup> Despite this substantial increase and the availability of domestic production capacity, as subject

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<sup>197</sup> Petitioners’ Postconference Brief at 30; *see also* Fallen Testimony at 2; Wallace Testimony at 3.

<sup>198</sup> Commerce initiated antidumping duty investigations based on estimated dumping margins of 326.49–675.83 percent for mattresses from Cambodia, 213.44–429.74 percent for mattresses from Indonesia, 42.92 percent for mattresses from Malaysia, 57.37–183.16 percent for mattresses from Serbia, 414.77–763.28 percent for mattresses from Thailand, 267.55–609.51 percent for mattresses from Turkey, and 481.72–989.90 percent for mattresses from Vietnam. *Mattresses From Cambodia, Indonesia, Malaysia, Serbia, Thailand, the Republic of Turkey, and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*, 85 Fed. Reg. 23002 (April 24, 2020).

<sup>199</sup> 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

<sup>200</sup> CR/PR at Tables IV-8, C-2.

imports captured \*\*\* percentage points of market share from the domestic industry during the period, the domestic industry's performance weakened according to most measures.<sup>201</sup>

The domestic industry's capacity, production, and rate of capacity utilization declined irregularly between 2017 and 2019. Specifically, the industry's capacity declined from \*\*\* units in 2017 to \*\*\* units in 2018 and \*\*\* units in 2019, a level \*\*\* percent lower than in 2017.<sup>202</sup> The industry's production declined from \*\*\* units in 2017 to \*\*\* units in 2018 before increasing to \*\*\* units in 2019, a level still \*\*\* percent lower than in 2017.<sup>203</sup> The industry's rate of capacity utilization declined from \*\*\* percent in 2017 to \*\*\* percent in 2018 before increasing to \*\*\* percent in 2019.<sup>204</sup>

Consistent with the domestic industry's declining capacity and production, the industry's employment declined from \*\*\* production related workers ("PRWs") in 2017 to \*\*\* PRWs in 2018, and \*\*\* PRWs in 2019, a level \*\*\* percent lower than in 2017.<sup>205</sup> The industry's hours worked and wages paid increased irregularly during the period of investigation, while the industry's productivity declined irregularly.<sup>206</sup>

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<sup>201</sup> CR/PR at Table C-2. We are unpersuaded by the joint respondents' argument that because subject imports from countries other than China were insignificant in 2017 and 2018, while subject imports from China had virtually exited the U.S. market by the second half of 2019, the question for the Commission should be whether subject imports from countries other than China caused or threatened material injury in the second half of 2019. Joint Respondents' Postconference Brief at 34-35. Having determined to cumulate subject imports, the question for the Commission is 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 cumulated imports under investigation. 19 U.S.C. §§ 1671d(b), 1673d(b). Furthermore, the Commission does not normally compare data from the first and second halves of the same calendar year because such comparisons can be distorted by the seasonality of sales and other factors. The record of the preliminary phase of the investigations shows that sales of mattresses in the U.S. market may be subject to seasonality. See CR/PR at II-11 (28 U.S. producers and 15 importers reported that the U.S. mattress market is subject to business cycles, with most reporting seasonal variations in mattress sales). Further, while subject imports from countries other than China comprised only \*\*\* and \*\*\* percent of apparent U.S. consumption in 2017 and 2018 respectively, they comprised \*\*\* percent in 2019. CR/PR at Table IV-8. Those imports together with subsidized imports from China undersold the domestic like product in 2019, taking market share from domestic producers and depressing domestic producer prices which led to poorer output and financial indicators for the domestic industry in 2019 than it would have experienced otherwise.

<sup>202</sup> CR/PR at Table C-2.

<sup>203</sup> CR/PR at Table C-2.

<sup>204</sup> CR/PR at Table C-2.

<sup>205</sup> CR/PR at Table C-2.

<sup>206</sup> CR/PR at Table C-2. The domestic industry's wages paid and hours worked increased irregularly by \*\*\* percent and \*\*\* percent, respectively, between 2017 and 2019. *Id.* The industry's productivity in units per 1,000 hours declined irregularly by \*\*\* percent during the same period. *Id.*

As the domestic industry's production declined, so did its U.S. shipments and market share. The domestic industry's U.S. shipments declined from \*\*\* units in 2017 to \*\*\* units in 2018 before increasing to \*\*\* units in 2019, a level still \*\*\* percent lower than in 2017.<sup>207</sup> The industry's share of apparent U.S. consumption declined from \*\*\* percent in 2017 to \*\*\* percent in 2018 and to \*\*\* percent in 2019, a level \*\*\* percentage points lower than in 2016.<sup>208</sup>

The domestic industry's end-of-period inventories increased during the period of investigation from \*\*\* units in 2017 to \*\*\* units in 2018 and to \*\*\* units in 2019, a level \*\*\* percent higher than in 2017.<sup>209</sup> Similarly, the industry's end-of-period inventories as a share of total shipments increased from \*\*\* percent in 2017 to \*\*\* percent in 2018 and to \*\*\* percent in 2019.<sup>210</sup>

The domestic industry's financial performance also declined during the period of investigation, as subject imports captured market share from the domestic industry and depressed prices for domestic products.<sup>211</sup> Specifically, the industry's net sales value declined from \$\*\*\* in 2017 to \$\*\*\* in 2018 before increasing to \$\*\*\* in 2019.<sup>212</sup> The industry's operating income declined from \$\*\*\* in 2017 to \$\*\*\* in 2018 before increasing to \$\*\*\* in 2019, a level \*\*\* percent lower than in 2017.<sup>213</sup> Similarly, the industry's operating income margin declined from \*\*\* percent in 2017 to \*\*\* percent in 2018 and 2019.<sup>214</sup> The domestic industry's average operating return on assets declined from \*\*\* percent in 2017 to \*\*\* percent in 2018 before increasing to \*\*\* percent in 2019.<sup>215</sup>

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<sup>207</sup> CR/PR at Table C-2.

<sup>208</sup> CR/PR at Table C-2.

<sup>209</sup> CR/PR at Table C-2.

<sup>210</sup> CR/PR at Table C-2.

<sup>211</sup> See CR/PR at Table C-2.

<sup>212</sup> CR/PR at Table C-2.

<sup>213</sup> CR/PR at Table C-2.

<sup>214</sup> CR/PR at Table C-2. The domestic industry's gross profit exhibited a similar irregularly declining trend, declining from \*\*\* in 2017 to \$\*\*\* in 2018 before increasing to \$\*\*\* in 2019, a level \*\*\* percent lower than in 2017. *Id.* The industry's net income declined throughout the period from \$\*\*\* in 2017 to \$\*\*\* in 2018 and to \$\*\*\* in 2019. *Id.* Seventeen responding domestic producers reported that subject imports had negative effects on their investment and sixteen domestic producers reported that subject imports had negative effects on their growth and development. CR/PR at Table VI-6

<sup>215</sup> Derived from CR/PR at Table C-2.

The domestic industry's capital expenditures increased irregularly during the period of investigation, while its research and development ("R&D") expenses declined.<sup>216</sup> Although domestic producers increased their capital expenditures in anticipation of demand growth, numerous responding producers reported that the financial returns on their recent investments have been disappointing due to subject import competition.<sup>217</sup> For example, Brooklyn Bedding reports that the foam cutting equipment that it acquired in 2015 was barely used in 2019 and that no more than three of its six roll packing machines are ever utilized.<sup>218</sup> Kolcraft claims that subject import competition has substantially reduced the return on its investment in automation in 2017.<sup>219</sup> \*\*\* "\*\*\*\*." <sup>220</sup>

The record of the preliminary phase of these investigations indicates that there is a causal nexus between subject imports and the domestic industry's declining performance between 2017 and 2019. Subject import volume increased significantly in absolute terms and relative to apparent U.S. consumption during the period of investigation, driven by significant subject import underselling.<sup>221</sup> The increasing volume of low-priced subject imports captured \*\*\* percentage points of market share from the domestic industry over the period.<sup>222</sup> As a consequence, the domestic industry suffered declining capacity, production, capacity utilization, employment, and U.S. shipments, despite strong demand growth that would have been expected to boost these measures of industry performance.<sup>223</sup>

Strong demand growth would also have been expected to benefit the domestic industry's revenues and financial performance. Instead, as the industry's production costs increased, significant volumes of low-priced subject imports depressed domestic product prices to a significant degree during the period of investigation.<sup>224</sup> The industry's declining prices and increasing COGS to net sales ratio translated directly into stagnant net sales revenues and

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<sup>216</sup> CR/PR at Table C-2. The domestic industry's capital expenditures declined from \$\*\*\* in 2017 to \$\*\*\* in 2018 but increased to \$\*\*\* percent in 2019, a level \*\*\* percent higher than in 2017. *Id.* The industry's R&D expenses increased from \$\*\*\* in 2017 to \$\*\*\* in 2018 before declining to \$\*\*\* in 2019, a level \*\*\* percent lower than in 2017. *Id.*

<sup>217</sup> See CR/PR at Table VI-7.

<sup>218</sup> Merwin Testimony at 3.

<sup>219</sup> Koltun Testimony at 1.

<sup>220</sup> CR/PR at Table III-3.

<sup>221</sup> CR/PR at Tables IV-2, C-2, and D-9.

<sup>222</sup> CR/PR at Table C-2.

<sup>223</sup> CR/PR at Tables IV-8, C-2.

<sup>224</sup> CR/PR at Table C-2.

declining gross profits, operating income, and net income.<sup>225</sup> While we recognize that many measures of the domestic industry’s performance improved \*\*\* between 2018 and 2019, the industry’s performance remained weaker than in 2017 according to most measures, despite increased demand, due to subject imports.<sup>226</sup>

We are unpersuaded by respondents’ argument that subject import competition is significantly attenuated by differences in quality and market segmentation. Respondents claim that the higher quality of subject imports limits their substitutability with the domestic like product.<sup>227</sup> While we recognize that certain importers and purchasers reported that they have experienced quality problems with domestically produced mattresses, the record does not show that these specific instances reflect significant quality differences between subject

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<sup>225</sup> CR/PR at Table C-2.

<sup>226</sup> We are unpersuaded by the joint respondents’ argument that public expressions of optimism made by certain domestic producers and independent analysts, as well as the domestic industry’s recent mergers and acquisitions activity, reflect a healthy industry. *See* Joint Respondents’ Postconference Brief at 39-43. The domestic producer and analyst statements highlighted by joint respondents are consistent with the \*\*\* improvements in many measures of the domestic industry’s performance between 2018 and 2019, which petitioners attribute to the “minimal relief” afforded by the antidumping duty order on imports from China. Petitioners’ Postconference Brief at 34; *see also* Fallen Testimony at 1-2; Wallace Testimony at 2-3. Even with these improvements, however, the domestic industry’s performance in 2019 remained weaker than in 2017 according to most measures. *See* CR/PR at Table C-2. Moreover, we base our analysis of the impact of subject imports on the domestic industry on the performance of domestic producers as a whole. 19 U.S.C. §§ 1677(4)(A), 1677(7)(C)(iii). Our determination that low-priced subject imports captured market share and depressed prices which caused the domestic industry’s trade and financial performance to be worse than it otherwise would have been during the POI is not undermined by individual producers’ or analysts’ expressions of optimism.

<sup>227</sup> Joint Respondents’ Postconference Brief at 15; DBM Respondents’ Brief at 11-12. As evidence, the joint respondents highlight testimony that Malouf Sleep experienced quality problems with mattresses supplied by ECS and that Classic allegedly regained business from a customer after the customer experienced quality problems with ECS. Joint Respondents’ Postconference Brief at 15-16 (citing *Mattresses from China*, Hearing Tr. at 250-51 (Douglas); Burger Testimony at 5). Respondent H Mattress claims that Corsicana supplied it with sub-standard mattresses that prevented H Mattress from making timely deliveries to its customers, while Thai producers offer higher quality and better conditions of sale. DBM Respondents’ Brief at 11-12. Malouf Sleep contends that its subject imported mattresses are qualitatively superior to domestically produced mattresses, and thus more highly rated by consumers on Amazon.com, because online retailers have a “consumer first mindset,” while domestic producers allegedly focus on cultivating brick and mortar retailers. CVB’s Responses to Staff Questions at 23-25.

In addition to respondents’ allegations, one responding purchaser reported purchasing subject imports from Vietnam instead of domestically produced mattresses because the subject imports were “higher quality and more durable.” CR/PR at V-41.

imports and domestically produced mattresses.<sup>228</sup> Other information on the record shows that subject imports had no significant edge over domestically produced mattresses in terms of quality.<sup>229</sup> We would also expect subject imports offering significantly higher quality to command a price premium in the U.S. market, given that more responding purchasers ranked “quality” among their top three purchasing factors than any other factor, but pricing product data show that subject imports pervasively undersold the domestic like product.<sup>230</sup> Thus, the record of the preliminary phase of these investigations does not support respondents’ argument that significant quality differences limited the substitutability of subject imports and domestically produced mattresses.

The joint respondents also argue that subject import competition is attenuated by market segmentation because most subject imports consisted of MiBs and most domestically produced mattresses consisted of FPMs.<sup>231</sup> Although U.S. shipment data broken down by packaging were not collected in the preliminary phase of these investigations, in *Mattresses from China*, the Commission recognized that “most subject import shipments consisted of

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<sup>228</sup> The specific quality problems reported by respondents concern domestically produced mattresses supplied by Corsicana and ECS, which together accounted for only \*\*\* percent of domestic industry production in 2019. Report at Table III-1. \*\*\*. Petitioners’ Responses to Staff Questions at 27. \*\*\*. Classic’s Responses to Staff Questions at 23. Furthermore, the warranty return rates for Corsicana and ECS were relatively low, at \*\*\* percent and \*\*\* percent, respectively, and \*\*\*. Petitioners’ Postconference Brief at 36 n.129, Exhibit 16. The warranty return rates of Leggett & Platt and FXI were \*\*\*, at \*\*\* percent and \*\*\* percent, respectively. Petitioners’ Postconference Brief at 36 n.129.

<sup>229</sup> Although Malouf Sleep cites consumer reviews on Amazon.com to argue that subject imports are qualitatively superior to domestically produced mattresses, \*\*\*. CVB’s Responses to Staff Questions at 27; Petitioners’ Responses to Staff Questions at 12, Exhibit 1-8 (\*\*\*). Although staff requested “independent mattress reviews,” Malouf Sleep was unable to provide any third party reviews to corroborate its contention that subject imports are qualitatively superior to domestically produced mattresses, other than average star ratings given by consumers on Amazon.com on selected mattress models. See CVB’s Responses to Staff Questions at 25-28.

<sup>230</sup> CR/PR at Tables II-5, D-9.

<sup>231</sup> Joint Respondents’ Postconference Brief at 12-13.

mattresses packaged as MiBs” but found that “these shipments differed from domestic industry shipments of FPMs only in terms of packaging” and that “the domestic industry also shipped large and increasing volumes of MiBs during the period.”<sup>232 233</sup>

Petitioners claim that the domestic industry continues to possess substantial capacity to produce MiBs, as it did in *Mattresses from China*, and there is no evidence or argument on the record suggesting that the industry’s capacity to produce MiBs has declined since the last investigation.<sup>234</sup> The record shows that numerous domestic producers invested in new MiB capacity during the period of investigation, including Brooklyn Bedding, \*\*\*, Kolcraft, and \*\*\*.<sup>235</sup>

Nor is there any new evidence on the record indicating that MiBs from the subject countries differ from domestically produced FPMs in ways other than packaging. Indeed, the joint respondents acknowledge that MiBs imported from the subject countries compete with domestically produced FPMs for sales to consumers, which directly influence sales at the wholesale level.<sup>236</sup> Their contention is that differences throughout the supply chain limit the substitutability of mattresses packaged as MiBs and FPMs.<sup>237</sup> In particular, they claim that most domestic producers have failed to make the substantial investments necessary to “completely reorient{” their business strategy from the traditional FPM business model, predicated on numerous geographically dispersed production facilities to minimize the logistical costs of

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<sup>232</sup> *Mattresses from China*, USITC Pub. 5000 at 20, 22; *see also id.* at 38.

<sup>233</sup> Commissioner Kearns notes that he did not participate in the recently concluded investigation of mattresses from China. He agrees that the record in this preliminary phase does not support respondents’ arguments of attenuated competition with regard to MiBs and intends to further examine the issue in any final phase.

<sup>234</sup> Petitioners’ Postconference Brief at 35; Petitioners’ Responses to Staff Questions at 15-17, 21 (claiming that all petitioners produce MiBs that are sold online); Rhea Testimony at 3 (stating that Leggett & Platt’s sales of MiB production equipment to domestic producers, specifically compression and rolling equipment, suggests that there is “more than enough” available MiB production capacity in the United States).

<sup>235</sup> CR/PR at VI-13, Table III-3; Kolton Testimony at 3; Merwin Testimony at 3-4 (stating that Brooklyn Bedding, a domestic MiB producer, doubled its capacity in 2019 expecting relief from unfairly traded imports).

<sup>236</sup> Joint Respondents’ Postconference Brief at 14; Burger Testimony at 2 (stating that once unrolled, mattresses packaged as MiBs “do share many similarities” with mattresses packaged as FPMs); *Mattresses from China*, USITC Pub. 5000 at 24 (finding that “captive retailers, third-party retailers, online retailers, and brick and mortar retailers all compete for sales to consumers at the retail level, which ultimately drive sales at the wholesale level.”); *see also* Petitioners’ Responses to Staff Questions at 16 (claiming that consumers comparison shop mattresses packaged as both FPMs and MiBs at brick and mortar retailers and online).

<sup>237</sup> Joint Respondents’ Postconference Brief at 14; Burger Testimony at 2-3.



shipping FPMs, to the MiB business model, characterized by a smaller number of larger production facilities and the satisfaction of certain customer expectations.<sup>238</sup>

Contrary to respondents' argument, however, the Commission found in *Mattresses from China* that "all of the innovative retailers identified by the parties as spearheading the sale of MiBs over the internet, including Casper, Leesa, Tuft & Needle, and Purple, either sourced their MiBs from domestic producers or produced their MiBs domestically during the period of investigation."<sup>239</sup> The joint respondents themselves acknowledge that domestic producers are "significant suppliers to MiB Developers," including "Casper, Leesa, and Tuft & Needle."<sup>240</sup> Domestic producers could not have supplied MiBs to the most innovative MiB retailers from their inception if the producers had not successfully adopted the business practices necessary to supply the MiB segment.<sup>241</sup> We intend to further investigate the influence of non-price factors on competition in the U.S. market, including differences in product packaging, in any final phase of the investigations.<sup>242</sup>

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

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<sup>238</sup> Joint Respondents' Postconference Brief at 12.

<sup>239</sup> *Mattresses from China*, USITC Pub. 5000 at 43.

<sup>240</sup> Joint Respondents' Postconference Brief at 9-10.

<sup>241</sup> We also note that subject foreign producers in countries other than China and Vietnam only began producing MiBs in late 2018 or early 2019, and thus have significantly less experience with the MiB segment than the numerous domestic producers that have been producing MiBs since before the period of investigation. *Classic's Responses to Staff Questions* at 17; *Petitioners' Responses to Staff Questions* at 17.

<sup>242</sup> Several respondents claimed that they imported subject mattresses because domestic producers were unwilling or unable to satisfy their requirements. The DBM respondents argue that Storkcraft was forced to import crib mattresses from Malaysia when domestic producers proved unable to supply them, either due to liability concerns or insufficient capacity. *DBM Respondents' Postconference Brief* at 6-9. It is unclear whether Storkcraft sought mattresses from \*\*\*. *CR/PR* at VI-11, Table III-1. The DBM respondents also claim that H Mattress had no choice but to import mattresses from Thailand because domestic producers including \*\*\* refuse to custom make mattresses for wholesalers like H Mattress with whom they compete for sales to brick and mortar retailers. *Id.* at 11. Walmart claims that it has been forced to import subject MiBs because domestic producers are incapable of satisfying its large demand for MiBs and unwilling to collaborate on new MiB products. *Walmart's Postconference Brief* at 1-2, 5. We intend to further investigate the production and supply capabilities of the domestic industry in any final phase of the investigations.

increased \*\*\* percent between 2017 and 2019.<sup>243</sup> The volume of nonsubject imports in the U.S. market declined during the period of investigation and was significantly smaller than the volume of cumulated subject imports, never accounting for more than \*\*\* percent of apparent U.S. consumption during the period.<sup>244</sup>

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

## **VIII. 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 Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam that are allegedly sold in the United States at less than fair value and imports of the subject merchandise from China that are allegedly subsidized by the government of China.

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<sup>243</sup> CR/PR at Tables IV-8, C-2.

<sup>244</sup> CR/PR at Table IV-8.

# Part I: Introduction

## Background

These investigations result from petitions filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) on March 31, 2020, by Brooklyn Bedding, Phoenix, Arizona; Corsicana Mattress Co. (“Corsicana”), Dallas, Texas; Elite Comfort Solutions (“Elite”), Newnan, Georgia; FXI, Inc. (“FXI”), Media, Pennsylvania; Innocor, Inc. (“Innocor”), Media, Pennsylvania; Kolcraft Enterprises, Inc. (“Kolcraft”), Chicago, Illinois; Leggett & Platt, Inc. (“Leggett & Platt”), Carthage, Missouri; the International Brotherhood of Teamsters, Washington, DC; and United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, Washington, DC, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of mattresses from China and less-than-fair-value (“LTFV”) imports of mattresses<sup>1</sup> from Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam. The following tabulation provides information relating to the background of these investigations.<sup>2 3</sup>

Effective date	Action
March 31, 2020	Petitions filed with Commerce and the Commission; institution of Commission investigations (85 FR 19503, April 7, 2020)
April 20, 2020	Commerce’s notices of initiation (85 FR 22998, April 24, 2020 (countervailing duty), and 85 FR 23002, April 24, 2020 (antidumping duty))
April 21, 2020	Commission’s conference (conducted through written statements, testimony, questions, and responses, April 17 – April 27, 2020)
May 14, 2020	Commission’s vote
May 15, 2020	Commission’s determinations
May 22, 2020	Commission’s views

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<sup>1</sup> See the section entitled “The subject merchandise” in Part I of this report for a complete description of the merchandise subject in this proceeding.

<sup>2</sup> Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission’s website ([www.usitc.gov](http://www.usitc.gov)).

<sup>3</sup> A list of witnesses participating in the conference via written submission is presented in appendix B of this 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--<sup>4</sup>

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

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

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

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

## **Market summary**

Mattresses are generally used by people for sleeping. The leading U.S. producers of mattresses are \*\*\*, while the leading producers of mattresses outside the United States include \*\*\* in Cambodia, \*\*\* in China, \*\*\* in Indonesia, \*\*\* in Malaysia, \*\*\* in Thailand, \*\*\* in Turkey, and \*\*\* in Vietnam. The leading U.S. importers of mattresses include \*\*\* (Cambodia); \*\*\* (China); \*\*\* (Indonesia); \*\*\* (Malaysia); \*\*\* (Serbia); \*\*\* (Thailand); \*\*\* (Turkey); \*\*\* (Vietnam); and \*\*\*

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

from nonsubject countries (primarily \*\*\*). U.S. purchasers of mattresses are mostly firms that purchase domestically produced mattresses and imported mattresses and sell them for retail either in brick and mortar establishments or over the internet; leading purchasers include \*\*\*.

Apparent U.S. consumption of mattresses totaled approximately \*\*\* mattresses (\$\*\*\* in 2019. Currently, at least 63 firms are known to produce mattresses in the United States.<sup>6</sup> U.S. producers' U.S. shipments of mattresses totaled 17.1 million mattresses (\$4.8 billion) in 2019 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value. U.S. importers' U.S. shipments from the eight subject sources combined totaled 10.6 million mattresses (\$1.5 billion) in 2019 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value. U.S. importers' U.S. shipments from nonsubject sources totaled \*\*\* mattresses (\$\*\*\* in 2019 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value.

## Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1 (total U.S. market) and table C-2 (U.S. market excluding three U.S. producers (\*\*\*). Except as noted, U.S. industry data are based on questionnaire responses of 52 firms that accounted for most U.S. production of mattresses during 2019. U.S. imports are based on questionnaire responses of 54 firms that accounted for most U.S. imports from the subject countries, according to data submitted in response to the Commission questionnaires and official import statistics.<sup>7</sup>

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<sup>6</sup> As discussed in Part III, the Commission received completed responses to its U.S. producers' questionnaire from 52 firms on a timely basis, but there were several other firms that provided incomplete or late responses to the Commission's U.S. producers' questionnaire. One firm, \*\*\*, only reported production of out-of-scope \*\*\* mattresses. It did not produce any in-scope mattresses during 2017-19.

<sup>7</sup> Questionnaire responses represent greater than 100 percent of U.S. imports from China, Indonesia, Malaysia, Serbia, Thailand, and Vietnam in 2019 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 the subject merchandise. Responding importers may have reported U.S. imports of mattresses entered under secondary HTS numbers. Questionnaire responses represent \*\*\* percent of U.S. imports from Cambodia, \*\*\* percent from Turkey, and \*\*\* percent from nonsubject sources in 2019 under the 6 primary HTS statistical reporting numbers.

## Previous and related investigations

Mattresses have been the subject of one prior antidumping duty investigation in the United States. That investigation resulted from a petition filed by nine U.S. producers of mattresses on September 18, 2018, alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of mattresses from China.<sup>8</sup> On October 23, 2019, Commerce determined that imports of mattresses from China were being sold at LTFV<sup>9</sup> and on December 9, 2019, the Commission determined that the domestic industry was materially injured by reason of LTFV imports of mattresses from China.<sup>10</sup> On December 16, 2019, Commerce issued its antidumping duty order on imports of mattresses from China with the final weighted-average dumping margins ranging from 57.03 to 1,731.75 percent.<sup>11</sup>

The Commission has also conducted several antidumping duty investigations on uncovered innerspring units, a product related to mattresses. Commenced in 2008, antidumping investigations regarding uncovered innerspring units from China, South Africa, and Vietnam resulted in affirmative determinations and the imposition of antidumping duty orders in 2008 (South Africa and Vietnam) and 2009 (China).<sup>12</sup> The orders were continued in 2014

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<sup>8</sup> The nine petitioners were 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. *Mattresses from China*, Inv. No. 731-TA-1424 (Final), USITC Publication 5000, December 2019 (“China final publication”), p. I-1. The scope of the investigation of mattresses from China was virtually identical to the scope of these investigations. See *id.* at pp. I-8-10. Three of those petitioning firms (Future Foam Inc., Serta Simmons Bedding, and Tempur Sealy International, Inc.) are not part of the petitioning group in these current investigations.

<sup>9</sup> 84 FR 56761, October 23, 2019. Commerce also determined that critical circumstances existed with respect to imports of mattresses from all non-individually examined companies that received a separate rate and the China-wide entity.

<sup>10</sup> 84 FR 67958, December 12, 2019. The Commission also found that imports subject to Commerce's affirmative critical circumstances determination were not likely to undermine seriously the remedial effect of the antidumping duty order on China.

<sup>11</sup> 84 FR 68395, December 16, 2019. The China-wide entity rate was 1,731.75 percent, Healthcare Co. Ltd. was 57.03 percent, Zinus Inc. 192.04 percent, and remaining 36 individual entities 162.76 percent.

<sup>12</sup> 73 FR 75390, December 11, 2008; 73 FR 75391, December 11, 2008; 74 FR 7661, February 19, 2009; *Uncovered Innerspring Units from South Africa and Vietnam*, Inv. Nos. 731-TA-1141-1142 (Final), USITC Publication 4051, December 2008; *Uncovered Innerspring Units from China*, Inv. Nos. 731-TA-1140 (Final), USITC Publication 4061, February 2009.

following first five-year reviews<sup>13</sup> and were continued again in 2019 following the second five-year reviews.<sup>14</sup>

## **Nature and extent of alleged subsidies and sales at LTFV**

### **Alleged subsidies**

On April 24, 2020, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on mattresses from China.<sup>15</sup> Commerce identified the following government programs in China on which it initiated its investigation:

- A. Preferential Lending
  - 1. Export Loans from Chinese State-Owned Banks (“SOCBs”)
- B. Export Credits from the Export-Import Bank of China
  - 2. Export Seller’s Credit
  - 3. Export Buyer’s Credit
- C. Tax Programs
  - 4. Income Tax Reduction for High or New Technology Enterprises
  - 5. Income Tax Deductions for Research and Development Expenses Under the Enterprise
  - 6. Income Tax Deductions/Credits for Purchase of Special Equipment
  - 7. Tax Incentives for Businesses in the Guangdong Province Special Economic Zone (“SEZ”)
- D. Indirect Tax Programs
  - 8. VAT Rebates on Domestically Produced Equipment
- E. Grant Programs
  - 9. Foreign Trade Fund Development Grants
  - 10. Grants for Energy Conservation and Emission Reduction
  - 11. SME Technology Innovation Fund
- F. Government Provision of Goods and Services for Less Than Adequate Remuneration (“LTAR”)
  - 12. Government Provision of Land-Use Rights in SEZs for LTAR
  - 13. Government Provision of Electricity in Guangdong Province for LTAR

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<sup>13</sup> 79 FR 22624, April 23, 2014.

<sup>14</sup> 84 FR 55285, October 16, 2019.

<sup>15</sup> 85 FR 22998, April 24, 2020; Enforcement and Compliance Office of AD/CVD Operations Countervailing Duty Investigation Initiation Checklist, April 20, 2020, pp. 6-16.



## **Alleged sales at LTFV**

On April 24, 2020, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on mattresses from Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam.<sup>16</sup> Commerce has initiated antidumping duty investigations based on estimated dumping margins of 326.49–675.83 percent for mattresses from Cambodia, 213.44–429.74 percent for mattresses from Indonesia, 42.92 percent for mattresses from Malaysia, 57.37–183.16 percent for mattresses from Serbia, 414.77–763.28 percent for mattresses from Thailand, 267.55–609.51 percent for mattresses from Turkey, and 481.72–989.90 percent for mattresses from Vietnam.

## **The subject merchandise**

### **Commerce's scope**

In the current proceeding, Commerce has defined the scope as follows:<sup>17</sup>

*The products covered by this investigation are 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.*

*The scope of this investigation is restricted to only "adult mattresses" and "youth mattresses." "Adult mattresses" are frequently described as "twin," "extra-long twin," "full," "queen," "king," or "California king" mattresses. "Youth mattresses" are typically described as "crib," "toddler," or "youth" mattresses. All adult and youth mattresses are included regardless of size or 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*

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<sup>16</sup> 85 FR 23002, April 24, 2020.

<sup>17</sup> 85 FR 22998, April 24, 2020; 85 FR 23002, April 24, 2020.

*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.*

*Also excluded is certain multifunctional furniture that is convertible from seating to sleeping, regardless of filler material or components, where that filler material or components are upholstered, integrated into the design and construction of, and inseparable from, the furniture framing, and the outermost layer of the multifunctional furniture converts into the sleeping surface. Such furniture may, and without limitation,*

*be commonly referred to as “convertible sofas,” “sofa beds,” “sofa chaise sleepers,” “futons,” “ottoman sleepers” or a like description.*

*Also excluded from the scope of this investigation are any products covered by the existing antidumping duty orders on uncovered innerspring units from China or Vietnam. See Uncovered Innerspring Units from the People’s Republic of China: Notice of Antidumping Duty Order, 74 FR 7661 (Feb. 19, 2009); Uncovered Innerspring Units From the Socialist Republic of Vietnam, 73 FR 75391 (Dec. 11, 2008).*

*Also excluded from the scope of this investigation are bassinet pads with a nominal length of less than 39 inches, a nominal width less than 25 inches, and a nominal depth of less than 2 inches.*

*Additionally, also excluded from the scope of this investigation are “mattress toppers.” A “mattress topper” is a removable bedding accessory that supplements a mattress by providing an additional layer that is placed on top of a mattress. Excluded mattress toppers have a nominal height of four inches or less.*

## **Tariff treatment**

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under 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”).<sup>18</sup> The 2020 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. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

## **Section 301 tariff treatment**

Merchandise classifiable under subheadings 9404.21.00, 9404.29.10, and 9404.29.90 were included among the group of products from China that are subject to an additional duty of 25 percent ad valorem, under HTS subheading 9903.88.03.<sup>19</sup>

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<sup>18</sup> Secondary statistical reporting numbers under which subject merchandise may be imported include 9404.21.0095, 9404.29.1095, 9404.29.9095, 9401.40.0000, and 9401.90.5081.

<sup>19</sup> HTSUS (2020) Revision 9, USITC Publication No. 5051, April 2020, p. 94-12.

## **The product<sup>20</sup>**

### **Description and applications**

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<sup>21</sup>, 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. 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 any 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 processes**

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.

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<sup>20</sup> Unless otherwise noted, information for this section comes from China final publication, pp. I-11 – I-15.

<sup>21</sup> Airbeds and waterbeds are excluded from the scope of the investigations.

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<sup>22</sup>) and the upholstery materials.

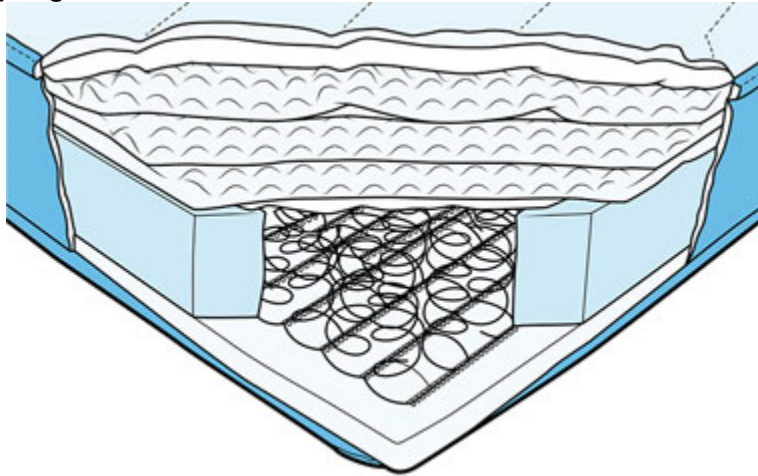
For both innerspring and hybrid mattresses, the innerspring unit may be produced internally or purchased from a supplier. Depending on the particular design, layers of fabric, upholstery, and/or foam are assembled around the core unit as operators “build-up” the mattress on an assembly table or production line. Separately, sewers run quilting machines that produce the ticking (also known as a “cover”), which may include a backing material.<sup>23</sup> 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). Manufacturers can package mattresses flat compressed, or package the mattress using a machine that compresses, then rolls the mattress. Mattresses that are compressed and rolled are shipped as mattresses-in-a-box to the end consumer, but flat compressed mattresses are not always shipped to the end consumer in the flat compressed state.

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<sup>22</sup> This report will refer to these types of mattresses as “innerspring,” “hybrid,” and “foam,” respectively.

<sup>23</sup> 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.

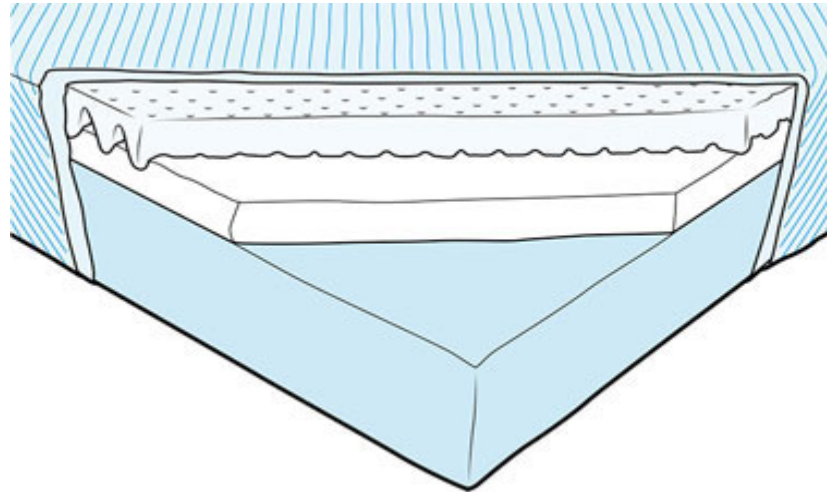
**Figure I-1**  
**Mattresses: Innerspring mattress construction**



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 production of the foam. Foam mattress manufacturers may be vertically integrated (producing both the foam and foam mattress themselves) or they may purchase foam from unaffiliated foam suppliers. During foam production, precursor chemicals are combined based on the specific formulation for the type of foam. For 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 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 which 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, but typically consist of 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). For compressed mattresses, U.S. producers’ use capital intensive machines that encloses the foam mattress in plastic, compresses the mattress, then rolls the mattress to be put into a box. Respondents in their post conference briefs stated that \*\*\*

**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 differ slightly 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.

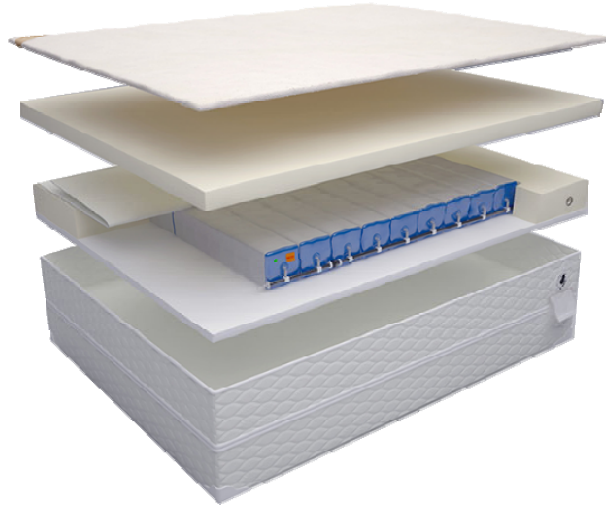
The manufacturing process for out-of-scope air-adjustable foam mattresses is distinguished by the inclusion of a layer with an air support system. The top layer can consist of cotton or wool. The second layer varies in density and is made of either memory foam, latex, or polyurethane foam and can come with multiple foam layers. The third layer has the air support system. Most air-adjustable foam mattresses have separate air support systems for each side of the bed that can be manually or electronically adjusted to increase or decrease the amount of air in the system. The air support system is used to adjust the firmness of the mattress based on

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<sup>24</sup> Joint respondents' postconference brief, exh. 3, pp. 1-2.

the support needs of the user. The three layers are housed in an enclosure made of different material depending on the manufacturer and sits on a foundation (figure I-3).

**Figure I-3**  
**Mattresses: Air adjustable foam mattress construction**



Source: *Adjustable Firmness Mattress Tips Before Buying*, Natural Form, <https://naturalform.com/adjustable-firmness-mattress/>, retrieved September 4, 2019.



## Domestic like product issues

Petitioners argue that the domestic like product should be defined as all mattresses, co-extensive with the scope of the investigations, consistent with the Commission's determination in the prior mattress investigation.<sup>25</sup> Joint Respondents note that they accept the definition of the domestic like product as contained in the petitions<sup>26</sup> and respondents H Mattress and Stork Craft indicate that they take no position on the definition of the domestic like product proposed in the petitions.<sup>27</sup>

Importer Cozy Comfort LLC ("Cozy Comfort"), however, argues that an examination of the six domestic like product factors supports the definition of a separate domestic like product for the product that it imports, known as a "Seat-to-Sleep" furniture component ("STS furniture component"). Cozy Comfort's product as advertised on the company website is shown in figure I-4.<sup>28</sup>

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<sup>25</sup> Petitions, pp. 13-14; petitioners' postconference brief, pp. 4-7. In the preliminary phase of the previous investigation of mattresses from China, the Commission concluded that 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. The Commission further observed that in-scope mattresses generally differ from out-of-scope futons, air mattresses, and waterbeds in terms of physical characteristics; manufacturing facilities, production processes, and employees; channels of distribution; producer and customer perceptions; and price, despite some overlap with respect to uses and interchangeability. Consequently, the Commission defined the domestic like product as all mattresses coextensive with the scope of the investigation. *Mattresses from China*, Inv. No. 731-TA-1424 (Preliminary), USITC Publication 4842, November 2018 ("China preliminary publication"), p. 11. In the final phase of the previous China investigation, the Commission found no new information on the record to indicate that it should revisit the domestic like product definition. The Commission therefore defined a single domestic like product consisting of all mattresses coextensive with the scope of the investigation. *China final publication*, p. 9.

<sup>26</sup> Joint respondents' postconference brief, p. 5.

<sup>27</sup> H Mattress and Stork Craft postconference brief, p. 6.

<sup>28</sup> Cozy Comfort \*\*\*, nor is it identified as a U.S. importer in the petitions. Cozy Comfort did not submit a response to the Commission's importer questionnaire in these investigations; \*\*\*.

**Figure I-4**  
**Cozy Mattress® in Sleeper Sofa**



Source: Cozy Comfort LLC website, <http://cozymattress.com/our-markets/retail/>, retrieved April 29, 2020.

Cozy Comfort explains that it imports the sub-component “seating deck and articulation mechanism” that forms an STS furniture component, which is then incorporated into sofas, chaises, and chairs as part of the seating surface and can be converted into a sleeping platform. Concerning the six like product factors, Cozy Comfort argues that its STS furniture component (1) is used exclusively in sofas, chaises, and chairs, and is “not individually usable, marketable, or offered for sale;” (2) is not available from any other supplier, and the “seating deck subcomponent” cannot be used in any other type of furniture component or as a mattress when placed on any flat surface other than in conjunction with the STS furniture component; (3) is sold only to furniture manufacturers to be installed into furniture specifically designed to accept the component and is not sold directly to individual consumers; (4) provides consumers with “a significant quality upgrade” over “{m}ost sleeper sofas fitted with a mattress . . . with

heavy, robust and plush sub-components;" (5) is \*\*\* using patented technology; and (6) \*\*\* resulting in \*\*\* compared to all other in-scope mattresses.<sup>29</sup>

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<sup>29</sup> Cozy Comfort's postconference brief, pp. 1-4.



## 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. Innerspring mattresses also typically contain some foam. 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 or trucks. In recent years, including since 2017, the mattress market has seen an increase in the popularity of mattresses sold via e-commerce, particularly mattresses-in-a-box (“MiBs”). The large majority of MiB-style mattresses are made of foam only; they are typically compressed and rolled for ease of shipment, and many of them are shipped directly to the consumer by common carrier. U.S. producers sell the large majority of their product to brick-and-mortar retailers and online retailers, which then sell them to consumers, while importers sell most mattresses imported from China either directly to consumers in their own brick and mortar stores and/or via their own websites, to third party online retailers for sale over the internet, or to third party brick and mortar retailers.<sup>1</sup>

U.S. producer and importer \*\*\* described U.S. mattress production as divided into four segments: Tier 1, consisting of U.S. producers Serta Simmons and Tempur Sealy, which produce mostly traditional (innerspring) mattresses; Tier 2, consisting of several dozen firms that have a more limited range of production and focus on the low-to-mid price range products; Tier 3, consisting of producers that assemble mattresses from foam cores and other components supplied by other firms; and Tier 4, consisting of firms that manufacture foam cores and mattresses for other producers, and sometimes do so for their own sales as well.

Twenty-eight U.S. producers and 25 importers indicated that there had been changes to the product range, mix, or marketing of mattresses since January 1, 2017, while 17 U.S. producers and 21 importers indicated that there had been no changes. Those identifying changes generally described the growth in online sales through large retailers such as Amazon and Wayfair, direct sales to consumers, and sales of foam mattresses, rolled mattresses, hybrid

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<sup>1</sup> *Mattresses from China*, Inv. No. 731-TA-1424 (Final), USITC Publication 5000, December 2019 (“China final publication”), p. II-1.

mattresses, and/or MiBs. Several U.S. producers described imported product as available online at much lower prices than domestic product, with \*\*\* describing how consumers searching online retailers by price will see U.S.-produced mattresses far down many search results (as more expensive). U.S. producer and importer \*\*\* described direct-to-consumer sales of MiBs as having expanded dramatically since 2013. It continued that the reasons why such sales are less expensive than traditional mattresses are that (1) MiBs have lower shipping costs, (2) MiB producers are more vertically integrated and have lower costs, and (3) brick-and-mortar retail has more mark-ups than direct-to-consumer sales. It further added that U.S. “Tier 1” producers did not add MiBs until 2016, but now multiple U.S. producers have such offerings. However, U.S. producer \*\*\* stated that some U.S. producers have been making MiBs for at least 15 years, and that it has made them since 2012. Additionally, importer \*\*\* described improvements in foam quality, and importer \*\*\* described increased private-label brands from major retailers. Importer \*\*\* described increased regulations on youth mattresses as having increased the cost of these mattresses.

Apparent U.S. consumption of mattresses increased \*\*\* percent during 2017-19, consistent with increases in Gross Domestic Product (GDP) and housing starts, as discussed below in “U.S. Demand.”

## **Channels of distribution**

U.S. producers and importers sell mattresses primarily to the retail market, as shown in table II-1. The only exception was imports from \*\*\* in 2017 and 2018 that were sold to non-retailers in \*\*\* (\*\*\* mattresses, respectively).

Table II-1

**Mattresses: U.S. producers' and importers' share of U.S. shipments, by sources and channels of distribution, 2017-19**

Item	Period		
	Calendar year		
	2017	2018	2019
<b>Share of reported shipments (percent)</b>			
<b>U.S. producers:</b>			
Retailers	85.3	85.5	84.6
Non-retailers	14.7	14.5	15.4
<b>U.S. importers: Cambodia:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: China:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: Indonesia:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: Malaysia:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: Serbia:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: Thailand:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: Turkey:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: Vietnam:</b>			
Retailers	***	***	***
Non-retailers	***	***	***
<b>U.S. importers: All other countries:</b>			
Distributors	***	***	***
End users	***	***	***

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

## Geographic distribution

U.S. producers and importers reported selling mattresses to all regions in the United States (table II-2). For U.S. producers, 32.8 percent of sales were within 100 miles of their production facility, 60.8 percent were between 101 and 1,000 miles, and 6.4 percent were over 1,000 miles. Importers sold 13.0 percent within 100 miles of their U.S. point of shipment, 74.9 percent between 101 and 1,000 miles, and 12.1 percent over 1,000 miles.

**Table II-2****Mattresses: Geographic market areas in the United States served by U.S. producers and importers**

<b>Region</b>	<b>U.S. producers</b>	<b>Cambodia</b>	<b>China</b>	<b>Indonesia</b>	<b>Malaysia</b>
Northeast	29	4	31	7	9
Midwest	30	4	28	4	9
Southeast	30	4	30	4	9
Central Southwest	27	4	31	6	9
Mountain	24	4	29	5	9
Pacific Coast	22	4	29	4	9
Other	16	4	19	5	7
All regions (except Other)	19	4	28	4	9
Reporting firms	45	4	32	7	9
<b>Region</b>	<b>Serbia</b>	<b>Thailand</b>	<b>Turkey</b>	<b>Vietnam</b>	
Northeast	3	14	2	15	
Midwest	3	14	2	14	
Southeast	3	14	1	15	
Central Southwest	3	14	1	15	
Mountain	3	15	1	16	
Pacific Coast	3	14	1	16	
Other	2	10	1	11	
All regions (except Other)	3	13	1	13	
Reporting firms	3	16	2	17	

Note: "Other" U.S. markets includes 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. While many of the subject countries' industries showed high capacity utilization, many had large and rapid increases in capacity over 2017 to 2019, as discussed further below.



**Table II-3**

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

Country	Capacity (number of mattresses)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2019 (percent)		Able to shift from alternate products
	2017	2019	2017	2019	2017	2019	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	23,721,161	23,204,336	75.2	74.1	***	***	***	***	13 of 51
Cambodia	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Indonesia	***	***	***	***	***	***	***	***	***
Malaysia	***	***	***	***	***	***	***	***	***
Serbia	***	***	***	***	***	***	***	***	***
Thailand	***	***	***	***	***	***	***	***	***
Turkey	***	***	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***	***	***

Note: Responding U.S. producers accounted for most U.S. production of mattresses in 2019. Responding foreign producer/exporter firms accounted for a small share of U.S. imports of mattresses from Cambodia, about one-third of imports from China, most imports from Indonesia, a small share of imports from Malaysia, all imports from Serbia, about two-thirds of imports from Thailand, and most imports from Vietnam during 2019. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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

**Domestic production**

Based on 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, restrained by low inventories, little ability to shift shipments from alternate markets, and little ability to shift production to or from alternate products.

**Subject imports from Cambodia**

Based on available information, producers of mattresses from Cambodia 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 of supply are the demonstrated ability of Cambodian suppliers to increase supply to the United States from 2018 to 2019, in the absence of additional information on the majority of mattresses supplied from Cambodia.

### **Subject imports from China**

Based on available information, producers of mattresses from 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 factor to this degree of responsiveness of supply is the demonstrated ability of Chinese suppliers to supply substantially more mattresses in 2018 than they did in 2019 (when antidumping duties began). Additionally, data from responding Chinese foreign producers indicate that there is unutilized capacity available for production.

### **Subject imports from Indonesia**

Based on available information, producers of mattresses from Indonesia have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of mattresses to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the demonstrated ability of Indonesian producers to increase capacity and production quickly from 2018 to 2019. However, this ability is constrained by the lack of exports to non-U.S. markets, the lack of ability to shift production from alternate products, and the lack of inventories, although Indonesian producers did indicate they had some spare production capacity.

### **Subject imports from Malaysia**

Based on available information, producers of mattresses from Malaysia 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 of supply are the demonstrated ability of Malaysian producers to increase capacity quickly from 2018 to 2019, as well as the currently low rate of capacity utilization in the Malaysian industry. However, this ability might be constrained somewhat by the lack of exports to non-U.S. markets, the lack of ability to shift production from alternate products, and the lack of inventories.

### **Subject imports from Serbia**

Based on available information, producers of mattresses from Serbia 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 of supply are the demonstrated ability of Serbian producers to increase capacity quickly in every year from 2017 to 2019, as well as the availability of unused capacity in the Serbian industry, the ability to

shift production from alternate products, and the existence of some exports to non-U.S. markets.

### **Subject imports from Thailand**

Based on available information, producers of mattresses from Thailand 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 of supply is the demonstrated ability of Thai producers to increase production each year from 2017 to 2019. However, this ability is constrained by the lack of exports to non-U.S. markets, the lack of ability to shift production from alternate products, and the lack of inventories, although Thai producers did indicate they had some spare production capacity.

### **Subject imports from Turkey**

Based on available information, producers of mattresses from Turkey have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of mattresses to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the existence of some inventories, and the high level of exports to other countries. However, this ability may be constrained somewhat by the lack of ability to shift production from alternate products.

### **Subject imports from Vietnam**

Based on available information, producers of mattresses from Vietnam 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 of supply is the demonstrated ability of Vietnamese producers to increase capacity every year from 2017 to 2019. However, this ability is constrained by the lack of exports to non-U.S. markets, the lack of ability to shift production from alternate products, the high level of capacity utilization, and the lack of inventories.

### **Imports from nonsubject sources**

Nonsubject imports declined in quantity and as a share of the U.S. market over 2017-2019, and never accounted for more than \*\*\* percent of the U.S. market. The largest source of nonsubject imports during 2017-19 was Mexico.

## Supply constraints

Most mattress suppliers (42 U.S. producers and 40 importers) indicated that they had not refused, declined, or been unable to supply mattresses since January 1, 2017. Three U.S. producers indicated that they had experienced supply constraints, citing foam supply concerns when they purchased from other U.S. producers (\*\*\*), an inability to meet occasional surges in demand from its U.S. facilities (\*\*\*), and rising fixed costs relative to sales (\*\*\*). Additionally, importer \*\*\* described receiving mattresses of unacceptable quality from U.S. producer \*\*\*, and described U.S. producers as being unwilling to supply mattresses produced to its requested specifications. Six importers (\*\*\*) reported experiencing supply constraints for their own supply, as purchasers and/or importers. \*\*\* described difficulty moving its supply chain from China to other countries after the antidumping duties on imports from China went into effect. \*\*\* indicated that slow and variable shipping times from Vietnam can cause inventory shortages. \*\*\* described Thai and Vietnamese suppliers as unable to accept new customers due to the COVID-19 response. \*\*\* described the section 301 tariffs, as well as Malaysia's restrictions in response to COVID-19, as forcing it to decline new customers. Similarly, \*\*\* also reported that the section 301 tariffs and the antidumping duties had restricted its supply of mattresses.

## 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 is the lack of widely used substitute products. While mattresses make up a moderate-to-large share of the cost of a mattress and foundation set, they typically make up a small-to-moderate share of the cost of products that incorporate mattresses.<sup>2</sup>

## End uses and cost share

Mattresses are used for support during sleep, and are also sometimes sold as parts of a bed or adjustable bed, or with a frame. They can be sold to retail consumers or institutional (e.g., hotels, hospitals, etc.) customers. U.S. producer \*\*\* described the traditional consumer cycle for purchasing a mattress as 10 years, but stated that the introduction of online mattress sales may have shortened that cycle.

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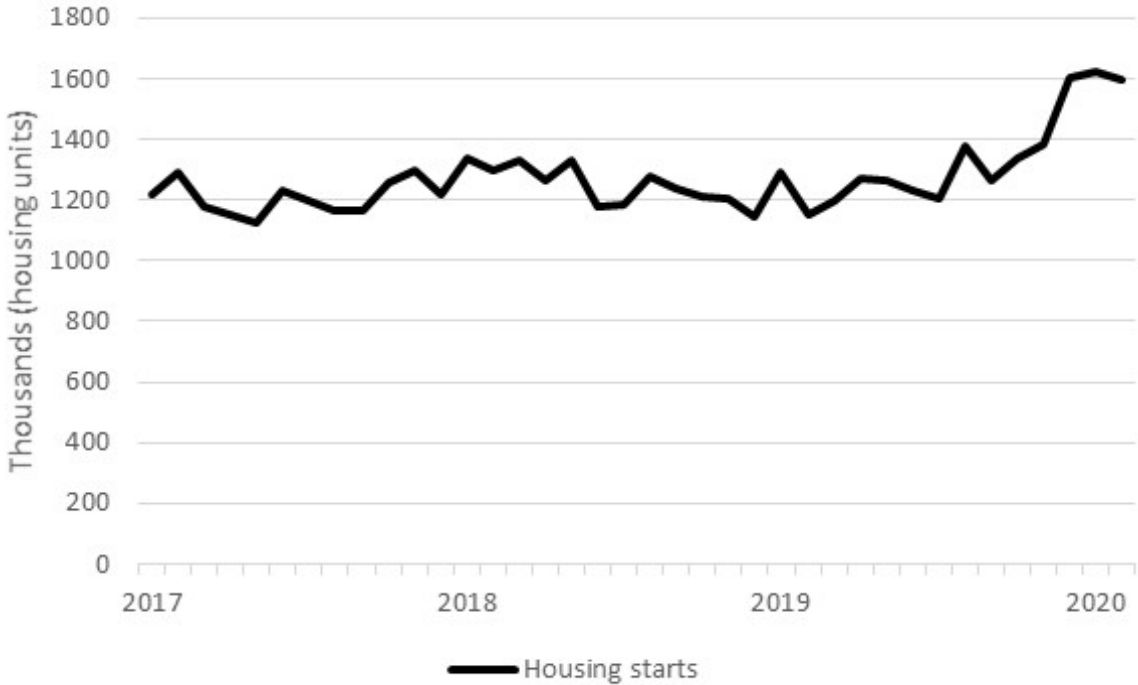
<sup>2</sup> See also China final publication, p. II-13.

**Business cycles**

Demand for mattresses is correlated with housing activity (exemplified by housing starts), interest rates, GDP, and consumer sentiment.<sup>3</sup> During 2017-2019, these factors generally indicated increased demand, but the recent COVID-19 related lockdowns in 2020 likely means a significant change in future trends.

Overall, housing starts increased 30.9 percent between January 2017 and April 2020 (figure II-1), although most of the increase began in December 2019. The effect of lockdowns on housing starts in subsequent months of 2020 is not yet known.

**Figure II-1**  
**Housing activity: Housing starts (seasonally adjusted annual rate), monthly, January 2017-February 2020**



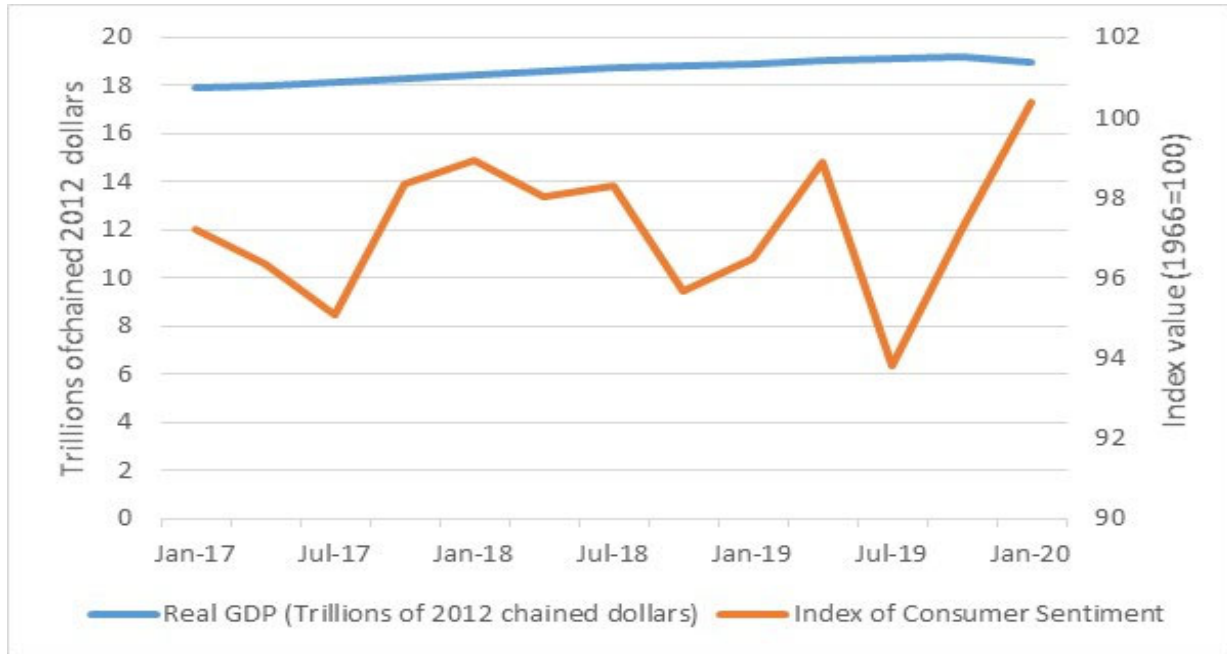
Sources: Census Bureau, Federal Reserve Bank of St. Louis (FRED economic data), retrieved April 15, 2020.

Real GDP and consumer sentiment both increased during January 2017-April 2020. Between January 2017 and December 2019, real GDP grew by 7.2 percent (figure II-2), although it fell 1.2 percent from the fourth quarter of 2019 to the first quarter of 2020. While consumer

<sup>3</sup> China final publication, p. II-15. See also U.S. producers' questionnaires of \*\*\*.

sentiment was mostly flat from January 2017 to December 2019, it rose in January-February 2020 to a level 3.2 percent above the level in January-March 2017.

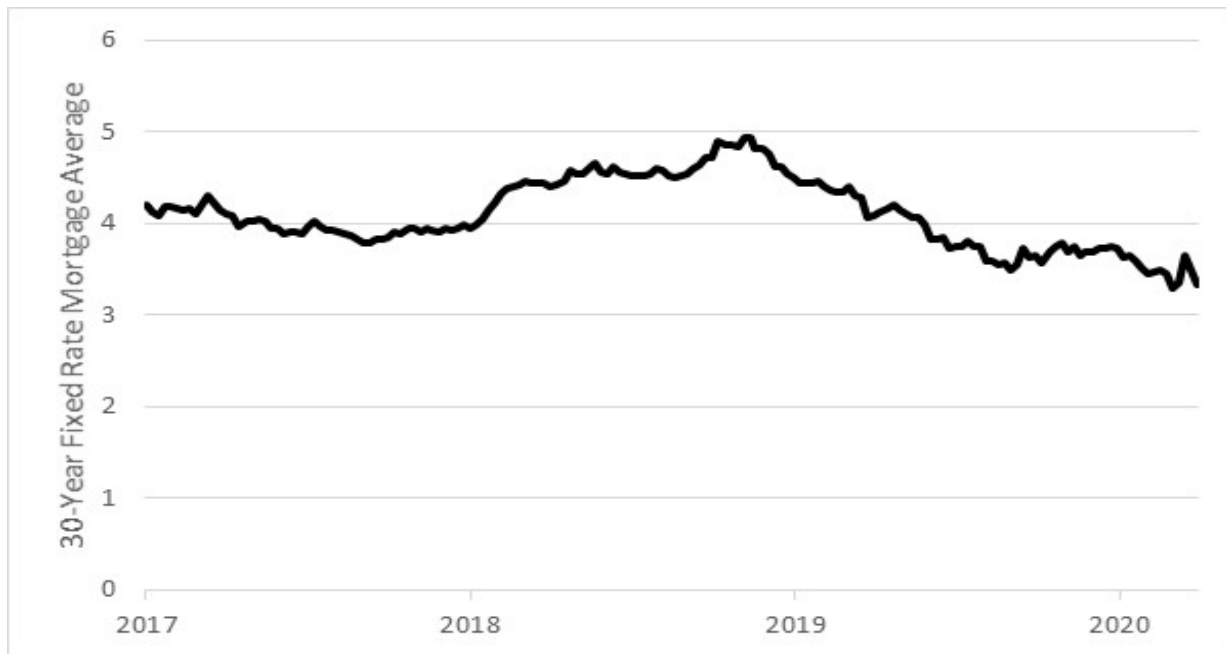
**Figure II-2**  
**GDP and consumer sentiment: Current GDP (seasonally adjusted), and index of consumer sentiment (3 month average), quarterly, January 2017-February 2020**



Sources: Bureau of Economic Analysis (GDP through 1st quarter 2020), and University of Michigan consumer surveys (through February 2020), via Federal Reserve Bank of St. Louis (FRED economic data), retrieved April 15, 2020, and May 5, 2020.

The 30-year fixed average mortgage rate fluctuated during January 2017-April 2019, and then decreased to 3.3 percent in April 2020 (figure II-3). All else equal, a lower rate would lower the cost of buying a home, as well as the cost of financing a mattress purchase directly, and thus may be correlated with higher mattress demand.

**Figure II-3**  
**Interest rates: 30-year fixed rate mortgage average in the United States, weekly, January 5, 2017- April 2, 2020**



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

U.S. producers and importers were split over whether the U.S. mattress market was subject to business cycles or conditions of competition. Nineteen U.S. producers and 33 importers indicated that it was not. However, 28 U.S. producers and 15 importers indicated that it was. Most firms describing distinctive conditions of competition or business cycles described the U.S. mattress market as slowing in the winter, and then showing increases in demand during tax refund season, during holidays (when retailers offer discounts), and/or during the back-to-school period. A smaller number of firms also described consumer purchasing patterns as tied to home buying. Other U.S. producers described distinctive conditions as including the presence of Amazon as well as sales of MiBs. Importer \*\*\* described demand for youth beds as slowing because it stated that the Millennial generation is having fewer children than past generations. Two importers indicated that the COVID-19 outbreak had slowed sales.

When asked if there had been any changes in the business cycles or conditions of competition in the U.S. mattress market since January 1, 2017, 21 U.S. producers and 11 importers stated that there had been. Most of these U.S. producers and importers cited some combination of increased online sales, increased sales of MiBs, increased imports, the effects of the presence of Amazon in the market, and/or increased sales directly to consumers. Two U.S.

producers described the tax season as resulting in more sales over a longer period of time in the past than now. One U.S. producer and one importer cited the recent COVID-19 outbreak, the effects of which the U.S. producer stated that it did not know yet. Importer \*\*\* stated that U.S. producers like \*\*\* began importing low-cost mattress components, putting smaller U.S. producers out of business. Ten U.S. producers and ten importers stated that there had been no changes in the business cycles or conditions of competition in the U.S. mattress market.

A plurality of U.S. producers and importers reported an increase in U.S. demand for mattresses since January 1, 2017 (table II-4), although a large number of U.S. producers also reported no change or a decrease in U.S. demand, and large numbers of importers reported no change in or fluctuating demand.

**Table II-4  
Mattresses: Firms’ responses regarding U.S. demand and demand outside the United States**

Item	Increase	No change	Decrease	Fluctuate
<b>Demand in the United States</b>				
U.S. producers	15	11	11	2
Importers	22	9	4	11
<b>Demand outside the United States</b>				
U.S. producers	6	8	1	1
Importers	9	6	1	4

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

In additional comments, U.S. producer and importer \*\*\* described the mattress market as divided into three broad segments based on consumer age: consumers aged 20-29, who prioritize price and favor online purchases of MiBs; consumers aged 30-59, who prioritize design and quality; and consumers over 59, who prioritize luxury products. It added that as the larger Baby Boom cohort of older consumers is replaced by the smaller Generation X cohort, demand for traditional mattresses is no longer sustaining higher prices. It continued that the large generations younger than Generation X prefer online sales of MiBs to traditional mattresses. Six other U.S. producers and 13 importers also noted the trend toward online sales and/or MiBs. Several importers emphasized the growing consumer demand for MiBs due to their convenience and comfort. For example, \*\*\* described the MiB as having been introduced \*\*\*, and becoming “extremely popular” due to its “price point, product design, and smaller packaging.” Importer \*\*\* described MiBs and hybrid mattresses as driving consumption growth in the United States, but added that traditional mattresses still make up about 75 percent of total U.S. consumption of mattresses. Three U.S. producers described low-priced imports as increasing their share of the U.S. market. However, importer \*\*\* stated that tariffs on imports from China had “destroyed” its business.



Regarding demand for mattresses outside the United States, most U.S. producers and importers expressed no knowledge, other than a few comments that the trend toward MiBs was also present in overseas markets.

### **Substitute products**

Forty-four U.S. producers and 40 importers stated that there were no substitutes for mattresses, but two U.S. producers and six importers stated that there were. Substitutes listed included futons, air mattresses, mattress toppers, and waterbeds, although only one of the U.S. producers or importers listing substitutes described changes in the price of substitutes as affecting the price of mattresses. Importer \*\*\* described lower prices for air mattresses as having put downward price pressure on the prices of other mattresses.

### **Substitutability issues**

The degree of substitution between domestic and imported mattresses depends upon factors such as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a moderately high degree of substitutability between domestically produced mattresses and mattresses imported from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam. U.S. producers generally described substitutability as quite high. Importers and purchasers described substitutability as more moderate, and sometimes described subject imports as higher quality than U.S. product, available in larger quantities than U.S. product, and/or more available in the form of MiBs than U.S. product.

### **Lead times**

U.S. producers mostly sold mattresses produced-to-order, while importers primarily made sales from inventory. U.S. producers shipped 75.1 percent of their 2019 shipments produced-to-order, and 24.9 percent from inventory. On the other hand, importers shipped 88.6 percent of their sales from inventory and 2.1 percent from foreign inventory, while 9.3 percent of their sales were produced-to-order.

For U.S. producers' produced-to-order sales, lead times averaged 8 days. For importers' produced-to-order sales, lead times averaged 44 days. For U.S. producers' sales from inventory, lead times averaged three days, and for importers, lead times for sales from inventory averaged four days. For importers sales' from foreign inventories, lead times averaged 80 days.

## Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations<sup>4</sup> were asked to identify the main purchasing factors their firm considered in their purchasing decisions for mattresses. Purchasers described a wide variety of factors, as shown in table II-5. The most frequently named factors included large volume capability, efficient delivery, price or value, and quality.

**Table II-5**

**Mattresses: Ranking of factors used in purchasing decisions as reported by purchasers, by factor**

Item	1 <sup>st</sup>	2nd	3rd	Total
	Number of firms (number)			
Quality/design control/standards	0	3	4	7
Manufacturing capability/scalability/availability/capacity	3	3	0	6
Delivery/logistics/warehouse/timeliness	2	1	2	5
Price/value/cost/customer cost perception/one cost for all stores	2	0	3	5
Breadth of product line	1	1	0	2
Raw materials/cost of raw materials	1	1	0	2
Brand	1	0	1	2
Research and development	1	0	0	1
Antidumping tariffs	0	1	0	1

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 mattresses from subject countries, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-6, most U.S. producers indicated that U.S.-produced mattresses are always interchangeable with imported mattresses, for all country sources, subject and nonsubject. Most importers did not respond to the question. Among those that did, half or more described U.S.-produced mattresses as either always or frequently interchangeable with imported mattresses from each subject country, although a plurality of

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<sup>4</sup> This information is compiled from responses by purchasers identified by Petitioners or others to the lost sales lost revenue allegations, or otherwise submitting a survey. Two pairs of purchasers (\*\*\*) were related, and are counted here only once each. See part V for more information.

responding importers usually described U.S.-produced mattresses as only sometimes interchangeable with imported mattresses.

**Table II-6**  
**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 importers reporting			
	A	F	S	N	A	F	S	N
<b>U.S. vs. subject countries:</b>								
U.S. vs. Cambodia	15	3	4	2	4	3	5	---
U.S. vs. China	15	7	4	2	7	11	13	1
U.S. vs. Indonesia	15	5	2	2	4	6	5	---
U.S. vs. Malaysia	15	5	2	2	6	4	6	---
U.S. vs. Serbia	14	4	2	2	3	3	4	---
U.S. vs. Thailand	15	5	3	2	6	6	8	---
U.S. vs. Turkey	14	5	2	2	3	4	3	---
U.S. vs. Vietnam	15	6	4	2	6	8	9	2
<b>Subject countries comparisons:</b>								
Cambodia vs. China	12	3	2	2	4	4	5	---
Cambodia vs. Indonesia	12	3	1	2	4	3	3	---
Cambodia vs. Malaysia	12	3	1	2	4	3	3	---
Cambodia vs. Serbia	12	3	1	2	3	3	3	---
Cambodia vs. Thailand	12	3	2	2	4	3	5	---
Cambodia vs. Turkey	12	3	1	2	3	3	3	---
Cambodia vs. Vietnam	12	3	2	2	4	3	5	---
China vs. Indonesia	12	3	1	2	4	4	6	---
China vs. Malaysia	12	3	1	2	4	4	6	---
China vs. Serbia	12	3	1	2	3	3	5	---
China vs. Thailand	12	3	2	2	5	5	8	---
China vs. Turkey	12	3	1	2	3	3	4	---
China vs. Vietnam	12	3	2	2	5	8	7	---
Indonesia vs. Malaysia	12	3	1	2	4	4	5	---
Indonesia vs. Serbia	12	3	1	2	3	3	4	---
Indonesia vs. Thailand	12	4	---	2	4	4	4	---
Indonesia vs. Turkey	12	3	1	2	3	3	3	---
Indonesia vs. Vietnam	12	3	1	2	4	4	4	---
Malaysia vs. Serbia	12	3	1	2	3	3	4	---
Malaysia vs. Thailand	12	3	1	2	3	4	4	---
Malaysia vs. Turkey	12	3	1	2	3	3	3	---
Malaysia vs. Vietnam	12	3	1	2	4	4	4	---

Table continued on next page.

**Table II-6—Continued.**

**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 importers reporting			
	A	F	S	N	A	F	S	N
Serbia vs. Thailand	12	3	1	2	3	3	4	---
Serbia vs. Turkey	12	3	1	2	3	3	3	---
Serbia vs. Vietnam	12	3	1	2	3	3	4	---
Thailand vs. Turkey	12	3	1	2	3	3	3	---
Thailand vs. Turkey	12	3	2	2	5	4	5	---
Turkey vs. Vietnam	12	3	1	2	3	3	4	---
<b>Nonsubject countries comparisons:</b>								
U.S. vs. nonsubject	10	3	3	1	6	5	5	---
Cambodia vs. nonsubject	8	3	1	1	4	3	4	---
China vs. nonsubject	8	3	1	1	4	5	5	---
Indonesia vs. nonsubject	8	3	1	1	4	3	4	---
Malaysia vs. nonsubject	8	3	1	1	4	3	4	---
Serbia vs. nonsubject	8	3	1	1	3	3	3	---
Thailand vs. nonsubject	8	3	1	1	4	3	4	---
Turkey vs. nonsubject	8	3	1	1	3	3	3	---
Vietnam vs. nonsubject	8	3	1	1	4	5	4	---

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

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

In additional comments, importers \*\*\* stated that U.S. and Vietnamese product are never interchangeable because the sizes are different. Importer \*\*\* described quality as a differentiating factor between U.S. product and subject imports. Importer \*\*\* stated that U.S. mattresses from \*\*\* had quality and warranty issues that product from \*\*\* did not have. Importer \*\*\* stated that the crib mattresses it required were not available from U.S. producers, due to liability concerns and capacity constraints. It continued that product from China and Malaysia did comply with regulations. Importers \*\*\* described MiBs as not interchangeable with traditional flat mattresses because of transportation and logistics issues. Importer \*\*\* described imported mattresses as sometimes having advantages, such as herbal infusion into foam, over U.S. product. Importer \*\*\* stated that the packaging of Chinese and Vietnamese mattresses made them smaller and easier to transport. Importer \*\*\* described interchangeability as limited by manufacturer capabilities, the cost of local materials, and the capabilities of labor.

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of mattresses from the United States, subject, or nonsubject countries. As seen in table II-7, most U.S. producers indicated that factors other than price are never significant in sales of U.S.-produced mattresses compared to imported mattresses, for all country sources, subject and nonsubject. Most importers did not respond to the question, but among those that did, pluralities described factors other than price as sometimes important in sales of U.S.-produced mattresses compared to sales of imported mattresses, while majorities usually described such factors as either always or frequently important.

**Table II-7**  
**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 importers reporting			
	A	F	S	N	A	F	S	N
<b>U.S. vs. subject countries:</b>								
U.S. vs. Cambodia	3	2	8	10	4	2	3	---
U.S. vs. China	4	4	9	10	6	8	12	4
U.S. vs. Indonesia	2	3	8	10	3	4	4	---
U.S. vs. Malaysia	2	3	8	10	4	3	5	1
U.S. vs. Serbia	2	2	7	10	2	2	3	---
U.S. vs. Thailand	3	3	8	10	5	4	8	1
U.S. vs. Turkey	2	3	7	10	2	2	3	---
U.S. vs. Vietnam	3	4	9	10	6	7	9	1
<b>Subject countries comparisons:</b>								
Cambodia vs. China	2	1	4	10	3	2	5	---
Cambodia vs. Indonesia	1	1	4	10	2	1	4	---
Cambodia vs. Malaysia	1	1	4	10	2	1	4	---
Cambodia vs. Serbia	1	1	4	10	1	1	4	---
Cambodia vs. Thailand	2	1	4	10	3	1	5	---
Cambodia vs. Turkey	1	1	4	10	1	1	4	---
Cambodia vs. Vietnam	2	1	4	10	3	1	5	---
China vs. Indonesia	1	1	4	10	3	3	6	---
China vs. Malaysia	1	1	5	9	3	2	7	---
China vs. Serbia	1	1	4	10	2	1	5	---
China vs. Thailand	2	1	5	9	4	2	8	2
China vs. Turkey	1	1	4	10	2	1	4	---
China vs. Vietnam	2	1	4	10	4	3	9	3

Table continued on next page.

**Table II-7--Continued**  
**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 importers reporting			
	A	F	S	N	A	F	S	N
Indonesia vs. Malaysia	1	1	4	10	2	2	6	---
Indonesia vs. Serbia	1	1	4	10	1	1	5	---
Indonesia vs. Thailand	1	1	4	10	2	1	6	---
Indonesia vs. Turkey	1	1	4	10	1	1	4	---
Indonesia vs. Vietnam	1	1	4	10	2	1	5	---
Malaysia vs. Serbia	1	1	5	9	1	1	5	---
Malaysia vs. Thailand	1	1	4	10	2	1	6	---
Malaysia vs. Turkey	1	1	4	10	1	1	4	---
Malaysia vs. Vietnam	1	1	4	10	2	1	6	---
Serbia vs. Thailand	1	1	4	10	1	1	5	---
Serbia vs. Turkey	2	---	4	10	1	1	4	---
Serbia vs. Vietnam	1	1	4	10	1	1	5	---
Thailand vs. Turkey	2	---	4	10	1	1	4	---
Thailand vs. Turkey	2	1	4	10	3	2	6	2
Turkey vs. Vietnam	1	1	4	10	1	1	5	---
<b>Nonsubject countries comparisons:</b>								
U.S. vs. nonsubject	2	1	6	6	3	5	6	---
Cambodia vs. nonsubject	1	1	3	6	3	1	5	---
China vs. nonsubject	1	1	3	6	3	3	6	---
Indonesia vs. nonsubject	1	1	3	6	3	2	4	---
Malaysia vs. nonsubject	1	1	3	6	3	2	4	---
Serbia vs. nonsubject	1	1	3	6	2	1	4	---
Thailand vs. nonsubject	1	1	3	6	3	1	5	---
Turkey vs. nonsubject	1	1	3	6	2	1	4	---
Vietnam vs. nonsubject	1	1	3	6	3	2	6	---

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

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

In additional comments, importers described factors such as quality, features, availability, packaging, product range, and delivery options can be important factors in comparison of mattresses from different sources. Seven importers indicated that subject imports (from China, Malaysia, Thailand, and/or Vietnam) were superior to product from the United States, although \*\*\* stated that delivery times from U.S. suppliers were shorter than those from Vietnamese suppliers. Additionally, \*\*\* stated that the ability to make MiBs is a critical factor. Importer \*\*\* stated that U.S. producers were not willing to

make a product that it could sell under its own name to brick and mortar retailers, but Thai and Vietnamese producers would.





## Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of 52 firms that accounted for most U.S. production of mattresses during 2019.

### U.S. producers

The Commission issued a U.S. producer questionnaire to more than 300 firms for which valid contact information was obtained based on information contained in the petitions and in the Commission's recent investigation on mattresses from China. Fifty-two firms provided usable and timely data on their operations.<sup>1</sup> Staff believes that these responses represent most U.S. production of mattresses.

Table III-1 lists U.S. producers of mattresses, their production locations, positions on the petitions, and shares of total reported production. One-half (26 of 52) of responding U.S. producers, representing \*\*\* percent of reported U.S. production of mattresses in 2019, indicated that they were in support of the petitions and 5 U.S. producers (\*\*\*), collectively representing \*\*\* percent of reported U.S. production, reported mixed/partial support for the petitions. Slightly more than one-fourth (15 of 52) of

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<sup>1</sup> A number of the 52 responding U.S. producers provided usable data in the trade section of the questionnaire but did not provide usable data in the financial or pricing sections. The following 11 additional firms submitted unusable and/or untimely responses to the Commission's U.S. producers' questionnaire and thus are not incorporated into the aggregate data presentations in this report: \*\*\*. These additional 11 firms together produced approximately \*\*\* in-scope mattresses in 2019 (equivalent to about \*\*\* percent of reported U.S. mattress production). In addition, one firm, \*\*\*, only reported production of out-of-scope \*\*\* mattresses. It did not produce any in-scope mattresses during 2017-19.

U.S. producers (\*\*\*), collectively representing \*\*\* percent of reported U.S. production of mattresses in 2019, indicated that they had no position on the petitions. Four U.S. producers, representing \*\*\* percent of U.S. production, reported that they were opposed to the petitions.<sup>2</sup>

**Table III-1**

**Mattresses: U.S. producers, their position on the petitions, location of production, and share of reported production, 2019**

Firm	Position on petitions	Production location(s)	Share of production (percent)
Acme	***	Norton Shores, MI	***
American Pacific	***	Garden Grove, CA	***
Ashley	***	Verona, MS Advance, NC Saltillo, MS	***
AW Industries	***	Hyattsville, MD	***
BIA	***	North Brunswick, NJ	***
Brooklyn	Petitioner	Phoenix, AZ	***
Capital	***	Verona, MS	***
Carpenter	***	Conover, NC Temple, TX Elkhart, IN Riverside, CA Lakeland, FL Fogelsville, PA	***
Classic	***	Jessup, MD	***
Comfort	***	Phoenix, AZ	***
Continental	***	Houston, TX	***
Corsicana	Petitioner	Corsicana, TX Shelbyville, TN Aurora, IL Glendale, AZ Bartow, FL Winlock, WA	***
Dream on Me	***	Piscataway, NJ	***
Dreamland	***	Haleyville, AL	***
Ecin	***	Fall River, MA	***

Table continued on next page.

<sup>2</sup> Of the 11 additional U.S. producers of in-scope mattresses that submitted wholly unusable and/or untimely responses, five (\*\*\*), together accounting for \*\*\* percent of 2019 U.S. production, indicated that they were in support of the petitions, five (\*\*\*), together accounting for \*\*\* percent of 2019 U.S. production, indicated that they had no position on the petitions, and one, (\*\*\*), accounting for \*\*\* percent of 2019 U.S. production, indicated that it was in opposition to the petitions.

**Table III-1—Continued**

**Mattresses: U.S. producers, their position on the petitions, location of production, and share of reported production, 2019**

<b>Firm</b>	<b>Position on petitions</b>	<b>Production location(s)</b>	<b>Share of production (percent)</b>
Elite	Petitioner	Americus, GA Newnan, GA Conover, NC Fort Smith, AR Verona, MS Ontario, CA	***
England	***	New Tazewell, TN	***
Everton	***	Filer, ID	***
FXI	Petitioner	Auburn, IN Portland, OR	***
Golden	***	Dallas, TX	***
Heritage	***	Orwell, OH	***
Holder	***	Kokomo, IN	***
Illinois Sleep	***	Chicago, IL Chicago, IL	***
Innocor	Petitioner	West Chicago, IL Baldwyn, MS	***
Jeffco	***	Webster, MA Millbury, MA Worcester, MA	***
Kolcraft	Petitioner	Aberdeen, NC	***
LCI	***	Durham, NC	***
Leggett & Platt	Petitioner	Tupelo, MI	***
Lions Volunteer	***	Morristown, TN	***
Lippert	***	Goshen, IN Nampa, ID	***
Mark's Mattress	***	Evansville, IN	***
Mattress Mill	***	Bozeman, MT	***
MBC	***	Corona, CA	***
Midwest Sleep	***	Toledo, IA	***
MTJ	***	Hudson, NC	***
Old West	***	Aurora, CO	***
Pittsburgh	Petitioner	Ellenton, FL	***
Prestige	***	Asheboro, NC	***
Rest Assured	***	Rochester MN	***
Restwell	***	Eden Prairie, MN	***
Salt Lake	***	Salt Lake City, UT	***
Serenity	***	Haleyville, AL	***

Table continued on next page.

Table III-1—Continued

Mattresses: U.S. producers, their position on the petitions, location of production, and share of reported production, 2019

Firm	Position on petitions	Production location(s)	Share of production (percent)
		Doraville, GA Phoenix, AZ Aurora, CO Tolleson, AZ Moreno Valley, CA Kapolei, HI Puyallup, WA West Coxsackie, NY Fredericksburg, VA Hazleton, PA Windsor Locks, CT Jamestown, NY Beloit, WI Monroe, OH Clear Lake, IA Janesville, WI Riviera Beach, FL Cullman, AL Charlotte, NC Trujillo Alto, PR Grovetown, GA Waycross, GA Houston, TX Shawnee Mission, KS	
Serta Simmons	***		***
Serta Restokraft	Petitioner	Romulus, MI	***
Sinomax	***	Nashville, TN Phoenix, AZ	***
Sleepworthy	***	Pinetops, NC	***
		Nashville, TN Oklahoma City, OK Phoenix, AZ Tualitan, OR	
Southerland	Petitioner		***
Star	***	Hialeah, FL	***
		Phoenix, AZ Richmond, CA Aurora, CO Orlando, FL Conyers, GA Plainfield, IL	
Tempur Sealy	***		***
Therapedic	***	Brockton, MA	***
United	Petitioner	Plainfield, NJ	***
Yankee	***	Agawam, MA	***

Table continued on next page.

**Table III-1—Continued**

**Mattresses: U.S. producers, their position on the petitions, location of production, and share of reported production, 2019**

<b>Number of firms</b>	<b>Position on petitions</b>	<b>Share of production (percent)</b>
26	Producers in support	***
4	Producers in opposition	***
5	Producers mixed/partial	***
15	Producers with no position	***
Total		***

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.

Serta, \*\*\*, was one of the petitioners in the recently completed investigation concerning China but is not a petitioner in these current investigations. The firm reported that it \*\*\*.<sup>3</sup> It reported in its follow-up response to the questionnaire that it "\*\*\*\*."

Tempur Sealy, \*\*\*, was also a petitioner in the recently completed investigation concerning China but is not a petitioner in these current investigations. The firm indicated in its response to the Commission's questionnaire that it \*\*\* in these investigations. In its follow-up questionnaire response concerning \*\*\* why it chose not to join as a petitioner in these investigations, Tempur Sealy indicated that "\*\*\*\*."

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<sup>3</sup> \*\*\*.

Two responding U.S. mattress producers (\*\*\*) are related to foreign producers of mattresses in subject countries and three U.S. producers (\*\*\*) are related to U.S. importers of the subject merchandise.<sup>4</sup> In addition, as discussed in greater detail later in this part of the report, four U.S. producers directly import the subject merchandise. Table III-2 presents information on U.S. producers' ownership and related and/or affiliated firms.

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

Item / Firm	Firm name	Affiliated/Ownership
<b>Ownership:</b>		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
<b>Related importers/exporters:</b>		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

Table continued on next page.

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<sup>4</sup> Domestic mattress producer \*\*\*, \*\*\*, \*\*\* established a U.S. production facility in \*\*\*, \*\*\*, which accounted for approximately \*\*\* percent of U.S. production in 2019, submitted an untimely and unusable response to the Commission's questionnaire and thus is not incorporated into the aggregate data presented in this report.

**Table III-2—Continued**

**Mattresses: U.S. producers' ownership, related and/or affiliated firms**

Item / Firm	Firm name	Affiliated/Ownership
<b>Related producers:</b>		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

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

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2017.

**Table III-3  
Mattresses: U.S. producers' reported changes in operations, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***
***	***
***	***
<b>Plant closings:</b>	
***	***
***	***
***	***
***	***
<b>Relocations:</b>	
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.



**Table III-3—Continued**

**Mattresses: U.S. producers' reported changes in operations, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Expansions:</b>	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
<b>Acquisitions:</b>	
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

**Table III-3—Continued**

**Mattresses: U.S. producers' reported changes in operations, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Consolidations:</b>	
***	***
***	***
***	***
***	***
***	***
***	***
<b>Prolonged shutdowns or curtailments:</b>	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.

**Table III-3—Continued**

**Mattresses: U.S. producers' reported changes in operations, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Revised labor agreements:</b>	
***	***
***	***
***	***
***	*** ***
<b>Other:</b>	
***	***
***	***
***	***
***	***
***	***

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

## U.S. production, capacity, and capacity utilization

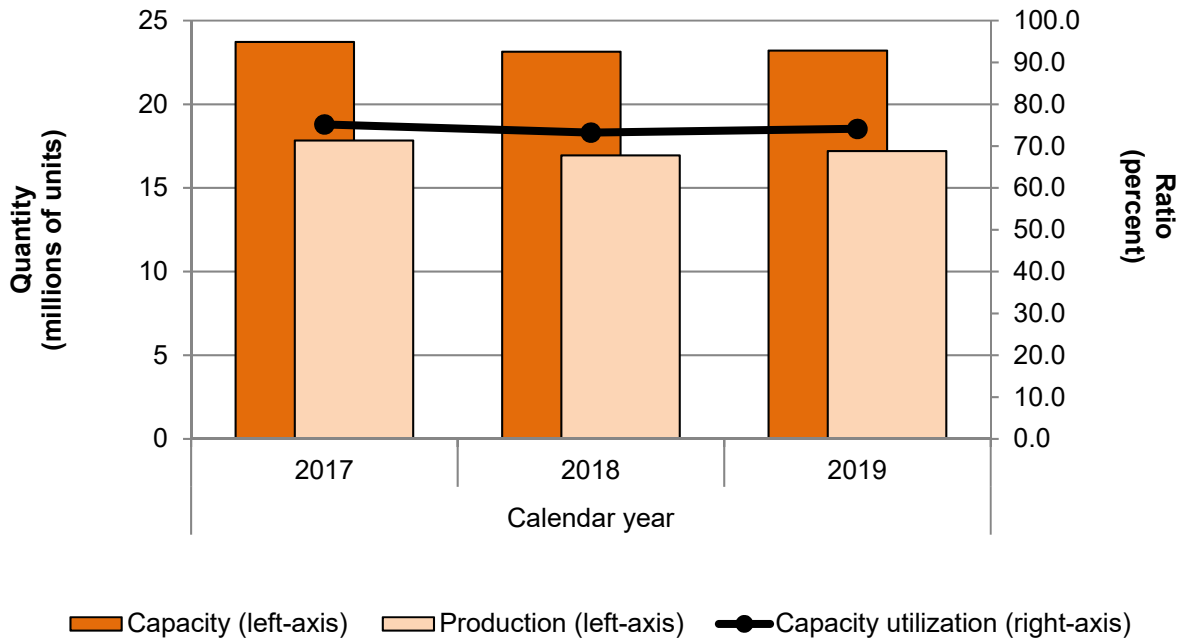
Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. The top 6 producers accounted for at least three-fourths of production in each full year period during 2017-19.

**Table III-4**  
**Mattresses: U.S. producers' production, capacity, and capacity utilization, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Capacity (units)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	23,721,161	23,144,077	23,204,336
	<b>Production (units)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	17,832,157	16,949,276	17,200,594
	<b>Capacity utilization (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	75.2	73.2	74.1
	<b>Share of production (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	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, 2017-19**



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

Overall, responding U.S. producers' annual production capacity decreased by 2.4 percent from 2017 to 2018 but increased by 0.3 percent from 2018 to 2019, ending 2.2 percent lower in 2019 than in 2017. Although a substantial number of U.S. producers (22 out of 52) reported an increase in capacity from 2017 to 2019 (including four of the six largest producers), these firms' increases in production capacity were outweighed by decreases in capacity reported by \*\*\*. According to \*\*\*, the decrease in its production capacity was due to \*\*\*.<sup>5</sup> The decrease in \*\*\* production capacity was attributed to \*\*\*.<sup>6</sup>

<sup>5</sup> \*\*\*.

<sup>6</sup> \*\*\*.

The U.S. production of mattresses followed the same general trend as reported capacity (although with slightly larger fluctuations), decreasing by 5.0 percent from 2017 to 2018, increasing by 1.5 percent from 2018 to 2019, and ending at 3.5 percent lower in 2019 than in 2017. A majority (33 of 52) of the responding U.S. producers of mattresses reported lower production in 2019 than in 2017.<sup>7</sup> U.S. producers' average capacity utilization decreased from 75.2 percent in 2017 to 73.2 percent in 2018, but increased to 74.1 percent in 2019.

### Alternative products

As shown in table III-5, mattresses accounted for the vast majority of total production on shared equipment in each full year during 2017-19 (94.4 percent, 92.2 percent, and 92.3 percent in 2017, 2018, 2019, respectively). Slightly more than one-fourth (15 of 52) of responding U.S. producers reported the production of out-of-scope merchandise on the same machinery used to produce mattresses in each year during 2017-19. In addition to the production of mattresses, these U.S. producers also produced \*\*\* on shared equipment.

**Table III-5**  
**Mattresses: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	24,787,906	24,453,265	24,666,621
Production:			
Mattresses	17,832,157	16,949,276	17,200,594
Out-of-scope production	1,058,123	1,440,850	1,444,066
Total production on same machinery	18,890,280	18,390,126	18,644,660
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	76.2	75.2	75.6
Share of production:			
Mattresses	94.4	92.2	92.3
Out-of-scope production	5.6	7.8	7.7
Total production on same machinery	100.0	100.0	100.0

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

<sup>7</sup> \*\*\* accounted for the \*\*\* of the decrease during this period.

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. By quantity and value, U.S. shipments accounted for \*\*\* percent of U.S. producers' total shipments in each year during 2017-19. The quantity of U.S. producers' U.S. shipments decreased by 5.9 percent from 2017 to 2018, but increased by 1.9 percent from 2018 to 2019, ending 4.1 percent lower in 2019 than in 2017. Among the 52 firms that reported U.S. shipments of mattresses during 2017-19, 32 firms reported lower quantity of U.S. shipments in 2019 than in 2017.<sup>8</sup> However, with the increase in average unit values of U.S. shipments from \$265 per mattress in 2017 to \$279 per mattress in 2019, the value of U.S. producers' U.S. shipments ended 0.7 percent higher in 2019 than in 2017.

While the majority of the responding U.S. producers reported unit values between \$200 and \$500 per mattress, there was some variance in the unit values reported by responding U.S. producers. Three firms reported a unit value of over \$1,000 per mattress, while eight firms reported a unit value of under \$100 per mattress. Dream on Me Inc. and Kolcraft, which \*\*\*, specialize in producing crib mattresses, while Holder Mattress Co., Mattress Mill, and Pittsburgh Mattress Factory, which specialize in the production of high-end, custom mattresses reported \*\*\*.<sup>9</sup>

Eleven firms reported export shipments during 2017-19.<sup>10</sup> U.S. producers' export shipments, which accounted for \*\*\* percent of U.S. producers' total shipments in each year during 2017-19 by quantity and value, increased by \*\*\* percent in terms of quantity from 2017 to 2019. The average unit values of export shipments also increased from \$\*\*\* per mattress in 2017 to \$\*\*\* per mattress in 2019. U.S. producers reporting exports of mattresses indicated that their primary export markets include Australia, Belize, Bermuda, Canada, Caribbean, China, Columbia, Hong Kong, Korea, and Mexico.

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<sup>8</sup> \*\*\*, accounted for the vast majority of the decrease in U.S. shipments during 2017-19.

<sup>9</sup> Dream On Me, <https://dreamonme.com/catalog/mattresses/>, retrieved April 26, 2020; Kolcraft, <https://www.kolcraft.com/products/crib-mattresses/>, retrieved April 26, 2020; Holder Mattress Co., <https://holdermattress.com/>, retrieved April 26, 2020; Mattress Mill, <https://www.mattressmill.com/our-story/factory-tour>, retrieved April 26, 2020; Pittsburgh Mattress Factory, <https://www.pittsburghmattressfactory.com/home>, retrieved April 26, 2020..

<sup>10</sup> \*\*\* accounted for the majority of export shipments in 2017-19.

**Table III-6**

**Mattresses: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2017-2019**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
U.S. shipments	17,806,018	16,749,048	17,071,538
Export shipments	***	***	***
Total shipments	***	***	***
	<b>Value (1,000 dollars)</b>		
U.S. shipments	4,727,245	4,575,333	4,759,338
Export shipments	***	***	***
Total shipments	***	***	***
	<b>Unit value (dollars per unit)</b>		
U.S. shipments	265	273	279
Export shipments	***	***	***
Total shipments	***	***	***
	<b>Share of quantity (percent)</b>		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	<b>Share of value (percent)</b>		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***

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



## U.S. producers' inventories

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. End-of-period inventories held by U.S. producers increased by 34.5 percent from 2017 to 2018, and increased further by 9.3 percent from 2018 to 2019, ending 47.0 percent higher in 2019 than in 2017. The ratios of U.S. producers' end-of-period inventories to their U.S. production increased from 1.9 percent in 2017 to 2.9 percent in 2019. \*\*\* accounted for the majority of inventories held by U.S. producers.

**Table III-7**  
**Mattresses: U.S. producers' inventories, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
U.S. producers' end-of-period inventories	341,429	459,172	501,852
	<b>Ratio (percent)</b>		
Ratio of inventories to.-- U.S. production	1.9	2.7	2.9
U.S. shipments	1.9	2.7	2.9
Total shipments	***	***	***

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

## U.S. producers' imports and purchases

U.S. producers' direct imports of mattresses are presented in table III-8 and U.S. producers' domestic purchases of mattresses are presented in table III-9. Four U.S. producers (\*\*\*) reported direct U.S. imports of subject merchandise during 2017-19. Seven U.S. producers (\*\*\*) reported U.S. purchases of mattresses from other domestic producers and one U.S. producer (\*\*\*) reported U.S. purchases of mattresses imported from \*\*\*.

**Table III-8**  
**Mattresses: U.S. producers' imports, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
	<b>Ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
	<b>Narrative</b>		
***	***		

Table continued on next page.

**Table III-8—Continued  
Mattresses: U.S. producers' imports, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
	<b>Ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
	<b>Narrative</b>		
***	***		
Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
	<b>Ratio (percent)</b>		
***	***	***	***
	<b>Narrative</b>		
***	***		

Table continued on next page.

**Table III-8—Continued**  
**Mattresses: U.S. producers' imports, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
	<b>Ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
	<b>Narrative</b>		
***	***		

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 III-9**  
**Mattresses: U.S. producers' purchases, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
	<b>Narrative</b>		
***	***		
Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
	<b>Narrative</b>		
***	***		
Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
***	***	***	***
***	***	***	***
	<b>Narrative</b>		
***	***		

Table continued on next page.

**Table III-9—Continued**  
**Mattresses: U.S. producers' purchases, 2017-19**

Item	Calendar year		
	2017	2018	2019
	Quantity (units)		
***	***	***	***
***	***	***	***
	Narrative		
***	***		
Item	Calendar year		
	2017	2018	2019
	Quantity (units)		
***	***	***	***
***	***	***	***
	Narrative		
***	***		
Item	Calendar year		
	2017	2018	2019
	Quantity (units)		
***	***	***	***
***	***	***	***
	Narrative		
***	***		
Item	Calendar year		
	2017	2018	2019
	Quantity (units)		
***	***	***	***
***	***	***	***
	Narrative		
***	***		
Item	Calendar year		
	2017	2018	2019
	Quantity (units)		
***	***	***	***
***	***	***	***
	Narrative		
***	***		

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

## U.S. employment, wages, and productivity

Table III-10 shows U.S. producers' employment-related data. The number of production related workers ("PRWs") decreased by 4.6 percent from 2017 to 2019. Out of 52 responding U.S. producers, 13 producers reported fewer PRWs in 2019 than in 2017. \*\*\* accounted for most of the decline in the number of PRWs, explaining that it has "\*\*\*\*." Hourly wages also declined from 2017 to 2019, while hours worked and total wages paid increased. Productivity increased from 2017 to 2018 but declined in 2019 to a level below that reported in 2017. Unit labor costs increased in each year from 2017 to 2019.

**Table III-10**

**Mattresses: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2017-19**

Item	Calendar year		
	2017	2018	2019
Production and related workers (PRWs) (number)	11,803	11,271	11,256
Total hours worked (1,000 hours)	23,080	21,655	23,861
Hours worked per PRW (hours)	1,955	1,921	2,120
Wages paid (\$1,000)	466,315	446,815	476,102
Hourly wages (dollars per hour)	\$20.20	\$20.63	\$19.95
Productivity (units per 1,000 hours)	772.6	782.7	720.9
Unit labor costs (dollars per pound)	\$26.15	\$26.36	\$27.68

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 137 firms believed to be importers of subject mattresses for which valid contact information was obtained, as well as to more than 300 firms believed to produce mattresses in the United States.<sup>1</sup> Usable questionnaire responses were received from 54 companies, representing most U.S. imports from each of the subject sources individually and all other nonsubject countries combined in 2019 under primary HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087 as follows:<sup>2</sup>

Cambodia: \*\*\* percent  
China: \*\*\* percent  
Indonesia: \*\*\* percent  
Malaysia: \*\*\* percent  
Serbia: \*\*\* percent  
Thailand: \*\*\* percent  
Turkey: \*\*\* percent  
Vietnam: \*\*\* percent  
Subject countries: 166.8 percent  
All other sources: \*\*\* percent

Table IV-1 lists all responding U.S. importers of mattresses from subject countries and other sources, their locations, and their shares of U.S. imports, in 2019.

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<sup>1</sup> The Commission issued questionnaires to those firms identified as U.S. importers in the petitions and in the Commission's recent investigation on mattresses from China, 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 from each of the subject countries individually and from all other nonsubject countries combined 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 2019.

<sup>2</sup> Other secondary HTS statistical reporting numbers under which U.S. imports of subject mattresses may enter the United States include: 9401.40.0000, 9401.90.5081, 9404.21.0000, 9404.21.0090, 9404.21.0095, 9404.29.1095, 9404.29.9050, 9404.29.9091, and 9404.29.9095. Entries of U.S. imports under secondary HTS numbers explain the greater than 100 percent coverage data presented.

**Table IV-1****Mattresses: U.S. importers, their headquarters, and share of total imports by source, 2019**

Firm	Headquarters	Share of imports by source (percent)		
		Subject sources	Nonsubject sources	All import sources
AC Pacific	Fontana, CA	***	***	***
Amazon	Seattle, WA	***	***	***
American Furniture	Englewood, CO	***	***	***
American Signature	Columbus, OH	***	***	***
Americanstar Mattress	Houston, TX	***	***	***
Americanstar International	Commerce, CA	***	***	***
Ashley	Arcadia, WI	***	***	***
Atlantic	South Deerfield, MA	***	***	***
Best Price	San Leandro, CA	***	***	***
Big Lots	Columbus, OH	***	***	***
Bob's Discount	Manchester, CT	***	***	***
Boyd	Maryland Heights, MO	***	***	***
China Beds Direct	Knoxville, TN	***	***	***
Classic	Columbia, MD	***	***	***
Costco	Issaquah, WA	***	***	***
CVB	Logan, UT	***	***	***
Deep Blue	Palatine, IL	***	***	***
Dickson	Houston, TX	***	***	***
Dorel	Wright City, MO	***	***	***
Dynasty	Irvine, CA	***	***	***
Ecos	Carlstadt, NJ	***	***	***
Furinno	Houston, TX	***	***	***
Glideaway	St. Louis, MO	***	***	***
Grand Life	Compton, CA	***	***	***
H Mattress	West Jordan, UT	***	***	***
Home Furnishings	Hermitage, TN	***	***	***
Homelegance	Fremont, CA	***	***	***
IKEA	Pratteln, Switzerland	***	***	***
J Squared	Greenfield, IN	***	***	***
Jonathan Louis	Gardena, CA	***	***	***
Keetsa	San Francisco, CA	***	***	***
Kittrich	Pomona, CA	***	***	***
Klaussner	Asheboro, NC	***	***	***

Table continued on next page.



**Table IV-1—Continued**

**Mattresses: U.S. importers, their headquarters, and share of total imports by source, 2019**

Firm	Headquarters	Share of imports by source (percent)		
		Subject sources	Nonsubject sources	All import sources
Kymdan	Cerritos, CA	***	***	***
Legends	Tolleson, AZ	***	***	***
Leggett & Platt	Carthage, MO	***	***	***
Martin	Saint Paul, MN	***	***	***
Ottomanson	Carlstadt, NJ	***	***	***
Resource	New York, NY	***	***	***
RTG	Seffner, FL	***	***	***
Sarton	Carolina, PR	***	***	***
Sinomax	Houston, TX	***	***	***
Soft-Tex	Waterford, NY	***	***	***
South Bay	Rancho Cucamonga, CA	***	***	***
Storkcraft	Las Vegas, NV	***	***	***
Subrtex	City of Industry, CA	***	***	***
Synergy	Ripley, MS	***	***	***
Target	Minneapolis, MN	***	***	***
Upward Mobility	Chattanooga, TN	***	***	***
ViSpring	Las Vegas, NV	***	***	***
Walmart	Bentonville, AR	***	***	***
Wayfair	Boston, MA	***	***	***
Williams-Sonoma	San Francisco, CA	***	***	***
Zinus	Tracy, CA	***	***	***
Total		***	***	***

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

Note: \*\*\*.

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

## U.S. imports

Table IV-2 and figure IV-1 present data for U.S. imports of mattresses from subject countries and all other sources as compiled from data submitted in response to Commission questionnaires.

**Table IV-2**  
**Mattresses: U.S. imports by source, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
U.S. imports from.-- Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	6,249,424	8,170,330	10,160,171
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	<b>Value (1,000 dollars)</b>		
U.S. imports from.-- Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	689,432	929,752	1,142,192
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***

Table continued on next page.

**Table IV-2—Continued**  
**Mattresses: U.S. imports by source, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Unit value (dollars per unit)</b>		
U.S. imports from.--			
Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	110	114	112
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	<b>Share of quantity (percent)</b>		
U.S. imports from.--			
Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***

Table continued on next page.

**Table IV-2—Continued**  
**Mattresses: U.S. imports by source, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Share of value (percent)</b>		
U.S. imports from.--			
Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	<b>Ratio to U.S. production</b>		
U.S. imports from.--			
Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	35.0	48.2	59.1
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
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.

**Figure IV-1**  
**Mattresses: U.S. import quantities and average unit values, 2017-19**

\* \* \* \* \*

Imports from China, by quantity, accounted for the majority of imports of mattresses from all sources during 2017 and 2018 (\*\*% percent, respectively), but fell to \*\*% percent of total U.S. imports in 2019, after section 301 duties and antidumping duties on mattresses from China were imposed and as U.S. imports of mattresses from other countries (especially Indonesia and Vietnam) increased. The quantity of U.S. imports from China increased by \*\*% percent from \*\* mattresses in 2017 to \*\* mattresses in 2018 before declining by \*\*% percent to \*\* mattresses in 2019. The value of U.S. imports from China increased by \*\*% percent from 2017 to 2018 but declined by \*\*% percent from 2018 to 2019, ending \*\*% percent lower in 2019 than in 2017. The unit value of U.S. imports from China increased from \$\*\* per mattress in 2017 to \$\*\* per mattress in 2018 and 2019.

Imports from all subject countries other than China increased by more than the decline in imports from China during 2018-19, resulting in an overall increase in U.S. imports from all subject countries combined of 24.4 percent from 8.2 million mattresses in 2018 to 10.2 million mattresses in 2019, a level 62.6 percent higher than in 2017. A similar increase in the value of U.S. imports from all subject countries of 65.7 percent was reported from 2017 to 2019. The unit value of U.S. imports from all subject countries increased from \$110 per mattress in 2017 to \$114 per mattress in 2018 before declining to \$112 per mattress in 2019. Only Malaysia (in 2019 at \$\*\*\* per mattress), Thailand (in 2018 at \$\*\*\* per mattress), and Vietnam (in 2019 at \$\*\*\* per mattress) reported import unit values greater than the unit values of imports from China.

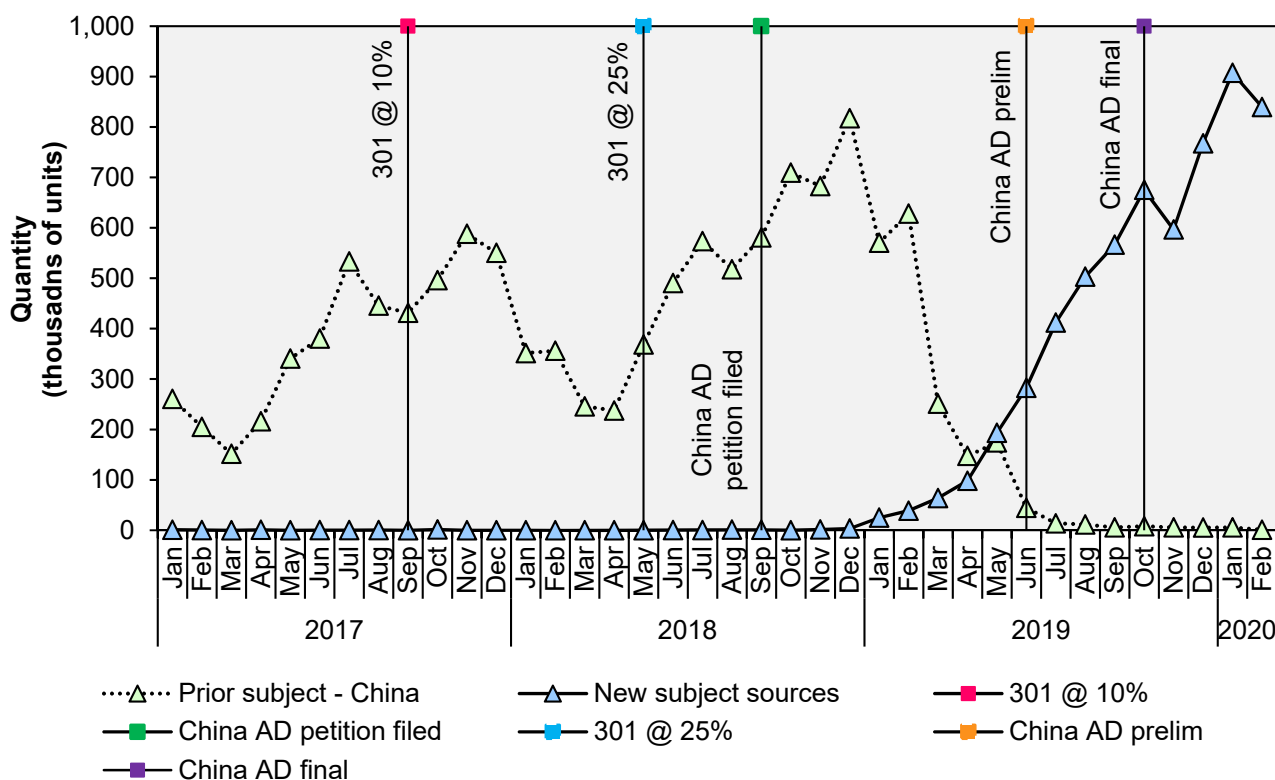
Forty-nine firms reported imports of mattresses from subject countries during 2019, with the following five accounting for almost three-fourths of total subject imports: \*\*\*. Imports of subject mattresses from China by four of the five largest importers (\*\*\*) declined in 2019 as their imports of mattresses from other subject countries increased. Importer Zinus, which sourced \*\*\* of its imported mattresses from China during 2017-18, sourced \*\*\* of its imports from other subject sources in 2019. In fact, a majority (\*\*\*) of responding U.S. importers that had previously reported imports from China during 2017-18, also reported an increased share of their subject imports accounted for by subject countries other than China in 2019.

Imports from nonsubject sources, by quantity, accounted for \*\*\* percent, \*\*\* percent, and \*\*\* percent of all imports in 2017, 2018, and 2019, respectively. The quantity of imports from nonsubject sources declined by \*\*\* percent from 2017 to 2018 but increased by \*\*\* percent from 2018 to 2019, ending \*\*\* percent higher in 2019 than in 2017. The value of imports from nonsubject sources showed similar trends. Ten firms reported imports of mattresses from nonsubject sources during 2019, with \*\*\* accounting for the overwhelming majority of reported imports from nonsubject sources. According to official import statistics, Mexico was the largest source of mattresses imported from nonsubject countries in 2019, followed by Taiwan, Canada, and the Philippines. Nonsubject countries for which import data were reported in questionnaire responses include Croatia, Italy, Mexico, Poland, Taiwan, and the United Kingdom. The average unit value of imports from nonsubject sources was less than the average unit value of imports from China in each year during 2017-19, but fluctuated in relation to all other subject countries individually depending on the year.

During 2019, the average unit value of imports from nonsubject sources was less than the average unit value of imports from China, Indonesia, Malaysia, and Vietnam but was more than the average unit value of imports from Cambodia, Serbia, Thailand, and Turkey.

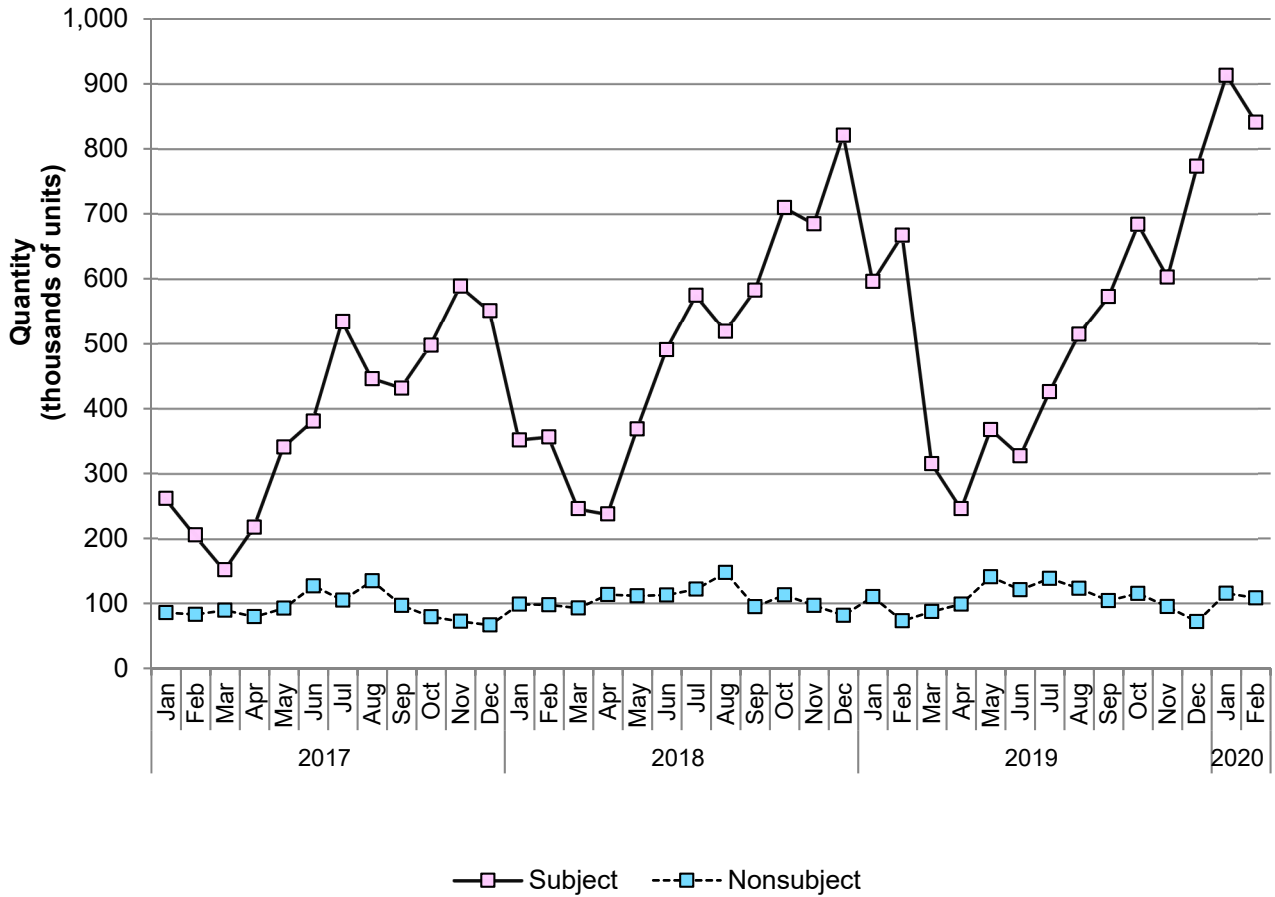
Figures IV-2 and IV-3 present monthly official U.S. import statistics. Following two years of overall increases in imports of mattresses from China in 2017 and 2018, a sharp decline in monthly imports from China began in December 2018, several months after the September 2018 filing of the petition concerning the antidumping duty investigation on imports of mattresses from China. As imports of mattresses from China sharply declined throughout 2019 and into the first two months of 2020, imports of mattresses from the other subject countries increased. Monthly imports of mattresses from nonsubject sources fluctuated within a relatively narrow range from January 2017 to February 2020.

**Figure IV-2**  
**Mattresses: Subject U.S. imports aggregated by new investigated sources and previous investigated sources, by month, January 2017 through February 2020**



Source: Official U.S. import statistics for HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, accessed April 6, 2020.

**Figure IV-3**  
**Mattresses: U.S. imports from aggregated subject and nonsubject sources, by month, January 2017 through February 2020**



Source: Official U.S. import statistics for HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, accessed April 6, 2020.



## Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.<sup>3</sup> 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.<sup>4</sup> Imports of mattresses from each of the subject countries accounted for more than 3 percent of the total volume of U.S. imports of mattresses during the most recent 12-month period preceding the filing of the petitions (March 2019 through February 2020). Table IV-3 presents the shares of total U.S. imports, by quantity, attributable to each subject country during March 2019 through February 2020 as compiled from data submitted in response to Commission questionnaires.<sup>5</sup>

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<sup>3</sup> 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)).

<sup>4</sup> Section 771 (24) of the Act (19 U.S.C § 1677(24)).

<sup>5</sup> The shares of total U.S. imports attributable to each subject country during March 2019 through February 2020 as compiled from official import statistics using the six primary HTS statistical reporting numbers (9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087) are as follows: Cambodia (7.9 percent), China (8.5 percent), Indonesia (17.6 percent), Malaysia (7.6 percent), Serbia (5.0 percent), Thailand (4.0 percent), Turkey (5.5 percent), and Vietnam (27.3 percent).

**Table IV-3****Mattresses: U.S. imports in the twelve month period preceding the filing of the petitions, March 2019 through February 2020**

Item	March 2019 through February 2020	
	Quantity (units)	Share quantity (percent)
U.S. imports from.-- Cambodia	***	***
China	***	***
Indonesia	***	***
Malaysia	***	***
Serbia	***	***
Thailand	***	***
Turkey	***	***
Vietnam	***	***
Subject sources	9,124,291	***
Nonsubject sources	***	***
All import sources	***	***

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

## Cumulation considerations

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, geographic markets, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

### Fungibility

Table IV-4 and figure IV-4 present data on U.S. producers' and U.S. importers' U.S. shipments by mattress type. During 2019, \*\*\* percent of all mattresses shipped in the United States were foam mattresses, \*\*\* percent were innerspring mattresses, and \*\*\* percent were hybrid mattresses. The overwhelming majority (\*\*\* percent) of U.S. shipments of innerspring mattresses during 2019 were manufactured in the United States, while almost all remaining U.S. shipments of innerspring mattresses were imported from subject countries. Slightly more than one-half of U.S. shipments of foam and hybrid mattresses (\*\*\* percent and \*\*\* percent, respectively) during 2019 were imported from subject countries. Mattresses produced in the United States accounted for \*\*\* and \*\*\* percent of total U.S. shipments of foam and hybrid mattresses in 2019, respectively. Foam mattresses accounted for the largest share of total U.S. shipments by importers from China, Indonesia, Malaysia, Serbia, Thailand, and Vietnam during 2019, whereas hybrid mattresses accounted for the majority of total U.S. shipments of mattresses imported from Cambodia and Turkey, and innerspring mattresses accounted for the largest share of total U.S. shipments of U.S. product. With the exception of U.S. shipments of imports from Serbia, there were reported U.S. shipments of all three types of mattresses from each of the subject countries during 2019. Only U.S. shipments of foam mattresses and hybrid mattresses were reported by U.S. importers from Serbia during 2019, with no U.S. shipments of imports of innerspring mattresses from Serbia.

**Table IV-4**  
**Mattresses: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019**

Source	U.S. shipments			
	Innerspring	Foam	Hybrid	All product types
	<b>Quantity (units)</b>			
U.S. producers	***	***	***	***
Imports from.--				
Cambodia	***	***	***	***
China	***	***	***	***
Indonesia	***	***	***	***
Malaysia	***	***	***	***
Serbia	***	***	***	***
Thailand	***	***	***	***
Turkey	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
U.S. producers and U.S. importers	***	***	***	***
	<b>Share across (percent)</b>			
U.S. producers	***	***	***	***
Imports from.--				
Cambodia	***	***	***	***
China	***	***	***	***
Indonesia	***	***	***	***
Malaysia	***	***	***	***
Serbia	***	***	***	***
Thailand	***	***	***	***
Turkey	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
U.S. producers and U.S. importers	***	***	***	***
	<b>Share down (percent)</b>			
U.S. producers	***	***	***	***
Imports from.--				
Cambodia	***	***	***	***
China	***	***	***	***
Indonesia	***	***	***	***
Malaysia	***	***	***	***
Serbia	***	***	***	***
Thailand	***	***	***	***
Turkey	***	***	***	***
Vietnam	***	***	***	***
Subject sources	***	***	***	***
Nonsubject sources	***	***	***	***
All import sources	***	***	***	***
U.S. producers and U.S. importers	***	***	***	***

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.

**Figure IV-4**  
**Mattresses: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019**

\* \* \* \* \*

## Geographical markets

Mattresses produced in the United States and imported into the United States are shipped nationwide.<sup>6</sup> Table IV-5 presents U.S. import quantities of mattresses by source and border of entry during 2019.<sup>7</sup> In 2019, U.S. import statistics for the primary HTS statistical reporting numbers for imports of mattresses (9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087) show that imports from each subject country entered all U.S. regions in 2019. The Western border of entry accounted for the largest share of total imports from Cambodia, China, Malaysia, and Vietnam, whereas the Eastern border of entry accounted for the largest share of total imports from Indonesia, Serbia, and Thailand, and the Northern border of entry accounted for the largest share of total imports from Turkey.

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<sup>6</sup> Domestic producers providing responses in these investigations reported that they manufacture mattresses in 34 states plus Puerto Rico. Petitioners noted that the U.S. mattress industry has the geographic reach to deliver a mattress anywhere in the United States within days of receiving an order. Petitioners' postconference brief, pp. 22-23. Respondents indicate that imports from subject countries are available in all geographic regions of the United States, as well. Joint respondents' postconference brief, response to staff questions, p. 12. See Part II for additional information on geographic markets.

<sup>7</sup> The "East" border of entry includes the following Customs entry districts for imports of mattresses from subject countries during 2019: Baltimore, MD; Boston, MA; Buffalo, NY; Charleston, SC; New York, NY; Norfolk, VA; Ogdensburg, NY; Philadelphia, PA; San Juan, PR; Savannah, GA; St. Albans, VT; and Washington, DC. The "North" border of entry includes the following Customs entry districts for imports of mattresses from subject countries during 2019: Chicago, IL; Cleveland, OH; Detroit, MI; Duluth, MN; Great Falls, MT; Minneapolis, MN; and St. Louis, MO. The "South" border of entry includes the following Customs entry districts for imports of mattresses from subject countries during 2019: Dallas-Fort Worth, TX; Houston-Galveston, TX; Miami, FL; Mobile, AL; New Orleans, LA; and Tampa, FL. The "West" border of entry includes the following Customs entry districts for imports of mattresses from subject countries during 2019: Columbia-Snake, OR; Honolulu, HI; Los Angeles, CA; San Francisco, CA; and Seattle, WA.

**Table IV-5**  
**Mattresses: U.S. imports by border of entry, 2019**

Item	Border of entry				
	East	North	South	West	All borders
	<b>Quantity (units)</b>				
Imports from.--					
Cambodia	84,502	74,079	18,240	333,715	510,536
China	591,401	366,227	157,219	751,252	1,866,099
Indonesia	368,406	104,942	182,165	284,563	940,076
Malaysia	110,554	57,717	7,357	193,004	368,632
Serbia	129,428	95,072	32,571	24,295	281,366
Thailand	76,396	51,096	12,466	53,376	193,334
Turkey	95,036	119,284	26,683	379	241,382
Vietnam	549,667	375,512	91,739	671,522	1,688,440
Subject sources	2,005,390	1,243,929	528,440	2,312,106	6,089,865
Nonsubject sources	69,564	38,653	584,551	585,765	1,278,533
All import sources	2,074,954	1,282,582	1,112,991	2,897,871	7,368,398
	<b>Share across (percent)</b>				
U.S. imports from.--					
Cambodia	16.6	14.5	3.6	65.4	100.0
China	31.7	19.6	8.4	40.3	100.0
Indonesia	39.2	11.2	19.4	30.3	100.0
Malaysia	30.0	15.7	2.0	52.4	100.0
Serbia	46.0	33.8	11.6	8.6	100.0
Thailand	39.5	26.4	6.4	27.6	100.0
Turkey	39.4	49.4	11.1	0.2	100.0
Vietnam	32.6	22.2	5.4	39.8	100.0
Subject sources	32.9	20.4	8.7	38.0	100.0
Nonsubject sources	5.4	3.0	45.7	45.8	100.0
All import sources	28.2	17.4	15.1	39.3	100.0
	<b>Share down (percent)</b>				
U.S. imports from.--					
Cambodia	4.1	5.8	1.6	11.5	6.9
China	28.5	28.6	14.1	25.9	25.3
Indonesia	17.8	8.2	16.4	9.8	12.8
Malaysia	5.3	4.5	0.7	6.7	5.0
Serbia	6.2	7.4	2.9	0.8	3.8
Thailand	3.7	4.0	1.1	1.8	2.6
Turkey	4.6	9.3	2.4	0.0	3.3
Vietnam	26.5	29.3	8.2	23.2	22.9
Subject sources	96.6	97.0	47.5	79.8	82.6
Nonsubject sources	3.4	3.0	52.5	20.2	17.4
All import sources	100.0	100.0	100.0	100.0	100.0

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

Source: Official U.S. import statistics for HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, accessed April 6, 2020.

## Presence in the market

Tables IV-6 and IV-7 and figure IV-5 present monthly official U.S. import statistics for subject countries and nonsubject sources. The monthly import statistics indicate that U.S. imports of mattresses from China were present in each month during January 2017 to December 2019. As imports of mattresses from China increased during 2017-18, monthly imports of mattresses from the other subject countries were sporadically present in the U.S. market. During the 24 months of 2017-18, imports from Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam were present in the U.S. market in 10, 2, 1, 0, 1, 10, and 7 months, respectively. However, as imports of mattresses from China sharply declined throughout 2019, imports of mattresses from the other subject countries increased and were largely present in the U.S. market in most months. During the 12 months of January-December 2019, imports of mattresses from Cambodia, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam were present in the U.S. market in 12, 9, 11, 9, 7, 11, and 12 months, respectively.



**Table IV-6**  
**Mattresses: U.S. imports by month, January 2017 through February 2020**

U.S. imports	Cambodia	China	Indonesia	Malaysia
	Quantity (units)			
2017: January	1,008	260,589	---	---
2017: February	448	204,932	---	---
2017: March	---	151,700	1	---
2017: April	919	216,288	---	---
2017: May	---	340,566	---	---
2017: June	---	380,347	---	---
2017: July	125	533,436	---	---
2017: August	---	445,569	---	---
2017: September	---	431,385	---	---
2017: October	1,376	496,017	---	---
2017: November	---	588,175	---	---
2017: December	---	550,321	---	---
2018: January	---	351,542	---	---
2018: February	---	356,071	---	---
2018: March	---	245,762	---	2
2018: April	---	237,595	---	---
2018: May	---	368,408	---	---
2018: June	147	490,368	---	---
2018: July	300	573,705	---	---
2018: August	1,150	517,802	---	---
2018: September	985	581,014	---	---
2018: October	---	709,398	---	---
2018: November	1,430	682,906	3	---
2018: December	---	817,503	---	---
2019: January	3,246	570,499	---	---
2019: February	4,316	628,066	---	527
2019: March	8,766	251,111	---	542
2019: April	20,996	147,494	12	609
2019: May	25,374	174,297	12,596	5,677
2019: June	46,755	44,557	86,950	27,194
2019: July	64,387	13,818	119,307	28,034
2019: August	80,244	11,554	125,187	45,088
2019: September	81,370	5,613	159,501	44,737
2019: October	75,932	8,020	156,147	64,800
2019: November	39,639	5,720	128,170	65,327
2019: December	59,511	5,350	152,206	86,097
2020: January	57,026	5,675	215,581	113,108
2020: February	64,683	1,132	233,568	117,275

Table continued on next page.

**Table IV-6—Continued**  
**Mattresses: U.S. imports by month, January 2017 through February 2020**

U.S. imports	Serbia	Thailand	Turkey	Vietnam
	Quantity (units)			
2017: January	---	---	---	---
2017: February	---	---	---	---
2017: March	---	---	---	---
2017: April	---	---	---	---
2017: May	---	---	27	---
2017: June	---	---	212	---
2017: July	---	10	---	200
2017: August	---	---	18	360
2017: September	---	---	---	---
2017: October	---	---	---	166
2017: November	---	---	2	1
2017: December	---	---	---	---
2018: January	---	---	---	---
2018: February	---	---	---	---
2018: March	---	---	---	---
2018: April	---	---	26	---
2018: May	---	---	---	---
2018: June	---	---	---	145
2018: July	---	---	---	156
2018: August	---	---	42	---
2018: September	---	---	35	---
2018: October	---	---	109	---
2018: November	---	---	123	---
2018: December	---	---	126	3,281
2019: January	---	---	305	21,543
2019: February	---	---	1,453	32,581
2019: March	---	---	---	54,633
2019: April	325	---	2,274	74,022
2019: May	24,303	---	15,395	109,959
2019: June	13,795	2,634	13,539	91,784
2019: July	28,691	4,577	21,723	145,383
2019: August	38,819	8,803	22,135	182,796
2019: September	33,578	34,059	33,261	180,169
2019: October	56,410	26,571	28,881	266,765
2019: November	49,657	49,470	28,900	235,494
2019: December	35,788	67,220	73,516	293,311
2020: January	52,631	68,376	92,333	308,426
2020: February	59,041	52,777	101,739	210,579

Table continued on next page.

**Table IV-6—Continued**  
**Mattresses: U.S. imports by month, January 2017 through February 2020**

U.S. imports	Subject sources	Nonsubject sources	All import sources
	Quantity (units)		
2017: January	261,597	85,690	347,287
2017: February	205,380	83,013	288,393
2017: March	151,701	89,316	241,017
2017: April	217,207	79,356	296,563
2017: May	340,593	92,467	433,060
2017: June	380,559	126,863	507,422
2017: July	533,771	104,918	638,689
2017: August	445,947	134,560	580,507
2017: September	431,385	96,709	528,094
2017: October	497,559	79,282	576,841
2017: November	588,178	72,272	660,450
2017: December	550,321	66,535	616,856
2018: January	351,542	98,620	450,162
2018: February	356,071	97,695	453,766
2018: March	245,764	92,719	338,483
2018: April	237,621	113,570	351,191
2018: May	368,408	111,579	479,987
2018: June	490,660	112,760	603,420
2018: July	574,161	121,892	696,053
2018: August	518,994	147,349	666,343
2018: September	582,034	94,754	676,788
2018: October	709,507	113,027	822,534
2018: November	684,462	96,792	781,254
2018: December	820,910	81,506	902,416
2019: January	595,593	110,168	705,761
2019: February	666,943	72,988	739,931
2019: March	315,052	87,398	402,450
2019: April	245,732	98,678	344,410
2019: May	367,601	140,911	508,512
2019: June	327,208	120,866	448,074
2019: July	425,920	138,387	564,307
2019: August	514,626	122,965	637,591
2019: September	572,288	104,211	676,499
2019: October	683,526	115,188	798,714
2019: November	602,377	94,987	697,364
2019: December	772,999	71,786	844,785
2020: January	913,156	115,531	1,028,687
2020: February	840,794	108,333	949,127

Source: Official U.S. import statistics for HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, accessed April 6, 2020.

Table IV-7

**Mattresses: Presence of monthly imports by source, threshold, and time period, January 2017 through February 2020**

Item	>0.0% of total imports in a month, i.e., any data	>0.1% of total imports in a month	>0.5% of total imports in a month	>1.0% of total imports in a month	>2.0% of total imports in a month	>3.0% of total imports in a month	U.S. imports
	Number of months with indicated presence (count)						
Imports from newly investigated subject sources.--							
Cambodia.--							
2017	5	4	---	---	---	---	3,876
2018	5	3	---	---	---	---	4,012
2019	12	12	11	10	10	9	510,536
Indonesia.--							
2017	1	---	---	---	---	---	1
2018	1	---	---	---	---	---	3
2019	9	8	8	8	8	7	940,076
Malaysia.--							
2017	---	---	---	---	---	---	0
2018	1	---	---	---	---	---	2
2019	11	10	8	8	7	7	368,632
Serbia.--							
2017	---	---	---	---	---	---	0
2018	---	---	---	---	---	---	0
2019	9	8	8	8	8	8	281,366
Thailand.--							
2017	1	---	---	---	---	---	10
2018	---	---	---	---	---	---	0
2019	7	7	7	5	4	4	193,334
Turkey.--							
2017	4	---	---	---	---	---	259
2018	6	---	---	---	---	---	461
2019	11	10	9	8	8	8	241,382
Vietnam.--							
2017	4	---	---	---	---	---	727
2018	3	1	---	---	---	---	3,582
2019	12	12	12	12	12	12	1,688,440
All newly investigated subject sources.--							
2017	10	4	---	---	---	---	4,873
2018	9	4	---	---	---	---	8,060
2019	12	12	12	12	12	12	4,223,766

Table continued on next page.

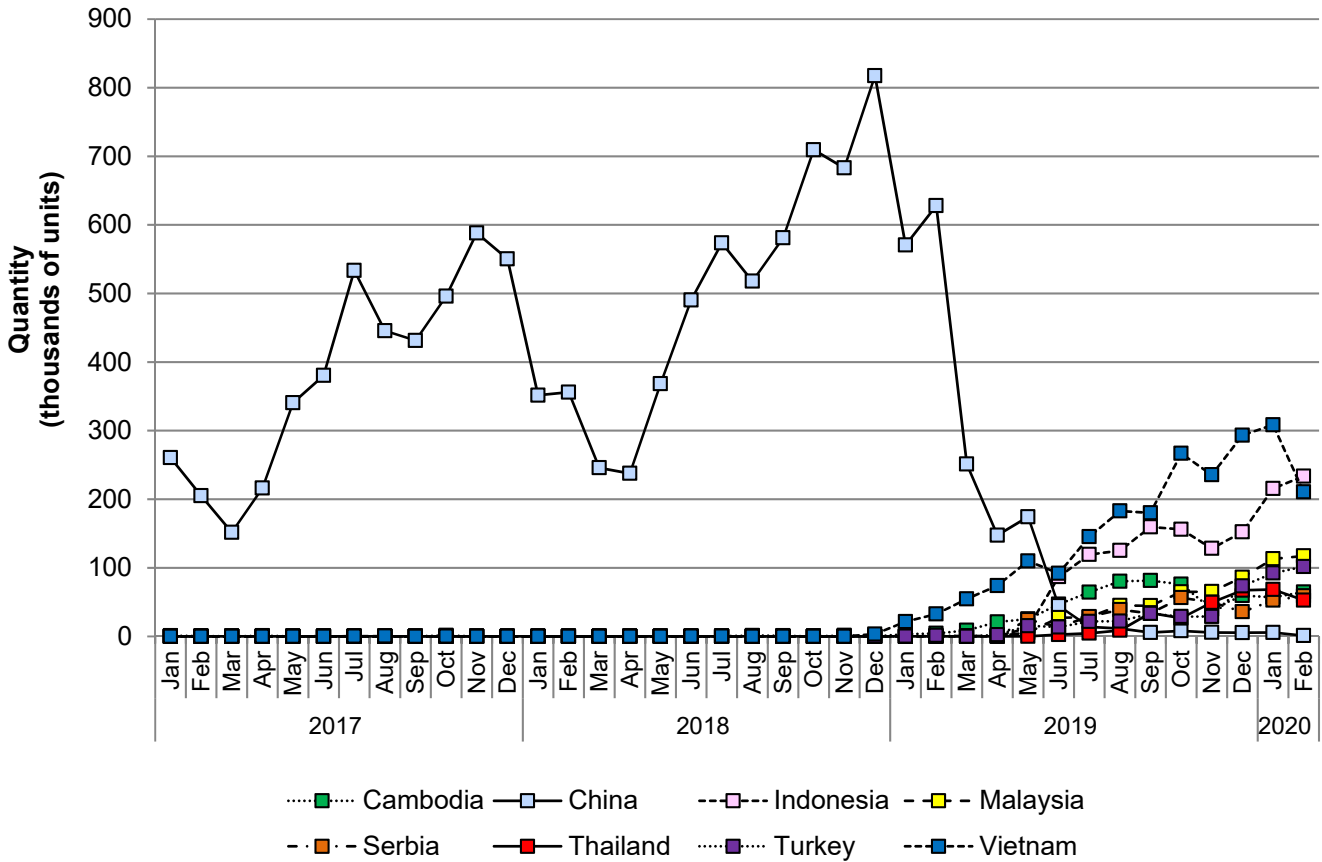
**Table IV-7—Continued**

**Mattresses: Presence of monthly imports by source, threshold, and time period, January 2017 through February 2020**

Item	>0.0% of total imports in a month, i.e., any data	>0.1% of total imports in a month	>0.5% of total imports in a month	>1.0% of total imports in a month	>2.0% of total imports in a month	>3.0% of total imports in a month	U.S. imports
	Number of months with indicated presence (count)						Quantity (units)
Imports from previously investigated subject sources.--							
China.--							
2017	12	12	12	12	12	12	4,599,325
2018	12	12	12	12	12	12	5,932,074
2019	12	12	12	9	7	6	1,866,099
Imports from subject sources.--							
2017	12	12	12	12	12	12	4,604,198
2018	12	12	12	12	12	12	5,940,134
2019	12	12	12	12	12	12	6,089,865
Imports from nonsubject sources.--							
2017	12	12	12	12	12	12	1,110,981
2018	12	12	12	12	12	12	1,282,263
2019	12	12	12	12	12	12	1,278,533

Source: Official U.S. import statistics for HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, accessed April 6, 2020.

**Figure IV-5**  
**Mattresses: U.S. imports from individual subject source, by month, January 2017 through February 2020**



Source: Official U.S. import statistics for HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087, accessed April 6, 2020.

## Apparent U.S. consumption and market shares

Table IV-8 and figure IV-6 present data on apparent U.S. consumption and U.S. market shares for mattresses. Apparent U.S. consumption increased by \*\*\* percent from 2017 to 2018 and by \*\*\* percent from 2018 to 2019, ending \*\*\* percent higher in 2019 than in 2017.<sup>8</sup> The increase in apparent U.S. consumption during 2017-19 was captured entirely by U.S. importers' increased U.S. shipments of mattresses from subject countries, which \*\*\* during the period as U.S. shipments by producers and importers from nonsubject countries declined slightly. During 2017-19, the change in the value of apparent U.S. consumption largely mirrored the change in the quantity of apparent U.S. consumption, increasing by \*\*\* percent.

U.S. producers' market share, by quantity, decreased from \*\*\* percent in 2017 to \*\*\* percent in 2018 and to \*\*\* percent in 2019.<sup>9</sup> Conversely, the market share of imports from all subject countries combined increased from \*\*\* percent in 2017 to \*\*\* percent in 2018, and to \*\*\* percent in 2019. The market share of imports from China alone increased from \*\*\* percent in 2017 to \*\*\* percent in 2018. However, while the market shares of imports from countries other than China increased between 2018 and 2019, the market share of imports from China decreased from \*\*\* percent in 2018 to \*\*\* percent in 2019. The aggregate share of the U.S. market held by imports from the seven subject countries other than China was \*\*\* percent in 2017, \*\*\* percent in 2018, and \*\*\* percent in 2019. The market share of nonsubject imports decreased from \*\*\* percent in 2017 to \*\*\* percent in 2018, and to \*\*\* percent in 2019.

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<sup>8</sup> According to petitioners and respondents, demand for mattresses can be influenced by gross domestic product, consumer sentiment, and the housing market. Petitioners' postconference brief, response to staff questions, p. 6.; Joint respondents' postconference brief, response to staff questions, p. 5.

<sup>9</sup> The decrease in U.S. producers' market share during 2017-19 largely reflects decreased U.S. shipments by \*\*\*. See Part III for additional information on responding U.S. producers' operations.

**Table IV-8**  
**Mattresses: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
U.S. producers' U.S. shipments	17,806,018	16,749,048	17,071,538
U.S. importers' U.S. shipments from.--			
Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	5,836,012	7,813,994	10,642,222
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Apparent U.S. consumption	***	***	***
	<b>Value (1,000 dollars)</b>		
U.S. producers' U.S. shipments	4,727,245	4,575,333	4,759,338
U.S. importers' U.S. shipments from.--			
Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	799,944	1,123,853	1,467,059
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
Apparent U.S. consumption	***	***	***

Table continued on next page.



**Table IV-8—Continued**

**Mattresses: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Share of quantity (percent)</b>		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.-- Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***
	<b>Share of value (percent)</b>		
U.S. producers' U.S. shipments	***	***	***
U.S. importers' U.S. shipments from.-- Cambodia	***	***	***
China	***	***	***
Indonesia	***	***	***
Malaysia	***	***	***
Serbia	***	***	***
Thailand	***	***	***
Turkey	***	***	***
Vietnam	***	***	***
Subject sources	***	***	***
Of which previously investigated	***	***	***
Of which newly investigated	***	***	***
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.

**Figure IV-6**  
**Mattresses: Apparent U.S. consumption, 2017-19**

\* \* \* \* \*

## Part V: Pricing data

### Factors affecting prices

#### Raw material costs

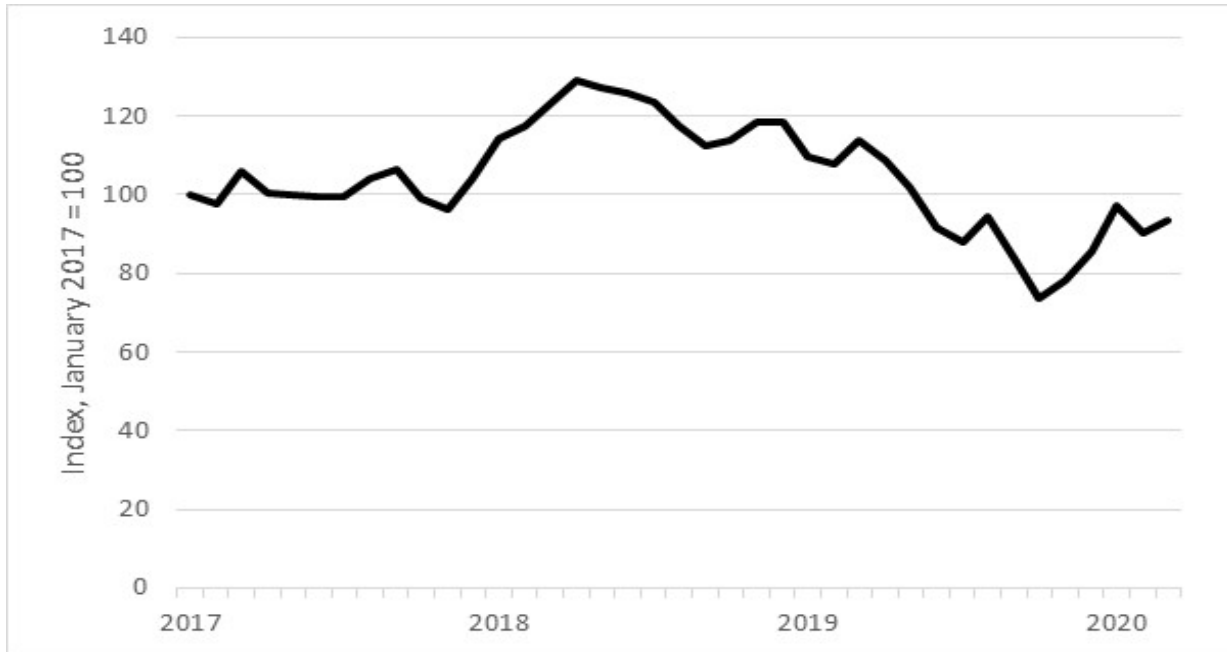
During 2017 to 2019, raw materials ranged from 78.2 percent (in 2019) to 79.3 percent (in 2018) of costs of goods sold for mattresses. The major raw materials used in the production of mattresses vary depending on the type of mattress being produced. Innerspring and hybrid mattresses use springs of iron or steel, usually made of wire rod, while foam mattresses do not. All three mattress types typically use some foam in various thicknesses, densities, and in various amounts, with foam mattresses consisting exclusively of one or more types of foam. The three primary types of foam used are polyurethane, viscoelastic (i.e., “memory foam”), and latex.<sup>1</sup>

Wire rod costs are approximated by the costs of iron and steel scrap. The producers’ price index for iron and steel scrap fluctuated from January 2017 to March 2020, ending 6.7 percent lower in March 2020 than in January 2017 (figure V-1). Prices of iron and steel scrap was at its lowest in October 2019 and highest in April 2018.

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<sup>1</sup> *Mattresses from China*, Inv. No. 731-TA-1424 (Final), USITC Publication 5000, December 2019 (“China final publication”), p. I-1.

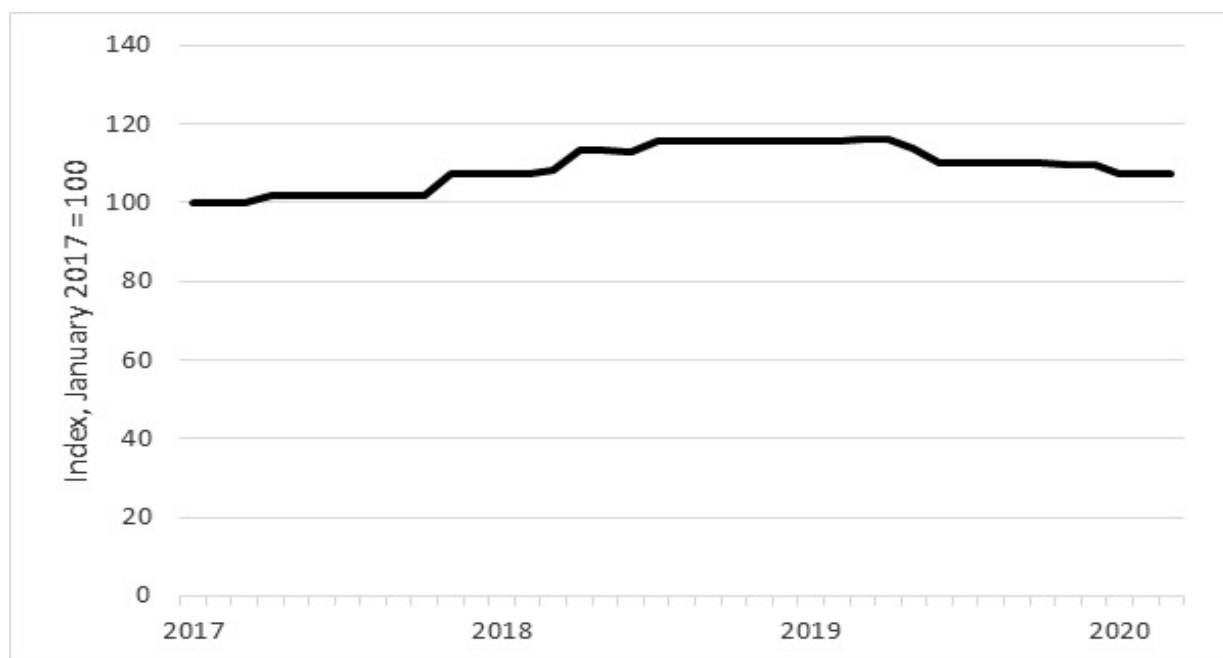
**Figure V-1**  
**Raw materials costs: Iron and steel scrap, producer price index, monthly, not seasonally adjusted, January 2017-March 2020**



Source: Bureau of Labor Statistics via Federal Reserve Bank of St. Louis, retrieved April 16, 2019.

The producers' price index for urethane foam increased 9.9 percent from January 2017 to June 2019, and then remained stable through October 2019 before falling 2.2 percent through March 2020 (figure V-2).

**Figure V-2**  
**Raw materials costs: Urethane foam, producer price index, monthly, not seasonally adjusted, January 2017-March 2020**



Source: Bureau of Labor Statistics via Federal Reserve Bank of St. Louis, retrieved April 29, 2019.

Thirty-four U.S. producers and 14 importers indicated that the costs of the raw materials used to make mattresses had increased since January 1, 2017. These firms cited increases in the costs of steel (innersprings), foam, and/or paper and cardboard, although some firms described the costs of foam (or its component chemicals) as having increased during 2017-18 before decreasing thereafter. Fifteen importers described raw material costs as fluctuating. U.S. producers and importers that described rising or fluctuating raw material costs often described either raising their selling prices for mattresses to cover increased costs, absorbing the higher costs in lost profits, or both. Two U.S. producers and eight importers indicated that there had been no change in raw material costs, and three U.S. producers and four importers described raw material costs as having decreased.

In the antidumping investigation on mattresses from China that concluded in December 2019, most responding U.S. producers (12 of 21 firms) reported that the announcement and subsequent imposition of tariffs pursuant to the section 301 investigation did not affect the prices of raw materials. In contrast, about half of responding importers (17 of 35 firms) in the

2019 antidumping investigation reported increased raw material costs due to the section 301 investigation.<sup>2</sup>

## **Transportation costs to the U.S. market**

Transportation costs for mattresses shipped from subject countries to the United States averaged 4.2 percent for Cambodia, 7.3 percent for China, 7.0 percent for Indonesia, 5.7 percent for Malaysia, 6.3 percent for Serbia, 9.9 percent for Thailand, 7.1 percent for Turkey, and 8.8 percent for Vietnam during 2019. These estimates were derived from official import data and represent the transportation and other charges on imports.<sup>3</sup>

## **U.S. inland transportation costs**

Most responding U.S. producers (37 of 46 responding) and importers (27 of 37 responding) reported that they typically arrange transportation to their customers, with the remaining responding firms indicating that purchasers arrange transportation.<sup>4</sup> Fifteen U.S. producers and 7 importers reported that their U.S. inland transportation costs ranged from 7 to 12 percent, while 8 U.S. producers and 17 importers reported that such costs ranged from 1 to 6 percent.<sup>5</sup> An additional 6 importers reported U.S. inland transportation costs of 15 to 20 percent.

## **Pricing practices**

### **Pricing methods**

U.S. producers and importers reported using a variety of price setting methods, including transaction-by-transaction negotiations, contracts, price lists, and other methods. As presented in table V-1, U.S. producers and importers sell primarily based on set price lists and transaction-by-transaction negotiations. “Other methods” included setting prices for a larger piece of furniture in which the mattress was included, pricing on a customer by customer basis, and separate pricing for most retailers with specific pricing for other purchasers.

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<sup>2</sup> China final publication, p. V-4.

<sup>3</sup> The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2019 and then dividing by the customs value based on the HTS subheadings 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087.

<sup>4</sup> Thirty importers indicated that they shipped imported mattresses from a storage facility, while 8 indicated that they did so from their point of importation.

<sup>5</sup> One U.S. producer indicated that such costs were 2 to 8 percent. Other U.S. producers and importers did not answer, or reported unreasonable answers (e.g. 100 percent).

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

Method	U.S. producers	Importers
Transaction-by-transaction	21	14
Contract	11	8
Set price list	28	21
Other	6	6
<b>Responding firms</b>	<b>49</b>	<b>36</b>

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

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

U.S. producers reported selling nearly half of their mattresses on the spot market, with most of their remaining shipments being sold through annual and long-term contracts (table V-2). U.S. importers reported that most of their mattresses are sold on the spot market, with about one-quarter of their shipments being sold through short-term contracts.

**Table V-2****Mattresses: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2019**

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

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

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

U.S. producers and importers reported short-term contracts ranging from 30 days to 6 months. Four U.S. producers and one importer reported that the lengths of their long-term contracts were between two and three years. Most responding U.S. producers and importers reported that their contracts are not indexed to raw materials, and that contracts generally fix prices, or fix prices and quantities. Regarding annual and short-term contracts, 8 U.S. producers' and 5 importers' contracts did allow price renegotiation, while 7 U.S. producers' contracts and 9 importers' contracts did not. Regarding long-term contracts, 3 U.S. producers and 1 importer indicated that their contracts allowed price renegotiation, while 3 U.S. producers stated that their long-term contracts did not.

## Sales terms and discounts

Most U.S. producers reported quoting prices on a delivered basis, while most importers reported quoting prices on an f.o.b. basis. Specifically, 32 U.S. producers and 11 importers

reported quoting prices on a delivered basis, while 19 U.S. producers and 29 importers reported quoting on an f.o.b. basis.

Pluralities of U.S. producers (22) and importers (17) reported having no specific discount policy. Among those that did report offering discounts, 15 U.S. producers and 7 importers reported offering annual total volume discounts, 10 U.S. producers and 8 importers reported offering quantity discounts, and 13 U.S. producers and 7 importers reported offering other types of discounts. These other discounts included customer-specific discounts, early payment discounts, discounts based on customer relationships, and seasonal discounts.

## 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 2017-19.

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

**Product 2.**-- Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 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.

Twenty-five U.S. producers and 29 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing or costs for all products for all quarters.<sup>6</sup> Pricing data reported by these firms accounted for approximately \*\*\* percent of U.S. producers' shipments of mattresses in 2019, \*\*\* percent of U.S. commercial shipments of subject imports from Cambodia, \*\*\* percent of such shipments from China, \*\*\* percent of such shipments from Indonesia, \*\*\* percent of such shipments from Malaysia, \*\*\* percent of such shipments from Serbia, \*\*\* percent of such shipments from Thailand, \*\*\* percent of such shipments from Turkey, and \*\*\* percent of such shipments from Vietnam.

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<sup>6</sup> 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.



Price data for products 1-3 are presented in tables V-3 to V-5 and figures V-3 to V-5. Price data for all subject countries together are presented in figures V-9 to V-11, along with cost data (see below).

**Table V-3**  
**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, 2017-19**

Period	United States		Cambodia - price			China - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	250	82,082	***	***	***	***	***	***
Apr.-June	257	86,405	***	***	***	***	***	***
July-Sept.	263	90,926	***	***	***	***	***	***
Oct.-Dec.	261	69,082	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	260	52,746	***	***	***	***	***	***
Apr.-June	200	95,444	***	***	***	***	***	***
July-Sept.	212	120,552	***	***	***	***	***	***
Oct.-Dec.	221	109,318	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	214	83,782	***	***	***	***	***	***
Apr.-June	202	101,197	***	***	***	***	***	***
July-Sept.	190	97,275	***	***	***	***	***	***
Oct.-Dec.	191	67,399	***	***	***	***	***	***
Period	Indonesia - price			Malaysia - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

Table continued on next page.

Table V-3--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, 2017-19

Period	United States		Serbia - price			Thailand - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	250	82,082	***	***	***	***	***	***
Apr.-June	257	86,405	***	***	***	***	***	***
July-Sept.	263	90,926	***	***	***	***	***	***
Oct.-Dec.	261	69,082	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	260	52,746	***	***	***	***	***	***
Apr.-June	200	95,444	***	***	***	***	***	***
July-Sept.	212	120,552	***	***	***	***	***	***
Oct.-Dec.	221	109,318	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	214	83,782	***	***	***	***	***	***
Apr.-June	202	101,197	***	***	***	***	***	***
July-Sept.	190	97,275	***	***	***	***	***	***
Oct.-Dec.	191	67,399	***	***	***	***	***	***
Period	Turkey - price			Vietnam - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

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**Table V-3--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, 2017-19**

Period	United States		All subject countries - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>					
Jan.-Mar.	250	82,082	158	39,165	36.9
Apr.-June	257	86,405	157	58,082	38.8
July-Sept.	263	90,926	156	49,543	40.7
Oct.-Dec.	261	69,082	149	43,838	42.9
<b>2018:</b>					
Jan.-Mar.	260	52,746	157	39,354	39.7
Apr.-June	200	95,444	157	52,893	21.6
July-Sept.	212	120,552	165	59,485	21.8
Oct.-Dec.	221	109,318	167	48,558	24.4
<b>2019:</b>					
Jan.-Mar.	214	83,782	149	124,533	30.4
Apr.-June	202	101,197	164	93,626	19.0
July-Sept.	190	97,275	160	114,223	15.4
Oct.-Dec.	191	67,399	144	128,490	24.5

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

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

Table V-4

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, 2017-19**

Period	United States		Cambodia - price			China - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	332	135,909	***	***	***	***	***	***
Apr.-June	342	187,941	***	***	***	***	***	***
July-Sept.	355	195,762	***	***	***	***	***	***
Oct.-Dec.	295	310,228	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	286	289,629	***	***	***	***	***	***
Apr.-June	321	293,015	***	***	***	***	***	***
July-Sept.	318	291,190	***	***	***	***	***	***
Oct.-Dec.	327	293,806	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	324	233,835	***	***	***	***	***	***
Apr.-June	274	350,799	***	***	***	***	***	***
July-Sept.	275	430,969	***	***	***	***	***	***
Oct.-Dec.	315	345,344	***	***	***	***	***	***
Period	Indonesia - price			Malaysia - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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Table V-4--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, 2017-19

Period	United States		Serbia - price			Thailand - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	332	135,909	***	***	***	***	***	***
Apr.-June	342	187,941	***	***	***	***	***	***
July-Sept.	355	195,762	***	***	***	***	***	***
Oct.-Dec.	295	310,228	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	286	289,629	***	***	***	***	***	***
Apr.-June	321	293,015	***	***	***	***	***	***
July-Sept.	318	291,190	***	***	***	***	***	***
Oct.-Dec.	327	293,806	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	324	233,835	***	***	***	***	***	***
Apr.-June	274	350,799	***	***	***	***	***	***
July-Sept.	275	430,969	***	***	***	***	***	***
Oct.-Dec.	315	345,344	***	***	***	***	***	***
Period	Turkey - price			Vietnam - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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**Table V-4--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, 2017-19**

Period	United States		All subject countries - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>					
Jan.-Mar.	332	135,909	207	62,483	37.8
Apr.-June	342	187,941	201	96,862	41.4
July-Sept.	355	195,762	206	66,833	42.1
Oct.-Dec.	295	310,228	196	84,672	33.7
<b>2018:</b>					
Jan.-Mar.	286	289,629	171	164,435	40.2
Apr.-June	321	293,015	194	182,717	39.5
July-Sept.	318	291,190	177	213,121	44.3
Oct.-Dec.	327	293,806	180	182,627	45.0
<b>2019:</b>					
Jan.-Mar.	324	233,835	182	186,753	43.6
Apr.-June	274	350,799	195	146,406	29.0
July-Sept.	275	430,969	204	169,584	25.9
Oct.-Dec.	315	345,344	186	281,636	41.0

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 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 3 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, 2017-19**

Period	United States		Cambodia - price			China - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	350	805,902	***	***	***	***	***	***
Apr.-June	298	732,540	***	***	***	***	***	***
July-Sept.	298	732,188	***	***	***	***	***	***
Oct.-Dec.	310	663,569	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	301	694,806	***	***	***	***	***	***
Apr.-June	321	678,171	***	***	***	***	***	***
July-Sept.	321	698,079	***	***	***	***	***	***
Oct.-Dec.	318	600,004	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	309	608,056	***	***	***	***	***	***
Apr.-June	314	492,796	***	***	***	***	***	***
July-Sept.	274	502,730	***	***	***	***	***	***
Oct.-Dec.	267	450,950	***	***	***	***	***	***
Period	Indonesia - price			Malaysia - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: 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.

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Table V-5--Continued

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, 2017-19**

Period	United States		Serbia - price			Thailand - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	350	805,902	***	***	***	***	***	***
Apr.-June	298	732,540	***	***	***	***	***	***
July-Sept.	298	732,188	***	***	***	***	***	***
Oct.-Dec.	310	663,569	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	301	694,806	***	***	***	***	***	***
Apr.-June	321	678,171	***	***	***	***	***	***
July-Sept.	321	698,079	***	***	***	***	***	***
Oct.-Dec.	318	600,004	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	309	608,056	***	***	***	***	***	***
Apr.-June	314	492,796	***	***	***	***	***	***
July-Sept.	274	502,730	***	***	***	***	***	***
Oct.-Dec.	267	450,950	***	***	***	***	***	***
Period	Turkey - price			Vietnam - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: 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.

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**Table V-5--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, 2017-19**

Period	United States		All subject countries - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>					
Jan.-Mar.	350	805,902	145	44,500	58.7
Apr.-June	298	732,540	150	48,867	49.5
July-Sept.	298	732,188	158	58,596	46.8
Oct.-Dec.	310	663,569	152	64,524	50.9
<b>2018:</b>					
Jan.-Mar.	301	694,806	171	79,106	43.4
Apr.-June	321	678,171	179	94,699	44.2
July-Sept.	321	698,079	173	126,956	46.1
Oct.-Dec.	318	600,004	173	102,826	45.7
<b>2019:</b>					
Jan.-Mar.	309	608,056	170	94,360	45.0
Apr.-June	314	492,796	167	138,351	46.6
July-Sept.	274	502,730	148	191,582	45.9
Oct.-Dec.	267	450,950	168	225,499	37.0

Note: 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.

**Figure V-3**  
**Mattresses: Weighted-average prices and quantities of domestic and imported product 1, by quarter, 2017-19**

\* \* \* \* \*

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

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

**Figure V-4**  
**Mattresses: Weighted-average prices and quantities of domestic and imported product 2, by quarter, 2017-19**

\* \* \* \* \*

Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 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, 2017-19**

\* \* \* \* \*

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.

## Import purchase cost data

Importers that did not re-sell their imports to unrelated retailers, wholesalers, or distributors were asked to provide import cost data (landed duty paid values and quantities) for the same three pricing products listed above. Importers reporting import cost data were asked to provide additional information regarding the costs and benefits of directly importing mattresses. Twelve importers providing useable cost data reported that they incurred additional costs beyond landed duty-paid costs by importing mattresses directly rather than purchasing from a U.S. producer or U.S. importer; (twenty-two indicated that they did not.) Importers were asked to provide import cost data for the same three products for which price data were requested. These data, along with prices from U.S. producers, are presented in tables V-6 to V-8 and figures V-6 to V-8. Figures V-9 to V-11 show U.S. producers' price data along with all subject U.S. importers' price and cost data. Purchase cost data accounted for \*\*\* percent of internal consumption of subject imports from Cambodia, \*\*\* percent of such shipments from China, \*\*\* percent of such shipments from Indonesia, \*\*\* percent of such shipments from Malaysia, \*\*\* percent of such shipments from Serbia, \*\*\* percent of such shipments from Thailand, \*\*\* percent of such shipments from Turkey, and \*\*\* percent of such shipments from Vietnam in 2019.

Seven importers estimated their additional costs of importing mattresses, with their average response 9.6 percent. Six of those providing answers in the range of 2 to 15 percent, and an additional importer indicated that such costs were 25 percent.<sup>7</sup> Importers described warehousing, logistics, insurance, customs brokerage fees, and labor costs as additional costs.

Firms were also asked to describe how these additional costs incurred by importing mattresses compares with additional costs incurred when purchasing from a U.S. producer or U.S. importer. Responding firms generally described the additional costs of holding inventory of imports, which they often described as not necessary if they had purchased from an unrelated supplier in the United States. Other costs described included logistics, transportation costs, and duties.

Twelve importers indicated that they compare costs of importing both to the cost of purchasing from a U.S. producer and to that of purchasing from a U.S. importer in determining whether to import mattresses. Five reported comparing costs only to those of purchasing from a U.S. producer, and seven importers reported comparing costs to purchasing from a U.S.

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<sup>7</sup> One additional importer described such costs as nearly 800 percent, mostly due to \*\*\*.

importer. Eleven importers do not compare costs of purchasing from either U.S. producers or importers.

When asked to identify benefits from importing mattresses directly instead of purchasing from U.S. producers or importers, importers' answers included statements that only MiBs are available from import sources, that U.S. producers were not willing or able to provide the product demanded, and/or that U.S. producers' prices were higher than the cost of importing.

When asked whether the import cost (excluding additional costs) of mattresses they imported are lower than the price of purchasing mattresses from a U.S. producer or importer, 17 importers stated that the import costs were lower, and 12 stated that they were higher. When asked whether the import cost (including additional costs) of mattresses they imported are lower than the price of purchasing mattresses from a U.S. producer or importer, 14 importers stated that the import costs were lower, and 13 stated that they were higher.

Finally, importers were asked to estimate their firms' savings from importing mattresses rather than purchasing from a U.S. producer or importer. Fourteen importers provided estimates of their savings from importing rather than purchasing from a U.S. producer. Their estimates ranged from 8 to 67 percent of the purchase price from a U.S. producer, with an average of 28 percent. Twelve importers provided estimates of their savings from importing rather than purchasing from a U.S. importer. Their estimates ranged from 2 to 60 percent of the purchase price from a U.S. importer, with an average of 24 percent.

Table V-6

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 1, landed duty-paid costs and quantities of imported product 1, and price-cost differentials, by quarter, 2017-19**

Period	United States		Cambodia - cost			China - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	250	82,082	***	***	***	***	***	***
Apr.-June	257	86,405	***	***	***	***	***	***
July-Sept.	263	90,926	***	***	***	***	***	***
Oct.-Dec.	261	69,082	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	260	52,746	***	***	***	***	***	***
Apr.-June	200	95,444	***	***	***	***	***	***
July-Sept.	212	120,552	***	***	***	***	***	***
Oct.-Dec.	221	109,318	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	214	83,782	***	***	***	***	***	***
Apr.-June	202	101,197	***	***	***	***	***	***
July-Sept.	190	97,275	***	***	***	***	***	***
Oct.-Dec.	191	67,399	***	***	***	***	***	***
Period	Indonesia - cost			Malaysia - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

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Table V-6--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 1, landed duty-paid costs and quantities of imported product 1, and price-cost differentials, by quarter, 2017-19

Period	United States		Serbia - cost			Thailand - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	250	82,082	***	***	***	***	***	***
Apr.-June	257	86,405	***	***	***	***	***	***
July-Sept.	263	90,926	***	***	***	***	***	***
Oct.-Dec.	261	69,082	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	260	52,746	***	***	***	***	***	***
Apr.-June	200	95,444	***	***	***	***	***	***
July-Sept.	212	120,552	***	***	***	***	***	***
Oct.-Dec.	221	109,318	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	214	83,782	***	***	***	***	***	***
Apr.-June	202	101,197	***	***	***	***	***	***
July-Sept.	190	97,275	***	***	***	***	***	***
Oct.-Dec.	191	67,399	***	***	***	***	***	***
Period	Turkey - cost			Vietnam - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

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

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**Table V-6--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 1, landed duty-paid costs and quantities of imported product 1, and price-cost differentials, by quarter, 2017-19**

Period	United States		All subject countries - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>					
Jan.-Mar.	250	82,082	100	37,855	59.9
Apr.-June	257	86,405	118	81,393	54.1
July-Sept.	263	90,926	110	72,051	58.1
Oct.-Dec.	261	69,082	113	95,418	56.7
<b>2018:</b>					
Jan.-Mar.	260	52,746	118	98,244	54.6
Apr.-June	200	95,444	117	64,513	41.5
July-Sept.	212	120,552	123	106,678	42.0
Oct.-Dec.	221	109,318	130	110,270	41.1
<b>2019:</b>					
Jan.-Mar.	214	83,782	132	172,107	38.1
Apr.-June	202	101,197	144	110,263	28.5
July-Sept.	190	97,275	131	124,940	30.9
Oct.-Dec.	191	67,399	119	114,200	37.3

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

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

Table V-7

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 2, landed duty-paid costs and quantities of imported product 2, and price-cost differentials, by quarter, 2017-19**

Period	United States		Cambodia - cost			China – cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	332	135,909	***	***	***	***	***	***
Apr.-June	342	187,941	***	***	***	***	***	***
July-Sept.	355	195,762	***	***	***	***	***	***
Oct.-Dec.	295	310,228	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	286	289,629	***	***	***	***	***	***
Apr.-June	321	293,015	***	***	***	***	***	***
July-Sept.	318	291,190	***	***	***	***	***	***
Oct.-Dec.	327	293,806	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	324	233,835	***	***	***	***	***	***
Apr.-June	274	350,799	***	***	***	***	***	***
July-Sept.	275	430,969	***	***	***	***	***	***
Oct.-Dec.	315	345,344	***	***	***	***	***	***
Period	Indonesia - cost			Malaysia - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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Table V-7--Continued

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 2, landed duty-paid costs and quantities of imported product 2, and price-cost differentials, by quarter, 2017-19**

Period	United States		Serbia - cost			Thailand - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	332	135,909	***	***	***	***	***	***
Apr.-June	342	187,941	***	***	***	***	***	***
July-Sept.	355	195,762	***	***	***	***	***	***
Oct.-Dec.	295	310,228	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	286	289,629	***	***	***	***	***	***
Apr.-June	321	293,015	***	***	***	***	***	***
July-Sept.	318	291,190	***	***	***	***	***	***
Oct.-Dec.	327	293,806	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	324	233,835	***	***	***	***	***	***
Apr.-June	274	350,799	***	***	***	***	***	***
July-Sept.	275	430,969	***	***	***	***	***	***
Oct.-Dec.	315	345,344	***	***	***	***	***	***
Period	Turkey - cost			Vietnam - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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**Table V-7--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 2, landed duty-paid costs and quantities of imported product 2, and price-cost differentials, by quarter, 2017-19**

Period	United States		All subject countries - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>					
Jan.-Mar.	332	135,909	177	33,277	46.7
Apr.-June	342	187,941	201	42,618	41.4
July-Sept.	355	195,762	184	72,198	48.0
Oct.-Dec.	295	310,228	186	53,778	36.9
<b>2018:</b>					
Jan.-Mar.	286	289,629	197	57,423	31.2
Apr.-June	321	293,015	183	54,218	43.1
July-Sept.	318	291,190	230	73,620	27.6
Oct.-Dec.	327	293,806	214	100,110	34.7
<b>2019:</b>					
Jan.-Mar.	324	233,835	221	139,176	31.8
Apr.-June	274	350,799	179	65,912	34.7
July-Sept.	275	430,969	150	72,061	45.4
Oct.-Dec.	315	345,344	156	219,142	50.6

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 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 product 3, landed duty-paid costs and quantities of imported product 3, and price-cost differentials, by quarter, 2017-19**

Period	United States		Cambodia - cost			China - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	350	805,902	***	***	***	***	***	***
Apr.-June	298	732,540	***	***	***	***	***	***
July-Sept.	298	732,188	***	***	***	***	***	***
Oct.-Dec.	310	663,569	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	301	694,806	***	***	***	***	***	***
Apr.-June	321	678,171	***	***	***	***	***	***
July-Sept.	321	698,079	***	***	***	***	***	***
Oct.-Dec.	318	600,004	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	309	608,056	***	***	***	***	***	***
Apr.-June	314	492,796	***	***	***	***	***	***
July-Sept.	274	502,730	***	***	***	***	***	***
Oct.-Dec.	267	450,950	***	***	***	***	***	***
Period	Indonesia - cost			Malaysia - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Note: 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.

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Table V-8--Continued

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 3, landed duty-paid costs and quantities of imported product 3, and price-cost differentials, by quarter, 2017-19**

Period	United States		Serbia - cost			Thailand - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	350	805,902	***	***	***	***	***	***
Apr.-June	298	732,540	***	***	***	***	***	***
July-Sept.	298	732,188	***	***	***	***	***	***
Oct.-Dec.	310	663,569	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	301	694,806	***	***	***	***	***	***
Apr.-June	321	678,171	***	***	***	***	***	***
July-Sept.	321	698,079	***	***	***	***	***	***
Oct.-Dec.	318	600,004	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	309	608,056	***	***	***	***	***	***
Apr.-June	314	492,796	***	***	***	***	***	***
July-Sept.	274	502,730	***	***	***	***	***	***
Oct.-Dec.	267	450,950	***	***	***	***	***	***
Period	Turkey - cost			Vietnam - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Note: 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.

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**Table V-8--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 3, landed duty-paid costs and quantities of imported product 3, and price-cost differentials, by quarter, 2017-19**

Period	United States		All subject countries - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>					
Jan.-Mar.	350	805,902	164	14,751	53.3
Apr.-June	298	732,540	135	15,472	54.6
July-Sept.	298	732,188	142	19,372	52.4
Oct.-Dec.	310	663,569	143	16,796	53.8
<b>2018:</b>					
Jan.-Mar.	301	694,806	146	27,064	51.5
Apr.-June	321	678,171	149	22,357	53.7
July-Sept.	321	698,079	146	37,764	54.5
Oct.-Dec.	318	600,004	137	45,214	56.9
<b>2019:</b>					
Jan.-Mar.	309	608,056	143	36,182	53.7
Apr.-June	314	492,796	153	48,084	51.3
July-Sept.	274	502,730	141	38,953	48.5
Oct.-Dec.	267	450,950	128	41,867	52.2

Note: 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.

**Figure V-6**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 1, by quarter, 2017-19**

\* \* \* \* \*

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

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



**Figure V-7**

**Mattresses: Weighted-average prices, landed-duty paid costs, and quantities of domestic and imported product 2, by quarter, 2017-19**

\* \* \* \* \*

Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

**Figure V-8**  
**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 3, by quarter, 2017-19**

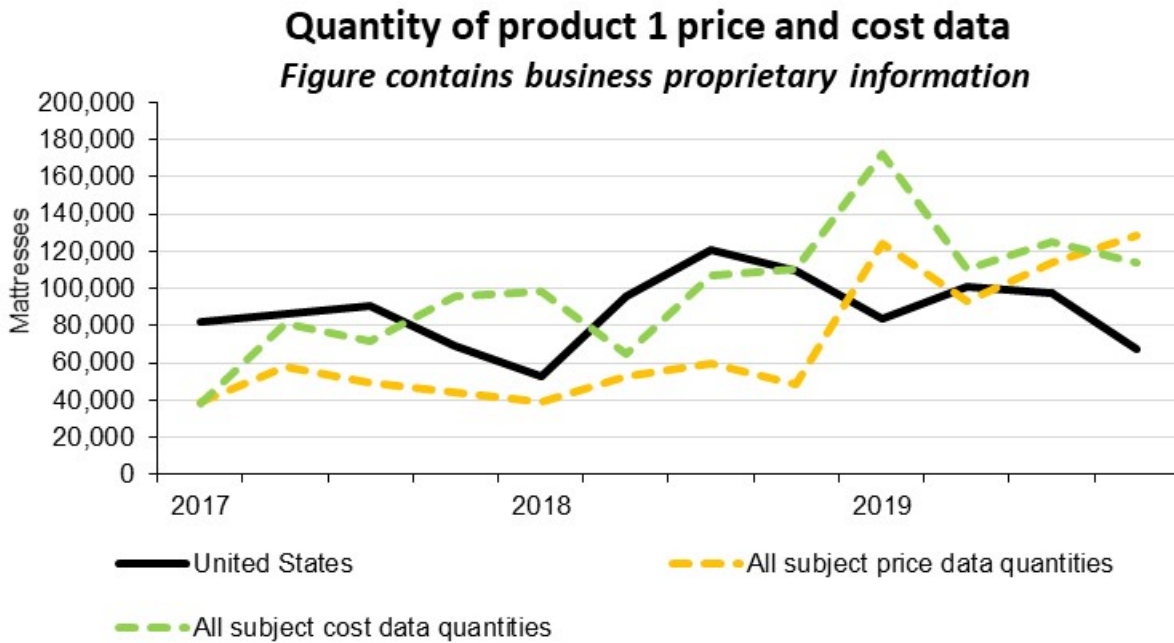
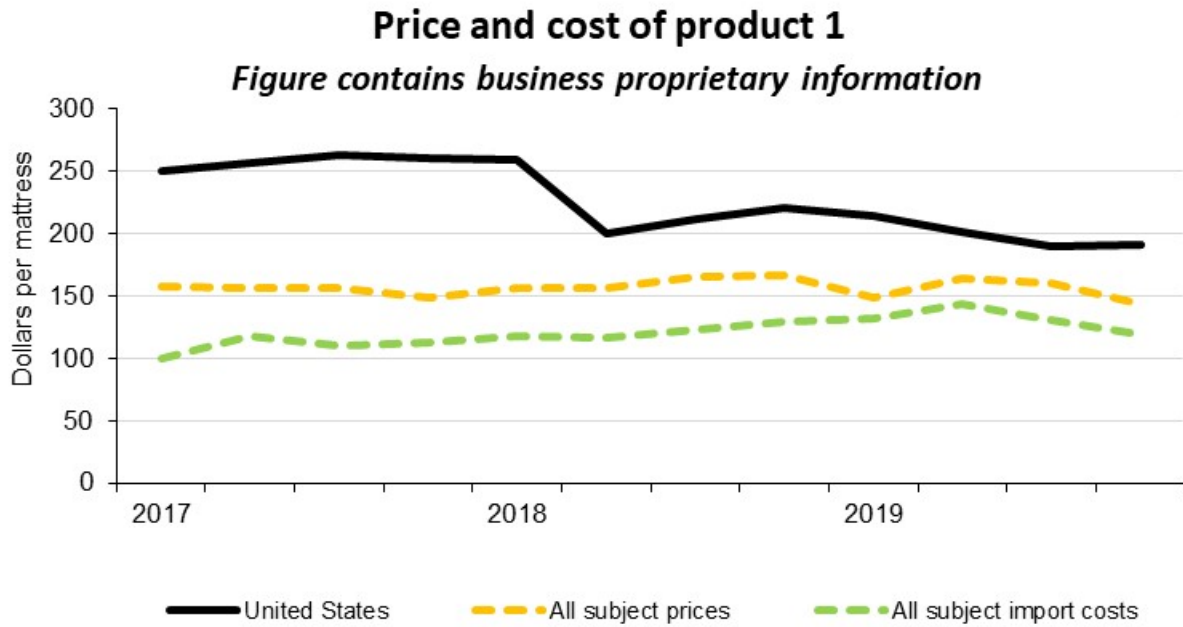
\* \* \* \* \*

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.

**Figure V-9**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 1, by quarter, all subject countries combined, 2017-19**

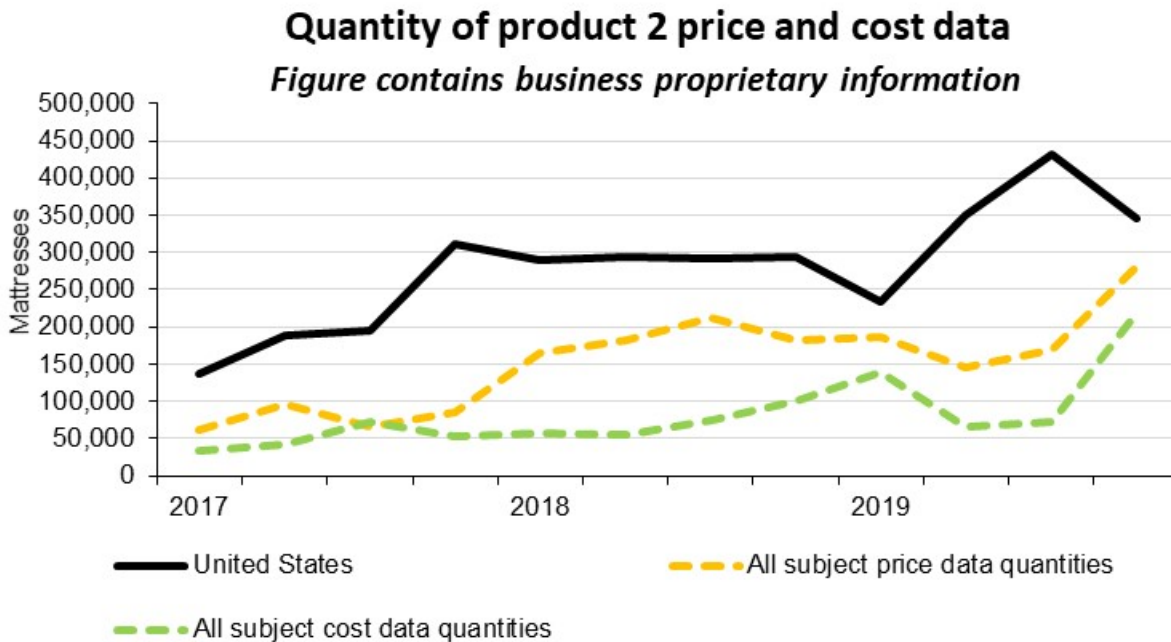
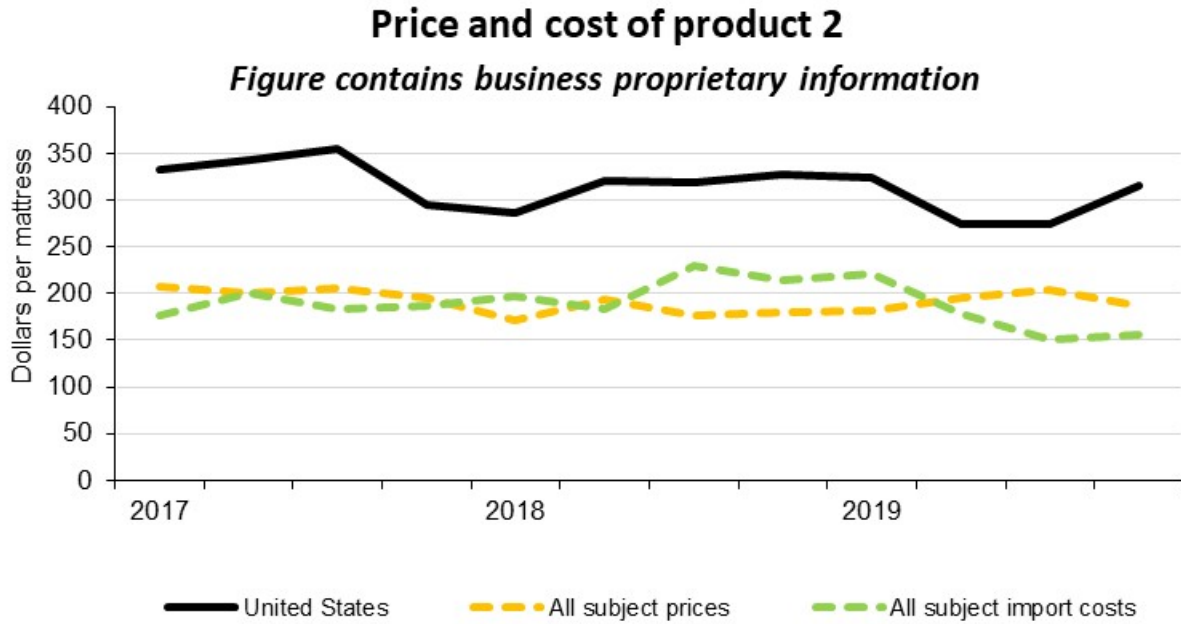


Product 1: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 8.0 inches but less than 10.0 inches.

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

**Figure V-10**

**Mattresses: Weighted-average prices, landed-duty paid costs, and quantities of domestic and imported product 2, by quarter, all subject countries combined, 2017-19**

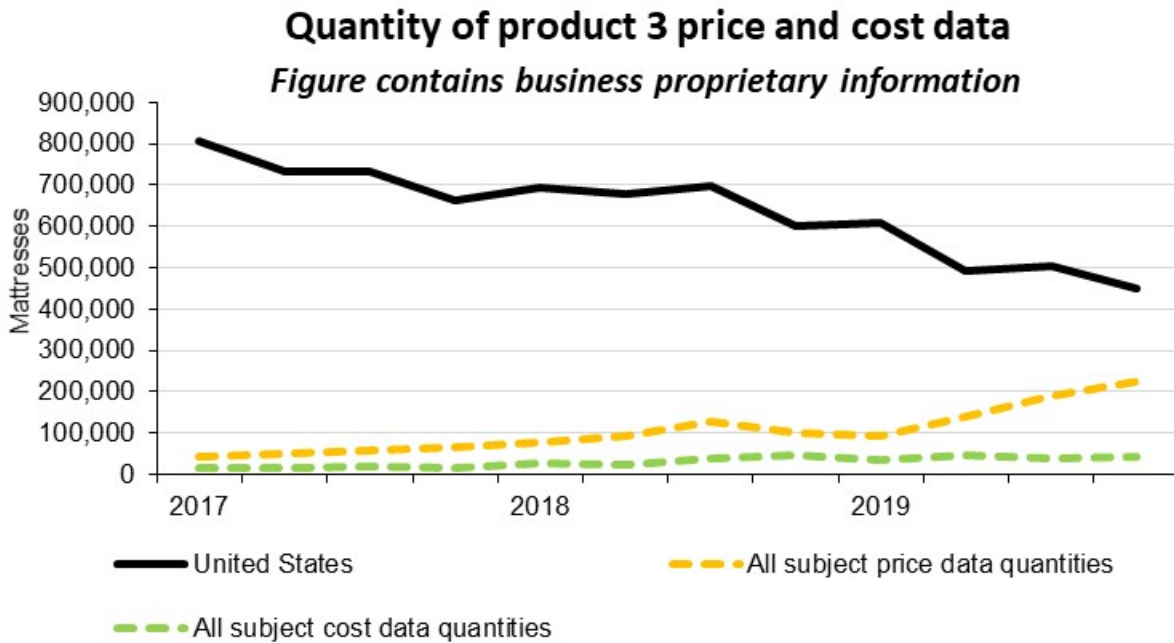
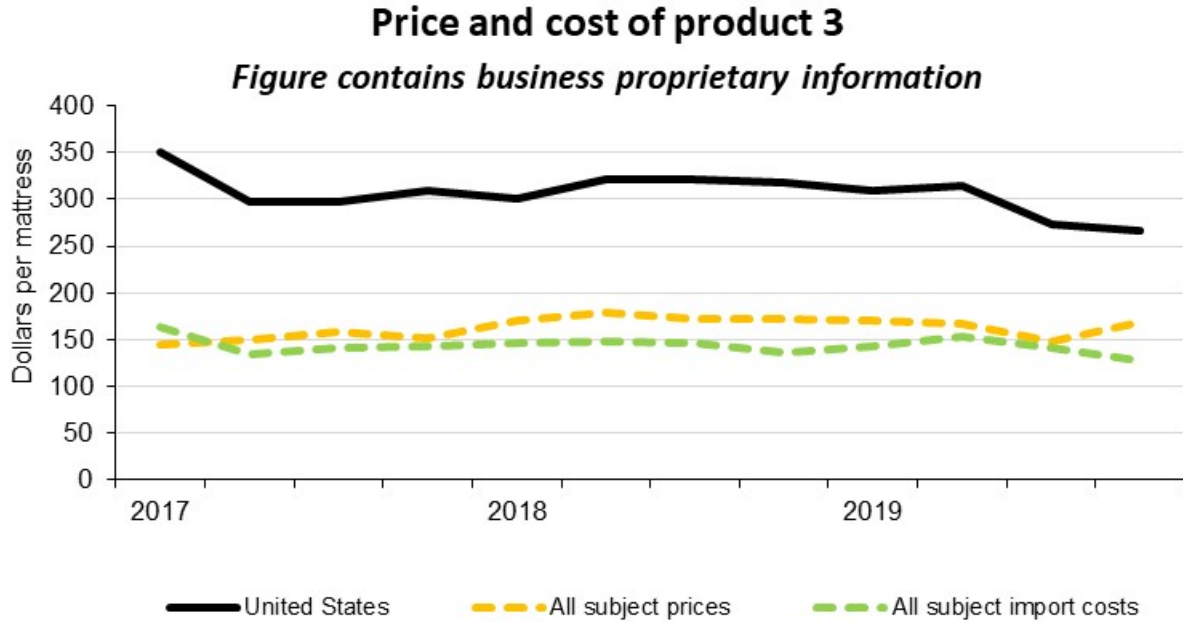


Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

**Figure V-11**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 3, by quarter, all subject countries combined, 2017-19**



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.

## Price and import purchase cost trends

In general, prices decreased during 2017-19. Table V-9 summarizes price trends, by country and by product. As shown in the table, domestic price decreases ranged from 5.2 to 23.7 percent during 2017-19 while import price decreases (for all subject countries combined) ranged from 8.8 to 10.0 percent for products 1 and 2. Import prices (for all subject countries combined) for product 3 rose 16.5 percent.

**Table V-9**

**Mattresses: Summary of weighted-average f.o.b. prices for products 1-3 from the United States, Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam**

Item	Number of quarters	Low price (per mattress)	High price (per mattress)	Change in price (percent)
<b>Product 1 – price</b>				
United States	12	190	263	(23.7)
Cambodia-price	***	***	***	***
China - price	***	***	***	***
Indonesia-price	***	***	***	***
Malaysia-price	***	***	***	***
Serbia-price	***	***	***	***
Thailand-price	***	***	***	***
Turkey-price	***	***	***	***
Vietnam-price	***	***	***	***
All subject-price	12	144	167	(8.8)
<b>Product 2 – price</b>				
United States	12	274	355	(5.2)
Cambodia-price	***	***	***	***
China - price	***	***	***	***
Indonesia-price	***	***	***	***
Malaysia-price	***	***	***	***
Serbia-price	***	***	***	***
Thailand-price	***	***	***	***
Turkey-price	***	***	***	***
Vietnam-price	***	***	***	***
All subject-price	12	171	207	(10.0)
<b>Product 3 – price</b>				
United States	12	267	350	(23.7)
Cambodia-price	***	***	***	***
China - price	***	***	***	***
Indonesia-price	***	***	***	***
Malaysia-price	***	***	***	***
Serbia-price	***	***	***	***
Thailand-price	***	***	***	***
Turkey-price	***	***	***	***
Vietnam-price	***	***	***	***
All subject-price	12	145	179	16.5

Note: Price change is calculated as the percentage change from the first quarter of 2017 to the last quarter of 2019, where available.

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

In general, import costs also decreased during 2017-19. Table V-10 summarizes the cost trends, by country and by product. As shown in the table, import cost decreases (for all subject countries combined) ranged from 12.2 to 21.9 percent during 2017-19 for products 2 and 3. Import costs (for all subject countries combined) for product 1 rose 19.2 percent.

**Table V-10**  
**Mattresses: Summary of weighted-average f.o.b. import costs for products 1-3 from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam**

Item	Number of quarters	Low cost (per mattress)	High cost (per mattress)	Change in price (percent)
<b>Product 1 – cost</b>				
Cambodia-cost	***	***	***	***
China-cost	***	***	***	***
Indonesia-cost	***	***	***	***
Malaysia-cost	***	***	***	***
Serbia-cost	***	***	***	***
Thailand-cost	***	***	***	***
Turkey-cost	***	***	***	***
Vietnam-cost	***	***	***	***
All subject-cost	12	100	144	19.2
<b>Product 2 – cost</b>				
Cambodia-cost	***	***	***	***
China-cost	***	***	***	***
Indonesia-cost	***	***	***	***
Malaysia-cost	***	***	***	***
Serbia-cost	***	***	***	***
Thailand-cost	***	***	***	***
Turkey-cost	***	***	***	***
Vietnam-cost	***	***	***	***
All subject-cost	12	150	230	(12.2)
<b>Product 3 – cost</b>				
Cambodia-cost	***	***	***	***
China-cost	***	***	***	***
Indonesia-cost	***	***	***	***
Malaysia-cost	***	***	***	***
Serbia-cost	***	***	***	***
Thailand-cost	***	***	***	***
Turkey-cost	***	***	***	***
Vietnam-cost	***	***	***	***
All subject-cost	12	128	164	(21.9)

Note: Cost change is calculated as the percentage change from the first quarter of 2017 to the last quarter of 2019, where available.

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

## Price and cost comparisons

### Price comparisons

As shown in table V-11, prices for product imported from subject countries were below those for U.S.-produced product in 123 of 126 instances (3.9 million mattresses); margins of

underselling ranged from 4.5 to 92.9 percent. In the remaining 3 instances (15,617 mattresses), prices for product from subject countries were between 0.6 and 9.0 percent above prices for the domestic product.

**Table V-11**  
**Mattresses: Instances of underselling/overselling and the range and average of margins, by country, 2017-19**

Source	Underselling				
	Number of quarters	Quantity (mattresses)	Average margin (percent)	Margin range (percent)	
				Min	Max
Cambodia	7	25,120	34.9	23.0	49.7
China	35	2,611,597	33.9	4.5	50.8
Indonesia	24	237,790	44.0	32.3	52.1
Malaysia	12	147,845	40.7	26.9	92.9
Serbia	9	49,571	27.7	6.0	52.0
Thailand	11	50,904	36.8	28.9	49.7
Turkey	3	28,723	29.4	15.9	37.8
Vietnam	22	792,618	46.9	16.9	72.7
Total	123	3,944,168	38.6	4.5	92.9
Source	(Overselling)				
	Number of quarters	Quantity <sup>1</sup> (mattresses)	Average margin (percent)	Margin range (percent)	
				Min	Max
Cambodia	---	---	---	---	---
China	1	13,546	(0.6)	(0.6)	(0.6)
Indonesia	---	---	---	---	---
Malaysia	---	---	---	---	---
Serbia	---	---	---	---	---
Thailand	---	---	---	---	---
Turkey	2	2,071	(7.7)	(6.5)	(9.0)
Vietnam	---	---	---	---	---
Total	3	15,617	(5.3)	(0.6)	(9.0)

Note: 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.

### Price-cost comparisons

As shown in table V-12, landed duty-paid costs for product imported from subject countries were below those for U.S.-produced product in 97 of 98 instances (2.5 million mattresses); price-cost differentials ranged from 3.3 to 68.5 percent. In the remaining instance,



(4,151 mattresses), landed duty-paid costs for product from subject imports were 31.6 percent above prices for the domestic product.

**Table V-12**

**Mattresses: Comparisons of import purchase costs and U.S.-producer sales prices, by country, 2017-19**

Source	Import purchase cost lower than U.S. sales price				
	Number of quarters	Quantity (mattresses)	Average price-cost difference (percent)	Price-cost difference range (percent)	
				Min	Max
Cambodia	4	13,293	58.6	49.7	65.8
China	35	1,843,963	42.9	11.7	59.9
Indonesia	9	377,919	44.1	33.4	51.5
Malaysia	8	18,829	45.3	3.3	68.5
Serbia	8	58,318	44.7	29.6	59.2
Thailand	9	18,360	41.4	22.8	55.6
Turkey	5	31,193	38.5	20.9	57.7
Vietnam	19	169,315	54.0	43.3	62.6
Total	97	2,531,190	45.8	3.3	68.5
Source	(Import purchase cost higher than U.S. sales price)				
	Number of quarters	Quantity <sup>1</sup> (mattresses)	Average price-cost difference (percent)	Price-cost difference range (percent)	
				Min	Max
Cambodia	---	---	---	---	---
China	1	4,151	(31.6)	(31.6)	(31.6)
Indonesia	---	---	---	---	---
Malaysia	---	---	---	---	---
Serbia	---	---	---	---	---
Thailand	---	---	---	---	---
Turkey	---	---	---	---	---
Vietnam	---	---	---	---	---
Total	---	---	---	---	---

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

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

## Lost sales and lost revenue

In the petition, seven U.S. producers submitted 28 lost sales or lost revenue allegations.<sup>8</sup> The allegations did not always include the specific values of the sales allegedly lost, but some estimates reached into the hundreds of millions of dollars of lost sales, from all subject countries.

In these investigations, of the 44 responding U.S. producers, 22 reported that they had to reduce prices, and 18 reported that they needed to roll back announced price increases in response to subject imports. However, 22 reported that they did not need to reduce prices, and 25 reported that they did not need to roll back announced price increases. Twenty-six U.S. producers reported that they had lost sales, and 18 reported that they had not.

Staff contacted 22 purchasers and received responses from 13 purchasers, including 5 (\*\*\*)<sup>9</sup> that were not identified in the lost sales and lost revenue allegations. Responding purchasers reported purchasing 23.7 million mattresses during 2017-19 (table V-13), and included \*\*\*.

During 2019, responding purchasers purchased 25.6 percent from U.S. producers, 4.4 percent from Cambodia, 19.1 percent from China, 17.8 percent from Indonesia, 5.6 percent from Malaysia, 0.6 percent from Serbia, 0.8 percent from Thailand, 0.0 percent from Turkey, 15.9 percent from Vietnam, 1.9 percent from nonsubject countries, and 8.3 percent from “unknown source” countries. Purchasers were asked about changes in their purchasing patterns from different sources since 2017. Of the responding purchasers, three reported decreasing purchases from domestic producers, five reported increasing their purchases from domestic producers, one reported fluctuating purchases, and four (\*\*\*) did not purchase any domestic product.<sup>10</sup> Explanations for increasing purchases of domestic product included increased demand and growth of business. Explanations for decreasing purchases of domestic product included consumer choice and the alleged inability of U.S. producers to manufacture to specifications, in necessary quantities. In other responses, three purchasers reported increasing purchases from Cambodia, five reported decreasing purchases from China, five reported

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<sup>8</sup> In addition to seven petitioners that submitted lost sales/lost revenue allegations, three U.S. producers (\*\*\*) submitted a combined 30 lost sales and lost revenue allegations in their questionnaires. \*\*\*.

<sup>9</sup> \*\*\*.

<sup>10</sup> Of the 13 responding purchasers, 3 purchasers indicated that they did not know the source of some of the mattresses that they purchased.

increasing purchases from Indonesia and/or Malaysia, two from Serbia, one from Turkey, and four from Vietnam.

Of 12 responding purchasers, 5 reported that, since 2017, they had purchased imported mattresses from subject countries instead of U.S.-produced product, while 7 stated that they had not. Of the five purchasers that stated that they had purchased imported mattresses instead of U.S. produced product, four (\*\*\*) stated that subject import prices were lower than U.S.-produced product, while one stated that they were not. (Two additional purchasers that did not switch stated that subject import prices were not lower.) One of these purchasers (\*\*\*) reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product, and estimated that it purchased \*\*\* mattresses from \*\*\* instead of domestic product (table V-14). \*\*\* stated that \*\*\* purchased mattresses from Vietnam rather than the United States because Vietnamese mattresses are higher quality and more durable than U.S. mattresses. \*\*\* stated that it purchased mattresses from subject countries rather than the United States because the foreign supplier was able to deliver mixed product types in the desired minimum orders.

Of six responding purchasers, one (\*\*\*) reported that U.S. producers had reduced prices in order to compete with lower-priced imports from the subject countries; seven reported that they did not know (table V-15). The reported estimated price reduction was 20 percent in response to competition from \*\*\*.



**Table V-14**

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

Purchaser	Subject imports purchased instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (mattresses)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--5; No--7	Yes--4; No--3	Yes-- 1; No--6	***	

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

**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
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total / average	Yes--1; No--5	20.0	

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

## Part VI: Financial experience of U.S. producers

### Background

Thirty four U.S. producers provided usable financial data.<sup>1</sup> All of the reporting producers except \*\*\* firms have a fiscal year that ends on December 31 and reported on the basis of generally accepted accounting principles (“GAAP”).<sup>2</sup> Net sales consisted primarily of commercial sales; however, six producers reported internal consumption and one reported transfers to related firms. These non-commercial sales combined accounted for \*\*\* percent of total net sales by quantity in 2019. Non-commercial sales are included but not presented separately in this section of the report. In 2019, \*\*\* accounted for \*\*\* percent of the U.S. producers’ net sales by quantity, \*\*\* accounted for \*\*\* percent, \*\*\* accounted for \*\*\* percent, \*\*\* accounted for \*\*\* percent, \*\*\* accounted for \*\*\* percent, \*\*\* accounted for \*\*\* percent, and all other firms accounted for \*\*\* percent.

Eight U.S. producers reported purchasing inputs from related suppliers: \*\*\*.<sup>3</sup>

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<sup>1</sup> \*\*\* submitted incomplete U.S. producer questionnaires in the financial section and their partial responses are not included in the aggregated financial data. These eighteen companies accounted for \*\*\* percent of production in 2019 (see table III-1).

<sup>2</sup> \*\*\* used tax and \*\*\* used cash as their accounting bases. The firms with fiscal year ends other than December 31 are \*\*\*.

<sup>3</sup> U.S. producer questionnaires, III-6, III-7, and III-8.

## 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.<sup>4</sup>

**Table VI-1**  
**Mattresses: Results of operations of U.S. producers, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Total net sales	17,327,611	16,188,557	16,448,606
	<b>Value (1,000 dollars)</b>		
Total net sales	4,679,415	4,528,615	4,699,895
Cost of goods sold.--			
Raw materials	2,108,943	2,142,268	2,189,351
Direct labor	316,445	290,829	311,075
Other factory costs	268,385	266,875	300,673
Total COGS	2,693,773	2,699,972	2,801,099
Gross profit	1,985,642	1,828,643	1,898,796
SG&A expense	1,274,509	1,194,760	1,248,196
Operating income or (loss)	711,133	633,883	650,600
Other expenses/(income), net	287,963	333,470	490,732
Net income or (loss)	423,170	300,413	159,868
Depreciation/amortization	180,571	185,697	199,903
Cash flow	603,741	486,110	359,771
	<b>Ratio to net sales (percent)</b>		
Cost of goods sold.--			
Raw materials	45.1	47.3	46.6
Direct labor	6.8	6.4	6.6
Other factory costs	5.7	5.9	6.4
Average COGS	57.6	59.6	59.6
Gross profit	42.4	40.4	40.4
SG&A expense	27.2	26.4	26.6
Operating income or (loss)	15.2	14.0	13.8
Net income or (loss)	9.0	6.6	3.4

Table continued on next page.

<sup>4</sup> \*\*\*. U.S. producers' questionnaire response of \*\*\*, question II-2.



**Table VI-1—Continued**  
**Mattresses: Results of operations of U.S. producers, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Ratio to total COGS (percent)</b>		
Cost of goods sold.--			
Raw materials	78.3	79.3	78.2
Direct labor	11.7	10.8	11.1
Other factory costs	10.0	9.9	10.7
Average COGS	100.0	100.0	100.0
	<b>Unit value (dollars per unit)</b>		
Total net sales	270	280	286
Cost of goods sold.--			
Raw materials	122	132	133
Direct labor	18	18	19
Other factory costs	15	16	18
Average COGS	155	167	170
Gross profit	115	113	115
SG&A expense	74	74	76
Operating income or (loss)	41	39	40
Net income or (loss)	24	19	10
	<b>Number of firms reporting</b>		
Operating losses	5	5	8
Net losses	6	9	13
Data	34	34	34

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

**Table VI-2**  
**Mattresses: Changes in average unit values between fiscal years**

Item	Between fiscal years		
	2017-19	2017-18	2018-19
	<b>Change in AUVs (dollars per unit)</b>		
Total net sales	▲15.68	▲9.69	▲5.99
Cost of goods sold.--			
Raw materials	▲11.39	▲10.62	▲0.77
Direct labor	▲0.65	▼(0.30)	▲0.95
Other factory costs	▲2.79	▲1.00	▲1.79
Average COGS	▲14.83	▲11.32	▲3.51
Gross profit	▲0.84	▼(1.64)	▲2.48
SG&A expense	▲2.33	▲0.25	▲2.08
Operating income or (loss)	▼(1.49)	▼(1.88)	▲0.40
Net income or (loss)	▼(14.70)	▼(5.86)	▼(8.84)

Note.--AUV changes preceded by a “▲” represent an increase, while period changes preceded by a “▼” represent a decrease.

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

**Table VI-3**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Total net sales (units)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	3,187,595	2,974,101	3,425,124
All firms	17,327,611	16,188,557	16,448,606
	<b>Total net sales (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	708,330	759,086	841,560
All firms	4,679,415	4,528,615	4,699,895
	<b>Cost of goods sold (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	470,923	520,450	582,028
All firms	2,693,773	2,699,972	2,801,099

Table continued on next page.

**Table VI-3—Continued**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Gross profit or (loss) (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	237,407	238,636	259,532
All firms	1,985,642	1,828,643	1,898,796
	<b>SG&amp;A expenses (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	130,942	132,440	156,852
All firms	1,274,509	1,194,760	1,248,196
	<b>Operating income or (loss) (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	106,465	106,196	102,680
All firms	711,133	633,883	650,600

Table continued on next page.

**Table VI-3—Continued**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Net income or (loss) (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	94,958	97,158	91,319
All firms	423,170	300,413	159,868
	<b>COGS to net sales ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	66.5	68.6	69.2
All firms	57.6	59.6	59.6
	<b>Gross profit or (loss) to net sales ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	33.5	31.4	30.8
All firms	42.4	40.4	40.4

Table continued on next page.

**Table VI-3—Continued**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>SG&amp;A expense to net sales ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	18.5	17.4	18.6
All firms	27.2	26.4	26.6
	<b>Operating income or (loss) to net sales ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	15.0	14.0	12.2
All firms	15.2	14.0	13.8
	<b>Net income or (loss) to net sales ratio (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	13.4	12.8	10.9
All firms	9.0	6.6	3.4

Table continued on next page.

**Table VI-3—Continued**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Unit net sales value (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	222	255	246
All firms	270	280	286
	<b>Unit raw materials (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	117	135	127
All firms	122	132	133
	<b>Unit direct labor (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	14	17	19
All firms	18	18	19

Table continued on next page.

**Table VI-3—Continued**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Unit other factory costs (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	16	23	24
All firms	15	16	18
	<b>Unit COGS (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	148	175	170
All firms	155	167	170
	<b>Unit gross profit or (loss) (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	74	80	76
All firms	115	113	115

Table continued on next page.

**Table VI-3—Continued**  
**Mattresses: Select results of operations of U.S. producers, by company, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Unit SG&amp;A expenses (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	41	45	46
All firms	74	74	76
	<b>Unit operating income or (loss) (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	33	36	30
All firms	41	39	40
	<b>Unit net income or (loss) (dollars per unit)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	30	33	27
All firms	24	19	10

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

## Net sales

Total net sales quantity irregularly declined from 2017 to 2019 while total net sales value irregularly increased. As shown in table VI-3, four firms \*\*\* accounted for most of the decline in net sales quantity from 2017 to 2019 while three firms \*\*\* accounted for most of the increase in net sales value over the same period. \*\*\*



\*\*\*.<sup>5</sup> As shown in table VI-3, average unit sales values increased from \$270 in 2017 to \$286 in 2019, with \*\*\*.<sup>6</sup>

### **Cost of goods sold and gross profit or (loss)**

Total cost of good sold (“COGS”) increased by 4.0 percent from 2017 to 2019. As shown in table VI-3, \*\*\* of the largest producers \*\*\* reported increasing total COGS from 2017 to 2019, although \*\*\* reported declining total COGS during the period.<sup>7</sup> As a ratio to net sales, COGS increased from 57.6 percent in 2017 to 59.6 percent in 2018 and 2019.

As shown in table VI-1, raw materials represent the single largest component of total COGS, and ranged from 78.2 percent in 2019 to 79.3 percent of total COGS in 2018. Per-unit raw material costs increased each year from \$122 per mattress in 2017 to \$133 per mattress in 2019). Raw materials consist of foam or other resilient materials, innersprings, chemicals and other additives, and other material inputs such as \*\*\*.

As a share of total COGS, direct labor costs ranged from 10.8 percent in 2018 to 11.7 percent in 2017, while other factory costs ranged from 9.9 percent in 2018 to 10.7 percent in 2019. Per-unit values for direct labor and other factory costs each moved within a narrow range of \$15 to \$19 during the reporting period.

As shown in table VI-3, average raw material costs, direct labor, and other factory costs varied greatly from company to company. These cost differences reflect underlying differences in input costs (e.g., foam, upholstery, innersprings, and chemicals) and product mix (e.g.,

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<sup>5</sup> U.S. producers’ questionnaire response of \*\*\*, question II-2.

<sup>6</sup> Emails from \*\*\*, April 27, 2020.

<sup>7</sup> \*\*\* reported a non-recurring charge of \$\*\*\* included in COGS in 2018 \*\*\*. Email from \*\*\*, April 25, 2020.

recreation vehicle sizes, sofa beds, child, twin, full, queen, and/or king), and variations in manufacturing processes, as well as customer requirements.

Table VI-1 shows that producers' aggregate gross profits irregularly declined from 2017 to 2019 because the increase in total COGS was greater than the increase in total net sales value driven by increased raw material costs. Gross profit margin (gross profit as a ratio to net sales) declined from 42.4 percent in 2017 to 40.4 percent in 2018 and 2019.

### **Selling, general, and administrative expenses and operating income or (loss)**

As shown in table VI-1, the U.S. industry's selling, general, and administrative ("SG&A") expense ratios (i.e., total SG&A expenses divided by net sales) irregularly declined from 27.2 percent in 2017 to 26.6 percent in 2019. \*\*\*.<sup>8</sup> On a per-unit basis, SG&A increased from \$74 in 2017 and 2018 to \$76 in 2019 for producers as a whole.

Operating income declined from \$711.1 million in 2017 to \$650.6 million in 2019. Aggregated for the industry, operating margins (operating income as a share of net sales) also declined, from 15.2 percent in 2017 to 13.8 percent in 2019.

### **Other expenses and net income or (loss)**

Classified below the operating income level are interest expense, other expense, and other income. In table VI-1, these items are aggregated and only the net amount is shown. The net "all other expenses" increased from 2017 to 2019. Interest expense and other expense were two major cost categories for reporting firms. \*\*\*.<sup>9</sup> \*\*\*.<sup>10</sup>

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<sup>8</sup> U.S. producers' questionnaire response of \*\*\*, questions III-10.

<sup>9</sup> \*\*\*. U.S. producers' questionnaire response of \*\*\*, questions III-10 and email from \*\*\*, April 22, 2020.

<sup>10</sup> \*\*\*. Email from \*\*\*, April 25, 2020.

Similar to operating income, net income declined each year from \$423.2 million 2017 to \$159.9 million in 2019 and net income margin (net income as a ratio to net sales) declined from 9.0 percent in 2017 to 3.4 percent in 2019.

## 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 proceeding, a variance analysis is not presented.

## Capital expenditures and research and development expenses

Table VI-4 presents capital expenditures and research and development (“R&D”) expenses by firm. Aggregated capital expenditures irregularly increased from 2017 to 2019.

\*\*\*.<sup>11</sup> \*\*\*.<sup>12</sup>

R&D expenses for U.S. producers irregularly declined from 2017 to 2019. \*\*\*.

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<sup>11</sup> Emails from \*\*\*, April 29, 2020.

<sup>12</sup> U.S. producers’ questionnaire responses of \*\*\*, question III-13.

**Table VI-4**

**Mattresses: Capital expenditures and research and development expenses for U.S. producers, by firm, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	Capital expenditures (1,000 dollars)		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	95,416	79,547	98,780
Research and development expenses (1,000 dollars)			
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	32,285	34,101	29,293

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

## Assets and return on assets

Table VI-5 presents data on the U.S. producers' total assets and their operating return on assets ("ROA").<sup>13</sup> Total assets continually declined from 2017 to 2019 and the ROA irregularly declined. \*\*\*.<sup>14</sup> \*\*\*.<sup>15</sup>

<sup>13</sup> The return on assets is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value for the subject product.

<sup>14</sup> U.S. producers' questionnaire responses of \*\*\*, question III-12.

<sup>15</sup> Email from \*\*\*, April 27, 2020.

**Table VI-5  
Mattresses: U.S. producers' total assets and return on assets, 2017-2019**

Firm	Fiscal years		
	2017	2018	2019
	<b>Total net assets (1,000 dollars)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	***	***	***
	<b>Operating return on assets (percent)</b>		
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
All other firms	***	***	***
All firms	***	***	***

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

## Capital and investment

The Commission requested that U.S. producers of mattresses describe any actual or potential negative effects of imports of mattresses from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-6 presents the number of firms reporting an impact in each category and table VI-7 provides the U.S. producers' narrative responses.

**Table VI-6**  
**Mattresses: Actual and anticipated negative effects of imports on investment and growth and development**

Item	No	Yes
Negative effects on investment	17	17
Cancellation, postponement, or rejection of expansion projects		4
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		7
Return on specific investments negatively impacted		10
Other		6
Negative effects on growth and development	18	16
Rejection of bank loans		0
Lowering of credit rating		2
Problem related to the issue of stocks or bonds		0
Ability to service debt		5
Other		13
Anticipated negative effects of imports	13	21

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

**Table VI-7**

**Mattresses: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017**

Item / Firm	Narrative
<b>Cancellation, postponement, or rejection of expansion projects:</b>	
***	***
***	***
***	***
***	***
<b>Denial or rejection of investment proposal:</b>	
***	***
<b>Reduction in the size of capital investments:</b>	
***	***
***	***
***	***
***	***
***	***
<b>Return on specific investments negatively impacted:</b>	
***	***
***	***
***	***

Table continued on next page.

**Table VI-7--Continued**

**Mattresses: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017**

***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
<b>Other negative effects on investments:</b>	
***	***
***	***
***	***
***	***
***	***
***	***
<b>Lowering of credit rating:</b>	
***	***
***	***

Table continued on next page.



**Table VI-7--Continued**

**Mattresses: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017**

<b>Ability to service debt:</b>	
***	***
***	***
***	***
***	***
***	***
<b>Other effects on growth and development:</b>	
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

Table continued on next page.



**Table VI-7--Continued**

**Mattresses: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017**

***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***

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



## Part VII: Threat considerations and information on nonsubject countries

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

*In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors<sup>1</sup>--*

- (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,*

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<sup>1</sup> 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).<sup>2</sup>*

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.

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<sup>2</sup> 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 Cambodia

The Commission issued foreign producers'/exporters' questionnaires to six firms for which valid contact information was obtained that are believed to produce and/or export mattresses from Cambodia.<sup>3</sup> A usable response to the Commission's questionnaire was received from one firm: Chius Polyurethane Material (Cambodia) Co., Ltd. ("Chius"). This firm's exports to the United States accounted for \*\*\* percent of U.S. imports of mattresses from Cambodia in 2019.<sup>4</sup> Table VII-1 presents information on the mattress operations submitted by Chius in Cambodia.

**Table VII-1**  
**Cambodia: Summary data for producers in Cambodia, 2019**

<b>Firm</b>	<b>Production (units)</b>	<b>Share of reported production (percent)</b>	<b>Exports to the United States (units)</b>	<b>Share of reported exports to the United States (percent)</b>	<b>Total shipments (units)</b>	<b>Share of firm's total shipments exported to the United States (percent)</b>
Chius	***	***	***	***	***	***

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

## Changes in operations

The responding producer in Cambodia did not report any changes in the nature of its mattress operations since January 1, 2017. Further, the firm indicated that it does not anticipate any changes in the character of its operations or organization relating to the production of mattresses in the future.

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<sup>3</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>4</sup> The coverage number presented was calculated using official import statistics for primary HTS statistical reporting numbers 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087. Chius reported that \*\*\* percent of its exports to the United States were imported by its related U.S. importer, \*\*\*. Other responding U.S. importers reported that producers of their mattress imports from Cambodia include \*\*\*.

## Operations on mattresses

Table VII-2 presents information on the mattress operations of Cambodian producer/exporter Chius. During 2017-19, Chius' capacity to produce mattresses remained constant, while its annual production of \*\*\* mattresses during 2017-18 increased by \*\*\* percent to \*\*\* mattresses in 2019. Calculated capacity utilization, therefore, increased by \*\*\* percentage points from \*\*\* percent in 2017 and 2018 to \*\*\* percent in 2019. Chius reported that its capacity and production are projected to remain constant during 2020 and 2021. Chius was asked about constraints on its production capacity. It reported that its capacity is limited by its "\*\*\*\*."

Chius' export shipments to the United States accounted for \*\*\* shipments of its mattresses during 2017-19. Export shipments to the United States mirrored the company's reported production data, increasing by \*\*\* percent from \*\*\* mattresses during 2017 and 2018 to \*\*\* mattresses in 2019. Like production, export shipments to the United States are projected to remain constant and are expected to continue to account for \*\*\* Chius' mattress shipments throughout 2020-21.



**Table VII-2**  
**Mattresses: Data on industry in Cambodia, 2017-19 and projected calendar years 2020 and 2021**

	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	<b>Ratios and shares (percent)</b>				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

## Alternative products

\*\*\*. The firm indicated \*\*\* “\*\*\*.”

## Exports

According to GTA, the leading export market for “articles of bedding”<sup>5</sup> from Cambodia is the United States (table VII-3). During 2019, the United States was the largest export market for articles of bedding from Cambodia, accounting for 97.1 percent, followed by Canada as a distant second, accounting for 2.8 percent.

**Table VII-3**  
**Articles of bedding: Cambodia exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Value (1,000 dollars)</b>		
United States	1,914	2,456	43,939
Canada	474	673	1,279
China	---	4	14
United Kingdom	---	---	13
All other destination markets	3	4	2
Total exports	2,391	3,137	45,248
	<b>Share of value (percent)</b>		
United States	80.1	78.3	97.1
Canada	19.8	21.4	2.8
China	---	0.1	0.0
United Kingdom	---	---	0.0
All other destination markets	0.1	0.1	0.0
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Quantity data are not available.

Source: Official imports statistics of imports from Cambodia (constructed export statistics for Cambodia) under HS subheadings 9404.21 and 9404.29 as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed April 23, 2020.

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<sup>5</sup> Throughout this report, the presentation of GTA export data is for “articles of bedding” reported at the 6-digit HS level, which includes not only in-scope mattresses, but also other mattresses and bedding articles that are not included in the scope of these investigations, such as specifically excluded mattresses, as well as mattress toppers, pillows, comforters, bedsheets, and other bedding items.

## The industry in China

The Commission issued foreign producers'/exporters' questionnaires to 38 firms for which valid contact information was obtained that are believed to produce and/or export mattresses from China.<sup>6</sup> A usable response to the Commission's questionnaire was received from one firm: Zinus (Xiamen) Inc. ("Zinus"). Zinus' exports to the United States accounted for \*\*\* percent of reported U.S. imports of mattresses from China in 2019.<sup>7</sup> Table VII-4 presents information on the mattress operations of the responding producer/exporter in China.

**Table VII-4**  
**Mattresses: Summary data on firms in China, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Zinus	***	***	***	***	***	***

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

## Changes in operations

As presented in table VII-5, Zinus reported two operational changes since January 1, 2017—the opening of its Zhangzhou plant in August 2017 and the beginning of the Zhangzhou export sales business in January 2019.

<sup>6</sup> These firms were identified through a review of information submitted in the petition, obtained from the Commission's recent investigation on mattresses from China, and contained in \*\*\* records.

<sup>7</sup> The coverage number presented was calculated using importer data submitted in response to Commission questionnaires. In the Commission's recent investigation on mattresses from China, usable questionnaire responses were received from 13 firms producing mattresses in China. These 13 firms' exports to the United States together accounted for 59.7 percent of U.S. imports of mattresses from China in 2018 and \*\*\* percent of overall production of mattresses in China in 2018. Zinus was the largest of the 13 responding producers, accounting for \*\*\* percent of 2018 mattress production in China as reported in that proceeding. The time period for which foreign producer data were collected in that investigation was 2016-18, January-June 2018, January-June 2019, and projected 2019-20. Investigation No. 731-TA-1424 (Final): Mattresses from China, Confidential Report, INV-RR-116, November 5, 2019, as revised in INV-RR-120, November 12, 2019 ("China final confidential report"), p. VII-3 and tables VII-1 and VII-3.

**Table VII-5  
Mattresses: Reported changes in operations by producers in China, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***
<b>Other:</b>	
***	***

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

## Operations on mattresses

Table VII-6 presents information on the mattress operations of Chinese producer/exporter Zinus. The firm's annual production capacity in China increased by \*\*\* percent from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2018, but declined by \*\*\* percent to \*\*\* mattresses in 2019, ending \*\*\* percent lower in 2019 than in 2017. Zinus' production capacity in China is projected to be \*\*\* percent lower in 2020 and 2021 than in 2019. Zinus was asked about constraints on its production capacity. It reported that its capacity is limited by \*\*\*.

Similar to its reported trends in capacity, mattress production by Zinus in China increased by \*\*\* percent from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2018, but declined by \*\*\* percent to \*\*\* mattresses in 2019, ending \*\*\* percent lower in 2019 than in 2017. Projections indicated that Zinus' production in China is expected to decline by \*\*\* during 2020 and 2021. Zinus' capacity utilization declined from \*\*\* percent in 2017 to \*\*\* percent in 2018 and is expected to be lower than the 2019 level during 2020-21.

The overall trend in Zinus' total shipments mirrored that of the firm's reported production, increasing slightly from 2017 to 2018, but declining in 2019 to a level below that reported in 2017. Zinus' export shipments accounted for \*\*\* of its total shipments during 2017-19 and \*\*\* of its exports were destined for the United States. Zinus' exports to the United States accounted for \*\*\* percent of its total shipments in 2017, \*\*\* percent in 2018, and \*\*\* percent in 2019. The quantity of exports to the United States declined by \*\*\* percent between 2017 and 2019, with the overwhelming majority of the decline occurring from 2018 to 2019. A further decline in its exports to the United States to \*\*\* is expected in 2020 and 2021. Export shipments to other countries, which increased from 2017 to 2019, were destined for \*\*\*.

Inventories represented a relatively minor (i.e., less than \*\*\* percent) and fluctuating share of Zinus' production and shipments during 2017-19, although the shares are expected to increase slightly during 2020-21 as the firm's production and shipments decline.

**Table VII-6**  
**Mattresses: Data on industry in China, 2017-19 and projected calendar years 2020 and 2021**

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	<b>Ratios and shares (percent)</b>				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

## Alternative products

As shown in table VII-7, Zinus reported the production of out-of-scope products on the same equipment and machinery used to produce mattresses. Mattresses accounted for the largest share of Zinus' overall plant production using shared equipment during 2017-19 (\*\* percent in 2017 and 2018 and \*\* percent in 2019), although the production of these other items increased in 2019 as production of mattresses declined. In addition to mattresses, other items produced by Zinus on shared equipment include mattress toppers and pet items. Zinus reported that \*\*. It added that \*\*.

**Table VII-7**  
**Mattresses: Overall capacity and production on the same equipment as in-scope production by the producer in China, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	**	**	**
Production:			
Mattresses	**	**	**
Out-of-scope production	**	**	**
Total production on same machinery	**	**	**
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	**	**	**
Share of production:			
Mattresses	**	**	**
Out-of-scope production	**	**	**
Total production on same machinery	**	**	**

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

## Exports

China is the largest mattress exporter in the world, accounting for 29 percent of global mattress exports.<sup>8</sup> According to GTA, the leading export market for “articles of bedding” from China is the United States (table VII-8). The leading export markets for articles of bedding from China in 2019, by quantity, were the United States and Japan, accounting for 27.6 percent and 19.3 percent, respectively.

**Table VII-8**  
**Articles of bedding: China exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
United States	26,852,188	27,874,795	22,232,641
Japan	14,826,945	17,394,938	15,535,311
United Kingdom	5,791,491	6,137,427	6,746,926
Bangladesh	43,948	1,576,630	5,523,787
Canada	2,282,553	2,207,274	3,113,880
Korea	1,907,454	1,756,715	2,502,754
Germany	1,984,202	1,808,945	2,328,059
Australia	1,828,701	1,897,892	2,247,386
Vietnam	926,648	1,310,633	2,023,858
All other destination markets	23,386,638	22,356,027	18,220,808
Total exports	79,830,768	84,321,276	80,475,410
	<b>Value (1,000 dollars)</b>		
United States	667,085	757,060	312,907
Japan	154,156	159,669	162,621
United Kingdom	33,297	34,447	44,703
Bangladesh	432	334	184
Canada	24,340	35,880	50,286
Korea	28,700	33,743	50,404
Germany	13,180	11,327	28,690
Australia	60,743	69,903	68,534
Vietnam	13,376	25,507	32,349
All other destination markets	232,203	263,858	328,794
Total exports	1,227,511	1,391,727	1,079,473

Table continued on next page.

<sup>8</sup> Petition, Vol. 1, exh. I-10, citing \*\*\*.

**Table VII-8—Continued**  
**Articles of bedding: China exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Unit value (dollars per unit)</b>		
United States	24.84	27.16	14.07
Japan	10.40	9.18	10.47
United Kingdom	5.75	5.61	6.63
Bangladesh	9.83	0.21	0.03
Canada	10.66	16.26	16.15
Korea	15.05	19.21	20.14
Germany	6.64	6.26	12.32
Australia	33.22	36.83	30.49
Vietnam	14.44	19.46	15.98
All other destination markets	9.93	11.80	18.04
Total exports	15.38	16.51	13.41
	<b>Share of quantity (percent)</b>		
United States	33.6	33.1	27.6
Japan	18.6	20.6	19.3
United Kingdom	7.3	7.3	8.4
Bangladesh	0.1	1.9	6.9
Canada	2.9	2.6	3.9
Korea	2.4	2.1	3.1
Germany	2.5	2.1	2.9
Australia	2.3	2.3	2.8
Vietnam	1.2	1.6	2.5
All other destination markets	29.3	26.5	22.6
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheadings 9404.21 and 9404.29 as reported by China Customs in the Global Trade Atlas database, accessed April 23, 2020.



## The industry in Indonesia

The Commission issued foreign producers'/exporters' questionnaires to 18 firms for which valid contact information was obtained that were believed to produce and/or export mattresses from Indonesia.<sup>9</sup> Usable responses to the Commission's questionnaire were received from eight firms: PT Celebes Putra Prima ("Celebes"); PT Graha Anom Jaya ("Central"); PT Demak Putra Mandiri ("Demak"); PT Dynasti Indomegah ("Dynasti"); PT Ecos Jaya Indonesia ("Ecos"); PT Graha Seribusatu Jaya ("Graha"); PT Romance Bedding and Furniture ("Romance"); and PT Zinus Global Indonesia ("Zinus Global").<sup>10</sup> These firms' exports to the United States accounted for \*\*\* percent of U.S. imports of mattresses from Indonesia in 2019.<sup>11</sup>

Table VII-9 presents information on the mattress operations of the responding producers and exporters in Indonesia.

**Table VII-9**  
**Mattresses: Summary data on firms in Indonesia, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Celebes	***	***	***	***	***	***
Central	***	***	***	***	***	***
Demak	***	***	***	***	***	***
Dynasti	***	***	***	***	***	***
Ecos	***	***	***	***	***	***
Graha	***	***	***	***	***	***
Romance	***	***	***	***	***	***
Zinus Global	***	***	***	***	***	***
Total	***	***	***	***	***	***

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

<sup>9</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>10</sup> One additional firm in Indonesia (\*\*\*) submitted an unusable response to the Commission's questionnaire and thus is not incorporated in the aggregate data presentations in this report. \*\*\* produced \*\*\* mattresses in 2019 (equivalent to \*\*\* percent of reported Indonesian mattress production). Additional Indonesian mattress producers identified by U.S. importers responding to the Commission's questionnaire include: \*\*\*.

<sup>11</sup> The coverage number presented was calculated using importer data submitted in response to Commission questionnaires.

## Changes in operations

As presented in table VII-10, three responding producers in Indonesia reported certain changes in operations since January 1, 2017, including plant openings, expansions, and equipment acquisitions.

**Table VII-10**  
**Mattresses: Reported changes in operations by producers in Indonesia, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***
***	*** *** ***
<b>Expansions:</b>	
***	***
<b>Acquisitions:</b>	
***	***

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

## Operations on mattresses

Table VII-11 presents information on the mattress operations of the responding producers and exporters in Indonesia. Responding producers' capacity in Indonesia increased by 378.1 percent during 2017-19, while production increased by 340.8 percent during the same period. The majority of the increase in capacity and production in Indonesia was reported from 2018 to 2019 and was attributable mostly to the opening of \*\*\*,<sup>12</sup> \*\*\*.<sup>13</sup> By 2019, \*\*\* were the largest producers of mattresses in Indonesia, together accounting for approximately \*\*\* of total reported production. Among the eight firms that reported production of mattresses in Indonesia during 2017-19, seven reported higher capacity

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<sup>12</sup> \*\*\*.

<sup>13</sup> \*\*\*.

in 2019 than in 2017, and five firms reported higher production. Responding producers' capacity in Indonesia is projected to be 36.8 percent higher in 2021 than in 2019 and production is projected to be 29.9 percent higher. Capacity utilization decreased from 89.2 percent in 2017 to 82.2 percent in 2019 and is projected to decline further to 78.1 percent in 2021.

**Table VII-11**  
**Mattresses: Data on industry in Indonesia, 2017-19 and projected calendar years 2020 and 2021**

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	754,113	942,886	3,605,585	4,749,019	4,932,094
Production	672,481	790,055	2,964,237	3,581,430	3,850,335
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	672,488	783,667	2,847,820	3,561,400	3,836,353
	<b>Ratios and shares (percent)</b>				
Capacity utilization	89.2	83.8	82.2	75.4	78.1
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

The overall trend in Indonesian producers' total shipments mirrored that of reported production, increasing by 323.5 percent from 2017 to 2019, with the majority of the increase occurring from 2018 to 2019. Commercial home market shipments accounted for \*\*\* of total shipments by Indonesian producers during 2017 (\*\*\* percent) and 2018 (\*\*\* percent). However, by 2019, exports to the United States accounted for \*\*\* of total shipments (\*\*\* percent) with the opening of \*\*\*, which exported \*\*\* of their mattress production to the United States. Exports to the United States increased from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. Commercial home market shipments increased from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. Export shipments to other countries, which accounted for \*\*\* percent or less of total shipments, increased from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. These mattress exports to countries other than the United States, which were reported by two producers (\*\*\*), were destined for \*\*\*.

End-of-period inventories, which increased in terms of quantity from 2017 to 2019, represented a relatively minor (i.e., \*\*\* percent) but increasing share of Indonesian production and shipments.

## Alternative products

Data on overall plant capacity for the eight responding mattress producers in Indonesia are presented in table VII-12. Mattresses accounted for an increasing majority of the aggregate firms' overall plant production using shared equipment during 2017-19 (64.3 percent in 2017, 68.1 percent in 2018, and 89.6 percent in 2019). Four firms in Indonesia reported the production of other products in addition to mattresses on the same equipment and machinery used to produce mattresses: \*\*\*. In addition to mattresses, other items produced by these four firms in Indonesia include mattress bases, mattress toppers, headboards, pillows, and foam. All responding producers in Indonesia reported that they \*\*\*.

**Table VII-12**

**Mattresses: Overall capacity and production on the same equipment as in-scope production by producers in Indonesia, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	1,143,220	1,379,460	3,971,040
Production:			
Mattresses	672,481	790,055	2,964,237
Out-of-scope production	372,705	369,234	342,748
Total production on same machinery	1,045,186	1,159,289	3,306,985
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	91.4	84.0	83.3
Share of production:			
Mattresses	64.3	68.1	89.6
Out-of-scope production	35.7	31.9	10.4
Total production on same machinery	100.0	100.0	100.0

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

## Exports

According to GTA, the leading export market for “articles of bedding” from Indonesia is currently the United States (table VII-13). During 2017, Singapore was the largest export market for articles of bedding from Indonesia, accounting for 30.0 percent, followed by the United States, accounting for 11.4 percent. However, by 2019, the United States became, by far, the largest export market, accounting for 93.3 percent, followed by Singapore as a distant second, accounting for 3.0 percent.

**Table VII-13**  
**Articles of bedding: Indonesia exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Value (1,000 dollars)</b>		
United States	2,025	8,979	192,686
Singapore	5,330	7,122	6,103
Germany	1,527	1,297	1,225
Malaysia	871	762	1,078
East Timor	763	557	805
Denmark	447	731	674
Australia	453	633	496
Vietnam	2,656	102	438
Thailand	209	189	316
All other destination markets	3,461	2,237	2,794
Total exports	17,742	22,608	206,614
	<b>Share of value (percent)</b>		
United States	11.4	39.7	93.3
Singapore	30.0	31.5	3.0
Germany	8.6	5.7	0.6
Malaysia	4.9	3.4	0.5
East Timor	4.3	2.5	0.4
Denmark	2.5	3.2	0.3
Australia	2.6	2.8	0.2
Vietnam	15.0	0.5	0.2
Thailand	1.2	0.8	0.2
All other destination markets	19.5	9.9	1.4
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Quantity data are not available.

Source: Official export statistics under HS subheadings 9404.21 and 9404.29 as reported by Statistics Indonesia in the Global Trade Atlas database, accessed April 23, 2020.

## The industry in Malaysia

The Commission issued foreign producers'/exporters' questionnaires to 20 firms for which valid contact information was obtained that were believed to produce and/or export mattresses from Malaysia.<sup>14</sup> Usable responses to the Commission's questionnaire were received from four firms: Bedco Sistem (M) Sdn Bhd ("Bedco"); Diglant Malaysia Sdn Bhd ("Diglant"); Masterfoam Industries Sdn Bhd ("Masterfoam"); and Wansern Foam Ind Sdn Bhd ("Wansern").<sup>15</sup> These firms' exports to the United States accounted for \*\*\* percent of U.S. imports of mattresses from Malaysia in 2019.<sup>16</sup>

Table VII-14 presents information on the mattress operations of the responding producers and exporters in Malaysia.

**Table VII-14**  
**Mattresses: Summary data on firms in Malaysia, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Bedco	***	***	***	***	***	***
Diglant	***	***	***	***	***	***
Masterfoam	***	***	***	***	***	***
Wansern	***	***	***	***	***	***
Total	***	***	***	***	***	***

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

<sup>14</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>15</sup> Additional Malaysian mattress producers identified by U.S. importers responding to the Commission's questionnaire include: \*\*\*.

<sup>16</sup> The coverage number presented was calculated using importer data submitted in response to Commission questionnaires.

## Changes in operations

As presented in table VII-15, all four responding producers in Malaysia reported certain changes in operations since January 1, 2017, including plant openings, expansions, and equipment acquisitions.

**Table VII-15**

**Mattresses: Reported changes in operations by producers in Malaysia, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***
***	***
<b>Expansions:</b>	
***	***
<b>Other:</b>	
***	***
***	***

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

## Operations on mattresses

Table VII-16 presents information on the mattress operations of the responding producers and exporters in Malaysia. Responding producers' capacity in Malaysia increased by 118.5 percent during 2017-19, while production increased by 28.2 percent during the same period. The majority of the increase in capacity in Malaysia was reported from 2018 to 2019 and was attributable mostly to the opening of \*\*\*,<sup>17</sup> which accounted for \*\*\* percent of the total capacity to produce mattresses in Malaysia in that year. \*\*\* firms in Malaysia reported higher capacity and production of mattresses in 2019 than in 2017, whereas \*\*\* reported lower amounts. Aggregate reported capacity in Malaysia is projected to be 7.3 percent higher in 2021 than in 2019 and production is projected to be 26.0 percent higher as \*\*\*. Capacity utilization in Malaysia increased from 94.4 percent in 2017 to 97.9 percent in 2018 \*\*\*, but declined

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<sup>17</sup> Diglant reported in its response to the Commission's questionnaire that it is not related to any producer of mattresses in any other country. However, according to its website, it appears to be related to Guangdong Diglant Furniture Industrial Co., Ltd., a mattress producer in Heyuan City, China, with a monthly production capacity of more than 15,000 spring and foam mattresses. Diglant webpage, <https://www.diglant.com/> and <https://www.diglant.com/about.html>, retrieved May 5, 2020.



to 55.4 percent in 2019 as \*\*\*. Capacity utilization is projected to increase to 65.0 percent by 2021.

**Table VII-16**

**Mattresses: Data on industry in Malaysia, 2017-19 and projected calendar years 2020 and 2021**

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	518,400	521,616	1,132,485	1,200,500	1,215,500
Production	489,385	510,638	627,192	770,484	789,984
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	489,345	510,603	627,137	769,984	790,484
	<b>Ratios and shares (percent)</b>				
Capacity utilization	94.4	97.9	55.4	64.2	65.0
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

The overall upward trend in the Malaysian producers' total shipments is similar to that of reported production, increasing by 28.2 percent from 2017 to 2019. Home market shipments accounted for \*\*\* of total shipments by Malaysian producers during 2017 (\*\*\*) and 2018 (\*\*\*) percent). However, by 2019, exports to the United States (\*\*\*) led to a decline in the share held by home market shipments, which accounted for \*\*\* percent of total shipments in that year, while exports to the United States increased from \*\*\* percent in 2018 to \*\*\* percent. Exports to countries other than the United States, which declined on an absolute and relative basis from 2017 to 2019, accounted for \*\*\* percent of total shipments in 2019. Exports to other countries, however, are expected to increase into 2020 and 2021 (\*\*\*). Principal other export markets reported by the \*\*\* mattress producers in Malaysia include \*\*\*.

End-of-period inventories, which increased by small amounts in terms of quantity from 2017 to 2019, represented a relatively minor (i.e., \*\*\* percent) and declining share of Malaysian production and shipments.

## Alternative products

Data on overall plant capacity for the four responding mattress producers in Malaysia are presented in table VII-17. Mattresses accounted for approximately \*\*\* of the aggregate firms' overall plant production using shared equipment during 2017-19. \*\*\* responding firms in Malaysia reported the production of other products in addition to mattresses on the same equipment and machinery used to produce mattresses. In addition to mattresses, other items produced by these \*\*\* firms in Malaysia include pillows, polyurethane and polyester foam, foundations, bedding, mattress protectors, mattress toppers, bolsters, and cushions. All responding producers in Malaysia reported that they \*\*\*. \*\*\* also noted "\*\*\*\*."

**Table VII-17**

**Mattresses: Overall capacity and production on the same equipment as in-scope production by producers in Malaysia, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	***	***	***
Production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	***	***	***
Share of production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

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

## Exports

According to GTA, the leading export market for “articles of bedding” from Malaysia is currently the United States (table VII-18). During 2017, Singapore was the largest export market for articles of bedding from Malaysia, accounting for 55.4 percent, followed by Japan and the United States, accounting for 8.1 percent each. However, by 2019, the United States became, by far, the largest export market, accounting for 79.9 percent, followed by Singapore as a distant second, accounting for 11.9 percent.

**Table VII-18**  
**Articles of bedding: Malaysia exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
United States	160,126	588,667	5,287,194
Singapore	1,093,860	927,252	788,525
Japan	160,269	163,403	186,915
Korea	76,885	77,059	61,776
Indonesia	80,808	68,646	56,313
Taiwan	67,523	84,952	39,818
China	81,244	39,412	37,572
Brunei	28,841	26,111	33,204
Hong Kong	71,918	19,989	22,159
All other destination markets	153,609	103,625	103,711
Total exports	1,975,083	2,099,116	6,617,187
	<b>Value (1,000 dollars)</b>		
United States	2,481	5,121	125,475
Singapore	17,013	17,340	14,626
Japan	12,561	15,579	18,102
Korea	7,353	7,766	6,269
Indonesia	2,637	2,815	1,350
Taiwan	3,395	3,555	2,878
China	7,064	5,348	3,502
Brunei	1,630	1,658	1,336
Hong Kong	4,657	4,869	3,410
All other destination markets	9,974	7,819	8,359
Total exports	68,767	71,870	185,307

Table continued on next page.

**Table VII-18—Continued**  
**Articles of bedding: Malaysia exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Unit value (dollars per unit)</b>		
United States	15.50	8.70	23.73
Singapore	15.55	18.70	18.55
Japan	78.37	95.34	96.84
Korea	95.64	100.77	101.47
Indonesia	32.64	41.01	23.98
Taiwan	50.29	41.85	72.28
China	86.95	135.69	93.20
Brunei	56.52	63.51	40.23
Hong Kong	64.75	243.56	153.90
All other destination markets	64.93	75.45	80.60
Total exports	34.82	34.24	28.00
	<b>Share of quantity (percent)</b>		
United States	8.1	28.0	79.9
Singapore	55.4	44.2	11.9
Japan	8.1	7.8	2.8
Korea	3.9	3.7	0.9
Indonesia	4.1	3.3	0.9
Taiwan	3.4	4.0	0.6
China	4.1	1.9	0.6
Brunei	1.5	1.2	0.5
Hong Kong	3.6	1.0	0.3
All other destination markets	7.8	4.9	1.6
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheadings 9404.21 and 9404.29 as reported by Department of Statistics Malaysia in the Global Trade Atlas database, accessed April 23, 2020.

## The industry in Serbia

The Commission issued foreign producers'/exporters' questionnaires to 11 firms for which valid contact information was obtained that are believed to produce and/or export mattresses from Serbia.<sup>18</sup> A usable response to the Commission's questionnaire was received from one firm: Healthcare Europe DOO Ruma ("Healthcare Europe").<sup>19</sup> This firm's exports to the United States accounted for \*\*\* percent of reported U.S. imports of mattresses from Serbia in 2019.<sup>20</sup> Table VII-19 presents information on the mattress operations submitted by Healthcare Europe in Serbia.

**Table VII-19**  
**Mattresses: Summary data on firms in Serbia, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Healthcare Europe	***	***	***	***	***	***

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

<sup>18</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>19</sup> Healthcare Europe reported that it is related to producers of mattresses in \*\*\*.

<sup>20</sup> The coverage number presented was calculated using importer data submitted in response to Commission questionnaires. Healthcare Europe indicated that \*\*\* are related U.S. importers and listed \*\*\* as its top U.S. importers during 2019. Importers \*\*\* submitted responses to the Commission's questionnaire, but related importer \*\*\* did not. Three of the four responding U.S. importers of mattresses from Serbia identified Healthcare Europe as the producer of the mattresses they import, whereas one U.S. importer (\*\*\*) reported that the mattress brands it imports from Serbia include \*\*\*.

## Changes in operations

As presented in table VII-20, Healthcare Europe reported \*\*\*.

**Table VII-20**

**Mattresses: Reported changes in operations by producers in Serbia, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***

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

## Operations on mattresses

Table VII-21 presents information on the mattress operations of Serbian producer/exporter Healthcare Europe. The firm's capacity in Serbia increased by \*\*\* percent during 2017-19, while production increased by \*\*\* percent during the same period. Projections indicated that the firm is expecting its capacity to be \*\*\* percent higher in 2021 than in 2019 and its production to be \*\*\* percent higher, as it anticipates the opening of an additional plant in Serbia during 2020-21 to supply mattresses to the European Union ("EU") market. Healthcare Europe's capacity utilization increased from \*\*\* percent in 2017 to \*\*\* percent in 2019 as it ramped up its production facility opened in 2017. The firm projects its capacity utilization to increase to \*\*\* by 2021. Healthcare Europe was asked about shifts in capacity and constraints on its production capacity. It reported that increases in reported capacity were the result of additional procurements of new packaging machinery and that its capacity is limited by its "\*\*\*."

Table VII-21

Mattresses: Data on industry in Serbia, 2017-19 and projected calendar years 2020 and 2021

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	<b>Ratios and shares (percent)</b>				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market Shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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.



The upward trend in Healthcare Europe's total shipments mirrored that of reported production, increasing by \*\*\* percent from 2017 to 2019, and are projected to increase further by \*\*\* percent from 2019 to 2021. Exports to markets other than the United States accounted for \*\*\* of total shipments by the Serbian producer during 2017 (\*\*\* percent) and 2018 (\*\*\* percent). However, by 2019, exports to the United States accounted for \*\*\* of total shipments (\*\*\* percent). Exports to the United States, increased from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. Healthcare Europe's home market shipments, which declined as a share of total shipments from \*\*\* percent in 2017 to \*\*\* percent in 2019, also declined in absolute terms from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019. Export shipments to other countries, which accounted for \*\*\* percent of total shipments in 2019, increased from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. These mattress exports to countries other than the United States were destined for \*\*\*.

End-of-period inventories, which increased in terms of quantity from 2017 to 2019, represented a relatively minor (i.e., \*\*\*) and fluctuating share of Serbia production.

## Alternative products

Data on overall plant capacity for the responding mattress producer in Serbia are presented in table VII-22. Mattresses accounted for \*\*\* percent, \*\*\* percent, and \*\*\* percent of the firm’s overall plant production using shared equipment during 2017-19. In addition to mattresses, Healthcare Europe in Serbia reported the production of \*\*\* and indicated that \*\*\*. It explained that “\*\*\*.”

**Table VII-22**

**Mattresses: Overall capacity and production on the same equipment as in-scope production by the producer in Serbia, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	***	***	***
Production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	***	***	***
Share of production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

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

## Exports

According to GTA, the leading export market for “articles of bedding” from Serbia is currently the United States (table VII-23). During 2017, however, there were no exports from Serbia to the United States. Poland, Bosnia, Croatia, and France were the largest export markets for articles of bedding from Serbia in 2017, together accounting for 57.9 percent of total exports. By 2019, the United States became the largest export market for articles of bedding produced in Serbia, accounting for 55.3 percent of total exports, followed by Poland as the second largest export market, accounting for 18.1 percent.

**Table VII-23**  
**Articles of bedding: Serbia exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Value (1,000 dollars)</b>		
United States	---	214	30,777
Poland	1,412	7,229	10,081
Germany	839	3,393	2,199
France	1,123	4,283	1,990
Bosnia	1,398	1,776	1,817
Croatia	1,240	1,565	1,612
Hungary	44	1,150	1,547
Macedonia	702	770	1,209
Bulgaria	318	856	1,049
All other destination markets	1,867	2,894	3,328
Total exports	8,943	24,129	55,609
	<b>Share of value (percent)</b>		
United States	---	0.9	55.3
Poland	15.8	30.0	18.1
Germany	9.4	14.1	4.0
France	12.6	17.8	3.6
Bosnia	15.6	7.4	3.3
Croatia	13.9	6.5	2.9
Hungary	0.5	4.8	2.8
Macedonia	7.9	3.2	2.2
Bulgaria	3.6	3.5	1.9
All other destination markets	20.9	12.0	6.0
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Quantity data are not available.

Source: Official imports statistics of imports from Serbia (constructed export statistics for Serbia) under HS subheadings 9404.21 and 9404.29 as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed April 23, 2020.

## The industry in Thailand

The Commission issued foreign producers'/exporters' questionnaires to 15 firms for which valid contact information was obtained that are believed to produce and/or export mattresses from Thailand.<sup>21</sup> A usable response to the Commission's questionnaire was received from one firm: Saffron Living Co., Ltd. ("Saffron").<sup>22</sup> This firm's exports to the United States accounted for \*\*\* percent of reported U.S. imports of mattresses from Thailand in 2019.<sup>23</sup> Table VII-24 presents information on the mattress operations submitted by Saffron in Thailand.

**Table VII-24**  
**Mattresses: Summary data on firms in Thailand, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Saffron	***	***	***	***	***	***

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

## Changes in operations

As presented in table VII-25, Saffron reported \*\*\*.

<sup>21</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>22</sup> Although Saffron reported in its response to the Commission's questionnaire that it is not related to any producers of mattresses in any other country, it appears to be related to Saffron Living, a producer of mattresses in China. "Saffron Living Inks Land and Building Lease Deal at WHA Eastern Seaboard Industrial Estate 1," <https://www.wha-industrialestate.com/en/media-activities/news/customer-news/3001/saffron-living-inks-land-and-building-lease-deal-at-wha-eastern-seaboard-industrial-estate-1>, retrieved March 5, 2020; "Saffron Living Inaugurates New Manufacturing Facility at EEC," <https://www.wha-industrialestate.com/en/media-activities/news/customer-news/3091/saffron-living-inaugurates-new-manufacturing-facility-at-eeec>, retrieved March 5, 2020.

<sup>23</sup> The coverage number presented was calculated using importer data submitted in response to Commission questionnaires. Saffron listed five top U.S. importers of its mattresses in 2019 (\*\*\*), four of which responded to the Commission's importer questionnaire in these investigations. Other responding U.S. importers reported that producers of their mattress imports from Thailand include \*\*\*.

**Table VII-25**

**Mattresses: Reported changes in operations by producers in Thailand, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***

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

### **Operations on mattresses**

Table VII-26 presents information on the mattress operations of Thai producer/exporter Saffron. The firm opened its operation on \*\*\*. The firm's reported capacity in Thailand was \*\*\* mattresses in 2019, which is expected to \*\*\* by 2020-21. Its production of \*\*\* mattresses in 2019 is expected to increase by \*\*\* percent to \*\*\* mattresses in 2020-21. Saffron projects that its capacity utilization will increase from \*\*\* percent in 2019 to \*\*\* percent in 2020-21 as it \*\*\*. The firm reported that \*\*\* constraint on capacity.

Saffron's total shipments mirrored that of reported production. The firm's reported total shipments of \*\*\* mattresses in 2019 is expected to increase by \*\*\* percent to \*\*\* mattresses in 2020-21. Exports to the United States, which accounted for \*\*\* of Saffron's mattress shipments during 2019, are expected to decline to \*\*\* percent of total shipments in 2020-21 as the company expects to shift some sales to the commercial home market and other export markets. Exports to the United States are expected to amount to \*\*\* mattresses annually during 2020-21, whereas Saffron's annual commercial home market shipments and other export markets are expected to be \*\*\* mattresses each during that time. Saffron expects to develop export markets for its mattresses in \*\*\* during 2020-21.

End-of-period inventories represented a relatively minor share (i.e., \*\*\*) of Saffron's production and shipments during 2019 and are \*\*\* during 2020-21.

Table VII-26

Mattresses: Data on industry in Thailand, 2017-19 and projected calendar years 2020 and 2021

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	<b>Ratios and shares (percent)</b>				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market Shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

\*\*\*

## Exports

According to GTA, the leading export markets for “articles of bedding” from Thailand are the United States, China, and South Africa (table VII-27). During 2019, the United States was the largest export market for articles of bedding from Thailand, accounting for 32.4 percent, followed by China (27.1 percent) and South Africa (21.0 percent).

**Table VII-27**  
**Articles of bedding: Thailand exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
United States	83,564	74,797	830,158
China	233,429	494,549	696,090
South Africa	324,660	205,025	538,087
Cambodia	19,553	22,158	149,531
Laos	97,739	98,056	133,130
Korea	69,022	56,347	45,780
Singapore	38,567	19,566	20,210
Myanmar	14,978	341,313	20,118
United Arab Emirates	19,817	20,265	18,492
All other destination markets	136,772	359,382	112,858
Total exports	1,038,101	1,691,458	2,564,454
	<b>Value (1,000 dollars)</b>		
United States	1,109	1,243	62,942
China	22,028	32,901	39,950
South Africa	812	513	556
Cambodia	797	1,212	1,381
Laos	2,754	2,646	3,385
Korea	5,791	4,737	3,512
Singapore	3,663	4,148	3,515
Myanmar	693	927	569
United Arab Emirates	50	90	55
All other destination markets	10,065	10,713	8,689
Total exports	47,762	59,130	124,554

Table continued on next page.

**Table VII-27—Continued**  
**Articles of bedding: Thailand exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Unit value (dollars per unit)</b>		
United States	13.27	16.62	75.82
China	94.37	66.53	57.39
South Africa	2.50	2.50	1.03
Cambodia	40.75	54.70	9.24
Laos	28.18	26.99	25.43
Korea	83.90	84.06	76.71
Singapore	94.98	212.02	173.91
Myanmar	46.30	2.72	28.27
United Arab Emirates	2.51	4.43	2.99
All other destination markets	73.59	29.81	76.99
Total exports	46.01	34.96	48.57
	<b>Share of quantity (percent)</b>		
United States	8.0	4.4	32.4
China	22.5	29.2	27.1
South Africa	31.3	12.1	21.0
Cambodia	1.9	1.3	5.8
Laos	9.4	5.8	5.2
Korea	6.6	3.3	1.8
Singapore	3.7	1.2	0.8
Myanmar	1.4	20.2	0.8
United Arab Emirates	1.9	1.2	0.7
All other destination markets	13.2	21.2	4.4
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data.

Source: Official export statistics under HS subheadings 9404.21 and 9404.29 as reported by Thai Customs Department in the Global Trade Atlas database, accessed April 23, 2020.



## The industry in Turkey

The Commission issued foreign producers'/exporters' questionnaires to 24 firms or which valid contact information was obtained that are believed to produce and/or export mattresses from Turkey.<sup>24</sup> A usable response to the Commission's questionnaire was received from one firm: Yatsan Yatak Sunger A.S. ("Yatsan"). Yatsan reported \*\*\* exports of mattresses to the United States from Turkey in 2019.<sup>25</sup> Table VII-24 presents information on the mattress operations submitted by Yatsan in Turkey.

**Table VII-28**  
**Mattresses: Summary data on firms in Turkey, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Yatsan	***	***	***	***	***	***

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

## Changes in operations

As presented in table VII-29, Yatsan reported one operational change since January 1, 2017—a revision to the agreement with its labor union.

**Table VII-29**  
**Mattresses: Reported changes in operations by producers in Turkey, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Revised labor agreements:</b>	
***	***

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

<sup>24</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>25</sup> Although Yatsan indicated that it did not export mattresses to the United States during 2019, it listed \*\*\* as its largest U.S. importer. \*\*\* did not respond to the Commission's importer questionnaire in these investigations and is not identified as an importer of record of mattresses from Turkey in \*\*\* import statistics. The two responding U.S. importers in these investigations (\*\*\*) reported that producers of their mattress imports from Turkey include \*\*\*. \*\*\* import statistics report that imports by \*\*\* from \*\*\* accounted for \*\*\* percent of total U.S. imports from Turkey during 2019.

## Operations on mattresses

Table VII-30 presents information on the mattress operations of producer/exporter Yatsan in Turkey. During 2017-19, Yatsan's capacity to produce mattresses declined by \*\*\* percent and its production of mattresses declined by \*\*\* percent from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019. Likewise, the firm's capacity utilization declined from \*\*\* percent in 2017 to \*\*\* percent in 2019. Although Yatsan noted that it "expect{s} production curtailment due to Covid-19 in 2020," its reported data indicate that its capacity and production are projected to increase \*\*\*, respectively, from 2019 to 2021 and that its capacity utilization will increase to \*\*\* percent in 2020 but decline to \*\*\* percent in 2021.

Yatsan reported \*\*\* export shipments of mattresses to the United States during 2017-19 and projected \*\*\* shipments during 2020-21. The share of the firm's home market shipments to its total shipments fluctuated between \*\*\* percent during 2017-19, while the share held by its exports to countries other than the United States fluctuated between \*\*\* percent. The share of Yatsan's other export markets to the firm's total shipments is expected to increase slightly from \*\*\* percent in 2019 to \*\*\* percent in 2021. Yatsan did not identify its principal other export markets.

Table VII-30

Mattresses: Data on industry in Turkey, 2017-19 and projected calendar years 2020 and 2021

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	***	***	***	***	***
Production	***	***	***	***	***
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***
	<b>Ratios and shares (percent)</b>				
Capacity utilization	***	***	***	***	***
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market Shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

Data on overall plant capacity for the responding mattress producer in Turkey are presented in table VII-31. Mattresses accounted for \*\*\* (\*\*\*) percent in 2017, \*\*\* percent in 2018, and \*\*\* percent in 2019) of the firm's overall plant production using shared equipment. In addition to mattresses, Yatsan in Turkey reported the production of \*\*\*.

**Table VII-31**  
**Mattresses: Overall capacity and production on the same equipment as in-scope production by producers in Turkey, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	***	***	***
Production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	***	***	***
Share of production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

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.

## Exports

According to GTA, the leading export market for “articles of bedding” from Turkey is currently the United States (table VII-32). During 2017, Iraq and Italy were the largest export markets for bedding articles from Turkey, accounting for 16.9 percent and 12.5 percent of Turkey’s total exports, respectively. The United States accounted for only 1.3 percent of total exports of bedding articles from Turkey during 2017. However, by 2019, the United States grew to be Turkey’s largest export market, accounting for 26.3 percent of total exports, followed by the United Kingdom and Italy as the second and third largest export markets, accounting for 8.8 percent and 8.6 percent of the total.

**Table VII-32**  
**Articles of bedding: Turkey exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Value (1,000 dollars)</b>		
United States	1,122	3,461	46,299
United Kingdom	3,376	12,623	15,524
Italy	10,407	11,832	15,131
Germany	5,742	6,724	10,702
Iraq	14,111	8,841	9,948
Netherlands	5,049	7,558	9,631
Ireland	759	2,346	8,830
Greece	5,071	6,121	5,912
France	4,426	4,722	4,826
All other destination markets	33,493	40,034	49,477
Total exports	83,557	104,261	176,280
	<b>Share of value (percent)</b>		
United States	1.3	3.3	26.3
United Kingdom	4.0	12.1	8.8
Italy	12.5	11.3	8.6
Germany	6.9	6.4	6.1
Iraq	16.9	8.5	5.6
Netherlands	6.0	7.2	5.5
Ireland	0.9	2.3	5.0
Greece	6.1	5.9	3.4
France	5.3	4.5	2.7
All other destination markets	40.1	38.4	28.1
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Quantity data are not available.

Source: Official export statistics under HS subheadings 9404.21 and 9404.29 as reported by State Institute of Statistics in the Global Trade Atlas database, accessed April 23, 2020.

## The industry in Vietnam

The Commission issued foreign producers'/exporters' questionnaires to 13 firms for which valid contact information was obtained that were believed to produce and/or export mattresses from Vietnam.<sup>26</sup> Usable responses to the Commission's questionnaire were received from nine firms: Cong Ty Tnhh Nem Thien Kim dba Better Zs Co., Ltd. ("Better Zs"); Comfort Bedding Co., Ltd. ("Comfort"); Hava's Co., Ltd. ("Hava's"); Saigon - Kymdan Rubber Stock Co. ("Kymdan"); Millennium Furniture Co. Ltd. ("Millennium"); Sinomax Macao Commercial Offshore Ltd. ("Sinomax"); Super Foam Vietnam Ltd. ("Super Foam"); Tongli Vietnam Industrial Co., Ltd. ("Tongli"); Wanek Furniture LLC ("Wanek").<sup>27</sup> These firms' exports to the United States accounted for \*\*\* percent of U.S. imports of mattresses from Vietnam in 2019.<sup>28</sup>

Table VII-33 presents information on the mattress operations of the responding producers and exporters in Vietnam.

**Table VII-33**  
**Mattresses: Summary data on firms in Vietnam, 2019**

Firm	Production (units)	Share of reported production (percent)	Exports to the United States (units)	Share of reported exports to the United States (percent)	Total shipments (units)	Share of firm's total shipments exported to the United States (percent)
Better Zs	***	***	***	***	***	***
Comfort	***	***	***	***	***	***
Hava's	***	***	***	***	***	***
Kymdan	***	***	***	***	***	***
Millennium	***	***	***	***	***	***
Sinomax	***	***	***	***	***	***
Super Foam	***	***	***	***	***	***
Tongli	***	***	***	***	***	***
Wanek	***	***	***	***	***	***
Total	***	***	***	***	***	***

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.

<sup>26</sup> These firms were identified through a review of information submitted in the petition and contained in \*\*\* records.

<sup>27</sup> Additional Indonesian mattress producers/exporters identified by U.S. importers responding to the Commission's questionnaire include: \*\*\*.

<sup>28</sup> The coverage number presented was calculated using importer data submitted in response to Commission questionnaires.

## Changes in operations

As presented in table VII-34, all nine responding producers in Vietnam reported certain changes in operations since January 1, 2017, including plant openings, expansions, consolidations, closings, shutdowns, curtailments, new investments, and equity transfers.

**Table VII-34**

**Mattresses: Reported changes in operations by producers in Vietnam, since January 1, 2017**

Item / Firm	Reported changed in operations
<b>Plant openings:</b>	
***	***
***	***
***	***
<b>Plant closings:</b>	
***	***
<b>Relocations:</b>	
***	***
<b>Expansions:</b>	
***	***
***	***
<b>Consolidations:</b>	
***	***
<b>Prolonged shutdowns or curtailments:</b>	
***	***
***	***
***	***
<b>Other:</b>	
***	***
***	***
***	***

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

## Operations on mattresses

Table VII-35 presents information on the mattress operations of the responding producers and exporters in Vietnam. Responding producers' capacity in Vietnam increased by 672.9 percent during 2017-19, while production increased by 757.2 percent during the same period. The majority of the increase in capacity and production in Vietnam was reported from 2018 to 2019 and such increases were indicated by all nine firms as new plants opened and new investments in machinery and existing facilities were made.<sup>29</sup> By 2019, \*\*\* were the largest producers of mattresses in Vietnam, together accounting for \*\*\* percent of total reported production. Responding producers' capacity in Vietnam is projected to be 60.4 percent higher in 2021 than in 2019 and production is projected to be 52.1 percent higher. Capacity utilization fluctuated between 70.3 percent and 92.1 percent during 2017-19 and is projected to be 85.6 percent in 2020 and 87.3 percent in 2021.

The upward trend in the Vietnamese producers' total shipments mirrored that of reported production, increasing by 758.2 percent from 2017 to 2019, with the majority of the increase occurring from 2018 to 2019. Exports to the United States accounted for the largest and increasing share of total shipments by producers in Vietnam during 2017-19 (\*\*\* percent in 2017, \*\*\* percent in 2018, and \*\*\* percent in 2019), whereas home market shipments fell relative to total shipments during that time (\*\*\* percent in 2017, \*\*\* percent in 2018, and \*\*\* percent in 2019). Exports to the United States increased by \*\*\* percent from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase

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<sup>29</sup> Four of the responding producers in Vietnam (\*\*\* ) reported in their responses to the Commission's questionnaire that they are currently not related to any producers of mattresses in any other country; however, \*\*\*. In addition, Tongli appears to be related to certain production facilities in Taiwan (Tong Li Industrial Co., Ltd.) and China (Tong Li Guangzhou foam factory), although it is unclear whether these are mattress production facilities and whether Tongli's location in China remains operational. Tongli webpage, <http://tongli-foam-sewing-vietnam.com/en/about/history.html> and <http://tongli-foam-sewing-vietnam.com/en/contact.html>, retrieved May 5, 2020. The following five responding producers in Vietnam indicated that they are related to producers of mattresses in other countries: \*\*\*. Related U.S. producer Sinomax USA Ltd. reported \*\*\*.



further by \*\*\* percent to \*\*\* mattresses by 2021. Home market shipments also increased, although at a more modest rate, from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. Export shipments to other countries, which accounted for \*\*\* percent or less of total shipments during 2017-19, increased from \*\*\* mattresses in 2017 to \*\*\* mattresses in 2019 and are projected to increase to \*\*\* mattresses by 2021. These mattress exports to countries other than the United States, which were reported by seven of the nine reporting producers in 2019, were destined for \*\*\*.

End-of-period inventories, which increased in terms of quantity from 2017 to 2019, declined irregularly as a share of production and shipments from \*\*\* percent in 2017 to \*\*\* percent in 2019.

Table VII-35

Mattresses: Data on industry in Vietnam, 2017-19 and projected calendar years 2020 and 2021

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	309,000	511,323	2,388,264	2,948,570	3,830,047
Production	256,460	359,492	2,198,412	2,523,173	3,343,247
End-of-period inventories	***	***	***	***	***
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	254,170	349,975	2,181,239	2,521,001	3,350,314
	<b>Ratios and shares (percent)</b>				
Capacity utilization	83.0	70.3	92.1	85.6	87.3
Inventories/production	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market Shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	***	***	***	***	***

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

Data on overall plant capacity for the responding mattress producers in Vietnam are presented in table VII-36. Mattresses accounted for \*\*\* (\*\*\*) percent in 2017, \*\*\* percent in 2018, and \*\*\* percent in 2019) of the overall plant production using shared equipment in Vietnam. Two firms in Vietnam (\*\*\*) reported the production of other products in addition to mattresses on the same equipment and machinery used to produce mattresses. In addition to mattresses, other items produced by these two firms in Vietnam include \*\*\*. Eight of nine responding producers in Vietnam reported that they \*\*\*. \*\*\*, which accounted for \*\*\*, \*\*\*, and \*\*\* percent of the out-of-scope products reported in 2017, 2018, and 2019, respectively, indicated that \*\*\* and noted that “\*\*\*.”

**Table VII-36**

**Mattresses: Overall capacity and production on the same equipment as in-scope production by producers in Vietnam, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Overall capacity	***	***	***
Production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***
	<b>Ratios and shares (percent)</b>		
Overall capacity utilization	***	***	***
Share of production:			
Mattresses	***	***	***
Out-of-scope production	***	***	***
Total production on same machinery	***	***	***

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.

## Exports

According to GTA, the leading export market for “articles of bedding” from Vietnam is currently the United States (table VII-37). During 2017, Japan was the largest export market for bedding articles from Vietnam, accounting for 68.2 percent of Vietnam’s total exports. The United States accounted for 9.6 percent of total exports of bedding articles from Vietnam during 2017. However, by 2019, the United States became Vietnam’s largest export market, accounting for 68.7 percent of total exports, followed by Japan as the second largest export market, accounting for 24.0 percent of the total.

**Table VII-37**  
**Articles of bedding: Vietnam exports by destination market, 2017-19**

Destination market	Calendar year		
	2017	2018	2019
	<b>Value (1,000 dollars)</b>		
United States	7,349	12,839	247,724
Japan	52,367	68,126	86,658
China	3,633	4,979	9,371
Singapore	2,151	2,307	3,847
Canada	321	142	3,707
South Korea	2,983	2,860	2,313
Taiwan	1,314	1,489	1,642
Hong Kong	236	866	902
Malaysia	2,090	1,378	708
All other destination markets	4,361	5,130	3,666
Total exports	76,804	100,117	360,538
	<b>Share of value (percent)</b>		
United States	9.6	12.8	68.7
Japan	68.2	68.0	24.0
China	4.7	5.0	2.6
Singapore	2.8	2.3	1.1
Canada	0.4	0.1	1.0
South Korea	3.9	2.9	0.6
Taiwan	1.7	1.5	0.5
Hong Kong	0.3	0.9	0.3
Malaysia	2.7	1.4	0.2
All other destination markets	5.7	5.1	1.0
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Quantity is not available.

Source: Official imports statistics of imports from Vietnam (constructed export statistics for Vietnam) under HS subheadings 9404.21 and 9404.29 as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed April 23, 2020.

## Subject countries combined

Table VII-38 presents summary data on mattress operations of the reporting subject producers in the eight subject countries combined. Of the total reported mattress production by responding foreign producers in 2019, Indonesia accounted for the largest share (\*\*\*) percent), followed by Vietnam (\*\*\*) percent), China (\*\*\*) percent), Malaysia (\*\*\*) percent), Serbia (\*\*\*) percent), Thailand (\*\*\*) percent), Turkey (\*\*\*) percent), and Cambodia (\*\*\*) percent).

Aggregate subject producers' capacity increased overall by 104.2 percent from 5.1 million mattresses in 2017 to 10.4 million mattresses in 2019, with projections for 2021 indicating a 21.2 percent increase in capacity over 2019 levels. Likewise, production increased overall by 79.9 percent from 4.5 million mattresses in 2017 to 8.1 million mattresses in 2019, with projections for 2021 indicating a 23.4 percent increase over 2019 levels. Capacity utilization declined from 87.7 percent in 2017 to 77.3 percent in 2019, but a slight increase in capacity utilization is forecasted for 2021.

Exports to the United States by the eight subject countries combined accounted for a larger share of their total shipments in 2019 (\*\*\*) percent) than in 2017 (\*\*\*) percent). Exports to the United States are projected to decline to \*\*\*) percent and \*\*\*) percent of subject producers' total shipments in 2020 and 2021, respectively.

Table VII-38

**Mattresses: Data on industry in the subject countries, 2017-19 and projected calendar years 2020 and 2021**

Item	Actual experience			Projections	
	Calendar year			Calendar year	
	2017	2018	2019	2020	2021
	<b>Quantity (units)</b>				
Capacity	5,115,713	6,001,825	10,443,784	11,462,089	12,656,641
Production	4,488,354	4,929,732	8,074,397	8,643,999	9,962,844
End-of-period inventories	114,264	190,987	227,782	269,825	283,127
Shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	4,492,705	4,855,299	8,039,326	8,593,002	9,951,542
	<b>Ratios and shares (percent)</b>				
Capacity utilization	87.7	82.1	77.3	75.4	78.7
Inventories/production	2.5	3.9	2.8	3.1	2.8
Inventories/total shipments	2.5	3.9	2.8	3.1	2.8
Share of shipments:					
Home market shipments:					
Internal consumption/ transfers	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***
Total home market shipments	***	***	***	***	***
Export shipments to:					
United States	***	***	***	***	***
All other markets	***	***	***	***	***
Total exports	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0

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

## U.S. inventories of imported merchandise

Table VII-39 presents data on U.S. importers' reported inventories of mattresses. U.S. importers' end-of-period inventories of imports from the eight subject countries combined increased by 26.9 percent from 1.2 million mattresses in 2017 to 1.5 million mattresses in 2018, but declined by 35.7 percent to 967,522 mattresses in 2019, ending 18.4 percent lower in 2019 than in 2017. This aggregate trend largely tracked the inventories held by imports from China alone, while the end-of-period inventories of imports from each of the other seven subject countries showed consistent increases from 2017 to 2019. U.S. importers' end-of-period inventories of imports from the seven subject countries combined (excluding China) increased by \*\*\* percent from \*\*\* mattresses at yearend 2017 to \*\*\* mattresses at yearend 2019. Forty-one importers of mattresses from subject countries held end-of-period inventories of subject merchandise during at least one point from 2017 to 2019, with \*\*\* holding the largest quantities of inventories of subject imports at yearend 2019. Subject sources accounted for \*\*\* percent of total import inventories at yearend 2019, while nonsubject sources accounted for \*\*\* percent.

The ratio of inventories to U.S. imports during 2019 was \*\*\* percent for imports from China, Indonesia, Serbia, and Vietnam and \*\*\* percent for imports from Cambodia, Malaysia, Thailand, and Turkey. The petitioners argue that in order to timely fulfill their customers' orders, U.S. importers require significantly larger levels of inventory than U.S. producers.<sup>30</sup> Joint respondents argue that MiBs are more often shipped from a central location than FPMs and require higher inventories to facilitate quick shipping and on-time delivery.<sup>31</sup>

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<sup>30</sup> Petitioners' postconference brief, response to staff questions, p. 11.

<sup>31</sup> Joint respondents postconference brief, response to staff questions, p. 13.

Table VII-39

## Mattresses: U.S. importers' end-of-period inventories of imports by source, 2017-19

Item	Calendar year		
	2017	2018	2019
	Inventories (units); Ratios (percent)		
Imports from Cambodia: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from China: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Indonesia: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Malaysia: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Serbia: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Thailand: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***

Table continued on next page.



**Table VII-39—Continued**

**Mattresses: U.S. importers' end-of-period inventories of imports by source, 2017-19**

Item	Calendar year		
	2017	2018	2019
	<b>Inventories (units); Ratios (percent)</b>		
Imports from Turkey: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from Vietnam: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from subject sources: Inventories	1,186,279	1,505,843	967,522
Ratio to U.S. imports	19.0	18.4	9.5
Ratio to U.S. shipments of imports	20.3	19.3	9.1
Ratio to total shipments of imports	***	***	***
Imports from nonsubject sources: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***
Imports from all import sources: Inventories	***	***	***
Ratio to U.S. imports	***	***	***
Ratio to U.S. shipments of imports	***	***	***
Ratio to total shipments of imports	***	***	***

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 after December 31, 2019. Forty-four responding importers reported outstanding orders of mattresses from subject sources during 2020, with ten firms (\*\*\*) collectively accounting for the vast majority of such arranged imports. Table VII-40 presents data for quantities of mattresses arranged for U.S. importation after December 31, 2019.

**Table VII-40**  
**Mattresses: Arranged imports, January 2020 through December 2020**

Item	Period				Total
	Jan-Mar 2020	Apr-Jun 2020	Jul-Sept 2020	Oct-Dec 2020	
	Quantity (units)				
Arranged U.S. imports from.--					
Cambodia	***	***	***	***	***
China	***	***	***	***	***
Indonesia	***	***	***	***	***
Malaysia	***	***	***	***	***
Serbia	***	***	***	***	***
Thailand	***	***	***	***	***
Turkey	***	***	***	***	***
Vietnam	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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 any of the eight subject countries in third-country markets.

## Information on nonsubject countries

Table VII-41 reports data on global exports of bedding products. China accounted for the largest share of global exports of bedding products, 19.7 percent, in 2019. Poland was the second largest exporter of bedding products, accounting for 14.5 percent, in 2019.<sup>32</sup> Vietnam accounted for the third largest share of exports of bedding products, 6.6 percent, in 2019.

**Table VII-41**  
**Articles of bedding: Global exports by exporter, 2017-19**

Exporter	Calendar year		
	2017	2018	2019
	<b>Value (1,000 dollars)</b>		
United States	175,705	199,526	178,440
Cambodia	2,391	3,137	45,248
China	1,227,511	1,391,727	1,079,473
Indonesia	17,742	22,608	206,614
Malaysia	68,767	71,870	185,307
Serbia	8,943	24,129	55,609
Thailand	47,762	59,130	124,554
Turkey	83,557	104,261	176,280
Vietnam	76,804	100,117	360,538
Poland	744,874	821,280	791,545
Belgium	205,225	223,001	221,750
Germany	156,897	202,314	219,136
All other exporters	1,821,903	1,989,156	1,823,290
Total	4,638,081	5,212,258	5,467,783
	<b>Share of value (percent)</b>		
United States	3.8	3.8	3.3
Cambodia	0.1	0.1	0.8
China	26.5	26.7	19.7
Indonesia	0.4	0.4	3.8
Malaysia	1.5	1.4	3.4
Serbia	0.2	0.5	1.0
Thailand	1.0	1.1	2.3
Turkey	1.8	2.0	3.2
Vietnam	1.7	1.9	6.6
Poland	16.1	15.8	14.5
Belgium	4.4	4.3	4.1
Germany	3.4	3.9	4.0
All other exporters	39.3	38.2	33.3
Total	100.0	100.0	100.0

Note: Exports for Cambodia, Serbia, and Vietnam were constructed using trading partner imports data (mirror stats). Quantity data are not available.

Source: Official import and export statistics under HS subheadings 9404.21 and 9404.29 reported by various national statistical authorities in the Global Trade Atlas database, accessed April 23, 2020.

<sup>32</sup> According to official import statistics for the six primary statistical reporting numbers for mattresses, U.S. imports from Poland were \$18,000 in 2017, \$14,000 in 2018, and \$1,000 in 2019. Therefore, global exports from Poland appear to be primarily bedding articles other than mattresses.



**APPENDIX A**

***FEDERAL REGISTER* NOTICES**



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

Citation	Title	Link
85 FR 19503, April 7, 2020	<i>Mattresses From Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations Title</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2020-04-07/pdf/2020-07207.pdf">https://www.govinfo.gov/content/pkg/FR-2020-04-07/pdf/2020-07207.pdf</a>
85 FR 22998, April 24, 2020	<i>Mattresses From the People's Republic of China: Initiation of Countervailing Duty Investigation</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2020-04-24/pdf/2020-08844.pdf">https://www.govinfo.gov/content/pkg/FR-2020-04-24/pdf/2020-08844.pdf</a>
85 FR 23002, April 24, 2020	<i>Mattresses From Cambodia, Indonesia, Malaysia, Serbia, Thailand, the Republic of Turkey, and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2020-04-24/pdf/2020-08758.pdf">https://www.govinfo.gov/content/pkg/FR-2020-04-24/pdf/2020-08758.pdf</a>





**APPENDIX B**

**LIST OF STAFF CONFERENCE WITNESSES**



## CALENDAR OF PRELIMINARY CONFERENCE

Those listed below participated in the United States International Trade Commission's preliminary conference. The Commission conducted its preliminary conference through submissions of written testimony and postconference briefs:

**Subject:** Mattresses from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam

**Inv. Nos.:** 701-TA-645 and 731-TA-1495-1501 (Preliminary)

**Date:** April 17, 2020 (written testimony)  
April 21, 2020 (staff questions)

### **EMBASSY APPEARANCE:**

**Embassy of Indonesia**  
**Washington, DC**

**Pradnyawati, Director of Trade Defense**  
**Wijayanto, Commercial Attaché**

### **OPENING REMARKS:**

In Support of Imposition (**Yohai Baisburd**, Cassidy Levy Kent (USA) LLP)  
In Opposition to Imposition (**Eric C. Emerson**, Steptoe & Johnson LLP)

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

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

Brooklyn Bedding; Corsicana Mattress Company;  
Elite Comfort Solutions; FXI, Inc.; Innocor, Inc.;  
Kolcraft Enterprises, Inc.; Leggett & Platt, Incorporated;  
The International Brotherhood of Teamsters, and  
United Steel, Paper and Forestry, Rubber, Manufacturing, Energy,  
Allied Industrial and Service Workers International Union, AFL-CIO ("USW")

**Eric Rhea**, President of Bedding Group and Vice President,  
Leggett & Platt, Incorporated

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

**John Merwin**, Chief Executive Officer, Brooklyn Bedding

**Stuart Fallen**, Vice President, Corsicana Bedding LLC

**Pete Wallace**, Chief Commercial Officer, Elite Comfort Solutions

**Harold Earley**, President and Chief Executive Officer, FXI, Inc.

**Roy Houseman**, Legislative Director, United Steel, Paper and Forestry,  
Rubber, Manufacturing, Energy, Allied Industrial and  
Service Workers International Union, AFL-CIO

**Michael F. Dolan**, Trade Policy Specialist,  
the International Brotherhood of Teamsters

**Thomas Koltun**, President, Kolcraft Enterprises, Inc.

**Schuyler Northstrom**, President and Chief Executive Officer,  
Uinta Mattress

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

Step toe & Johnson LLP  
Washington, DC  
on behalf of

Classic Brands, LLC  
CVB, Inc.  
Sinomax USA, Inc.  
Healthcare Europe DOO Duma  
Saffron Living, Ltd.  
Diglant Malaysia Sdn Bhd

**Scott Burger**, Chief Executive Officer, Classic Brands, LLC

**Jeffrey D. Steed**, Chief Legal Officer, Malouf

**James Dogan**, Vice President, Economic Consulting Services, LLC

**Eric C. Emerson** )  
**Thomas J. Trendl** )  
 ) – OF COUNSEL  
**Hui Cao** )  
**Zachary Simmons** )

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

Doyle, Barlow & Mazard PLLC  
Washington, DC  
on behalf of

H Mattress Inc.  
Super Foam Vietnam Ltd  
Tongli Vietnam Industrial Co., Ltd  
Storkcraft Manufacturing (USA) Inc.

**Jeremy Haaga**, Owner, H Mattress

**Adam Segal**, Chief Executive Officer, Stork Craft

**Jack Cheong**, Chief Executive Officer, Super Foam

**Peter Pan**, General Manager, Tongli Vietnam

**Camelia C. Mazard** )  
**André P. Barlow** )  
 ) – OF COUNSEL  
**Keith Lively** )  
**Farhad Mirzadeh** )

Mowry & Grimson, PLLC  
Washington, DC  
on behalf of

Ashley Furniture Industries, Inc. (“Ashley”)

**Brian Adams**, Vice President of Procurement, International Sourcing  
Operations, Quality and Regulatory Affairs, Ashley

**Kristin H. Mowry** )  
**Jeffrey S. Grimson** )  
 ) – OF COUNSEL  
**Jill A. Cramer** )  
**James C. Beaty** )

**-END-**

**APPENDIX C**  
**SUMMARY DATA**

Table C-1: Mattresses: Summary data concerning the U.S. market, 2017-19 .....C-3

Table C-2: Mattresses: Summary data concerning the U.S. market excluding three U.S. producers (\*\*), 2017-19.....C-6



**All producers**

**Table C-1**

**Mattresses: Summary data concerning the U.S. market, 2017-19**

(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		
	2017	2018	2019	2017-19	2017-18	2018-19
<b>U.S. consumption quantity:</b>						
Amount.....	***	***	***	▲***	▲***	▲***
Producers' share (fn1).....	***	***	***	▼***	▼***	▼***
<b>Importers' share (fn1):</b>						
Cambodia.....	***	***	***	▲***	▲***	▲***
China.....	***	***	***	▼***	▲***	▼***
Indonesia.....	***	***	***	▲***	▲***	▲***
Malaysia.....	***	***	***	▲***	***	▲***
Serbia.....	***	***	***	▲***	***	▲***
Thailand.....	***	***	***	▲***	▲***	▲***
Turkey.....	***	***	***	▲***	***	▲***
Vietnam.....	***	***	***	▲***	▲***	▲***
Subject sources.....	***	***	***	▲***	▲***	▲***
Of which previously investigated....	***	***	***	▼***	▲***	▼***
Of which newly investigated.....	***	***	***	▲***	▲***	▲***
Nonsubject sources.....	***	***	***	▼***	▼***	▼***
All import sources.....	***	***	***	▲***	▲***	▲***
<b>U.S. consumption value:</b>						
Amount.....	***	***	***	▲***	▲***	▲***
Producers' share (fn1).....	***	***	***	▼***	▼***	▼***
<b>Importers' share (fn1):</b>						
Cambodia.....	***	***	***	▲***	▲***	▲***
China.....	***	***	***	▼***	▲***	▼***
Indonesia.....	***	***	***	▲***	▲***	▲***
Malaysia.....	***	***	***	▲***	***	▲***
Serbia.....	***	***	***	▲***	***	▲***
Thailand.....	***	***	***	▲***	▲***	▲***
Turkey.....	***	***	***	▲***	***	▲***
Vietnam.....	***	***	***	▲***	▲***	▲***
Subject sources.....	***	***	***	▲***	▲***	▲***
Of which previously investigated....	***	***	***	▼***	▲***	▼***
Of which newly investigated.....	***	***	***	▲***	▲***	▲***
Nonsubject sources.....	***	***	***	▼***	▼***	▼***
All import sources.....	***	***	***	▲***	▲***	▲***
<b>U.S. importers' U.S. shipments of imports from:</b>						
<b>Cambodia:</b>						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
<b>China:</b>						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▼***	▲***	▼***
<b>Indonesia:</b>						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
<b>Malaysia:</b>						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***

**Table C-1--Continued**

**Mattresses: Summary data concerning the U.S. market, 2017-19**

(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		
	2017	2018	2019	2017-19	2017-18	2018-19
U.S. importers' U.S. shipments of imports from:						
Serbia:						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Thailand						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Turkey:						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	***	▲***
Vietnam						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▼***	▼***	▼***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Subject sources:						
Quantity.....	5,836,012	7,813,994	10,642,222	▲82.4	▲33.9	▲36.2
Value.....	799,944	1,123,853	1,467,059	▲83.4	▲40.5	▲30.5
Unit value.....	\$137	\$144	\$138	▲0.6	▲4.9	▼(4.2)
Ending inventory quantity.....	1,186,279	1,505,843	967,522	▼(18.4)	▲26.9	▼(35.7)
Subject sources previously investigated:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▼***
Subject sources newly investigated:						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▼***	▼***	▼***
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.....	23,721,161	23,144,077	23,204,336	▼(2.2)	▼(2.4)	▲0.3
Production quantity.....	17,832,157	16,949,276	17,200,594	▼(3.5)	▼(5.0)	▲1.5
Capacity utilization (fn1).....	75.2	73.2	74.1	▼(1.0)	▼(1.9)	▲0.9
U.S. shipments:						
Quantity.....	17,806,018	16,749,048	17,071,538	▼(4.1)	▼(5.9)	▲1.9
Value.....	4,727,245	4,575,333	4,759,338	▲0.7	▼(3.2)	▲4.0
Unit value.....	\$265	\$273	\$279	▲5.0	▲2.9	▲2.1
Export shipments:						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	341,429	459,172	501,852	▲47.0	▲34.5	▲9.3
Inventories/total shipments (fn1).....	***	***	***	▲***	▲***	▲***

**Table C-1--Continued**

**Mattresses: Summary data concerning the U.S. market, 2017-19**

(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			Calendar year		
	2017	2018	2019	2017-19	2017-18	2018-19
U.S. producers <sup>1</sup> :						
Production workers.....	11,803	11,271	11,256	▼(4.6)	▼(4.5)	▼(0.1)
Hours worked (1,000s).....	23,080	21,655	23,861	▲3.4	▼(6.2)	▲10.2
Wages paid (\$1,000).....	466,315	446,815	476,102	▲2.1	▼(4.2)	▲6.6
Hourly wages (dollars per hour).....	\$20.20	\$20.63	\$19.95	▼(1.2)	▲2.1	▼(3.3)
Productivity (units per 1,000 hours).....	772.6	782.7	720.9	▼(6.7)	▲1.3	▼(7.9)
Unit labor costs.....	\$26.15	\$26.36	\$27.68	▲5.8	▲0.8	▲5.0
Net sales:						
Quantity.....	17,327,611	16,188,557	16,448,606	▼(5.1)	▼(6.6)	▲1.6
Value.....	4,679,415	4,528,615	4,699,895	▲0.4	▼(3.2)	▲3.8
Unit value.....	\$270	\$280	\$286	▲5.8	▲3.6	▲2.1
Cost of goods sold (COGS).....	2,693,773	2,699,972	2,801,099	▲4.0	▲0.2	▲3.7
Gross profit or (loss) (fn2).....	1,985,642	1,828,643	1,898,796	▼(4.4)	▼(7.9)	▲3.8
SG&A expenses.....	1,274,509	1,194,760	1,248,196	▼(2.1)	▼(6.3)	▲4.5
Operating income or (loss) (fn2).....	711,133	633,883	650,600	▼(8.5)	▼(10.9)	▲2.6
Net income or (loss) (fn2).....	423,170	300,413	159,868	▼(62.2)	▼(29.0)	▼(46.8)
Capital expenditures.....	95,416	79,547	98,780	▲3.5	▼(16.6)	▲24.2
R&D expenses.....	32,285	34,101	29,293	▼(9.3)	▲5.6	▼(14.1)
Net assets.....	***	***	***	▼***	▼***	▼***
Unit COGS.....	\$155	\$167	\$170	▲9.5	▲7.3	▲2.1
Unit SG&A expenses.....	\$74	\$74	\$76	▲3.2	▲0.3	▲2.8
Unit operating income or (loss) (fn2).....	\$41	\$39	\$40	▼(3.6)	▼(4.6)	▲1.0
Unit net income or (loss) (fn2).....	\$24	\$19	\$10	▼(60.2)	▼(24.0)	▼(47.6)
COGS/sales (fn1).....	57.6	59.6	59.6	▲2.0	▲2.1	▼(0.0)
Operating income or (loss)/sales (fn1)....	15.2	14.0	13.8	▼(1.4)	▼(1.2)	▼(0.2)
Net income or (loss)/sales (fn1).....	9.0	6.6	3.4	▼(5.6)	▼(2.4)	▼(3.2)

**Notes:**

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "----". Period changes preceded by a ▲" represent an increase, while period changes preceded by a ▼" represent a decrease.

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

fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

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

**Related party exclusion**

**Table C-2**

**Mattresses: Summary data concerning the U.S. market excluding three U.S. producers \*\*\*, 2017-19**

(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		
	2017	2018	2019	2017-19	2017-18	2018-19
<b>U.S. consumption quantity:</b>						
Amount.....	***	***	***	▲***	▲***	▲***
<b>Producers' share (fn1):</b>						
Included producers.....	***	***	***	▼***	▼***	▼***
Excluded producers.....	***	***	***	▲***	▲***	▲***
All producers.....	***	***	***	▼***	▼***	▼***
<b>Importers' share (fn1):</b>						
Cambodia.....	***	***	***	▲***	▲***	▲***
China.....	***	***	***	▼***	▲***	▼***
Indonesia.....	***	***	***	▲***	▲***	▲***
Malaysia.....	***	***	***	▲***	***	▲***
Serbia.....	***	***	***	▲***	***	▲***
Thailand.....	***	***	***	▲***	▲***	▲***
Turkey.....	***	***	***	▲***	***	▲***
Vietnam.....	***	***	***	▲***	▲***	▲***
<b>Subject sources.....</b>						
Of which previously investigated....	***	***	***	▼***	▲***	▼***
Of which newly investigated.....	***	***	***	▲***	▲***	▲***
<b>Nonsubject sources.....</b>						
All import sources.....	***	***	***	▲***	▲***	▲***
<b>U.S. consumption value:</b>						
Amount.....	***	***	***	▲***	▲***	▲***
<b>Producers' share (fn1):</b>						
Included producers.....	***	***	***	▼***	▼***	▼***
Excluded producers.....	***	***	***	▲***	▲***	▼***
All producers.....	***	***	***	▼***	▼***	▼***
<b>Importers' share (fn1):</b>						
Cambodia.....	***	***	***	▲***	▲***	▲***
China.....	***	***	***	▼***	▲***	▼***
Indonesia.....	***	***	***	▲***	▲***	▲***
Malaysia.....	***	***	***	▲***	***	▲***
Serbia.....	***	***	***	▲***	***	▲***
Thailand.....	***	***	***	▲***	▲***	▲***
Turkey.....	***	***	***	▲***	***	▲***
Vietnam.....	***	***	***	▲***	▲***	▲***
<b>Subject sources.....</b>						
Of which previously investigated....	***	***	***	▼***	▲***	▼***
Of which newly investigated.....	***	***	***	▲***	▲***	▲***
<b>Nonsubject sources.....</b>						
All import sources.....	***	***	***	▲***	▲***	▲***
<b>U.S. importers' U.S. shipments of imports from:</b>						
<b>Cambodia:</b>						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
<b>China:</b>						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▼***	▲***	▼***
<b>Indonesia:</b>						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***

Table C-2--Continued

**Mattresses: Summary data concerning the U.S. market excluding three U.S. producers \*\*\*, 2017-19**

(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		
	2017	2018	2019	2017-19	2017-18	2018-19
U.S. importers' U.S. shipments of imports from:						
Malaysia						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Serbia:						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Thailand						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Turkey:						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	▲***	***	▲***
Vietnam						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▼***	▼***	▼***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Subject sources:						
Quantity.....	5,836,012	7,813,994	10,642,222	▲82.4	▲33.9	▲36.2
Value.....	799,944	1,123,853	1,467,059	▲83.4	▲40.5	▲30.5
Unit value.....	\$137	\$144	\$138	▲0.6	▲4.9	▼(4.2)
Ending inventory quantity.....	1,186,279	1,505,843	967,522	▼(18.4)	▲26.9	▼(35.7)
Subject sources previously investigated:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▼***
Subject sources newly investigated:						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▼***	▼***	▼***
Nonsubject sources:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▲***	▼***	▲***
Unit value.....	***	***	***	▲***	▼***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
All import sources:						
Quantity.....	***	***	***	▲***	▲***	▲***
Value.....	***	***	***	▲***	▲***	▲***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▲***	▲***	▼***
Included U.S. producers':						
Average capacity quantity.....	***	***	***	▼***	▼***	▼***
Production quantity.....	***	***	***	▼***	▼***	▲***
Capacity utilization (fn1).....	***	***	***	▼***	▼***	▲***
U.S. shipments:						
Quantity.....	***	***	***	▼***	▼***	▲***
Value.....	***	***	***	▲***	▼***	▲***
Unit value.....	***	***	***	▲***	▲***	▲***

**Table C-2--Continued**

**Mattresses: Summary data concerning the U.S. market excluding three U.S. producers \*\*\*, 2017-19**

(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		
	2017	2018	2019	2017-19	2017-18	2018-19
Included U.S. producers':						
Export shipments:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▲***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▲***
Inventories/total shipments (fn1).....	***	***	***	▲***	▲***	▲***
Production workers.....	***	***	***	▼***	▼***	▼***
Hours worked (1,000s).....	***	***	***	▲***	▼***	▲***
Wages paid (\$1,000).....	***	***	***	▲***	▼***	▲***
Hourly wages (dollars per hour).....	***	***	***	▼***	▲***	▼***
Productivity (units per 1,000 hours).....	***	***	***	▼***	▲***	▼***
Unit labor costs.....	***	***	***	▲***	▲***	▲***
Net sales:						
Quantity.....	***	***	***	▼***	▼***	▲***
Value.....	***	***	***	▼***	▼***	▲***
Unit value.....	***	***	***	▲***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	▲***	▼***	▲***
Gross profit or (loss) (fn2).....	***	***	***	▼***	▼***	▲***
SG&A expenses.....	***	***	***	▼***	▼***	▲***
Operating income or (loss) (fn2).....	***	***	***	▼***	▼***	▲***
Net income or (loss) (fn2).....	***	***	***	▼***	▼***	▼***
Capital expenditures.....	***	***	***	▲***	▼***	▲***
R&D expenses.....	***	***	***	▼***	▲***	▼***
Net assets.....	***	***	***	▼***	▼***	▼***
Unit COGS.....	***	***	***	▲***	▲***	▲***
Unit SG&A expenses.....	***	***	***	▲***	▲***	▲***
Unit operating income or (loss) (fn2).....	***	***	***	▼***	▼***	▲***
Unit net income or (loss) (fn2).....	***	***	***	▼***	▼***	▼***
COGS/sales (fn1).....	***	***	***	▲***	▲***	▼***
Operating income or (loss)/sales (fn1)....	***	***	***	▼***	▼***	▲***
Net income or (loss)/sales (fn1).....	***	***	***	▼***	▼***	▼***

Notes:

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

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

fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

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

**APPENDIX D**

**PRICE DATA EXCLUDING THREE U.S. PRODUCERS  
(\*\*\*)**





This appendix provides data corresponding to the data in tables V-3 to V-12, and figures V-3 to V-11, with data from U.S. producers \*\*\* excluded from the U.S. price data. The price and cost data provided by importers do not change, although the margins of underselling/(overselling) may change.

Excluding price data provided by U.S. producers \*\*\*, 22 U.S. producers and 29 importers provided usable pricing data. Price data for products 1-3 are presented in tables D-1 to D-3 and figures D-1 to D-3, which correspond to tables V-3 to V-5 and figures V-3 to V-5, respectively.

Table D-1

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19

Period	United States		Cambodia - price			China-price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Indonesia - price			Malaysia - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

Table continued on next page.

Table D-1--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19

Period	United States		Serbia - price			Thailand - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Turkey - price			Vietnam - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

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**Table D-1--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19**

Period	United States		All subject countries - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>					
Jan.-Mar.	***	***	158	39,165	***
Apr.-June	***	***	157	58,082	***
July-Sept.	***	***	156	49,543	***
Oct.-Dec.	***	***	149	43,838	***
<b>2018:</b>					
Jan.-Mar.	***	***	157	39,354	***
Apr.-June	***	***	157	52,893	***
July-Sept.	***	***	165	59,485	***
Oct.-Dec.	***	***	167	48,558	***
<b>2019:</b>					
Jan.-Mar.	***	***	149	124,533	***
Apr.-June	***	***	164	93,626	***
July-Sept.	***	***	160	114,223	***
Oct.-Dec.	***	***	144	128,490	***

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

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

Table D-2

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19**

Period	United States		Cambodia - price			China-price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Indonesia - price			Malaysia - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

Table continued on next page.

Table D-2--Continued

M Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19

Period	United States		Serbia - price			Thailand – price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Turkey - price			Vietnam – price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

Table continued on next page.

**Table D-2--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19**

Period	United States		All subject countries - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>					
Jan.-Mar.	***	***	207	62,483	***
Apr.-June	***	***	201	96,862	***
July-Sept.	***	***	206	66,833	***
Oct.-Dec.	***	***	196	84,672	***
<b>2018:</b>					
Jan.-Mar.	***	***	171	164,435	***
Apr.-June	***	***	194	182,717	***
July-Sept.	***	***	177	213,121	***
Oct.-Dec.	***	***	180	182,627	***
<b>2019:</b>					
Jan.-Mar.	***	***	182	186,753	***
Apr.-June	***	***	195	146,406	***
July-Sept.	***	***	204	169,584	***
Oct.-Dec.	***	***	186	281,636	***

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

Table D-3

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19

Period	United States		Cambodia - price			China - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Indonesia - price			Malaysia - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: 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.

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Table D-3--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19

Period	United States		Serbia - price			Thailand - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Turkey - price			Vietnam - price				
	Price (per mattress)	Quantity (mattresses)	Margin (percent)	Price (per mattress)	Quantity (mattresses)	Margin (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: 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.

Table continued on next page.

**Table D-3--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 excluding three U.S. producers (\*\*\*) and margins of underselling/ (overselling), by quarter, 2017-19**

Period	United States		All subject countries - price		
	Price (per mattress)	Quantity (mattresses)	Price (per mattress)	Quantity (mattresses)	Margin (percent)
<b>2017:</b>					
Jan.-Mar.	***	***	145	44,500	***
Apr.-June	***	***	150	48,867	***
July-Sept.	***	***	158	58,596	***
Oct.-Dec.	***	***	152	64,524	***
<b>2018:</b>					
Jan.-Mar.	***	***	171	79,106	***
Apr.-June	***	***	179	94,699	***
July-Sept.	***	***	173	126,956	***
Oct.-Dec.	***	***	173	102,826	***
<b>2019:</b>					
Jan.-Mar.	***	***	170	94,360	***
Apr.-June	***	***	167	138,351	***
July-Sept.	***	***	148	191,582	***
Oct.-Dec.	***	***	168	225,499	***

Note: 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.

**Figure D-1**  
**Mattresses: Weighted-average prices and quantities of domestic and imported product 1**  
**excluding three U.S. producers (\*\*\*), by quarter, 2017-19**

\* \* \* \* \*

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

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

**Figure D-2**

**Mattresses: Weighted-average prices and quantities of domestic and imported product 2 excluding three U.S. producers (\*\*\*), by quarter, 2017-19**

\* \* \* \* \*

Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

**Figure D-3**  
**Mattresses: Weighted-average prices and quantities of domestic and imported product 3**  
**excluding three U.S. producers (\*\*\*), by quarter, 2017-19**

\* \* \* \* \*

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.

## **Import purchase cost data**

Tables D-4 to D-6 and figures D-4 to D-6 present import cost data along with U.S. price data, with \*\*\* excluded from the U.S. price data. Figures D-7 to D-9 present import cost data for all subject imports combined along with prices for all subject imports combined, compared to U.S. price data, with \*\*\* excluded from the U.S. price data. Tables D-4 to D-6 and figures D-4 to D-6 correspond to tables V-6 to V-8 and figures V-6 to V-8, respectively. Figures D-7 to D-9 correspond to figures V-9 to V-11.

Table D-4

Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 1, landed duty-paid costs and quantities of imported product 1 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19

Period	United States		Cambodia - cost			China - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Indonesia - cost			Malaysia - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

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Table D-4--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 1, landed duty-paid costs and quantities of imported product 1 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19

Period	United States		Serbia - cost			Thailand - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Turkey - cost			Vietnam - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

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

Table continued on next page.



**Table D-4--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 1, landed duty-paid costs and quantities of imported product 1 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19**

Period	United States		All subject countries - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>					
Jan.-Mar.	***	***	100	37,855	***
Apr.-June	***	***	118	81,393	***
July-Sept.	***	***	110	72,051	***
Oct.-Dec.	***	***	113	95,418	***
<b>2018:</b>					
Jan.-Mar.	***	***	118	98,244	***
Apr.-June	***	***	117	64,513	***
July-Sept.	***	***	123	106,678	***
Oct.-Dec.	***	***	130	110,270	***
<b>2019:</b>					
Jan.-Mar.	***	***	132	172,107	***
Apr.-June	***	***	144	110,263	***
July-Sept.	***	***	131	124,940	***
Oct.-Dec.	***	***	119	114,200	***

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

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

Table D-5

Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 2, landed duty-paid costs and quantities of imported product 2 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19

Period	United States		Cambodia - cost			China - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Indonesia - cost			Malaysia - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

Table continued on next page.

Table D-5--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 2, landed duty-paid costs and quantities of imported product 2 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19

Period	United States		Serbia - cost			Thailand - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Turkey - cost			Vietnam - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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**Table D-5--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 2, landed duty-paid costs and quantities of imported product 2 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19**

Period	United States		All subject countries - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>					
Jan.-Mar.	***	***	177	33,277	***
Apr.-June	***	***	201	42,618	***
July-Sept.	***	***	184	72,198	***
Oct.-Dec.	***	***	186	53,778	***
<b>2018:</b>					
Jan.-Mar.	***	***	197	57,423	***
Apr.-June	***	***	183	54,218	***
July-Sept.	***	***	230	73,620	***
Oct.-Dec.	***	***	214	100,110	***
<b>2019:</b>					
Jan.-Mar.	***	***	221	139,176	***
Apr.-June	***	***	179	65,912	***
July-Sept.	***	***	150	72,061	***
Oct.-Dec.	***	***	156	219,142	***

Note: Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

Table D-6

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 3, landed duty-paid costs and quantities of imported product 3 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19**

Period	United States		Cambodia - cost			China - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Indonesia - cost			Malaysia - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***		
Apr.-June	***	***	***	***	***	***		
July-Sept.	***	***	***	***	***	***		
Oct.-Dec.	***	***	***	***	***	***		

Note: 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.

Table continued on next page.

Table D-6--Continued

Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 3, landed duty-paid costs and quantities of imported product 3 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19

Period	United States		Serbia - cost			Thailand - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
Period	Turkey - cost			Vietnam - cost				
	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)		
<b>2017:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2018:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
<b>2019:</b>								
Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***

Note: 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.

Table continued on next page.

**Table D-6--Continued**

**Mattresses: Weighted-average f.o.b. prices and quantities of domestic product 3, landed duty-paid costs and quantities of imported product 3 excluding three U.S. producers (\*\*\*), and price-cost differentials, by quarter, 2017-19**

Period	United States		All subject countries - cost		
	Price (per mattress)	Quantity (mattresses)	LDP cost (per mattress)	Quantity (mattresses)	Price-cost differential (percent)
<b>2017:</b>					
Jan.-Mar.	***	***	164	14,751	***
Apr.-June	***	***	135	15,472	***
July-Sept.	***	***	142	19,372	***
Oct.-Dec.	***	***	143	16,796	***
<b>2018:</b>					
Jan.-Mar.	***	***	146	27,064	***
Apr.-June	***	***	149	22,357	***
July-Sept.	***	***	146	37,764	***
Oct.-Dec.	***	***	137	45,214	***
<b>2019:</b>					
Jan.-Mar.	***	***	143	36,182	***
Apr.-June	***	***	153	48,084	***
July-Sept.	***	***	141	38,953	***
Oct.-Dec.	***	***	128	41,867	***

Note: 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.

**Figure D-4**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 1 excluding three U.S. producers (\*\*\*) , by quarter, 2017-19**

\* \* \* \* \*

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

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



**Figure D-5**  
**Mattresses: Weighted-average prices, landed-duty paid costs, and quantities of domestic and imported product 2 excluding three U.S. producers (\*\*\*) , by quarter, 2017-19**

\* \* \* \* \*

Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

**Figure D-6**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 3 excluding three U.S. producers (\*\*\*) , by quarter, 2017-19**

\* \* \* \* \*

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.

**Figure D-7**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 1 excluding three U.S. producers (\*\*\*) , by quarter, all subject countries combined, 2017-19**

\* \* \* \* \*

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

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

**Figure D-8**

**Mattresses: Weighted-average prices, landed-duty paid costs, and quantities of domestic and imported product 2 excluding three U.S. producers (\*\*\*) , by quarter, all subject countries combined, 2017-19**

\* \* \* \* \*

Product 2: Memory foam mattress (without any innersprings), queen size, height (edge to edge) greater than or equal to 10.0 inches but less than or equal to 12.0 inches.

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

**Figure D-9**

**Mattresses: Weighted-average prices, landed duty-paid costs, and quantities of domestic and imported product 3 excluding three U.S. producers (\*\*\*) , by quarter, all subject countries combined, 2017-19**

\* \* \* \* \*

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.

## **Price and import purchase cost trends**

Table D-7 summarizes price trends, by country and by product, excluding three U.S. producers (\*\*\*) . Table D-8 is a replication of table V-10, and provided here for convenience. It summarizes cost trend, by country and by product.

Table D-7

**Mattresses: Summary of weighted-average f.o.b. prices for products 1-3 from the United States, Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam, excluding three U.S. producers (\*\*\*)**

Item	Number of quarters	Low price (per mattress)	High price (per mattress)	Change in price (percent)
<b>Product 1 – price</b>				
United States	***	***	***	***
Cambodia-price	***	***	***	***
China-price	***	***	***	***
Indonesia-price	***	***	***	***
Malaysia-price	***	***	***	***
Serbia-price	***	***	***	***
Thailand-price	***	***	***	***
Turkey-price	***	***	***	***
Vietnam-price	***	***	***	***
All subject-price	12	144	167	(8.8)
<b>Product 2 – price</b>				
United States	***	***	***	***
Cambodia-price	***	***	***	***
China-price	***	***	***	***
Indonesia-price	***	***	***	***
Malaysia-price	***	***	***	***
Serbia-price	***	***	***	***
Thailand-price	***	***	***	***
Turkey-price	***	***	***	***
Vietnam-price	***	***	***	***
All subject-price	12	171	207	(10.0)
<b>Product 3 – price</b>				
United States	***	***	***	***
Cambodia-price	***	***	***	***
China-price	***	***	***	***
Indonesia-price	***	***	***	***
Malaysia-price	***	***	***	***
Serbia-price	***	***	***	***
Thailand-price	***	***	***	***
Turkey-price	***	***	***	***
Vietnam-price	***	***	***	***
All subject-price	12	145	179	16.5

Note: Price change is calculated as the percentage change from the first quarter of 2017 to the last quarter of 2019, where available.

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

Table D-8

**Mattresses: Summary of weighted-average f.o.b. import costs for products 1-3 from Cambodia, China, Indonesia, Malaysia, Serbia, Thailand, Turkey, and Vietnam**

Item	Number of quarters	Low cost (per mattress)	High cost (per mattress)	Change in cost (percent)
<b>Product 1 – cost</b>				
Cambodia-cost	***	***	***	***
China-cost	***	***	***	***
Indonesia-cost	***	***	***	***
Malaysia-cost	***	***	***	***
Serbia-cost	***	***	***	***
Thailand-cost	***	***	***	***
Turkey-cost	***	***	***	***
Vietnam-cost	***	***	***	***
All subject-cost	12	100	144	19.2
<b>Product 2 – cost</b>				
Cambodia-cost	***	***	***	***
China-cost	***	***	***	***
Indonesia-cost	***	***	***	***
Malaysia-cost	***	***	***	***
Serbia-cost	***	***	***	***
Thailand-cost	***	***	***	***
Turkey-cost	***	***	***	***
Vietnam-cost	***	***	***	***
All subject-cost	12	150	230	(12.2)
<b>Product 3 – cost</b>				
Cambodia-cost	***	***	***	***
China-cost	***	***	***	***
Indonesia-cost	***	***	***	***
Malaysia-cost	***	***	***	***
Serbia-cost	***	***	***	***
Thailand-cost	***	***	***	***
Turkey-cost	***	***	***	***
Vietnam-cost	***	***	***	***
All subject-cost	12	128	164	(21.9)

Note: Cost change is calculated as the percentage change from the first quarter of 2017 to the last quarter of 2019, where available.

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



## Price and cost comparisons

### Price comparisons

Table D-9 shows instances of underselling and overselling when three U.S. producers (\*\*\*) are excluded from the data.

**Table D-9**  
**Mattresses: Instances of underselling/overselling and the range and average of margins, excluding three U.S. producers (\*\*\*) , by country, 2017-19**

Source	Underselling				
	Number of quarters	Quantity (mattresses)	Average margin (percent)	Margin range (percent)	
				Min	Max
Cambodia	***	***	***	***	***
China	***	***	***	***	***
Indonesia	***	***	***	***	***
Malaysia	***	***	***	***	***
Serbia	***	***	***	***	***
Thailand	***	***	***	***	***
Turkey	***	***	***	***	***
Vietnam	***	***	***	***	***
Total	***	***	***	***	***
Source	(Overselling)				
	Number of quarters	Quantity <sup>1</sup> (mattresses)	Average margin (percent)	Margin range (percent)	
				Min	Max
Cambodia	***	***	***	***	***
China	***	***	***	***	***
Indonesia	***	***	***	***	***
Malaysia	***	***	***	***	***
Serbia	***	***	***	***	***
Thailand	***	***	***	***	***
Turkey	***	***	***	***	***
Vietnam	***	***	***	***	***
Total	***	***	***	***	***

Note: 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.

## Price-cost comparisons

Table D-10 compares import costs and U.S. producer sales prices, when pricing data for three U.S. producers (\*\*\*) is excluded.

**Table D-10**  
**Mattresses: Comparisons of import purchase costs and U.S.-producer sales prices, excluding three U.S. producers (\*\*\*) by country, 2017-19**

Source	Import purchase cost lower than U.S. sales price				
	Number of quarters	Quantity (mattresses)	Average price-cost difference (percent)	Price-cost difference range (percent)	
				Min	Max
Cambodia	***	***	***	***	***
China	***	***	***	***	***
Indonesia	***	***	***	***	***
Malaysia	***	***	***	***	***
Serbia	***	***	***	***	***
Thailand	***	***	***	***	***
Turkey	***	***	***	***	***
Vietnam	***	***	***	***	***
Total	***	***	***	***	***
Source	(Import purchase cost higher than U.S. sales price)				
	Number of quarters	Quantity <sup>1</sup> (mattresses)	Average price-cost difference (percent)	Price-cost difference range (percent)	
				Min	Max
Cambodia	***	***	***	***	***
China	***	***	***	***	***
Indonesia	***	***	***	***	***
Malaysia	***	***	***	***	***
Serbia	***	***	***	***	***
Thailand	***	***	***	***	***
Turkey	***	***	***	***	***
Vietnam	***	***	***	***	***
Total	***	***	***	***	***

Note: 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.

**APPENDIX E**

**FINANCIAL DATA EXCLUDING THREE U.S. PRODUCERS  
(\*\*\*)**

Table E-1: Mattresses: Results of operations of U.S. producers excluding three U.S. producers  
\*\*\*, 2017-19 ..... E-3

Table E-2: Mattresses: Changes in AUVs excluding three U.S. producers \*\*\*, between fiscal  
years ..... E-4

**Table E-1**

**Mattresses: Results of operations of U.S. producers excluding three U.S. producers \*\*\*, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Quantity (units)</b>		
Total net sales	***	***	***
	<b>Value (1,000 dollars)</b>		
Total net sales	***	***	***
Cost of goods sold.--			
Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Total COGS	***	***	***
Gross profit	***	***	***
SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income or (loss)	***	***	***
Depreciation/amortization	***	***	***
Cash flow	***	***	***
	<b>Ratio to net sales (percent)</b>		
Cost of goods sold.--			
Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

Table continued on next page.

**Table E-1--Continued**

**Mattresses: Results of operations of U.S. producers excluding three U.S. producers \*\*\*, 2017-19**

Item	Fiscal year		
	2017	2018	2019
	<b>Ratio to total COGS (percent)</b>		
Cost of goods sold.--			
Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
	<b>Unit value (dollars per unit)</b>		
Total net sales	***	***	***
Cost of goods sold.--			
Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***
	<b>Number of firms reporting</b>		
Operating losses	***	***	***
Net losses	***	***	***
Data	***	***	***

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

**Table E-2**

**Mattresses: Changes in AUVs excluding three U.S. producers \*\*\*, between fiscal years**

Item	Between fiscal years		
	2017-19	2017-18	2018-19
	<b>Change in AUVs (dollars per unit)</b>		
Total net sales	***	***	***
Cost of goods sold.--			
Raw materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Average COGS	***	***	***
Gross profit	***	***	***
SG&A expense	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

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