Vertical Shaft Engines from China

Investigation Nos. 701-TA-637 and 731-TA-1471 (Preliminary)

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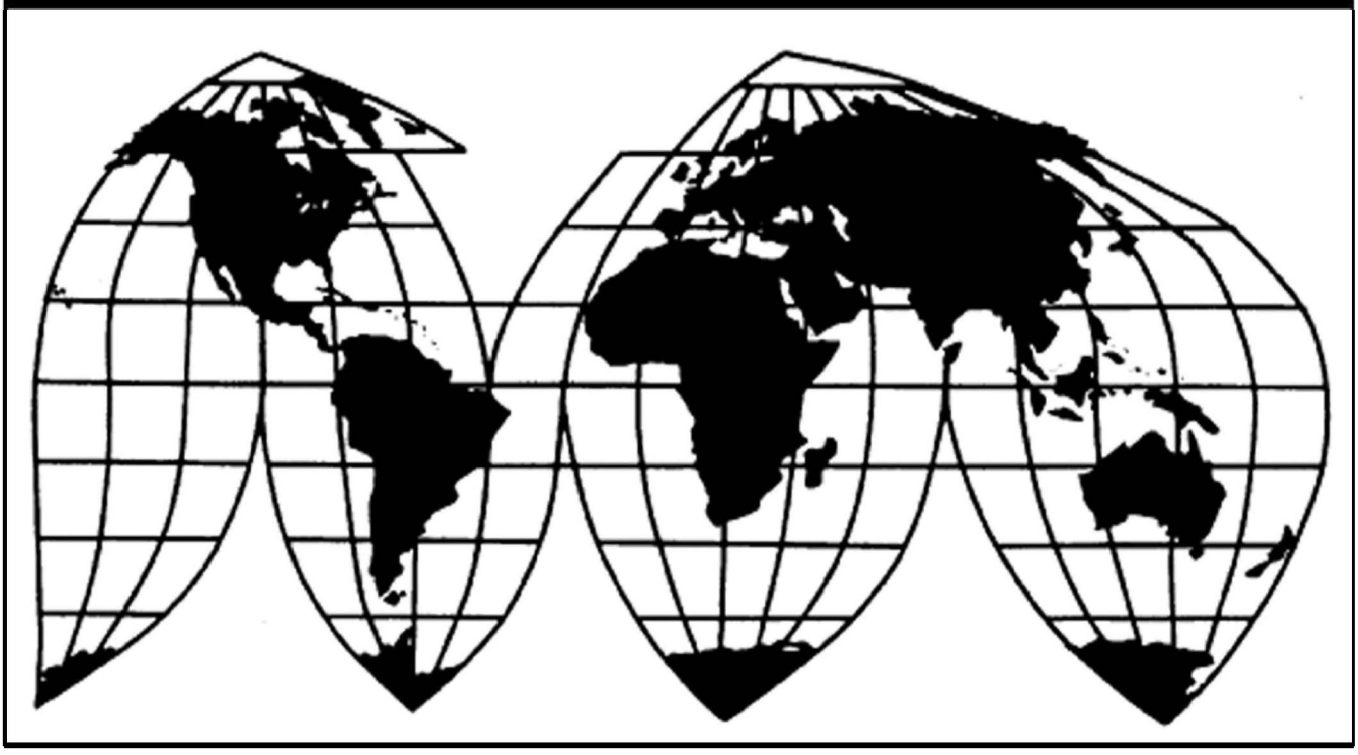
U.S. International Trade Commission



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Note.—Information that would reveal confidential operations of individual concerns may not be published.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
Washington, DC

Investigation Nos. 701-TA-637 and 731-TA-1471 (Preliminary)

Vertical Shaft Engines from China

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to 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 vertical shaft engines from China that are alleged to be sold in the United States at less than fair value ("LTFV") and to be subsidized by the government of China.[2] The products subject to these investigations are primarily provided for in subheadings 8407.90.10, 8407.90.90, 8409.91.50, and 8409.91.99 of the Harmonized Tariff Schedule of the United States ("HTS").

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

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

[2] *Certain Vertical Shaft Engines Between 225cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*, 85 FR 8809 (February 18, 2020); *Certain Vertical Shaft Engines Between 223cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Countervailing Duty Investigation,* 85 FR 8835 (February 18, 2020).

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.

BACKGROUND

On January 15, 2020, the Coalition of American Vertical Engine Producers,[3] 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 vertical shaft engines from China and LTFV imports of vertical shaft engines from China. Accordingly, effective January 15, 2020, the Commission instituted countervailing duty investigation No. 701-TA-637 and antidumping duty investigation No. 731-TA-1471 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of January 23, 2020 (85 FR 3945). The conference was held in Washington, DC, on February 5, 2020, and all persons who requested the opportunity were permitted to appear in person or by counsel.

[3] The Coalition of American Vertical Engine Producers is comprised of Kohler Co., Kohler, Wisconsin, and Briggs & Stratton Corporation, Wauwatosa, Wisconsin.

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 vertical shaft engines ("VSEs") from China that are allegedly sold in the United States at less than fair value ("LTFV") and 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.[1] 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."[2]

II. Background

Parties to the Investigations. The Coalition of American Vertical Engine Producers is comprised of U.S. producers Briggs & Stratton Corporation ("B&S") and Kohler Co. ("Kohler") (collectively "Petitioner"). On January 15, 2020, Petitioner filed antidumping and countervailing duty petitions in these investigations, alleging that an industry in the United States is materially injured and threatened with material injury by reason of LTFV and subsidized imports of VSEs from China. Representatives and counsel for B&S and Kohler appeared at the staff conference and submitted separate post-conference briefs.[3]

[1] 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, 2*0 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.

[2] *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).

[3] The B&S post-conference brief focuses on the threat of material injury arguments, which are incorporated by reference in the Kohler post-conference brief; the Kohler post-conference brief focuses on the present material injury arguments and is incorporated by reference in the B&S post-conference

Several respondent firms participated in these investigations. U.S. importers and purchasers of VSEs MTD Products, Inc. ("MTD") and the Toro Company and Toro Purchasing Company (collectively "Toro") appeared at the conference and submitted a joint post-conference brief. Chinese producer Yamaha Motor Powered Products Jiangsu Co., Ltd. and its related U.S. importer, Yamaha Motor Corporation U.S.A. (collectively "Yamaha") submitted a post-conference brief but did not appear at the staff conference. Chinese producer Loncin Motor Co., Ltd. ("Loncin") appeared at the staff conference and submitted a letter in lieu of a brief and a response to staff questions.[4]

Data Coverage. U.S. industry data are based on the questionnaire responses of three firms (B&S, Kohler, and Kawasaki Motors Manufacturing Corp., U.S.A. ("Kawasaki")) that accounted for 100 percent of U.S. production of VSEs in 2018.[5] U.S. import data are based on questionnaire responses from ten U.S. importers that the Commission estimates accounted for approximately *** percent of total subject imports in 2018.[6] The Commission received responses to its questionnaires from three Chinese producers/exporters of subject merchandise; these firms' exports of subject merchandise to the United States are equivalent to approximately *** percent of U.S. imports of VSEs from China in 2018.[7]

III. Domestic Like Product

A. In General

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."[8] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or

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brief. Kohler Post-Conference Brief at 41; B&S Post-Conference Brief at 1. Given these interlocking arguments, and the fact that the Petitioner filed the petitions on behalf of both U.S. producers, we have referenced all of B&S and Kohler's arguments as Petitioner's arguments in these Views.

[4] MTD and Toro Post-Conference Brief; Yamaha Post-Conference Brief, and Loncin Letter in Lieu of a Brief and Response to Staff Questions.

[5] OINV Memorandum INV-SS-020 dated February 24, 2020, Confidential Report ("CR") and Public Report ("PR") at Table III-1.

[6] CR/PR at I-4 & n.6, IV-1.

[7] CR/PR at VII-3. The Commission received foreign producer questionnaire responses from Jiangsu Jiangdong Group Imp & Exp, Co. Ltd., Loncin, and Yamaha. These producers were unable to estimate their firms' 2018 share of Chinese VSE production. *Id*.

[8] 19 U.S.C. § 1677(4)(A).

those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[9] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[10]

The decision regarding the appropriate domestic like product(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.[11] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[12] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[13] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,[14] the Commission determines what domestic product is like the imported articles Commerce has identified.[15] The Commission may, where appropriate,

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[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(10).

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

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

[13] *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.").

[14] *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).

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

include domestic articles in the domestic like product in addition to those described in the scope.[16]

B. Product Description

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

{S}park-ignited, non-road, vertical shaft engines, whether finished or unfinished, whether assembled or unassembled, primarily for riding lawn mowers and zero-tum radius lawn mowers. Engines meeting this physical description may also be for other non-hand-held outdoor power equipment such as, including but not limited to, tow-behind brush mowers, grinders, and vertical shaft generators. The subject engines are spark ignition, single or multiple cylinder, air cooled, internal combustion engines with vertical power take off shafts with a minimum displacement of 225 cubic centimeters (cc) and a maximum displacement of 999cc. Typically, engines with displacements of this size generate gross power of between 6.7 kilowatts (kw) to 42 kw.

Engines covered by this scope normally must comply with and be certified under Environmental Protection Agency (EPA) air pollution controls title 40, chapter I, subchapter U, part 1054 of the Code of Federal Regulations standards for small non-road spark-ignition engines and equipment. Engines that otherwise meet the physical description of the scope but are not certified under 40 CFR part 1054 and are not certified under other parts of subchapter U of the EPA air pollution controls are not excluded from the scope of this proceeding. Engines that may be certified under both 40 CFR part 1054 as well as other parts of subchapter U remain subject to the scope of this proceeding.

For purposes of this investigation, an unfinished engine covers at a minimum a sub-assembly comprised of, but not limited to, the following components: crankcase, crankshaft, camshaft, piston(s), and connecting rod(s). Importation of these components together, whether assembled or unassembled, and whether or not accompanied by additional components such as an oil pan, manifold, cylinder head(s), valve train, or valve cover(s), constitutes an unfinished engine for purposes of this investigation. The inclusion of other products such as spark plugs fitted into the cylinder head or electrical devices (*e.g*., ignition modules, ignition coils) for synchronizing with the motor to supply tension current does not remove the product from the

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

scope. The inclusion of any other components not identified as comprising the unfinished engine subassembly in a third country does not remove the engine from the scope.

The engines subject to this investigation are typically classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheadings: 8407.90.1020, 8407.90.1060, and 8407.90.1080. The engine subassemblies that are subject to this investigation enter under HTSUS 8409.91.9990. Engines subject to this investigation may also enter under HTSUS 8407.90.9060 and 8407.90.9080. The HTSUS subheadings are provided for convenience and customs purposes only, and the written description of the merchandise under investigation is dispositive.[17]

VSEs are spark-ignited engines with a minimum displacement of 225cc and a maximum displacement of 999cc that are primarily used in traditional riding mowers (also referred to as tractors) and zero-turn mowers (which are commonly used by professional landscapers). VSEs may also be used in other non-hand-held outdoor power equipment.[18] The scope of these investigations also includes engine subassemblies (unassembled or unfinished VSEs).[19]

Arguments of the Parties

Petitioner's Arguments. Petitioner argues that there is one domestic like product that is coextensive with the scope of these investigations and that the Commission should include VSE subassemblies in the domestic like product under a semi-finished product analysis.[20]

Respondents' Arguments. Respondents MTD and Toro have not taken a position on the Commission's domestic like product definition, but they reserve the right to address the issue should these investigations proceed further.[21] Respondent Yamaha did not comment on the definition of the domestic like product.

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[17] *Certain Vertical Shaft Engines Between 225cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation,* 85 Fed. Reg. 8809, 8814 (Feb. 18, 2020). *Certain Vertical Shaft Engines Between 223cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Countervailing Duty Investigation,* 85 Fed. Reg. 8835, 8839-40 (Feb. 18, 2020).

[18] CR/PR at I-8 and II-1; Transcript of Commission staff conference held February 5, 2020 ("Tr.") at 29 (Rodgers). VSEs are distinguishable in physical characteristics and uses from smaller vertical shaft engines with lower displacement used to power push-behind mowers and horizontal shaft engines that have a shaft coming out of the side of the engine which can be used to turn a machine, like a tiller or power generator, on its side. Kohler Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 2-4.

[19] CR/PR at I-8. The domestic industry's shipments of unfinished VSEs were low throughout the POI, accounting for just *** to *** percent of the industry's total U.S. shipments. CR/PR at Table III-7.

[20] Kohler Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 1, 4-5; B&S Post-Conference Brief at 8 n.28.

[21] MTD and Toro Post-Conference Brief at 2.

C. Analysis

Both VSE subassemblies and finished VSEs are included in the scope of these investigations. This raises the question as to whether, under a semi-finished product analysis,[22] VSE subassemblies should be included in the same domestic like product as finished VSEs. We analyze the issue below.

Dedication for Use. Domestically produced VSE subassemblies are dedicated for use as finished VSEs. The subassemblies are either incorporated by U.S. producers into finished VSEs or sold as VSE replacement parts.[23]

Separate Markets. Subassemblies are either further processed by U.S. producers to become finished engines or sold as replacement parts for VSE engines. Therefore, subassemblies are not sold in any other markets besides the market for VSEs.[24]

Differences in Physical Characteristics and Functions of the Upstream and Downstream Articles. A subassembly, often referred to as a short block, typically consists of an engine crankcase, oil pan, crankshaft, camshaft, balance shafts, connecting rod, and pistons. A finished engine contains the short block as well as the components added to the short block to make the long block (including the valvetrain and breather system components), and the parts needed to start and power the engine and meet emissions requirements (including the carburetor, starter, ignition modules, and cooling fan). The subassembly has no function separate from that of a finished engine; it either becomes a finished engine or a replacement assembly for an existing damaged VSE.[25]

Differences in Value. The short block reportedly constitutes 50 percent of the value of a finished engine.[26]

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[22] In a semi-finished products analysis, the Commission examines the following: (1) the significance and extent of the processes used to transform the upstream into the downstream articles; (2) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) whether there are perceived to be separate markets for the upstream and downstream articles; and (5) differences in the costs or value of the vertically differentiated articles. *See*, *e.g.*, *Glycine from India*, *Japan*, *and Korea*, Inv. Nos. 731-TA-1111-1113 (Preliminary), USITC Pub. No. 3921 at 7 (May 2007). *Artists' Canvas from China*, Inv. No. 731-TA-1091 (Final), USITC Pub. No. 3853 at 6 (May 2006); *Live Swine from Canada*, Inv. No. 731-TA-1076 (Final), US1TC Pub. 3766 at 8 n.40 (Apr. 2005); *Certain Frozen Fish Fillets from Vietnam*, Inv. No. 731-TA-1012 (Preliminary), USITC Pub. No. 3533 at 7 (Aug. 2002).

[23] CR/PR at I-8; Tr. at 20 (DeFrancesco).

[24] CR/PR at I-8; Kohler Post-Conference Brief at 5.

[25] CR/PR at I-8; Kohler Post-Conference Brief at 5. Tr. at 47 (Hudak).

[26] Kohler Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 5.

Extent of Processes Used to Transform Upstream Product into Downstream Product. After a subassembly or short block is manufactured, the process for assembly of the engine is continued by adding the valvetrain, cylinder heads, valve covers, and breather system components to the short block to create the long block assembly. The final phase of the assembly process requires adding an intake manifold, carburetor, starter, flywheel, spark plugs, ignition modules, cooling fan, and any other component required to power the engine and meet emissions requirements. At this point, the engine is a finished engine.[27]

Conclusion. The available information indicates that all VSE subassemblies are dedicated for use in the production of finished VSEs or as a replacement assembly for a damaged VSE, and that there is no separate market for subassemblies other than to be used in VSEs. While subassemblies have different physical characteristics insofar as they need additional parts and further processing to be transformed into finished engines which adds value, the short block accounts for a substantial share of the finished engines' value, and the only function of the VSE subassemblies are to be used in a finished VSE.

Based on the foregoing, we include subassemblies and finished VSE engines in the same definition of the domestic like product and define a single domestic like product that is coextensive with the scope of these 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."[28] 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 an issue as to whether firms that supply and machine components for U.S. producers' production of VSEs engage in sufficient production-related activities to be considered as domestic producers. Petitioner maintains that these activities do not constitute domestic production, and Respondents did not address the issue.[29] In deciding

[27] CR/PR at I-9. Kohler Post-Conference Brief at 5; Tr. at 46-48 (Hudak).

[28] 19 U.S.C. § 1677(4)(A).

[29] Kohler Post-Conference Brief at 10, Exhibit 1, Answers to Staff Questions at 6; B&S Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 2-3. Petitioner and Respondents MTD and Toro agree that the domestic industry should consist of B&S, Kohler, and Kawasaki. Kohler Post-

whether a firm qualifies as a domestic producer, the Commission generally has analyzed the overall nature of a firm's production-related activities in the United States, although production-related activities at minimum levels could be insufficient to constitute domestic production.[30]

Domestic producer *** purchases a small portion of its VSE engine components (about *** of its 200 to 400 VSE engine components) from ***. Although most of *** machining is done in-house, it purchases machined *** that are dedicated to the production of VSEs. *** reports that ***.[31] *** explains that ***.[32] ***.[33] B&S states that its production of VSEs is highly vertically integrated, but that it purchases components *** from outside vendors for its VSE production; it adds significant value to these components and B&S's manufacturing processes ***.[34]

In the preliminary phase of these investigations, the record does not include information about the *** or other vendors' capital investment, technical expertise, or employees. However, the available evidence shows that these firms supply a wide variety of industries, are not dedicated to the production of VSEs, and add only a fraction of the value of the finished engines. Therefore, we find that firms that supply and machine components for U.S. producers' production of VSEs do not engage in sufficient production-related activities to be considered domestic producers of VSE.

There are no issues with respect to the related parties provision in these investigations, and no other domestic industry issues.[35] We therefore define the domestic industry as all U.S. producers of VSEs: B&S, Kohler, and Kawasaki.

Conference Brief at 6; B&S Post-Conference Brief at 8, n.28, Exhibit 1, Answers to Staff Questions at 2-3; Tr. at 132 (Griffin) (Buenz). Respondent Yamaha does not comment on the Commission's definition of the domestic industry.

[30] The Commission generally considers the following 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. *See Crystalline Silica Photovoltaic Cells and Modules from China,* Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 (Nov. 2012) at 12-13; *Forged Steel Fittings from India and Korea*, Inv. Nos. 701-TA-631 and 731-TA-1463-1464 (Preliminary), USITC Pub. 5006 (Dec. 2019) at 11-13.

[31] ***; *** Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 6.

[32] *** Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 6.

[33] *** Post-Conference Brief, Exhibit 1, Answers to Staff Questions at 6.

[34] B&S Post-Conference Brief, Exhibit 17 at 1-2.

[35] ***. CR at III-2; Kawasaki Producer Questionnaire, Question I-5, I-6, and I-7. We do not have any information on the record as to whether *** exports subject merchandise to the United States. *** certified that it did not import VSEs into the United States. CR at IV-1. Thus, based on the available

V. Reasonable Indication of Material Injury by Reason of Subject Imports[36]

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.[37] 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.[38] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[39] 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.[40] 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."[41]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with

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information in these preliminary investigations, *** is not a related party under the related parties provision. 19 U.S.C. § 1677(4)(B).

[36] 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 petitions shall generally be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i). The exceptions to this general rule are not applicable here.

Subject imports from China are clearly above the pertinent statutory negligibility threshold. The petitions were filed on January 15, 2020. Subject imports from China accounted for *** percent of total imports of VSEs by quantity based on importer questionnaire data in the 12-month period (January through December 2019) preceding the filing of the petitions. CR at IV-5 and Table IV-3. We therefore find that subject imports from China are not negligible for purposes of these antidumping and countervailing duty investigations.

[37] 19 U.S.C. §§ 1671b(a), 1673b(a).

[38] 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).

[39] 19 U.S.C. § 1677(7)(A).

[40] 19 U.S.C. § 1677(7)(C)(iii).

[41] 19 U.S.C. § 1677(7)(C)(iii).

material injury by reason of" unfairly traded imports,[42] 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.[43] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[44]

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.[45] In performing its examination, however, the Commission need not isolate

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[42] 19 U.S.C. §§ 1671b(a), 1673b(a).

[43] *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).

[44] 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).

[45] 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,

the injury caused by other factors from injury caused by unfairly traded imports.[46] 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.[47] It is clear that the existence of injury caused by other factors does not compel a negative determination.[48]

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."[49] 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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developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[46] 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.").

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

[48] *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.").

[49] *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."[50] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[51]

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.[52] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[53]

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

U.S. demand for VSEs is driven by demand for riding mowers, which is in turn, at least to a large extent, driven by demand for new homes.[54] ***.[55] New home construction increased from January 2016 to September 2019.[56] A majority of responding U.S. producers and a plurality of responding U.S. importers reported that U.S. demand for VSEs had increased since January 1, 2016.[57] The market for VSEs is seasonal, based on the demand for landscape services for residential mowing. Original equipment manufacturers ("OEMs") that produce riding mowers generally make most of their engine purchases in early winter and then sell their mowers to retailers in late winter and spring.[58]

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[50] *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.

[51] *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.").

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

[53] *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.").

[54] CR/PR at II-9.

[55] CR/PR at II-9 and Figure II-1.

[56] CR/PR at II-10 and Figure II-2.

[57] CR/PR at Table II-5.

[58] CR/PR at II-8. Respondents MTD and Toro contend that demand for commercial riding lawn mowers is growing at a greater rate than the demand for residential riding lawn mowers; Petitioner disagrees. MTD and Toro Post-Conference Brief at 11; Kohler Post-Conference Brief at 12-13.

Apparent U.S. consumption increased by *** percent between 2016 and 2018, increasing from *** units in 2016 and 2017 to *** units in 2018; it was *** percent lower in interim (January to September) 2019 (*** units) than in interim 2018 (*** units).[59]

2. Supply Conditions

The U.S. VSEs market was supplied by the domestic industry, subject imports, and a small volume of nonsubject imports over the POI. The domestic industry held the largest share of the VSE market over the POI. The industry is highly concentrated, as discussed above, it consists of three producers: B&S, Kawasaki, and Kohler. There were several structural changes to the industry over the POI. In 2018, Kohler began consolidating its Kohler, Wisconsin production operations into its Hattiesburg, Mississippi production facility. ***.[60] ***.[61]

The domestic industry's reported capacity increased by *** percent between 2016 and 2018, increasing from *** units in 2016 to *** units in 2017 and *** units in 2018; it was *** units in both interim 2018 and in interim 2019.[62] The domestic industry's capacity utilization was *** percent in 2016, *** percent in 2017, and *** percent in 2018; it was *** percent in interim 2018 and *** percent in interim 2019.[63] Domestic producers' shipments accounted for *** percent of apparent U.S. consumption in 2016, *** percent in 2017, and *** percent in 2018; their market share was *** percent in interim 2018 and *** percent in interim 2019.[64]

Subject imports held the second-largest share of the market over the POI. U.S. importers MTD and Loncin collectively accounted for *** percent of subject imports in 2018.[65] Subject imports accounted for *** percent of apparent U.S. consumption in 2016, *** percent in 2017, and *** percent in 2018; their market share was *** percent in interim 2018 and *** percent in interim 2019.[66] Nonsubject imports' market share was low throughout the POI, ranging from *** percent of apparent U.S. consumption.[67]

3. Substitutability and Other Conditions

Based on the record, we find that subject imports and the domestic like product are at least moderately substitutable, subject to variations in features. Factors limiting substitutability

[59] CR/PR at Tables IV-5, C-1.
[60] ***. CR/PR at Table III-3.
[61] CR/PR at Table III-3.
[62] CR/PR at Tables III-4, C-1. The increase in capacity from 2016 to 2018 was driven by ***.
[63] CR/PR at Table III-4.
[64] CR/PR at Table IV-5.
[65] CR/PR at Table IV-1.
[66] CR/PR at Table IV-5.
[67] CR/PR at Table IV-5. Sources of nonsubject imports include Japan and ***. CR/PR at II-7.

include engines designed for a particular mower platform, engine features, supplier relationships, warranty procedures, and OEM branding of engines.[68]

U.S. producers and U.S. importers differed over the extent to which VSEs from the United States and China were interchangeable. Two U.S. producers reported that they were always interchangeable and one reported that they were frequently interchangeable. Two U.S. importers reported that they were frequently interchangeable, three reported that they were sometimes interchangeable, and another three reported that they were never interchangeable.[69]

U.S. producers and U.S. importers also differed on the importance of non-price factors in purchasing VSEs from the United States versus from China. Two U.S. producers reported that non-price factors were sometimes important and one reported that they were never important. Six U.S. importers reported that non-price factors were always important, one reported that they were frequently important, and two reported that they were sometimes important.[70]

Purchasers responding to the Commission's lost sales/lost revenue survey were asked to identify the main factors that their firm considered in purchasing decisions for VSEs. They identified the following major factors: branding, warranty, quality, service support, and cost (or price).[71] Accordingly, we find that price is one of several important factors in purchasing VSEs.

VSEs are mostly sold to OEMs, for use in the production of riding mowers, with a much smaller volume sold to distributors, who sell to or support a dealer network.[72] OEMs decide how to pair a particular engine to each mower model.[73] Price negotiations between VSE manufacturers and OEMs for a particular model year mower typically begin in spring and summer, a year prior to the delivery of the engine to the OEM. Sales agreements establish a price for the engine, but may not establish a volume of sales.[74] U.S. producers sell the domestic like product through spot sales and long-term or annual contracts, while U.S. importers sell subject imports primarily through short-term contracts, with a smaller share of sales using annual contracts and spot sales.[75] There are a wide range of rebates and discounts offered in

[68] CR/PR at II-12.

[69] CR/PR at Table II-7.

[70] CR/PR at II-15 and Table II-8.

[71] CR/PR at II-13 and Table II-6.

[72] CR/PR at II-4. CR/PR at Table II-2. In 2018, *** percent of U.S. producers' U.S. shipments of VSEs and *** percent of U.S. importers' U.S. shipments of VSEs went to OEMs. *Id.*

[73] CR/PR at II-2.

[74] CR/PR at V-3. ***. CR/PR at V-5.

[75] CR/PR at Table V-3. U.S. producers reported that *** percent of its shipments were sold through spot sales, *** percent through long-term contracts, and *** percent through annual contracts.

the VSE market.[76] The domestic product is typically sold with warranty protection, with warranty claims managed by the domestic producer, whereas respondents maintain that the cost of warranty protection is not included in subject import prices and the OEM purchaser manages the warranty claims on those engines.[77]

VSEs are required to comply with and be certified under the U.S. Environmental Protection Agency ("EPA") air pollution control standards for small, non-road spark-ignition engines.[78] There is also an additional certification required for VSEs in California set forth by the California Air Resources Board. In general, VSEs are certified to meet both sets of regulations.[79]

Raw materials accounted for *** percent of the cost of goods sold ("COGS") for domestically produced VSEs in 2018.[80] VSEs are produced from cast iron and aluminum parts, and the domestic industry's raw material costs are therefore affected by fluctuations in the price of aluminum and steel scrap.[81] Both U.S. producers and U.S. importers reported a wide range of responses with respect to the impact of the section 232 tariffs on imported steel and aluminum on VSE prices: one U.S. producer and two U.S. importers reported that the section 232 tariffs had increased prices, one U.S. producer and two U.S. importers reported that they had not affected VSE prices, and one U.S. producer reported that they caused prices to fluctuate.[82]

Additional duties pursuant to section 301 of the Trade Act of 1974 were imposed on certain subject VSE imports.[83] These VSE imports became subject to additional duties of ten percent in August and September 2018, which were increased to 25 percent effective May 2019.[84] Respondent MTD filed an exclusion request with the Office of the U.S. Trade

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U.S. importers reported that *** percent of its shipments were sold through short-term contracts, *** percent through annual contracts, and *** percent through spot sales. *Id.*

[76] CR/PR at V-5-6.

[77] CR/PR at V-5; MTD and Toro Post-Conference Brief at 20.

[78] Title 40, Chapter I, Subchapter U, Part 1054 of the Code of Federal Regulations.

[79] CR/PR at I-9-10.

[80] CR/PR at Table VI-1.

[81] CR/PR at V-1.

[82] CR/PR at V-1-3 and Table V-1.

[83] The subject imports that are subject to additional *ad valorem* import duties under Section 301 are those classified in subheadings 8407.90.10, 8407.90.90, 8409.91.50, and 8409.91.99. CR/PR at I-7 & n.9.

[84] CR/PR at I-7 n.9.

Representative ("USTR") related to these section 301 duties.[85] Subsequently, USTR granted exclusions to certain VSEs valued at less than $180.00 in July and October 2019.[86] Most responding market participants (all three U.S. producers and five of seven U.S. importers) reported that the section 301 tariffs had an impact on the VSE market. Four responding U.S. importers reported that the section 301 tariffs caused prices to increase.[87]

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."[88]

The volume of subject imports increased by *** percent from 2016 to 2018; the volume of subject imports was *** percent lower in interim 2019 than in interim 2018.[89] Subject imports increased from *** units in 2016 to *** units in 2017 and *** units in 2018; they were *** units in interim 2018 and *** units in interim 2019.[90] The market share of subject imports increased from *** percent of apparent U.S. consumption in 2016 to *** percent in 2017 and *** percent in 2018, an increase of *** percentage points. The market share of subject imports was *** percent in interim 2018 and *** percent in interim 2019.[91] It appears that the lower subject import volume and market share in interim 2019 compared to interim 2018 was likely due to the section 301 duties imposed in late 2018, but USTR has subsequently granted exclusions to the section 301 duties and there is evidence that subject imports have increased following those exclusions.[92]

For the purposes of these preliminary investigations, we find that the volume and increase in volume of subject imports are significant both in absolute terms and relative to consumption in the United States.

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[85] *Request for Exclusion from Section 301 Tariffs: Vertical Shaft Rider and Residential Zero-Turn Mower Engines (HTS Number 8704.90.1020)* from MTD to The Honorable Robert E. Lighthizer, United States Trade Representative dated December 18, 2018 ("MTD Exclusion Request"), B&S Post-Conference Brief, Exhibit 14.

[86] Exclusions were granted to products classified in subheadings 8407.90.1020 and 8407.90.9060 in July and October 2019. *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation,* 84 Fed. Reg. 37,381, 37, 382 (U.S. Trade Rep. July 31, 2019). *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation,* 84 Fed. Reg. 52553, 52557 (U.S. Trade Rep. Oct. 2, 2019).

[87] CR at II-3 and Table II-1.

[88] 19 U.S.C. § 1677(7)(C)(i).

[89] CR/PR at IV-2.

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

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

[92] Kohler Post-Conference Brief at 22; B&S Post-Conference Brief at 11-12, Exhibit 8 at 10, 19.

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.[93]

As discussed in section V.B.3 above, we find that subject imports and the domestic like product are at least moderately substitutable, subject to variations in features, and that price is one of several important purchasing factors for VSEs.

We have examined several sources of data in our underselling analysis, including pricing data, import purchase cost data, data derived from lost sales/lost revenue purchaser survey responses, and other data on the record. The Commission collected quarterly f.o.b. pricing data on sales of four VSE products shipped to unrelated U.S. customers during the POI.[94] *** U.S. producers, ***, and two importers, ***, provided usable pricing data for sales of the requested products.[95] No firms reported pricing data for all products for all quarters.[96] The pricing data reported by these firms accounted for approximately *** percent of the U.S. producers' U.S. shipments of VSEs in 2018 and *** percent of subject imports.[97]

These pricing data show that subject imports undersold the domestic like product in *** out of *** quarterly comparisons, at margins ranging between *** and *** percent, and an average underselling margin of *** percent. Subject imports oversold the domestic like product in the remaining *** quarterly comparisons at margins ranging between *** and ***

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[93] 19 U.S.C. § 1677(7)(C)(ii).

[94] CR/PR at V-6. The four pricing products are:

Product 1—Vertical shaft engine, air-cooled, single cylinder, carbureted, 340-400cc displacement.

Product 2—Vertical shaft engine, air-cooled, single cylinder, carbureted, 410-550cc displacement.

Product 3—Vertical shaft engine, air-cooled, twin cylinder, carbureted, 650-700cc displacement.

Product 4—Vertical shaft engine, air-cooled, twin cylinder, carbureted, 701-725cc displacement.

[95] CR at V-7. ***. CR at V-7 n.18.

[96] CR/PR at V-7 n.17.

[97] CR/PR at V-7. In any final phase of these investigations, parties should provide suggestions in their comments on draft questionnaires for pricing products that provide coverage from all domestic producers and importers.

percent, and an average overselling margin of *** percent.[98] The available data also reflect predominant underselling by volume, with *** units of subject imports associated with instances of underselling, as compared to *** units of subject imports associated with instances of overselling. Thus, *** percent of the quantity of subject imports covered by the Commission's pricing data was sold at an average price that was less than that of the comparable domestic product.[99]

The Commission also collected import purchase cost data for the same four pricing products from firms that imported VSE engines from China for use in the production of their own downstream products.[100] Three importers, ***, reported usable import purchase cost data, although not all firms reported cost data for all products for all quarters.[101] Purchase cost data reported by these firms accounted for *** percent of subject imports from China in 2018.[102] Based on the purchase cost data obtained by the Commission, landed duty-paid costs for subject imports were below the sales price for U.S. produced VSEs in all 41 quarterly comparisons involving *** units of subject imports, at price-cost differentials ranging from *** to *** percent.[103]

We recognize that the import purchase cost data may not reflect the total cost of importing and therefore requested that direct importers provide additional information regarding the costs and benefits of directly importing VSEs. Two of the three importers that reported purchase cost data reported additional costs associated with importing VSEs.[104] *** reported that its additional cost to import equated to *** percent of landed duty-paid value and *** reported that its additional cost to import was *** percent of landed duty-paid value.[105] *** estimated that it saved *** percent of landed duty-paid value by importing VSEs rather than purchasing them from an importer and *** estimated that it saved *** percent of

[98] CR/PR at Table V-9. We note that the entire volume of overselling in the price comparisons is attributable to pricing Product 3 reported by ***. ***. CR/PR at Table V-6 and Table V-9.

[99] Calculated from CR/PR at Table V-9.

[100] CR/PR at V-6.

[101] CR/PR at V-6-7. ***. CR/PR at V-7n.19.

[102] CR/PR at V-7.

[103] CR/PR at V-21. We note that the import purchase cost data cover a greater quantity of subject imports than importer pricing data and that ***, only provided import purchase cost data. CR/PR at V-7 and Table IV-1.

[104] The U.S. Importer Questionnaire asked respondents to report only costs they would not incur when purchasing from a U.S. producer or importer.

[105] CR/PR at V-16.

landed duty-paid value by importing VSEs rather than purchasing them from a U.S. producer.[106] The average price-cost differential between the import purchase costs and prices for the domestic like product was *** percent.[107] This indicates that the import purchase cost was lower than the sales price of the domestic like product on average, even if the reported additional costs to import subject VSEs *** were considered.[108]

We have also considered purchaser lost sales/lost revenue responses. Three of the six purchasers responding to the Commissions lost sales/lost revenue questionnaire survey reported that they had purchased subject imports rather than the domestic like product. Purchasers reported a *** percentage point increase in their share of purchases and imports of subject imports.[109] While two of those purchasers reported that subject import prices were lower than those for domestically produced VSEs, none of the purchasers reported that price was a primary reason for their decision to purchase subject imports rather than the domestic like product. Purchasers identified branding, warranty, and total value as non-price reasons for purchasing subject imports rather than the domestic like product.[110]

We have considered these data in light of other record evidence that are inconsistent with the stated non-price reasons for purchasing subject imports instead of the domestic like product. For example, a *** executive provided evidence that ***.[111] Similarly, B&S provides ***. ***.[112] MTD's Exclusion Request also highlights the importance of keeping costs low for the mower manufacturer; it states that "the cost of components is essential to the company's ability to have and maintain an edge."[113] After considering all of the record evidence, we find,

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[106] CR/PR at V-17. We note that two of the three importers reporting useable import purchase cost data, ***, indicated that they compare costs of importing VSEs to the cost of purchasing VSEs from a U.S. producer in deciding whether to import VSEs. *** also compares the costs of importing VSEs to the costs of purchasing VSEs from a U.S. importer. *** did not report that it compares the costs of importing VSEs to the costs of purchasing VSEs from either U.S. producers or importers. CR/PR at V-16-17.

[107] CR/PR at Table V-10.

[108] We note that ***. CR/PR at V-16.

[109] CR/PR at Tables V-11 and V-12.

[110] CR/PR at V-24 and Table V-12. In addition, of the six responding purchasers, three reported that U.S. producers had not reduced prices in order to compete with lower-priced subject imports and three reported that they did not know. Purchaser *** reported that U.S. producers reduced prices by one percent due to commodity price changes and not because of imports. CR/PR at V-24.

[111] Kohler Post-Conference Brief, Exhibit 4, Declaration of Brian Melka at 3-4. CR/PR at Table 12.

[112] B&S Post-Conference Brief, Exhibit 16, Affidavit of Randy Ballard at 7-8 and Attachment, ***.

[113] B&S Post-Conference Brief, Exhibit 14, MTD Exclusion Request at 3.

for purposes of these preliminary determinations, that there has been significant price underselling by the subject imports and this underselling has led to lost sales and lost market share for the domestic industry.[114]

We have also examined available data on price trends. Domestic producers' prices for Products 1, 3, and 4 increased over the POI by *** percent, *** percent, and *** percent, respectively, and prices for Product 2 decreased by *** percent. U.S. importers' subject import prices for Products 2, 3, and 4 increased over the POI by *** percent, *** percent, and *** percent, respectively. Purchase cost data for subject imports for Products 1, 2, and 3 decreased by *** percent, *** percent, and *** percent, respectively.[115]

We note that subject import prices generally increased in late 2018 and stayed at those levels in interim 2019 and that domestic prices generally increased after 2018.[116] We acknowledge that the tariffs that were imposed beginning in 2018 may have affected these price trends. However, even if we examine price trends from 2016 to 2018, they do not show clear domestic price declines.[117] Accordingly, the record in the preliminary phase of these investigations does not show that subject imports depressed prices of the domestic like product to a significant degree.

We also have considered whether subject imports prevented price increases for the domestic like product which otherwise would have occurred to a significant degree. The domestic industry's ratio of COGS to net sales was relatively flat and declined somewhat overall during the calendar years of the POI; it was *** percent in 2016, *** percent in 2017, and *** percent in 2018. The COGS to net sales ratio was *** percent in interim 2018, and higher, at *** percent in interim 2019.[118] Apparent U.S. consumption was lower in interim 2019 than in interim 2018, however, which would make it less likely that the domestic industry would be

[114] At the staff conference an MTD representative stated that the "value equation" of an engine is very important to its customers and that subject imports' value equation is preferable to that of the domestic product. Tr. at 128-29 (Trumpler). Respondents MTD and Toro argue that the subject imports are superior to the domestic product in several respects which render the Commission's price comparisons of the subject imports and the domestic product inappropriate. MTD and Toro Post-Conference Brief at 19-21. By contrast, Petitioner contends that ***. Kohler Post-Conference Brief, Exhibit 4, Declaration of Brian Melka at 3-4. In any final phase of these investigations, we intend to request information on what firms consider when they are evaluating the "value proposition" with respect to their sourcing decisions in the U.S. VSE market.

[115] CR/PR at Table V-8 and Figure V-6. There were no U.S. subject importer sales price data with respect to Product 1 and no U.S. subject import purchase cost data with respect to Product 4.

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

[117] CR/PR at Figure V-6.

[118] CR/PR at Table VI-1.

able to raise its prices in interim 2019. Further, many prices for domestically produced VSEs are negotiated approximately a year before they are delivered; due to this arrangement, domestic producers may have been restricted in their ability to respond to changes in costs in interim 2019.[119] [120]

In conclusion, given the significant underselling that led to lost sales and lost market share for the domestic industry, we find that subject imports have had adverse price effects on the domestic industry.

E. Impact of the Subject Imports[121]

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."[122]

At a time of rising demand from 2016 to 2018, the domestic industry's production increased, but its shipments and sales increased at a lower rate than increases in apparent U.S. consumption and its operating income showed sharp declines. The domestic industry's capacity increased by *** percent between 2016 and 2018, increasing from *** units in 2016 to *** units in 2017 and *** units in 2018; capacity was *** units in interim 2018 and interim 2019.[123] Production increased by *** percent from 2016 to 2018, increasing from *** units in 2016 and 2017 to *** units in 2018; it was *** units in interim 2018 and *** units in interim 2019.[124] Capacity utilization increased irregularly from *** percent in 2016 to *** percent in

[119] U.S. producers reported that *** percent of their shipments were through annual or long-term contracts with the remainder sold through spot sales. CR/PR at Table V-3.

[120] In any final phase of these investigations, the Commission will further investigate the domestic producers' ability to respond to changes in production costs.

[121] In its notice initiating the antidumping duty investigation on VSEs from China, Commerce reported estimated dumping margins ranging from 324.73 percent to 637.73 percent. CR at I-6; *Certain Vertical Shaft Engines Between 225cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation,* 85 Fed. Reg. 8809, 8812 (Feb. 18, 2020).

[122] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[123] CR/PR at Tables III-4 and C-1.

[124] CR/PR at Tables III-4 and C-1.

2017 and *** percent in 2018; it was *** percent in interim 2018 and *** percent in interim 2019.[125]

The domestic industry's share of apparent U.S. consumption fell from *** percent in 2016 to *** percent in 2017 and *** percent in 2018; it was *** percent in interim 2018 and *** percent in interim 2019.[126] U.S. shipments increased by *** percent from 2016 to 2018, increasing irregularly from *** units in 2016 to *** units in 2017 and *** units in 2018.[127] U.S. shipments were *** units in interim 2018 and *** units in interim 2019.[128] Ending inventories of producers in the domestic industry fell by *** percent from 2016 to 2018, decreasing irregularly from *** units in 2016 to *** units in 2017 and *** units in 2018; they were *** units in interim 2018 and higher, at *** units, in interim 2019.[129]

With respect to employment, the number of production-related workers (PRWs) increased by *** percent from 2016 to 2018, increasing from *** PRWs in 2016 to *** PRWs in 2017 and *** PRWs in 2018; it was *** PRWs in interim 2018, and higher, at *** PRWs, in interim 2019.[130] Total hours worked increased by *** percent from 2016 to 2018, increasing from *** hours in 2016 to *** hours in 2017, and *** hours in 2018; there were *** hours worked in interim 2018 and *** hours worked in interim 2019.[131] Hours worked per PRW decreased irregularly from *** hours in 2016 to *** hours in 2017 and *** hours in 2018; they were *** hours in interim 2018 and *** in interim 2019. Wages paid increased by *** percent from 2016 to 2018, increasing from $*** in 2016 to $*** in 2017 and $*** in 2018; they were $*** in interim 2018, and higher, at $***, in interim 2019.[132] Hourly wages (dollars per hour) increased from $*** in 2016 to $*** in 2017 and $*** in 2018; they were $*** in interim 2018 and $*** in interim 2019. Productivity increased by *** percent from 2016 to 2018, increasing (in units per 1,000 hours) from *** in 2016 to *** in 2017, and *** in 2018; it was *** units in interim 2018 and *** units in interim 2019.[133] Unit labor costs (dollars per unit) were level from 2016 to 2018; they were $*** in 2016, $*** in 2017, and $*** in 2018; they were $*** in interim 2018 and $*** in interim 2019.[134]

[125] CR/PR at Tables III-4 and C-1.
[126] CR/PR at Tables IV-5 and C-1.
[127] CR/PR at Tables III-6 and C-1.
[128] CR/PR at Tables III-8 and C-1.
[129] CR/PR at Tables VI-1 and C-1.
[130] CR/PR at Tables III-10 and C-1.
[131] CR/PR at Tables III-10 and C-1.
[132] CR/PR at Tables III-10 and C-1.
[133] CR/PR at Tables III-10 and C-1.
[134] CR/PR at Tables III-10 and C-1.

Total net sales value increased by *** percent from 2016 to 2018, increasing irregularly from $*** in 2016 to $*** in 2017 and $*** in 2018; they were $*** in interim 2018, and lower, at $*** in interim 2019.[135] Total COGS increased by *** percent from 2016 to 2018, increasing irregularly from $*** in 2016 to $*** in 2017 and then $*** in 2018; it was $*** in interim 2018 and $*** in interim 2019.[136] The industry's ratio of COGS to net sales was relatively flat and declined somewhat overall from 2016 to 2018; it was *** percent in 2016, *** percent in 2017 and *** percent in 2018; it was *** percent in interim 2018 and *** percent in interim 2019.[137] Gross profit increased by *** percent from 2016 to 2018, decreasing from $*** in 2016 to $*** in 2017, and then increasing to $*** in 2018; it was $*** in interim 2018, and lower, at $*** in interim 2019.[138]

Operating income fell by *** percent from 2016 to 2018, decreasing steadily from $*** in 2016 to $*** in 2017, and $*** in 2018; it was $*** in interim 2018 and lower, at $***, in interim 2019.[139] The industry's operating income margin decreased from *** percent in 2016 to *** percent in 2017, and *** percent in 2018; it was *** percent in interim 2018 and *** percent in interim 2019.[140] Net income declined by *** percent from 2016 to 2018, decreasing from $*** in 2016 to $*** in 2017 and $*** in 2018; it was $*** in interim 2018, and lower, at a $*** loss, in interim 2019.[141]

Capital expenditures increased by *** percent between 2016 and 2018, increasing from $*** in 2016 to $*** in 2017, and $*** in 2018; they were $*** in interim 2018, and lower, at $***, in interim 2019.[142] Research and development expenses fell from $*** in 2016 to $*** in 2017, and $*** in 2018; they were $*** in interim 2018 and $*** in interim 2019.[143] U.S. producers' total assets were $*** in 2016, $*** in 2017, and higher, at $*** in 2018. Their operating return on assets was *** percent in 2016, *** percent in 2017, and *** percent in 2018.[144] *** U.S. producers reported a wide range of negative effects of subject imports on

[135] CR/PR at Tables VI-1 and C-1.
[136] CR/PR at Tables VI-1 and C-1.
[137] CR/PR at Tables VI-1 and C-1.
[138] CR/PR at Tables VI-1 and C-1.
[139] CR/PR at Tables VI-1 and C-1.
[140] CR/PR at Tables VI-1 and C-1.
[141] CR/PR at Tables VI-1 and C-1.
[142] CR/PR at Tables VI-6 and C-1.
[143] CR/PR at Tables VI-6.
[144] CR/PR at Table VI-7.

investment, growth, and development including cancelled projects, reduced capital investment, and reduced investment in technology and engine innovations.[145]

As discussed above, a significant volume of low-priced subject imports that were at least moderately substitutable with the domestic like product significantly undersold the domestic like product, gaining sales and market share at the expense of the domestic industry at a time of rising demand. Shipments increased but at a much lower rate than increasing demand. Due to the competition from the subject imports, the domestic industry was unable to fully benefit from the increase in demand, and its lost sales and market share resulted in lower revenue than it would have realized otherwise and lower operating income and margins for the industry. Its research and development expenses also decreased. When demand declined in interim 2019, the domestic industry's output and operating income declined, notwithstanding some gain in market share for the domestic industry, which appears to be related to the imposition of the section 301 tariffs. However, there is evidence that subject imports increased after USTR granted exemptions for certain VSEs from the section 301 tariffs.[146]

We have also considered whether there are other factors that may have had an adverse impact during the POI to ensure that we are not attributing injury from other factors to the subject imports. Respondents have argued that several factors may be responsible for any injury that the domestic industry has experienced, and we address these arguments in turn.

Respondents have argued that the domestic industry does not offer advanced electronic fuel ignition ("EFI") or integrated electronic governor features ("E-Gov") in its residential engines, and that the industry's failure to provide its customers with innovations has injured the domestic industry.[147] The domestic producers provided evidence that they can offer such innovations to their customers and ***.[148] Respondents also have claimed that OEMs are reluctant to do business with Kohler because its engines have safety and quality issues, and because of a substantial civil penalty Kohler was required to pay to the EPA and the State of California.[149] The record indicates that Kohler had substantial sales of VSEs throughout the POI and reports that ***, which is inconsistent with the contention that there are significant quality concerns associated with Kohler's products.[150] In any final phase of these investigations, we

[145] CR/PR at Tables VI-8 and VI-9.

[146] Kohler Post-Conference Brief at 22; B&S Post-Conference Brief at 11-12, Exhibit 8 at 10, 19.

[147] MTD and Toro Post-Conference Brief at 8-9.

[148] Kohler Post-Conference Brief, Exhibit 4 at 3, Exhibit 14, MTD Canada Meeting. B&S Post-Conference Brief, Exhibit 16 at 3-4.

[149] MTD and Toro Post-Conference Brief at 27-30.

[150] Kohler Post-Conference Brief at 5. CR/PR at Table VI-3.

will further examine the differences between products offered by the domestic industry and subject importers as well as any safety and quality issues.

Respondents also argue that OEMs are reluctant to do business with B&S because it competes in the lawnmower market and it was involved in a patent dispute with ***.[151] B&S asserts that it only accounts for approximately *** percent of the riding and zero-turn mower market, and that ***. B&S also contends that the patent dispute with *** has been going on for a decade and has no bearing on the data in this case. These issues do not seem to involve the quality of B&S's engines, and the record indicates that ***.[152]

In addition, Respondents claim that competition with U.S. producer Kawasaki has caused injury to other domestic producers.[153] Under the statute, however, we consider the domestic industry as a whole, and we find that neither intra-industry competition nor increased purchases from Kawasaki can explain the domestic industry's loss of market share to subject imports.[154]

We have also considered trends in apparent U.S. consumption and nonsubject imports. We observe that demand increased for much of the POI, and nonsubject imports played a small role in the market, never accounting for more than *** percent of the U.S. market over the POI.[155]

Accordingly, for purposes of these preliminary determinations, we conclude that subject imports had a significant adverse impact on the domestic industry.

VI. 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 subject imports of VSEs from China that are allegedly subsidized and sold in the United States at LTFV.

[151] MTD and Toro Post-Conference Brief at 31-33.
[152] B&S Post-Conference Brief at 44-45, 47, Exhibit 16 at 2, Exhibit 17 at 2-5.
[153] MTD and Toro Post-Conference Brief at 2-5 and 15.
[154] 19 U.S.C. § 1677(4)(A).
[155] CR/PR at Table C-1.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by the Coalition of American Vertical Engine Producers (Kohler Co., Kohler, Wisconsin, and Briggs & Stratton Corporation, Wauwatosa, Wisconsin), on January 15, 2020, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of certain vertical shaft engine between 225 and 999cc and parts thereof ("VSEs") from China.[1] The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
January 15, 2020	Petitions filed with Commerce and the Commission; institution of Commission investigations (85 FR 3945, January 23, 2020)
February 4, 2020	Commerce's notices of initiations (85 FR 8809 and 85 FR 8835, February 18, 2020)
February 5, 2020	Commission's conference
February 28, 2020	Commission's vote
March 2, 2020	Commission's determinations
March 9, 2020	Commission's views

[1] See the section entitled "The subject merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

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

[3] Appendix B presents the witnesses who appeared at the Commission's conference.

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

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

[4] 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—[5]

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

Organization of report

Part I of this report presents information on the subject merchandise, alleged 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

VSEs are generally used in riding lawn mowers and zero-turn radius lawn mowers. The leading U.S. producer of VSEs is ***, while the leading responding producer of VSEs in China is ***. The leading U.S. importers of VSEs from China are ***. The leading importer of VSEs from Japan, the only nonsubject source, is ***. U.S. purchasers of VSEs are firms that manufacture riding mowers; leading purchasers include MTD, Toro, Deere, and Husqvarna.

Apparent U.S. consumption of VSEs totaled approximately *** units ($***) in 2018. Currently, three firms are known to produce VSEs in the United States. U.S. producers' U.S. shipments of VSEs totaled *** units ($***) in 2018 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from China totaled *** units ($***) in 2018 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports

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

from nonsubject sources totaled *** in 2018 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. Except as noted, U.S. industry data are based on U.S. producer questionnaire responses of three firms that accounted for all known U.S. production of VSEs during 2018. VSEs are imported under HTS subheadings 8407.90 and 8407.91. These codes are basket categories that include "other engines" not subject to these investigations. Therefore, import volume data shown in the report are based on responses to the Commission's importer questionnaires.[6] Chinese industry data are based on questionnaire response of three firms that accounted for approximately *** percent of US imports from China during 2018.

Previous and related investigations

VSEs have not been the subject of prior countervailing and/or antidumping duty investigations in the United States.

Nature and extent of alleged subsidies and sales at LTFV

Alleged subsidies

On February 18, 2020, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on VSEs from China. Commerce identified the following government programs in China:[7]

1. Preferential Lending
    - Policy Loans to the Vertical Shaft Engine Industry
    - Government Directed Debt Restructuring in the Chinese Vertical Shaft Engine Industry
2. Subsidies Under the State Capital Operating Budget
    - Subsidies Under the State Capital Operating Budget

[6] Based on customs proprietary data, the top 45 importers of record accounted for *** percent of U.S. imports of VSEs including other engines from China during 2018. The Commission received 30 responses of which 10 firms confirmed importation of VSEs from China. Staff believes these responses account for approximately of *** percent of subject imports from China.

[7] Certain Vertical Shaft Engines Between 225cc and 999cc, and Parts Thereof from the People's Republic of China: Enforcement and Compliance Office of AD/CVD Operations Countervailing Duty Investigation Initiation Checklist, February 4, 2020.

3. Export Subsidies and Export Credit Insurance
    - Export Loans from Chinese State Owned Banks
    - Export Seller's Credit
    - Export Buyer's Credit
4. Income Tax and Direct Tax Program
    - Income Tax Reduction for High or New Technology Enterprises
    - Income Tax Deduction for Research and Development Expenses Under the Enterprise Income Tax Law
    - Income Tax Credits for Domestically Owned Companies Purchasing Domestically Produced Equipment
    - Import Tariff and VAT Exemptions for FIEs and Certain Domestic Enterprises Using Imported Equipment in Encouraged Industries
5. Government Provision of Goods and Services for Less Than Adequate Remuneration
6. Provision of Land for Less Than Adequate Remuneration to Encouraged Industries
    - Provision of Unwrought Aluminum for LTAR
    - Provision of Pig Iron for LTAR
    - Provision of Electricity for Less Than Adequate Remuneration
    - The Provision of Steam Coal for LTAR
7. Grant Programs
    - Foreign Trade Development Fund Grants
    - Export Assistance Grants
    - Interest Payment Subsidies
    - GOC and Sub-Central Government Subsidies for the Development of Famous Brands and China World Top Brands
    - State Key Technology Fund Grants
    - Grants for Retiring Outdated Capacity/Industrial Restructuring
    - Grants for Energy Conservation and Emission Reduction

Alleged sales at LTFV

On February 18, 2020, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation on product from China. Commerce has its initiated antidumping duty investigation based on estimated dumping margins of 324.73 percent to 637.73 percent for VSEs from China.[8]

The subject merchandise

Commerce's scope

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

> *The merchandise covered by this investigation consists of spark-ignited, non-road, vertical shaft engines, whether finished or unfinished, whether assembled or unassembled, primarily for riding lawn mowers and zero-tum radius lawn mowers. Engines meeting this physical description may also be for other non-hand-held outdoor power equipment such as, including but not limited to, tow-behind brush mowers, grinders, and vertical shaft generators. The subject engines are spark ignition, single or multiple cylinder, air cooled, internal combustion engines with vertical power take off shafts with a minimum displacement of 225 cubic centimeters (cc) and a maximum displacement of 999cc. Typically, engines with displacements of this size generate gross power of between 6.7 kilowatts (kw) to 42 kw.*
>
> *Engines covered by this scope normally must comply with and be certified under Environmental Protection Agency (EPA) air pollution controls title 40, chapter I, subchapter U, part 1054 of the Code of Federal Regulations standards for small non-road spark-ignition engines and equipment. Engines that otherwise meet the physical description of the scope but are not certified under 40 CFR part 1054 and are not certified under other parts of subchapter U of the EPA air pollution controls are not excluded from the scope of this proceeding. Engines that may be certified under both 40 CFR part 1054 as well as other parts of subchapter U remain subject to the scope of this proceeding.*
>
> *For purposes of this investigation, an unfinished engine covers at a minimum a subassembly comprised of, but not limited to, the following components: crankcase, crankshaft, camshaft, piston(s), and connecting*

[8] Certain Vertical Shaft Engines Between 225cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation, 85 FR 8809, February 18, 2020.

rod(s). Importation of these components together, whether assembled or unassembled, and whether or not accompanied by additional components such as an oil pan, manifold, cylinder head(s), valve train, or valve over(s), constitutes an unfinished engine for purposes of this investigation. The inclusion of other products such as spark plugs fitted into the cylinder head or electrical devices (e.g., ignition modules, ignition coils) for synchronizing with the motor to supply tension current does not remove the product from the scope. The inclusion of any other components not identified as comprising the unfinished engine subassembly in a third-country does not remove the engine from the scope.

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations are imported under a number of provisions of the Harmonized Tariff Schedule of the United States ("HTS"). VSEs (including any unfinished good that has the essential character of a complete engine) are primarily imported under statistical reporting numbers 8407.90.1020, 8407.90.1060, and 8407.90.1080, while the covered less-than-complete engines are imported under 8409.91.5085 and 8409.91.9990. Subject goods may also be imported under statistical reporting numbers 8407.90.9060 and 8407.90.9080. The 2020 general rate of duty is free for HTS subheadings 8407.90.10 and 8407.90.90, and 2.5 percent *ad valorem* for HTS subheadings 8409.91.50 and 8409.91.99. 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

Various Chinese products subject to these investigations are also subject to additional duties under Section 301 of the Trade Act of 1974. Imported Chinese products subject to these investigations that are subject to additional 25 percent *ad valorem* import duties under Section 301 are those classified in subheadings 8407.90.10, 8407.90.90, 8409.91.50, and 8409.91.99.[9]

[9] See U.S. note 20(f), subchapter III of HTS chapter 99. Subheadings 8407.90.10 and 8407.90.90 were in the second tranche, which went into effect August 23, 2018. Subheadings 8409.91.50 and 8409.91.99 were included in the third tranche, which went into effect September 24, 2018, and then the tariff rates were increased from 10 percent to 25 percent on May 10, 2019. For more information see https://ustr.gov/issue-areas/enforcement/section-301-investigations/tariff-actions

Exclusions were granted at the statistical reporting number level, and were granted to products classified in 8407.90.1020 on July 31, 2019,[10] and 8407.90.9060 on October 2, 2019.[11]

The product

Description and applications

VSEs are spark-ignited, single or multiple cylinder, air cooled, internal combustion, non-road engines with vertical power take off shafts with a minimum displacement of 225 cubic centimeters (cc) and a maximum displacement of 999cc.[12] Most engines with this size displacement generate a gross power between 6.7 kilowatts (kw) and 42kw.[13] VSEs covered by this scope also include subassemblies (unassembled or unfinished VSEs), but do not include engines with a displacement of 224cc or less, nor does it include engines with a horizontal shaft.[14] The subassemblies are designed for dedicated use in becoming a completed VSE or as a replacement assembly, and have no independent use and no separate markets.[15]

VSEs, are primarily used in riding lawn mowers and zero-turn radius lawn mowers, although engines meeting this physical description may also be used in other non-hand-held outdoor power equipment.[16] The engine displacements in this range correspond to horsepower ranges for riding lawn mowers, and are generally not used for non-riding lawn mowers or other types of vehicles (such as automobiles). Engines less than 225cc are not suitable for riding lawn mowers, and therefore have different customers and are different products.[17] Similarly, horizontal shaft engines have different customers, distribution channels, and price points, and are primarily used in generators and various construction equipment.[18]

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[10] This exclusion only applies to engines valued at less $180. See: *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 Fed. Reg. 37,381, 37,382 (U.S. Trade Rep. July 31, 2019).

[11] *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 Fed. Reg. 52,553, 52,557 (U.S. Trade Rep. Oct. 2, 2019).

[12] Petitioner Kohler's postconference brief, p. 6.

[13] Petition p. 5.

[14] Petitioner Kohler's postconference brief, p. 6.

[15] Petitioner Kohler's postconference brief, p. 9-10.

[16] VSEs covered by this scope used in other applications account for less than one percent of the engines covered by the scope. Conference transcript, p. 69 (Melka).

[17] Conference transcript, p. 68 (Rodgers).

[18] Conference transcript, p. 54 and p. 68 (Hudak).

Manufacturing processes[19]

The manufacturing process for VSEs is a continuous and lengthy operation, consisting of five production stages: casting major components; machining these components; assembling the short block; assembling the long block; and finishing. The first two stages are casting and machining. The process begins by casting various major cast iron and aluminum components (i.e. the crankcases, cylinder heads, oil pans, crankshafts, camshafts, balance shafts, connecting rods, pistons, and flywheels) that make up the predominant portions of the engines. Some engine producers are vertically integrated such that this is done using their own aluminum cast houses and iron foundries, while others use external foundries. The next stage is to machine these casted components. Machining includes the process of milling, turning, drilling, boring, grinding, honing, deburring, balancing, and washing, as well as any other step required to transform the casted parts into components that can be used in a finished engine. The exact number of components that are machined varies from producer to producer, but most engine manufacturers perform machining "in-house."[20]

After casting and machining, the primary assembly process occurs on an assembly line. Most of the major cast iron and aluminum components produced in the prior two steps (including the engine crankcase, oil pan, crankshaft, camshaft, balance shafts, connecting rods, and pistons) create the "short block" subassembly. Added to those components are smaller minor parts such as rings, gaskets, bolts, screws, springs, governor gears, and washers, among others, to complete the short block. The assembly process then continues by adding the valvetrain, cylinder heads, valve covers, and breather system components to the short block to create the "long block" assembly. The final phase of the assembly process requires adding the remaining engine parts to create a finished engine. These additional components include an intake manifold, carburetor, starter, flywheel, spark plugs, ignition modules, cooling fan, and any other component required to power the engine and meet emissions requirements. Moreover, various testing occurs to ensure quality control and EPA compliance.

In additional to numerous internal testing and quality control, all engines covered by the scope of this VSE investigations should also comply with and be certified under the Environmental Protection Agency air pollution controls title 40, chapter I, subchapter U, part 1054 of the Code of Federal Regulations standards for small non-road spark-ignition engines

[19] Unless otherwise noted, information in this section is from the Petition, pp. 6-8.

[20] Some producers source components from external machine shops instead of machining the components internally.

and equipment.[21] There is also an additional certification required for engines in California set forth by the California Air Resources Board and, in general, engines are certified to meet both sets of regulations.[22]

Domestic like product issues

Petitioner proposes a domestic like product coextensive with the scope of these investigations and contends that the Commission should include vertical shaft engine subassemblies in the same domestic like product as finished engines.[23] None of the respondent parties challenge petitioner's proposed definition of the domestic like product for purposes of the preliminary phase of these investigations. Respondents MTD and Toro reserved the right to argue for a separate like product definition should the Commission proceed to final phase investigations.[24]

[21] Petition p. 5. However, engines that otherwise that otherwise meet the physical description of the scope but are not certified under 40 CFR part 1054 and are not certified under other parts of subchapter U of the EPA air pollution controls are not excluded from the scope.

[22] Conference transcript, pp. 155-156 (Krueger).

[23] Petitioner Kohler's postconference brief, p. 6, Ex. 1 at 4-5.

[24] Respondents' MTD and Toro postconference brief, p.2. Yamaha did not address domestic like product issues in its postconference brief.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

VSEs are used in riding mowers, both traditional riding mowers (also referred to as tractors) and zero-turn mowers, which are commonly used by professional landscapers.[1] Most VSEs are consumed in the U.S. market, which is estimated to comprise 85 percent of the total world market.[2]

The U.S. VSEs market is supplied by three domestic producers, Briggs & Stratton, Kawasaki, and Kohler, as well as imported product. Kawasaki reportedly competes at the higher end of the market, in both price and quality, and it reportedly sells mostly commercial engines, although it also sells consumer equipment.[3] In addition to producing engines, Briggs & Stratton also produces riding mowers, which it sells to its dealer networks but not to major retailers.[4]

Most VSEs are sold to the OEMs that manufacture riding mowers, with a small share sold to the replacement market. OEMs sell their mowers to major home center retailers, such as Home Depot and Lowe's, as well as hardware stores, home and garden stores, and dealers.[5] The OEM market is concentrated among a small number of manufacturers, including MTD, Toro, Deere, and Husqvarna.[6] Many of the major OEMs source VSEs from multiple producers

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[1] Petition, exhibit I-17, p. 1. Conference transcript, p. 29 (Rodgers).

[2] Conference transcript, p. 35 (Melka).

[3] Conference transcript, p. 82 (Rodgers). According to Yamaha, Kawasaki and Kohler are the main domestic producers serving the commercial market. Respondent Yamaha's postconference brief, p. 28. ***. Petitioner Briggs & Stratton postconference brief, exhibit 16.

[4] Conference transcript, p. 40 (Brown) and p. 87 (Rodgers). Briggs & Stratton stopped selling its lawn and garden products through mass retailers in 2012. Petitioner Briggs & Stratton postconference brief, p. 5.

[5] Conference transcript, p. 32 (Rodgers), p. 41 (Brown).

[6] Conference transcript, p. 88 (Rodgers). ***.

***.

including U.S. producers and Chinese producers.[7] MTD is the largest U.S. producer of powered outdoor lawn equipment, and purchases VSEs from all three U.S. producers as well as from Chinese producer Zongshen, with which MTD has a joint development agreement for VSEs.[8]

VSEs may be branded with the engine manufacturer's name, or in some cases, the brand name of the mower OEM. Briggs & Stratton sells VSEs only under its two labels, Briggs & Stratton and Vanguard (its brand for premium commercial engines), except for a Deere label, and the vast majority of Kohler's engines carry the Kohler brand name.[9] Engines produced in China for MTD and Toro carry the OEM's brand name.

Riding lawn mowers have model years.[10] OEMs decide how to pair a particular engine to each mower model.[11] U.S. manufacturers typically ship engines to OEMs on a trailer with 2 to 4 engines per rack with the rack and steel trailer returned to the OEM. Engines sold by U.S. producers to distributors and dealers and engines sold to all channels by importers are typically packaged individually in a cardboard box.[12] Engine warranties generally are for 2 to 3 years, with the highest rate of claims in the first year.[13]

Firms were asked if there were any changes in marketing or product range of VSEs since 2016. Among U.S. producers, *** stated that robotic mower use has increased in Europe, but have not had a significant effect on the U.S. market, and ***. Among importers, ***,

---

[7] Conference transcript, p. 21 (DeFrancesco). ***.

[8] MTD mower brands include Cub Cadet, Troy Bilt, Remington, and Yard Machines, and it also private labels mowers under the Craftsman, Murray, and Snapper names. MTD stated that Husqvarna recently announced that it will exit the production of private label mowers to focus on its own branded equipment, which would leave MTD as the only producer of private label riding mowers. MTD reported that under its agreement with Zongshen to develop engines that are individually optimized for MTD's product, MTD supports product development, engineering, quality assurance, and assists with compliance testing and certification to U.S. standards. It reported that with its own engines it has more control of quality, warranty and consumer experience/satisfaction, and these engines are not directly interchangeable with petitioners' engines. Conference transcript, pp. 112-116 (Trumpler), p. 88 (Rodgers).

Briggs & Stratton licenses some of its mower brands to Walmart, and ***. Petitioner Briggs & Stratton postconference brief, exhibit 1, p. 5.

[9] Conference transcript, p. 90 (Melka and Rodgers).

[10] Petition, p, 18.

[11] Petition, p. 18.

[12] Petition, exhibit I-8, p.4.

[13] Petition, exhibit I-17, p. 3.

that Husqvarna exited the market for entry level residential mowers, negatively affecting Briggs & Stratton and Kohler engine shipments in this category, and that the Sears bankruptcy and store closings artificially drove the market down while on-hand inventories were marked down to clear out the inventory. ***. *** reported that there has been a shift to zero-turn mowers, which requires different features than tractors. *** stated that it entered the rental market, which requires larger VSEs.

Overall, apparent U.S. consumption in 2018 was *** percent higher than in 2016, decreasing by *** percent from 2016 to 2017 and increasing by *** percent from 2017 to 2018. Apparent U.S. consumption was *** percent lower in interim 2019 compared to interim 2018.

Impact of section 301 tariffs

As discussed in part I, various products subject to these investigations have been subject to section 301 tariffs beginning in August 2018, although some exclusions were granted on July 31 and September 23, 2019. Most firms (3 of 3 U.S. producers and 5 of 7 importers) reported that section 301 tariffs had an impact on the VSEs market. Firms' reported impacts of the section 301 tariffs on overall U.S. demand, supply, prices, and raw material costs are shown in table II-1.

Table II-1
VSEs: Impact of Section 301 tariffs

Country pair	U.S. producers				U.S. importers			
	I	NC	D	F	I	NC	D	F
U.S. supply	---	2	---	1	1	2	---	1
China supply	1	1	---	1	---	2	2	1
Other country supply	---	2	---	1	2	2	---	---
Prices	1	---	1	1	4	---	---	1
U.S. demand	---	3	---	---	3	2	---	1
Raw material costs	1	---	---	2	4	1	---	---

Note: I=increased, NC=no change, D=decreased, F=fluctuated.

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

U.S. producer *** stated that there were "exceptionally" high quantities of imported engines from China in April and May 2018, before the tariffs went into effect, that imports continued after the tariffs went into effect, that import volumes surged after the exclusions were granted, and that Chinese imports have consistently suppressed and depressed *** prices.

***.

Regarding raw material costs, ***. Importer *** reported increased costs of raw materials and component parts that go into engine production and importer *** stated that exemptions from section 301 tariffs have allowed it to continue its business. Importer *** stated that section 301 tariffs increased the price of engines imported from China, and that U.S. producers quoted a similar increase because of increased costs of Chinese components in U.S.-produced engines.

Channels of distribution

VSEs are mostly sold to OEMs, for use in production of riding mower engines, with a much smaller volume sold to distributors, who sell or support a dealer network.[14] During January 2016-September 2019, 95 to 99 percent of U.S. producers' and subject imports' U.S. shipments, and about *** percent of nonsubject import shipments were to OEMs (table II-2).

Geographic distribution

U.S. producers and importers reported selling VSEs to all U.S. regions (table II-3). For U.S. producers, 23 percent of sales were within 100 miles of their production facility, 62 percent were between 101 and 1,000 miles, and 16 percent were over 1,000 miles. Importers sold 80 percent within 100 miles of their U.S. point of shipment, 17 percent between 101 and 1,000 miles, and 3 percent over 1,000 miles.

[14] Petition, pp. 18-19.

Table II-2
VSEs: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, January 2016-September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Share of U.S. shipments (percent)				
U.S. producers: to Distributors or dealers	***	***	***	***	***
to OEMs	***	***	***	***	***
U.S. importers: China to Distributors or dealers	***	***	***	***	***
to OEMs	***	***	***	***	***
U.S. importers: Nonsubject to Distributors or dealers	***	***	***	***	***
to OEMs	***	***	***	***	***
U.S. importers: All sources: to Distributors or dealers	***	***	***	***	***
to OEMs	***	***	***	***	***

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

Table II-3
VSEs: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Importers
Northeast	3	3
Midwest	3	5
Southeast	3	4
Central Southwest	3	4
Mountain	2	3
Pacific Coast	3	3
Other	2	1
All regions (except Other)	2	3
Reporting firms	3	5

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

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

Supply and demand considerations

U.S. supply

Table II-4 provides a summary of the supply factors regarding VSEs from U.S. producers and from China. U.S. producers ship mainly to the U.S. home market whereas Chinese producers reported a relatively small share of shipments to the Chinese home market. U.S. producers reported higher capacity utilization than responding Chinese producers.

Table II-4
VSEs: Supply factors that affect the ability to increase shipments to the U.S. market

Item	2016	2018	2016	2018	2016	2018	Shipments by market in 2018 (percent)		Able to shift to alternate products
	Capacity (1,000 units)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	***	***	***	***	***	***	***	***	1 of 3
China	***	***	***	***	***	***	***	***	0 of 3

Note: Responding U.S. producers accounted for all of U.S. production of VSEs in 2018. Responding foreign producer/exporter firms accounted for less than half of U.S. imports of VSEs from China during 2018. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from China, 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 VSEs have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced VSEs to the U.S. market. The main contributing factors to this degree of responsiveness of supply is the availability of unused capacity. U.S. producers have a limited ability to shift shipments from alternate markets and to shift production to or from alternate products.

U.S. producers' capacity increased by *** percent from 2016 to 2018, but was outpaced by a production increase of *** percent, leading to increased capacity utilization. U.S. producers' reported export markets were ***. All three U.S. producers also produce horizonal shaft engines on the same equipment as VSEs, although horizontal engines comprised a small percentage of total production on the same equipment. Factors affecting U.S. producers' ability to shift production include much more limited demand for horizontal engines, engines are produced-to-order, and a different configuration for the horizontal shaft lines that is not easily changed.

Subject imports from China[15]

Based on available information, responding Chinese producers of VSEs have the ability to respond to changes in demand with large changes in the quantity of shipments of VSEs to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and some ability to shift shipments from alternate markets. A

[15] ***.

factor mitigating responsiveness of supply is a limited ability to shift production to or from alternate products.

Responding foreign producers' capacity increased from 2016 to 2018. Capacity utilization also increased but remained low at *** percent in 2018. *** reported that its principal other export market was ***. All responding Chinese producers reported that they were unable to switch production to other products.

Imports from nonsubject sources

Sources of nonsubject imports include Japan and ***. Briggs & Stratton imported VSEs from Japan through a joint venture which ***. ***. Nonsubject imports accounted for *** percent of total U.S. import quantity in 2018, down from *** percent in 2016.

Supply constraints

Most firms (2 of 3 U.S. producers and 7 of 8 importers) reported no supply constraints. ***. Importer *** reported that Kawasaki had constrained supply from 2015 to 2017, while it was expanding capacity, and that during that time, Kohler temporarily secured some of Kawasaki's placements. Toro stated that it is increasing its purchases from Kawasaki in 2020 but that prior to that time, Kawasaki had told Toro that it lacked production capacity to produce the particular engines Toro required.[16] Yamaha stated that when it was entering the market in 2016 and 2017, Kawasaki's inability to meet demand created an opportunity for Yamaha's imports.[17] ***.[18]

U.S. demand

Based on available information, the overall demand for VSEs is likely to experience small changes in response to changes in price. The main contributing factors are the lack of substitute products and the small-to-moderate cost share of VSEs in its end-use products.

[16] Conference transcript, p 108 (Stoel).
[17] Respondent Yamaha's postconference brief, p. 29.
[18] Petitioner Briggs & Stratton postconference brief, exhibit 16.

End uses and cost share

U.S. demand for VSEs depends on the demand for riding lawn mowers and zero-turn mowers. VSEs account for a small-to-moderate share of the cost of riding mowers and zero-turn mowers, reportedly 10 to 25 percent.

Business cycles

The market for VSEs is seasonal, based on the demand for landscape services for residential mowing.[19] OEMs generally make most of their engine purchases in early winter and then sell their mowers to retailers in late winter and spring.[20]

Most responding firms (all 3 responding U.S. producers and 8 of 9 importers) indicated that the VSE market was subject to business cycles. Firms reported seasonal sales and that weather affects demand, with higher rainfall increasing demand. U.S. producer *** stated that VSEs production is very seasonal since OEMs produce most of their mowers from January to April. MTD stated that it typically builds its mowers during ***, during which time it receives the engines from U.S. producers.[21] Importer *** stated that warmer weather has reduced rainfall in the Southeast, a major consuming region for riding mowers.

Most firms (all 3 responding U.S. producers and 8 of 9 importers) indicated that the market was not subject to other distinct conditions of competition. One importer, ***, reported the following other conditions of competition: ***.

Some firms reported changes to the conditions of competition. U.S. producer *** stated that the peak production window has narrowed due to OEMs not wanting to carry inventory. *** stated that subject imports have taken the increase in overall demand and market share from domestic producers. Importer *** cited growth in battery-operated and robotic mowers, increased consumer desirability of engines branded with the same name as the mower, increasing popularity of commercial lawn care services, and Kawasaki's capacity constraints ***.

[19] Conference transcript, p. 20 (DeFrancesco).
[20] Petition, p. 19, and conference transcript, p. 20 (DeFrancesco).
[21] Respondents MTD and Toro postconference brief, exhibit 1, item 22.

Demand trends

U.S. demand for VSEs is driven by demand for riding mowers, which is in turn, driven by demand for new homes. According to the ***, overall U.S. shipments of riding mowers increased in 2017 and 2018 and were projected to increase in 2019 and 2020 (figure II-1). Shipments of commercial and zero-turn mowers have driven the increase, with shipments up *** percent and *** percent, respectively between 2016 and 2018, while shipments of residential riding mowers declined slightly. These trends were projected to accelerate in 2019 and 2020, with shipments of commercial and zero-turn mowers projected to increase by *** percent and *** percent between 2018 and 2020, and residential mower shipments projected to decline by *** percent. According to petitioners, zero-turn mowers exist in both the residential and commercial categories.[22] ***.[23]

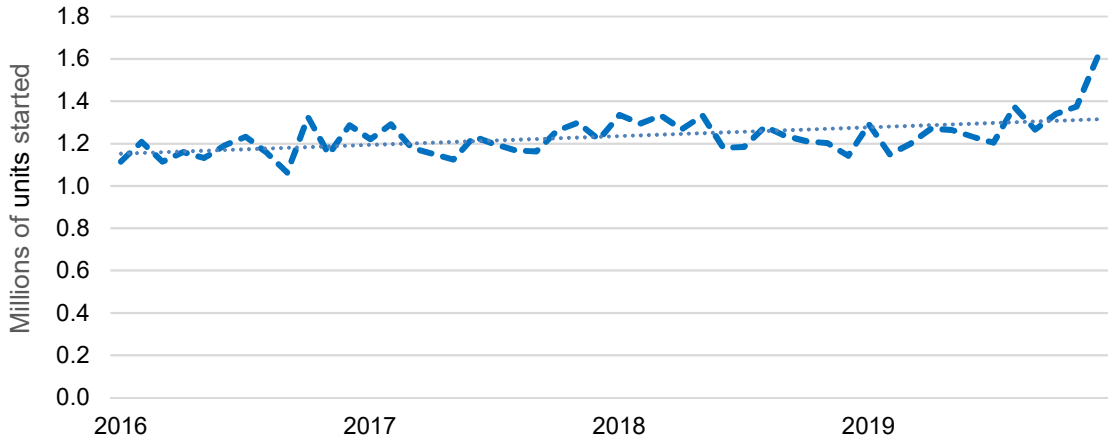
Figure II-1
U.S. riding mower shipments: *, annual, 2016-2018 (actual), and 2019-2020 (projected)**

* * * * * * *

[22] Petitioner Kohler postconference brief, p. 13.
[23] Respondents MTD and Toro postconference brief, exhibit 1, item 20.

Residential housing starts drives demand for mowers.[24] New home construction increased from January 2016 to September 2019 and increased sharply in the fourth quarter of 2019 (figure II-2). Overall, the number of new privately-owned housing units started increased by 13.6 percent between January 2016 and September 2019.

Figure II-2
Home construction: New privately-owned housing units started, seasonally adjusted, monthly, January 2016-December 2019



Source: Census Bureau, https://www.census.gov/construction/nrc/index.html, retrieved January 20, 2020.

Most firms reported an increase in U.S. demand for VSEs since January 1, 2016 (table II-5).

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

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	2	1	---	---
Importers	4	---	2	2
Demand outside the United States				
U.S. producers	---	1	1	1
Importers	1	---	1	4

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

U.S. producers *** reported increased demand driven by residential housing starts, and *** added that demand for mowers increased in 2019 since it was one of the wettest years on record. *** reported flat overall demand, with declines

[24] Petition, p. 19.

in demand for tractors and increased demand for zero-turn mowers. Petitioners expect demand growth of 1 to 3 percent for VSEs.[25]

Importers cited a number of factors with respect to U.S. demand trends. *** cited market growth for final products. *** reported that demand fluctuates based on demand for tractors and zero-turn mowers. *** reported increased demand resulting from a strong economy as well as ***. *** reported decreased demand, citing California's intent to eliminate gas engines by 2026, growth in battery-powered mowers, price increases because of tariff increases, emission regulations, robotics growth, low margins at opening price points, Husqvarna exiting the residential market, and the Sears bankruptcy. *** also cited the Sears bankruptcy, as well as a shift to commercial lawn services, as reasons for reduced demand. ***.[26]

Regarding demand outside of the United States, firms reported decreased demand in Europe and Canada, the major non-U.S. markets for VSEs. Specifically, U.S. producer *** reported some weather-related decreases in demand in Europe, although it stated that the U.S. market is the largest market for riding mowers, and thus VSEs, and *** reported a slight decline in demand in Europe with the increased use of robotic mowers. Importer *** reported decreased demand in the Europe and Canada due to an increase of battery-powered products and robotics.

Substitute products

Substitutes for VSEs are limited. Most U.S. producers (2 of 3) and importers (7 of 9) reported that there were no substitutes. Among firms reporting substitutes, U.S. producer *** stated that diesel and water-cooled engines and battery powered mowers were substitutes but are priced higher than VSEs. Importer *** stated that battery-powered engine growth and more aggressive battery-powered engine pricing has created downward pressure on pricing and demand for gas engines.

Substitutability issues

The degree of substitution between domestic and imported VSEs depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of

[25] Conference transcript, p. 35 (Melka).
[26] Respondents MTD and Toro postconference brief, exhibit 2, p. 6.

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 moderate degree of substitutability between domestically produced VSEs and VSEs imported from China. Factors limiting substitutability include engines designed for a specific mower platform, engine features, supplier relationships, warranty procedures, and OEM branding of engines.

Lead times

VSEs are typically produced-to-order for the customer when a purchase order is issued.[27] U.S. producers reported that *** percent of their commercial shipments were produced-to-order, with lead times averaging 44 days.[28] Importers reported lead times of 120 days for produced-to-order product from China. Respondents reported lead times of *** from U.S. producers and *** from China.[29]

Factors affecting purchasing decisions

Petitioners stated that in addition to price, OEMs also have based purchase decisions on quality, engineering support, working relationships, service network, and engine features.[30] Respondents identified engine features and innovations, engine performance, and suitability for targeted end-use applications as non-price factors in purchasing decisions.[31] ***.[32]

Petitioners described the qualification process for VSEs. Briggs & Stratton has on-site staff with OEMs to help with heat and cold testing; and field testing done by OEMs, which will try out a tractor with different engines so that they are easily interchangeable.[33] Kohler stated that OEMs will qualify two or more engines for an application and that pricing is agreed to

[27] Petitioner's responses to supplemental questions concerning Volume I of Petitions, p. 6.
[28] ***.
[29] Respondents MTD and Toro postconference brief, exhibit 2, p. 1.
[30] Conference transcript, p. 49 (Hudak).
[31] Respondents MTD and Toro postconference brief, p. 5.
[32] Respondents MTD and Toro postconference brief, exhibit 2, pp. 1-2.
[33] Conference transcript, p. 85 (Brown).

before the qualification process, although if an engine is very low-priced an OEM might qualify a single engine.[34]

Purchasers responding to lost sales lost revenue allegations[35] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for VSEs. The major purchasing factors identified by firms include branding, warranty, quality, service support, and cost (table II-6).

Table II-6
VSEs: Factors used in purchasing decisions as reported by U.S. purchasers

Purchaser	First	Second	Third	Other factors
***	***.	***.	***.	***.
***	***	***	***	--
***	***	***	***	--
***	***	***.	***	***
***	***	***	***	***
***	***	***	***	***.

Table notes on next page.

[34] Conference transcript, p. 86 (Melka).

[35] This information is compiled from responses by purchasers identified by Petitioners to the lost sales lost revenue allegations. See Part V for additional information.

Table II-6
VSEs: Factors used in purchasing decisions as reported by U.S. purchasers—Continued.

Note: ***.

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

Comparison of U.S.-produced and imported VSEs

In order to determine whether U.S.-produced VSEs can generally be used in the same applications as imports from China, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-7, U.S. producers reported that products from the United States, China, and all other sources were always or frequently interchangeable while most importers reported that domestic and Chinese produced VSEs were sometimes or never interchangeable.

Table II-7
VSEs: Interchangeability between VSEs produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. China	2	1	---	---	---	2	3	3
United States vs. Other	2	1	---	---	---	2	2	2
China vs. Other	2	1	---	---	---	2	2	2

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

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

Reasons reported by importers for limited interchangeability include engines that are specifically manufactured for the OEM's brand, platform-specific specifications, a small number of engine platforms available from U.S. producers, and certain features not available from some U.S. producers.

Specifically, *** stated that it requires an array of engines with different displacements that are optimized for the end-use application, that U.S. producers use a small number of engine platforms that they modify based on the application, and that for many applications, U.S. producers' only available option is an outsized engine that has been modified

to run with a lower output by running less efficiently. *** stated that its engines are specifically engineered and manufactured for its brand. *** stated that there is no interchangeability for replacement engines since the same engine that was originally sold with the mower must be used. *** stated that air filtration systems, exhaust systems, controls and power take off specifications are platform specific. *** stated that end use products that are designed with a particular engine source for the best cost purpose have different dimensions/sizes/structures, so the OEM may have to change some or a lot of parts in order to switch to another engine. *** reported that engines from different sources are never interchangeable because of *** internal quality requirements and proprietary technical specifications. Toro stated that the engines it sources from its Chinese partner have options (e-governing and electronic fuel injection ("EFI")) not available from petitioners for residential mower engines.[36] Yamaha stated that within the commercial market, features such as 75-degree V-angle, ball bearing and mid-plate support, more consistent power and torque, and better fuel consumption differentiate its engines from its competitors' products; and that well-recognized brands like Yamaha can be used by riding mower OEMs to differentiate their products with consumers.[37]

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of VSEs from the United States, subject, or nonsubject countries. As seen in table II-8, U.S. producers reported that such differences were sometimes or never significant whereas six of nine responding importers reported that such differences between domestic and Chinese produced VSEs were always significant.

Table II-8
VSEs: Significance of differences other than price between VSEs produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. China	---	---	2	1	6	1	2	---
United States vs. Other	---	---	2	1	4	1	2	---
China vs. Other	---	---	2	1	4	1	2	---

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

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

In describing these differences, *** stated that *** brand engineering, quality, performance, and technical support are priorities for its consumers. *** reported

[36] Conference transcript, p. 129 (Trumpler).
[37] Respondent Yamaha's postconference brief, pp. 19.

that the U.S. OEMs consider engine performance, quality, customer feedback, and supplier relationship in order to offer better and more reliable products to the end user. *** stated that quality, brand, and parts availability (particularly in EU and non-US markets) are important non-price factors.

***. MTD stated that not all producers make the specific engine sizes and characteristics it requires and that Zongshen has worked with MTD to provide innovations such as EFI and E-Gov for residential mowers, which neither Kohler nor Briggs & Stratton offers in their residential engine offerings.[38] In addition, it stated that U.S. producers manage warranty claims while OEMs that source VSEs from China manage the warranty claim.[39] MTD also reported quality and liability issues with Kohler engines including fire incidents.[40]

***. Toro stated that regarding domestic producers, Toro has a long-standing policy not to purchase VSEs from Briggs & Stratton since it is a competitor in the riding mower industry; that Kohler has not offered "innovative solutions" and has not "consistently met Toro's high standard from customer care;" and that Kawasaki has not been able to fulfill Toro's

[38] Respondents MTD and Toro postconference brief, pp. 6, 9.
[39] Respondents MTD and Toro postconference brief, p. 7.
[40] Respondents MTD and Toro postconference brief, p. 27-30.

demand due to capacity limitations.[41] ***.[42] Toro stated that six years ago it diversified its supply by sourcing a portion of its VSEs from Loncin, and benefits include Toro handles the warranty claims rather than rely on warranty responsiveness of U.S. manufacturers; Toro has engineers that develop innovative solutions (e.g., self-cleaning air filter housing, quick drain oil hose) that Loncin then implements in its Toro engines; that its partnership with Loncin resulted in innovations including engines with double the EPA useful life, a quick-drain oil hose (can drain oil with no tools), self-cleaning air filter housing, and a unique torque curve that better pairs the engine to its application.[43]

Petitioners disagreed with respondents claims that they do not offer certain features on their engines. Kohler stated that it has EFI and electronic governing on the vast majority of its products and that it has offered to MTD to develop other lines of products.[44] Briggs & Stratton stated that it generally makes its technology available to all customers except when it co-develops certain products or features with some of its OEMs, which is limited to a few SKUs.[45] In addition, ***.[46]

[41] Conference transcript, pp. 121-124 (Buenz), Respondents MTD and Toro postconference brief, p. 32.

[42] Respondents MTD and Toro postconference brief, exhibit 2, item 7.

[43] Respondents MTD and Toro postconference brief, p. 5.

[44] Conference transcript, p. 81 (Hudak).

[45] Conference transcript, pp. 80-81 (Rodgers).

[46] Petitioner Briggs & Stratton postconference brief, p. 46.

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 three firms that accounted for all known U.S. production of VSEs in 2018.

U.S. producers

The Commission issued a U.S. producer questionnaire to four firms based on information contained in the petition, and staff research. Three firms provided usable data on their production operations.[1] Staff believes that these responses represent all U.S. production of VSEs.

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

[1] *** submitted a questionnaire response that certified it does not produce VSEs.

Table III-1
VSEs: U.S. producers, their positions on the petition, production locations, and shares of reported production, 2018

Firm	Position on petition	Production location(s)	Share of production (percent)
Briggs and Stratton	Petitioner	Statesboro, Georgia Auburn, Alabama Wauwatosa, Wisconsin Poplar Bluff, Missouri Murray, Kentucky	***
Kawasaki	***	Maryville, Missouri Lincoln, Nebraska	***
Kohler	Petitioner	Kohler, Wisconsin Hattiesburg, Mississippi	***
Total			***

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms of VSEs. One U.S. producer is related to a U.S. importer of the subject merchandise and two U.S. producers *** are related to foreign producers *** (China) of VSEs.

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

Item / Firm	Firm name	Affiliated/Ownership
Ownership:		
***	***	***
Related importers/exporters:		
***	***	***
Related producers:		
***	***	***
***	***	***

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

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2016. Two U.S. producers reported plant closings, one U.S. producer reported plant relocation, one U.S. producer reported expansion, two U.S. producer reported consolidation of their facilities, two U.S. producers reported prolonged shutdowns or curtailments and one U.S. producer reported a revised labor agreement.

Table III-3
VSEs: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changed in operations
Plant closings:	
***	***
***	***
Relocations:	
***	***
Expansions:	
***	***
Consolidations:	
***	***
***	***
Prolonged shutdowns or curtailments:	
***	***
***	***

Table continued on the next page.

Table III-3--Continued
VSEs: U.S. producers' reported changes in operations, since January 1, 2016

Revised labor agreements:	
***	***

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. U.S. producers' capacity increased by *** percent from 2016 to 2018; and it was higher in interim in 2019 than interim 2018 by *** percent. *** increased their capacity from 2016 to 2018 by *** percent; and it increased in interim 2019 compared to interim 2018 by *** percent. U.S. producers' production increased by *** percent from 2016 to 2018, and it was higher in interim 2018 than interim 2019 by *** percent. *** and *** increased production from 2016 to 2018 by *** percent and *** percent respectively, while *** experienced a *** decrease from 2016 to 2018. *** accounted for *** percent of U.S. VSEs production in 2018.[2] Capacity utilization increased by *** percentage points from 2016 to 2018[3] and was *** percentage points lower in interim 2019 than interim 2018.

[2] In October 2017, Briggs and Stratton ended its Japanese joint venture to produce commercial twin-cylinder engine production and moved it's production to the Statesboro, GA and Auburn, AL. This decision created 150 combined new jobs in Statesboro, GA and Auburn, AL. Conference transcript, p.30 (Rogers).

[3] At the conference, petitioner asserted that the low levels of capacity utilization are indicative of the domestic producers' extreme vulnerabilty to material injury from imports because imports prohibit their ability to obtain a healthy rate of return on their investments. Conference transcript, p.27 (Rogers).

Table III-4
VSEs: U.S. producers' production, capacity, and capacity utilization, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Capacity (units)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Production (units)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Capacity utilization (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Share of production (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***

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

Figure III-1
VSEs: U.S. producers' production, capacity, and capacity utilization, 2016-18, January to September 2018, and January to September 2019

* * * * * * *

Alternative products

As shown in table III-5, at least *** percent of the product produced by U.S. producers was VSEs from 2016 to 2018. In 2016 and 2017, *** produced out of scope product *** on the same machinery and equipment used to produce VSEs. In 2018, *** reported producing out of scope product on the same equipment. The ratio and shares of VSEs produced in interim 2019 was lower that interim 2018 by *** percentage points higher in interim 2019 than interim 2018.

Table III-5
VSEs: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
Overall capacity	***	***	***	***	***
Production:					
Vertical shaft engines	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
Vertical shaft engines	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. producers' U.S. shipments of VSEs increased by *** units (approximately *** percent) from 2016 to 2018; it was lower in interim 2019 than interim 2018 by *** percent. ***. The value of U.S. shipments increased by *** percent from 2016 to 2018; while it decreased in interim 2019 as compared to interim 2018 by *** percent. U.S. producers' commercial shipments accounted for *** percent in 2016, *** percent in 2017, *** percent in 2018 of U.S. shipments.

Two firms *** reported internal consumption, which decreased by *** percent from 2016 to 2018. Two firms *** reported transfers to related firms, which increased by *** percent from 2016 to 2018.

Export shipments in terms of quantity decreased by *** percent from 2016 to 2018. Export shipments accounted for *** percent of total shipments in 2018. Export shipments in terms of value increased by *** percent from 2016 to 2018. The value of export shipments was lower in interim 2019 compared to interim 2018 by *** percent.

The average unit value for U.S. producers' commercial U.S. shipments of VSEs was $*** per unit in 2018, $*** lower than 2016 and $*** higher than 2017. ***.[4] The average unit value for internal consumption was above the average unit value for U.S. commercial shipments in all periods. However, the average unit value for transfers to related firms were higher than both U.S. shipments and internal consumption from 2016-2018, and interim 2019 stayed at interim 2018 level. From 2016 to 2018, export shipments for all three U.S. producers varied, but the industry experienced a net increase by *** percent. ***. The average unit value for total shipments increased $*** from 2016 to $*** in 2018, at the same time, average unit value for export shipments increased $***.

Table III-6
VSEs: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

Table continued on the next page.

[4] ***.

Table III-6--Continued
VSEs: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Unit value (dollars per unit)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of value (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
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.

U.S. shipments by type

U.S. producers' U.S. shipments of finished VSEs increased by *** percent by quantity and by *** percent by value from 2016 to 2018. ***.

U.S. producers' U.S. shipments of unfinished VSEs decreased by *** percent by quantity and by *** percent by value from 2016 to 2018. Only one U.S. firm *** reported producing unfinished VSEs. Unfinished VSEs' share of U.S. shipments remained relatively stable between *** percent to *** percent from 2016 to 2018.

The average unit value for finished VSEs increased from $*** to $*** during 2016 to 2018. The average unit value of unfinished VSEs increased by *** percent from 2016 to 2018. Table III-7 presents U.S. producers' U.S. shipments by type.

Table III-7
VSEs: U.S. producers' U.S. shipments by type, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
U.S. shipment by type.-- Unfinished	***	***	***	***	***
Finished	***	***	***	***	***
Total shipment by type	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipment by type.-- Unfinished	***	***	***	***	***
Finished	***	***	***	***	***
Total shipment by type	***	***	***	***	***
	Unit value (dollars per unit)				
U.S. shipment by type.-- Unfinished	***	***	***	***	***
Finished	***	***	***	***	***
Total shipment by type	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipment by type.-- Unfinished	***	***	***	***	***
Finished	***	***	***	***	***
Total shipment by type	***	***	***	***	***
	Share of value (percent)				
U.S. shipment by type.-- Unfinished	***	***	***	***	***
Finished	***	***	***	***	***
Total shipment by type	***	***	***	***	***

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

U.S. producers' inventories

Table III-8 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**.** U.S. producers end-of-period inventories fluctuated from 2016 to 2018 but decreased by *** percent overall. U.S. producers' end-of-period inventories were higher in interim 2019 than interim 2018 by *** percent. From 2016 to 2018, the end-of-period inventories for two of three U.S. producers *** increased by *** percent and *** percent,

respectively; while *** end-of-period inventory decreased by *** percent. End-of-period inventories as a share of U.S. production decreased by *** percentage points in 2018 compared with 2016. End-of-period inventories as a share of U.S. shipments in 2018 was *** percent (*** percentage points lower than 2016 and *** percentage points below 2017). U.S. production as a ratio to total shipment decreased by *** percentage points from 2016 to 2018; while it was higher in interim 2019 than interim 2018 by *** percentage points. U.S. shipment as a ratio to total shipment decreased by *** percentage point from 2016 to 2018; while it was higher in interim 2019 than interim 2018 by *** percentage points.

Table III-8
VSEs: U.S. producers' inventories, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
U.S. producers' end-of-period inventories	***	***	***	***	***
	Ratio (percent)				
Ratio of inventories to. --					
U.S. production	***	***	***	***	***
U.S. shipments	***	***	***	***	***
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.

U.S. producers' imports and purchases

U.S. producers' imports and purchases of VSEs are presented in table III-9. No U.S. producers reported importing VSEs from China. *** imported VSEs from one nonsubject country ***.

Table III-9
VSEs: U.S. producers' U.S. production, and imports, 2016-18, January to September 2018, and January to September 2019

* * * * * * *

U.S. employment, wages, and productivity

Table III-10 shows U.S. producers' employment-related data. U.S. producers added *** production and related workers (PRWs) between 2016 and 2018, an increase of *** percent. Total hours worked increased by *** hours or *** percent. *** PRWs and total hours worked both increased by *** percent; while ***.[5]

[5] At the staff conference, the petitioner testified that the seasonal nature of production for VSEs affects the employment levels in producers' facilities, and that they have contracts with certain temporary employment agencies that allows them to hire more employees in order to meet production demands during certain time of the year. Conference transcript, pp. 63-64 (Rogers and Melka).

Both wages paid and hourly wages increased from 2016 to 2018, *** percent and *** percent, respectively. Productivity remained stable at *** units per hour; unit labor costs increased slightly from $*** per unit to $*** per unit from 2016 to 2018.

Table III-10
VSEs: U.S. producers' employment related data, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
Production and related workers (PRWs) (number)	***	***	***	***	***
Total hours worked (1,000 hours)	***	***	***	***	***
Hours worked per PRW (hours)	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (units per hour)	***	***	***	***	***
Unit labor costs (dollars per unit)	***	***	***	***	***

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 196 firms believed to be importers of VSEs, as well as to all U.S. producers of VSEs.[1] As detailed in Part I, U.S. imports are based on questionnaire responses received from 10 U.S. importers[2] that staff believes account for a substantial share of U.S. imports from China and nonsubject sources in 2018 under the HTS basket statistical reporting number 8407.90. Table IV-1 lists all responding U.S. importers of VSEs from China and other sources, their locations, and their shares of U.S. imports, in 2018.

Table IV-1
VSEs: U.S. importers, their headquarters, and share of total imports by source, 2018

Firm	Headquarters	Share of imports by source (percent)		
		China	Nonsubject sources	All import sources
American Honda	Torrance, CA	***	***	***
Briggs and Stratton	Wauwatosa, WI	***	***	***
Generac	Waukesha, WI	***	***	***
Harbor Freight	Calabasas, CA	***	***	***
Husqvarna	Charlotte, NC	***	***	***
Liquid Combustion	Travelers Rest, SC	***	***	***
Loncin	Chongqing, China	***	***	***
MTD	Valley City, OH	***	***	***
Toro	Bloomington, MN	***	***	***
Yamaha	Cypress, CA	***	***	***
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.

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under statistical reporting numbers 8407.90.1020, 8407.90.1060, and 8407.90.1080 in 2018.

[2] The Commission received *** questionnaire responses from U.S. importers that certified that they do not import VSEs; these importers are: ***.

U.S. imports

Table IV-2 and figure IV-1 presents data for U.S. imports of VSEs from China and all other sources. U.S. imports of VSEs from China increased *** percent by quantity and *** percent by value from 2016 to 2018; while imports from China by quantity and value were lower in interim 2019 than interim 2018 by *** percent and *** percent, respectively. The top three U.S. importers driving the growth of subject imports from China are *** from 2016 to 2018. Imports from nonsubject sources increased *** percent by both quantity and value from 2016 to 2016. U.S. imports from nonsubject sources by quantity and value were lower in interim 2019 as compared to interim 2018 by *** percent and *** percent, respectively.

The average unit values of imports from China increased from 2016 to 2018 by *** percent; while the average unit value for imports from nonsubject sources fluctuated and was *** percent lower in 2018 from 2016. The average unit value for both imports from China was higher in interim 2019 compared to interim 2018 by *** percent; while imports from nonsubject sources was lower in interim 2019 than interim 2018 by *** percent. As a ratio to U.S. production, imports from China increased by *** percentage points from 2016 to 2018; while imports from nonsubject sources decreased by *** percentage points during this same period.

Table IV-2
VSEs: U.S. imports, by source, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Unit value (dollars per unit)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of quantity (percent)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of value (percent)				
U.S. imports from.-- China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Ratio to U.S. production				
U.S. imports from.-- China	***	***	***	***	***
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
Vertical shaft engines: U.S. import quantities average unit values, 2016-18, January to September 2018, and January to September 2019

* * * * * * *

U.S. imports by type

No U.S. importer reported imports of unfinished VSEs from either China or nonsubject sources from 2016 to 2018, and interim periods.

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] 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

[3] 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)).

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.[4] Based on questionnaire data, imports from China accounted for *** percent of total imports of VSEs by quantity during 2018. Table IV-3 presents U.S. imports from January to December 2019, the 12 months preceding the filing of the petition.

Table IV-3
VSEs: U.S. imports in the twelve month period preceding the filling of the petition, January through December 2019

Item	January through December 2019	
	Quantity (units)	Share quantity (percent)
U.S. imports from.--		
China	***	***
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.

Apparent U.S. consumption

Table IV-4 presents data on apparent U.S. consumption and U.S. market shares for VSEs. Apparent U.S. consumption of VSEs products in terms of quantity increased by *** percent from 2016 to 2018; however, interim 2019 was lower than interim 2018 by *** percent. Value of apparent U.S. consumption of VSEs grew by *** percent from 2016 to 2018 and was higher in interim 2019 compared to interim 2018 by *** percent.

From 2016 to 2018, U.S. producers' U.S. shipment by quantity and value increased by *** percent and *** percent, respectively; while it decreased in interim 2019 compared to interim 2018 by *** percent (quantity) and *** percent (value).

From 2016 to 2019, U.S. importers' U.S. shipments from China by quantity increased *** percent. During this same period, U.S. importers' imports from nonsubject sources decreased *** percent by quantity. By quantity, U.S. shipments from China and nonsubject sources both declined in interim 2019 by *** percent and *** percent, respectively, compared to interim 2018. From 2016 to 2018, the value of U.S. imports from China increased by *** percent and U.S. imports from nonsubject sources increased by *** percent. Imports from China by value was *** percent lower in interim 2019 compared to interim

[4] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

2018; while imports from nonsubject sources by value was *** percent lower in interim 2019 than interim 2018.

Table IV-4
VSEs: Apparent U.S. consumption, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***

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

U.S. market shares

U.S. market share data are presented in table IV-5. The market share based on quantity for U.S. producers' U.S. shipments fell by *** percentage points from 2016 to 2018; however, U.S. producers market share in interim 2019 increased by *** percentage points compared to interim 2018. The quantity of U.S. imports of VSEs from China increased in market share by *** percentage points from 2016 to 2018. U.S. market share of VSEs from China in interim 2019 was lower than interim 2018 by *** percentage points. Nonsubject imports' market shares experienced a slight decline from *** percent in 2016 to *** percent in 2018; and was *** percent in interim 2019 compared to *** percent in interim 2018.

In terms of value, U.S. producers' market share fell by *** percentage points from 2016 to 2018; it was *** percentage points lower in interim 2019 compared to interim 2018. From 2016 to 2018, the market share based on value for imports from China increased by *** percentage points; while it was *** percentage points lower in interim 2019 than interim 2020. Based on value, the market share for nonsubject import sources increased by *** percentage points from 2016 to 2018; it was lower by *** percentage point in interim 2019 compared to 2018.

Table IV-5
VSEs: Market shares, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
Apparent U.S. consumption	***	***	***	***	***
	Share of value (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.--China	***	***	***	***	***
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-2
Vertical shaft engines: Apparent U.S. consumption, 2016-18, January to September 2018, and January to September 2019

* * * * * * *

Part V: Pricing data

Factors affecting prices

Raw material costs

During 2016-18, U.S. producers' raw materials' share of the cost of goods sold increased slightly, from *** percent to *** percent. During January-September 2018 and January-September 2019, the shares were *** percent and *** percent, respectively. VSEs are produced from machined cast iron and aluminum parts. Engine producers may have their own aluminum cast houses or iron foundries or may use external foundries.[1] VSEs raw material prices were impacted by section 232 tariffs on steel and aluminum and section 301 tariffs on imported parts from China.

The prices of aluminum and steel scrap increased overall between January 2016 and September 2019, by *** and *** percent, respectively (figure V-1). Aluminum prices increased by *** percent from January 2016 to May 2018, and then declined in the remainder of 2018 and in 2019. Steel scrap prices generally followed a similar trend; these prices *** between January 2016 and their peak in April 2018 and showed large declines in January-October 2019 before increasing again in November 2019 to January 2020.

All three responding U.S. producers reported that raw material prices have fluctuated since January 1, 2016. ***. Among importers, two firms reported that raw material prices increased, one firm reported no change in these prices, and one reported that these prices fluctuated.

[1] Petition, exhibit I-8, p. 2.

Figure V-1
Raw materials: Prices of aluminum and steel scrap, monthly, January 2016-January 2020

* * * * * * *

One U.S. producer each reported that section 232 tariffs[2] caused an increase, no change, or fluctuation of raw material prices, with one producer reporting a resultant increase in VSE prices (table V-1). ***. Among importers, two firms reported an increase in raw material prices as a result of section 232 tariffs and three reported no change. Two importers each reported an increase or no change in VSEs prices as a result of section 232 tariffs.

[2] The President announced in March 2018 that additional 25 percent ad valorem national security duties are to be applied, under Section 232 of the Trade Expansion Act of 1962, as amended, to most steel mill products imported from all countries, except initially Canada and Mexico; and subsequently Argentina, Australia, Brazil, the European Union ("EU") member states, and Korea, effective March 23, 2018. The exemptions were subsequently modified with annual import quota limits for Korea, effective May 1, 2018; and for Argentina and Brazil, effective June 1, 2018; but were not continued for Canada, Mexico, and the EU member states, effective June 1, 2018. The exemptions were continued, effective August 13, 2018, for Argentina, Australia, Brazil, and Korea; but the duty rate was doubled to 50 percent for Turkey. More recently, the exemptions were reinstated for Canada and Mexico, effective May 20, 2019; and the duty rate was cut back to 25 percent for Turkey, effective May 21, 2019. For more information, see https://www.cbp.gov/trade/remedies/232-tariffs-aluminum-and-steel.

Table V-1
VSEs: Firms' responses regarding the impact of the 232 tariffs

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Impact on the cost of raw materials: U.S. producers	1	1	---	1
Importers	2	3	---	---
Impact on the prices of VSEs: U.S. producers	1	1	---	1
Importers	2	2	---	---

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

U.S. inland transportation costs

All three responding U.S. producers and two of five importers reported that the customer typically arranges transportation. *** reported that its U.S. inland transportation costs were *** percent and most importers reported costs of 3 percent or less.

Pricing practices

Pricing methods

VSE prices are based on power (horsepower, output power, rated engine displacement), type of starter, type of fuel used, and other features and options.[3] Price negotiations between VSE manufacturers and OEMs for a particular model year mower typically begin in spring and summer, a year prior to the delivery of the engine to OEM.[4] Sales agreements establish a price for the engine but may not establish a volume of sales.[5]

U.S. producers and importers reported using contracts, set price lists, and other methods to set prices (table V-2). U.S. producers reported spot sales and long-term and annual contract sales and importers reported selling mostly under short-term contracts (table V-3). Among U.S. producers, ***. Briggs & Stratton sells VSEs under annual contracts, while Kohler's negotiations establish a price but generally do not involve a commitment to purchase a particular volume.[6]

[3] Petition, volume II, p. 2.
[4] Petition, pp. 18-20.
[5] Petition, p. 19. Conference transcript, p. 21 (DeFrancesco).
[6] Petitioner Kohler postconference brief, p. 14.

Table V-2
VSEs: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Importers
Transaction-by-transaction	---	---
Contract	1	2
Set price list	1	3
Other	3	---
Responding firms	3	4

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.

***.[7]

***.[8] ***.[9]

[7] Petitioner Kohler postconference brief, exhibit 1, pp. 15-16.
[8] Petitioner Briggs & Stratton postconference brief, exhibit 1, p. 8.
[9] Petitioner Briggs & Stratton postconference brief, exhibit 16.

Table V-3
VSEs: U.S. producers' and importers' shares of U.S. shipments by type of sale, 2018

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.

Several OEMs described their purchase agreements for VSEs. MTD enters into annual price agreements with its suppliers in the spring (typically April) and asks its suppliers "for directional guides on pricing" so that MTD can quote mower prices to its customers.[10] MTD stated that supplier prices *** and pricing can sometimes be adjusted if there are large changes to the product offerings.[11] ***.[12] ***.

Sales terms and discounts

All three U.S. producers and two of three responding importers typically quote prices on an f.o.b. basis. U.S. producers typically offer quantity-based discount and rebate programs for OEMs.[13] Volume rebates may also be offered to the OEMs' customers and may be paid by the engine producer either to the OEM or directly to the customer. U.S. producers' engines are typically sold with warranty protection.

[10] Respondent MTD and Toro postconference brief, exhibit 1, item 9.
[11] Respondent MTD and Toro postconference brief, exhibit 1, items 9 and 22.
[12] Respondent MTD and Toro postconference brief, exhibit 2, p. 2.
[13] Petition, p. 20.

In describing discounts, ***. ***.[14] ***.[15] ***.[16]

Price and purchase cost 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 VSE products shipped to unrelated U.S. customers during January 2016-September 2019. In addition, firms that imported these products from China for use in production of downstream products were requested to provide import purchase cost data for these products.

Product 1: Vertical shaft engine, air-cooled, single cylinder, carbureted, 340-400cc displacement.

[14] ***. Petitioner Briggs & Stratton postconference brief, exhibit 1, p. 9, exhibit 16.
[15] Petitioner Kohler postconference brief, exhibit 1, p. 17.
[16] Respondent MTD and Toro postconference brief, exhibit 2, p. 2.

Product 2: Vertical shaft engine, air-cooled, single cylinder, carbureted, 410-550cc displacement.

Product 3: Vertical shaft engine, air-cooled, twin cylinder, carbureted, 650-700cc displacement.

Product 4: Vertical shaft engine, air-cooled, twin cylinder, carbureted, 701-725cc displacement.

Two U.S. producers (***) and two importers (***) provided usable pricing data for sales of the requested products, and three importers (***) reported usable import purchase cost data.[17] [18] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of VSEs and *** percent of imports from China in 2018. Purchase cost data reported by these firms accounted for *** percent of imports from China in 2018.[19]

Price data and landed duty paid purchase cost data for products 1-4 are presented in tables V-4 to V-7 and figures V-2 to V-5.[20]

[17] No firms reported pricing or cost data for all products for all quarters. Per-unit pricing and cost 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.

[18] ***.

***. Price data reported by importers *** are not included since ***.

[19] ***.

[20] LDP import value does not include any potential additional costs that a purchaser may incur by importing rather than purchasing from another importer or U.S. producer. Price-cost differentials are based on LDP import values whereas margins of underselling/overselling are based on importer sales prices.

Table V-4
VSEs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, January 2016-September 2019

Period	United States		China - price			China - cost		
	Price (per unit)	Quantity (units)	Price (per unit)	Quantity (units)	Margin (percent)	LDP value (per unit)	Quantity (units)	Price-cost differential (percent)
2016: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***

Note: Product 1: Vertical shaft engine, air-cooled, single cylinder, carbureted, 340-400cc displacement.

Note: ***.

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

Table V-5
VSEs: 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, January 2016-September 2019

	United States		China - price			China - cost		
Period	Price (per unit)	Quantity (units)	Price (per unit)	Quantity (units)	Margin (percent)	LDP value (per unit)	Quantity (units)	Price-cost differential (percent)
2016: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***

Note: Product 2: Vertical shaft engine, air-cooled, single cylinder, carbureted, 410-550cc displacement.

Note: ***.

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

Table V-6
VSEs: 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, January 2016-September 2019

Period	United States		China - price			China - cost		
	Price (per unit)	Quantity (units)	Price (per unit)	Quantity (units)	Margin (percent)	LDP value (per unit)	Quantity (units)	Price-cost differential (percent)
2016: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***

Note: Product 3: Vertical Shaft Engine, Air-Cooled, Twin Cylinder, Carbureted, 650-700cc displacement.

Note: ***.

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

Table V-7
VSEs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), and landed duty-paid costs, by quarter, January 2016-September 2019

	United States		China - price			China - cost		
Period	Price (per unit)	Quantity (units)	Price (per unit)	Quantity (units)	Margin (percent)	LDP value (per unit)	Quantity (units)	Price-cost differential (percent)
2016: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-June	***	***	***	***	***	***	***	***
July-Sept.	***	***	***	***	***	***	***	***

Note: Product 4: Vertical shaft engine, air-cooled, twin cylinder, carbureted, 701-725cc displacement.

Note: ***.

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

Figure V-2
VSEs: Weighted-average prices, import purchase costs, and quantities of domestic and imported product 1, by quarter, January 2016-September 2019

* * * * * * *

Figure V-3
VSEs: Weighted-average prices, import purchase costs, and quantities of domestic and imported product 2, by quarter, January 2016-September 2019

* * * * * * *

Figure V-4
VSEs: Weighted-average prices, import purchase costs, and quantities of domestic and imported product 3, by quarter, January 2016-September 2019

* * * * * * *

Figure V-5
VSEs: Weighted-average prices, import purchase costs, and quantities of domestic and imported product 4, by quarter, January 2016-September 2019

* * * * * * *

Import purchase cost data

Importers reporting import purchase cost data were asked to provide additional information regarding the costs and benefits of directly importing VSEs. Two of the three importers providing useable cost data reported that they incurred additional costs beyond landed duty-paid costs by importing VSEs directly rather than purchasing from a U.S. producer or U.S. importer.[21] ***.

***.

Firms were also asked to describe how these additional costs incurred by importing VSEs compares with additional costs incurred when purchasing from a U.S. producer or U.S. importer.[22] MTD stated that it incurs the following costs on its imports from Zongshen that it does not incur when purchasing from U.S. producers: handling and servicing warranty claims costs, customer services costs, and costs for co-developing innovations.[23] ***.

Two of the three importers *** reporting useable import cost data indicated that they compare costs of importing to the cost of purchasing from a U.S. producer in determining whether to import VSEs, one importer *** compares costs

[21] ***.

[22] ***.

[23] Respondent MTD and Toro postconference brief, exhibit 1, item 10.

to purchasing from a U.S. importer, and one importer (***) does not compare costs of purchasing from either U.S. producers or importers.

Two importers identified benefits from importing VSEs directly instead of purchasing from U.S. producers or importers. ***.

When asked whether the import cost (both excluding and including additional costs) of VSEs they imported are lower than the price of purchasing VSEs from a U.S. producer or importer, *** reported that the costs were not lower and *** reported that they were lower. Importer (***) estimated that it saved *** percent of LDP value by importing VSEs rather than purchasing from a U.S. importer, and importer (***) estimated saving *** percent compared to purchasing the product from a U.S. producer.[24]

Price and import purchase cost trends

U.S. producers' prices increased overall during January 2016-September 2019. Table V-8 summarizes the price trends, by country and by product. As shown in the table, domestic price increases for products 1, 3, and 4 ranged from *** to *** percent during January 2016-September 2019 while import price increases ranged from *** to *** percent for products 2, 3, and 4. Domestic prices decreased for product 2, by *** percent. Landed duty-paid cost decreases ranged from *** to *** percent.[25]

[24] *** reported that it based its estimate on previous company transactions.

[25] ***.

Table V-8
VSEs: Summary of weighted-average f.o.b. prices and importer purchase costs, for products 1-4, by country

Item	Number of quarters	Low price/cost (dollars per unit)	High price/cost (dollars per unit)	Change in price/cost over period[1] (percent)
Product 1: United States	***	***	***	***
China price	***	***	***	***
China cost	***	***	***	***
Product 2: United States	***	***	***	***
China price	***	***	***	***
China cost	***	***	***	***
Product 3: United States	***	***	***	***
China price	***	***	***	***
China cost	***	***	***	***
Product 4: United States	***	***	***	***
China price	***	***	***	***
China cost	***	***	***	***

Note: Change in price is percentage change from the first quarter in which data were available to the last quarter in which price data were available. ***.

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

Indexed price data and purchase cost data for products 1-4 are shown in figure V-6. U.S. producers' prices showed mixed trends but generally fluctuated within a narrow range in 2016 and 2017, with an increase for some products' prices in third quarter 2017. U.S. producers' prices generally showed some mixed trends in 2018, with prices of products 2, 3, and 4 declining in the second through fourth quarters of the year. U.S. producers' prices generally increased in 2019.

Subject import prices increased in the third quarter of 2018 and generally remained at nearly the same level in 2019. Subject import purchase costs declined in the third and fourth quarter of 2018 and increased in 2019. As noted previously, section 301 tariffs on VSEs began taking effect in August 2018, and exclusions were granted in July and September 2019, and section 232 tariffs on imported steel and aluminum took effect in March 2018.

Figure V-6
VSEs: Indexed prices and purchase costs, January 2016-September 2019

* * * * * * *

Figure V-6--Continued.
VSEs: Indexed prices and purchase costs, January 2016-September 2019

* * * * * * *

Price and purchase cost comparisons

Price comparisons

As shown in table V-9, prices for product imported from China were below those for U.S.-produced product in 30 instances (*** units); margins of underselling ranged from *** to *** percent. In the remaining 15 instances (*** units), prices for product from China were between *** and *** percent above prices for the domestic product.

Table V-9
VSEs: Instances of underselling/overselling and the range and average of margins, by product, January 2016-September 2019

Product	Underselling				
	Number of quarters	Quantity (units)	Average margin (percent)	Margin Range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, underselling	***	***	***	***	***
Product	**(Overselling)**				
	Number of quarters	**Quantity (units)**	**Average margin (percent)**	**Margin Range (percent)**	
				Min	**Max**
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, overselling	***	***	***	***	***

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-10, landed duty-paid costs for VSEs imported from China were below the sales price for U.S.-produced product in all 41 instances (*** units); price-cost differentials ranged from *** to *** percent.

Table V-10
VSEs: Comparisons of import purchase costs and U.S.-producer sales prices, January 2016-September 2019

Product	Import purchase cost lower than U.S. sales price				
	Number of quarters	Quantity (units)	Average price-cost difference (percent)	Range of price-cost difference (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total, lower	***	***	26.8	***	***

Note: These data include only quarters in which there is a comparison between the U.S. and subject product. There were no quarters in which the import purchase cost was higher than the U.S. sales price.

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

Lost sales and lost revenue

*** of the three responding U.S. producers reported that they had to either reduce prices or roll back announced price increases, and that they had also lost sales.[26] Two U.S. producers submitted lost sales and lost revenue allegations, and identified five firms with which they lost sales or revenue (all five consisting of both lost sales and lost revenues allegations).[27]

***. Petitioners reported lost sales in all years of the period of investigation. *** stated that it particularly lost sales in 2019, following the section 301 tariffs exclusions on some VSEs, and stated that if it had won these sales it would have produced these engines at the end of 2019 and into 2020.[28]

Staff received responses from six purchasers.[29] Responding purchasers reported purchasing *** million units of VSEs during January 2016-September 2019 (table V-11). All six purchasers reported purchasing domestic VSEs, five reported purchases of subject imported VSEs and two reported purchases of VSEs from nonsubject countries. Five of the six purchasers reported increased overall purchases of VSEs from 2016 to 2018, however, one purchaser, ***.

[26] ***.

[27] ***. Additional details regarding these allegations are shown in the petition, volume 1, exhibit I-24.

[28] Petition, exhibit, I-17, p. 3.

[29] ***.

Table V-11
VSEs: Purchasers' reported purchases and imports

Purchaser	Purchases and imports in January 2016-September 2019 (units)			Change in domestic share[2] (pp, 2016-18)	Change in subject country share[2] (pp, 2016-18)
	Domestic	Subject	Nonsubject		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	***	***	***	***	***

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

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

During 2018, responding purchasers purchased *** percent from U.S. producers, *** percent from China, and *** percent from nonsubject countries. When asked about changes in their purchasing patterns from different sources since 2016, two purchasers reported increasing purchases of both domestic and Chinese VSEs, three reported fluctuating purchases of both domestic and Chinese VSEs, and one purchaser reported constant domestic purchases. One purchaser each reported increased or fluctuating purchases of nonsubject imports. Reasons reported for increased purchases were increased sales of mowers and adding a new supplier from China.

***.[30] ***.

[30] ***.

Of the six responding purchasers, three reported that, since 2016, they had purchased imported VSEs from China instead of U.S.-produced product (table V-12). Two of these purchasers reported that subject import prices were lower than U.S.-produced product. No purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Purchasers identified branding, warranty, and total value as non-price reasons for purchasing imported rather than U.S.-produced product.

Table V-12
VSEs: 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 subject imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity (units)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--3; No--3	Yes--2; No--2	Yes--0; No--1	***	

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

Of the six responding purchasers, three reported that U.S. producers had not reduced prices in order to compete with lower-priced imports from China and three reported that they did not know (table V-13). Purchaser *** reported that U.S. producers reduced prices by 1 percent due to commodity price changes, not because of imports.

Table V-13
VSEs: Purchasers' responses to U.S. producer price reductions

Purchaser	Producers reduced price (Y/N)	If producer reduced prices:	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total / average	Yes--0; No—3	***	

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

In responding to the lost sales lost revenue survey, some purchasers provided additional information on purchases and market dynamics. ***.

***.

Part VI: Financial experience of U.S. producers

Background

Three U.S. producers provided usable financial results on their VSEs operations. All of the responding U.S. producers provided their results on the basis of generally accepted accounting principles ("GAAP") and two of the U.S. producers reported their financial results on a calendar-year basis.[1]

Operations on VSEs

Figure VI-1 presents the responding firms' share of the total net sales quantity in 2018. Table VI-1 presents aggregated data on U.S. producers' operations in relation to VSEs over the period examined. Table VI-2 presents changes in the average unit value ("AUV") data for the data presented in table VI-1, while table VI-3 presents selected company-specific financial data.

[1] ***.

Figure VI-1
VSEs: Share of net sales quantity, by firm, 2018

* * * * * * *

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

Table VI-1
VSEs: Results of operations of U.S. producers, 2016-18, January-September 2018, and January-September 2019

Item	Fiscal year			January to September	
	2016	2017	2018	2018	2019
	Quantity (units)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	***	***	***	***	***
	Value (1,000 dollars)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
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	***	***	***	***	***
	Ratio to net sales (percent)				
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 VI-1—Continued
VSEs: Results of operations of U.S. producers, 2016-18, January-September 2018, and January-September 2019

Item	Fiscal year			January to September	
	2016	2017	2018	2018	2019
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
	Unit value (dollars per unit)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
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)	***	***	***	***	***
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	***	***	***	***	***

Note: Unit values shown as $0 represent values greater than $0, but less than $0.50.

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

Table VI-2
VSEs: Changes in AUVs between annual years and interim-year periods, January-September 2018, and January-September 2019

Item	Between fiscal years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Change in AUVs (dollars per unit)			
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
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.

Table VI-3
VSEs: Results of operations of U.S. producers, by firm, 2016-18, January-September 2018, and January-September 2019

Item	Fiscal year			January to September	
	2016	2017	2018	2018	2019
	Total net sales (units)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Total net sales (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Cost of goods sold (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Gross profit or (loss) (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	SG&A expenses (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Operating income or (loss) (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
VSEs: Results of operations of U.S. producers, by firm, 2016-18, January-September 2018, and January-September 2019

Item	Fiscal year			January to September	
	2016	2017	2018	2018	2019
	Net income or (loss) (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	COGS to net sales ratio (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Gross profit or (loss) to net sales ratio (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	SG&A expense to net sales ratio (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Operating income or (loss) to net sales ratio (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Net income or (loss) to net sales ratio (percent)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
VSEs: Results of operations of U.S. producers, by firm, 2016-18, January-September 2018, and January-September 2019

Item	Fiscal year			January to September	
	2016	2017	2018	2018	2019
	Unit net sales value (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit raw materials (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit direct labor (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit other factory costs (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit COGS (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit gross profit or (loss) (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
VSEs: Results of operations of U.S. producers, by firm, 2016-18, January-September 2018, and January-September 2019

Item	Fiscal year			January to September	
	2016	2017	2018	2018	2019
	Unit SG&A expenses (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit operating income or (loss) (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	Unit net income or (loss) (dollars per unit)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***

Note: Unit values shown as $(0) represent values less than $0, but greater than $(0.50).

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

Net sales

In addition to commercial sales, the industry's reported net sales included internal consumption and transfers to related firms, with commercial sales, internal consumption, and transfers to related firms accounting for ***, ***, and *** percent, respectively, of total reported net sales in 2018.[2]

The industry's net sales quantity increased irregularly from *** units in 2016 to *** units in 2018, but was lower in interim 2019, at *** units, compared with interim 2018, at *** units. Net sales value also increased irregularly from 2016 to 2018 (from $*** in 2016 to $*** in 2018), and was lower in interim 2019, at

[2] Internal consumption was reported by ***.

$***, compared with interim 2018, at $***. The net sales AUV increased from $*** per unit in 2016 to $*** per unit in 2018, and was higher in interim 2019 (at $*** per unit) compared with interim 2018 (at $*** per unit).[3]

Cost of goods sold and gross profit or (loss)

Raw material costs, direct labor, and other factory costs accounted for ***, ***, and *** percent of total COGS, respectively, in 2018. As a ratio to net sales, total COGS decreased irregularly from *** percent in 2016 to *** percent in 2018, and was *** percent in interim 2018 and *** percent in interim 2019. On a company-by-company basis, two of the three reporting producers reported an increase in their COGS to sales ratios from 2016 to 2018, while all companies reported a higher COGS to sales ratio in interim 2019 compared to interim 2018. The AUV of COGS increased from $*** per unit in 2016 to $*** per unit in 2018, and was higher in interim 2019, at $*** per unit, than during interim 2018, at $*** per unit. Table VI-4 shows the value, unit value, and share of value of raw materials, by type, for 2018.

Table VI-4
WCVs: U.S. producers' raw materials, by type, 2018

Raw materials	Fiscal year 2018		
	Value (1,000 dollars)	Unit value (dollars per unit)	Share of value (percent)
Cast iron and aluminum components	***	***	***
Other material inputs	***	***	***
Total, raw materials	***	***	***

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

As seen in table VI-1, net sales revenue increased more than the total COGS between 2016 and 2018, which resulted in gross profit increasing from $*** in 2016 to $*** in 2018. When comparing the interim periods, the opposite is true. While both total net sales revenue and total COGS were lower in interim 2019 than in interim 2018, the difference in the net sales revenue between the interim periods was greater. This led to gross profit being lower in interim 2019 (at $***) compared with interim 2018 (at $***).

[3] The AUVs of ***. Conference transcript, p. 82 (Rodgers).

SG&A expenses and operating income

As seen in table VI-1, the industry's SG&A expenses increased by *** percent between 2016 and 2018, from $*** to $***, but were lower in interim 2019 than in interim 2018. *** accounted for the largest share of the increase from 2016 to 2018. The company reported ***.[4] The company reported that the majority of the ***.[5] The SG&A expense ratio (the ratio of SG&A expenses to net sales value) increased from *** percent in 2016 to *** percent in 2018, but was lower in interim 2019 (at *** percent) compared with interim 2018 (at *** percent).

The increase in SG&A expenses between 2016 and 2018 caused operating income to follow a different directional trend than gross profit during that period, decreasing from $*** in 2016 to $*** in 2018. Operating income was lower in interim 2019 (at $***), than in interim 2018 (at $***).

Other expenses and net income or (loss)

The industry's total interest expense increased from $*** in 2016 to $*** in 2018, and was higher in interim 2019 than in interim 2018. All other expenses increased irregularly from $*** in 2016 to $*** in 2018, but was higher in interim 2019 compared with interim 2018. All other income increased irregularly from $*** in 2016 to $*** in 2018, but was lower in interim 2019 compared with interim 2018. Net income decreased from $*** in 2016 to $*** in 2018, and was lower in interim 2019 (a net loss of $***) compared with interim 2018 ($***).

[4] The company reported ***'s U.S. producer questionnaire at III-10.
[5] Email from ***.

Variance analysis

A variance analysis for the operations of U.S. producers of VSEs is presented in table VI-5.[6] The information for this variance analysis is derived from table VI-1. The analysis shows that the decrease in operating income between 2016 and 2018 as well as the lower operating income in interim 2019 compared to interim 2018, are due to unfavorable net cost/expense variances, despite favorable price variances (i.e., costs/expenses increased more than net sales).

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

Table VI-5
VSEs: Variance analysis on the operations of U.S. producers, 2016-18, January-September 2018, and January-September 2019

Item	Between fiscal years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Value (1,000 dollars)			
Net sales: Price variance	***	***	***	***
Volume variance	***	***	***	***
Net sales variance	***	***	***	***
COGS: Cost variance	***	***	***	***
Volume variance	***	***	***	***
COGS variance	***	***	***	***
Gross profit variance	***	***	***	***
SG&A expenses: Cost/expense variance	***	***	***	***
Volume variance	***	***	***	***
Total SG&A expense variance	***	***	***	***
Operating income variance	***	***	***	***
Summarized (at the operating income level) as: Price variance	***	***	***	***
Net cost/expense variance	***	***	***	***
Net volume variance	***	***	***	***

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

Capital expenditures and research and development expenses

Table VI-6 presents capital expenditures and R&D expenses by firm. The industry's capital expenditures increased from $*** in 2016 to $*** in 2018, but were lower in interim 2019 (at $***) compared with interim 2018 (at $***).[7] R&D expenses decreased from $*** in 2016 to $*** in 2018, but were higher in interim 2019 compared with interim 2018.[8]

Table VI-6
VSEs: Capital expenditures and R&D expenses of U.S. producers, 2016-18, January-September 2018, and January-September 2019

	Fiscal year			January to September	
	2016	2017	2018	2018	2019
Item	Capital expenditures (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***
	R&D expenses (1,000 dollars)				
Briggs and Stratton	***	***	***	***	***
Kawasaki	***	***	***	***	***
Kohler	***	***	***	***	***
All firms	***	***	***	***	***

Note: As mentioned previously, ***.

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

[7] ***'s U.S. producer questionnaire response at III-13.
[8] ***'s U.S. producer questionnaire responses at III-13.

Assets and return on assets

Table VI-7 presents data on the U.S. producers' total assets and their return on assets ("ROA").[9] Total assets increased from $*** in 2016 to $*** in 2018. *** of the U.S. producers reported an overall increase in their total assets between 2016 and 2018, but *** accounted for the largest share.[10]

Table VI-7
VSEs: U.S. producers' total assets and return on assets, 2016-18

Firm	Fiscal years		
	2016	2017	2018
	Total net assets (1,000 dollars)		
Briggs and Stratton	***	***	***
Kawasaki	***	***	***
Kohler	***	***	***
All firms	***	***	***
	Operating return on assets (percent)		
Briggs and Stratton	***	***	***
Kawasaki	***	***	***
Kohler	***	***	***
All firms	***	***	***

Note: As mentioned previously, ***.

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

[9] The return on assets ("ROA") 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.

[10] During the period examined, ***'s U.S. producer questionnaire at II-2.

Capital and investment

The Commission requested U.S. producers of VSEs to describe any actual or potential negative effects of imports of VSEs from China on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-8 presents the number of firms reporting an impact in each category and table VI-9 provides the U.S. producers' narrative responses.

Table VI-8
VSEs: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2016

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

Note: ***.

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

Table VI-9
VSEs: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2016

Item / Firm	Narrative
Cancellation, postponement, or rejection of expansion projects:	
***	***
***	***
Reduction in the size of capital investments:	
***	***
***	***
Return on specific investments negatively impacted:	
***	***
Lowering of credit rating:	
***	***
Ability to service debt:	
***	***
Other effects on growth and development:	
***	***
***	***

Table continued on next page.

Table VI-9—Continued
VSEs: Narratives relating to actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2016

Item / Firm	Narrative
Anticipated effects of imports:	
***	***
***	***

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

---

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

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

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

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

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

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

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

The industry in China

The Commission issued foreign producers' or exporters' questionnaires to 34 firms believed to produce and/or export VSEs from China.[3] Usable responses to the Commission's questionnaire were received from three firms: Jiangsu Jiangdong Group Imp & Exp, Co. Ltd. ("Jiangsu"),[4] Loncin Motor Co., Ltd. ("Loncin"), and Yamaha Motor CIS ("Yamaha"). These firms' exports to the United States were equivalent to approximately *** percent of U.S. imports of VSEs from China in 2018. The three producers were unable to estimate their firms' share of production of VSEs in China during 2018. Table VII-1 presents information on the VSEs operations of the responding producers and exporters in China.

Table VII-1
VSEs: Summary data for producers in China, 2018

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)
Jiangsu	***	***	***	***	***	***
Loncin	***	***	***	***	***	***
Yamaha	***	***	***	***	***	***
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.

Changes in operations

As presented in table VII-2, producers in China reported several operational and organizational changes since January 1, 2016, including *** expansions and *** prolonged shutdowns or curtailments.

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

[4] ***. Phone note with Zhu (Judy) Wang, Counsel for Jaingsu, on February 19, 2020.

Table VII-2
Vertical shaft engines: Reported changes in operations by producers in China, since January 1, 2016

Item / Firm	Reported changed in operations
Expansions:	
***	***
***	***
***	***
Prolonged shutdowns or curtailments:	
***	***

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

Operations on vertical shaft engines

Table VII-3 presents information on the VSEs operations of the responding producers and exporters in China. Capacity in China increased by *** percent from 2016 to 2018; it was higher in interim 2019 than interim 2018 by *** percent. This is largely attributed to ***. Capacity is projected to remain at 2019 level in 2020. VSEs production in China more than doubled by *** percent from 2016 to 2018; while it was lower in interim 2019 than interim 2018 by *** percent. In 2020, production is projected to be higher than 2019 by *** percent. End-of-period inventories decreased by *** percent from 2016 to 2018; however, inventories were higher in interim 2019 than interim 2018 by *** percent. End-of-period inventories are projected to increase from 2019 to 2020 by *** percent. Capacity utilization increased from 2016 to 2018 by *** percentage points; however, it was lower in interim 2019 than 2018 by *** percentage points. Capacity utilization is projected to increase by *** percentage points.

Total home market shipments increased from 2016 to 2018 by *** percent; it was higher in interim 2019 than interim 2018 by *** percent. Home market shipment is projected to increase in 2020 compared to 2019 by *** percent.

Export shipments to the United States increased from 2016 to 2018 by *** percent. Export shipments to the United States were *** percent lower in interim 2019 compared to interim 2018; however, export shipments to the United States are projected to be *** percent higher in 2020 than 2019.

Table VII-3
Vertical shaft engines: Data for producers in China, 2016-18, January to September 2018, and January to September 2019 and projection calendar years 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (units)						
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	***	***	***	***	***	***	***
	Ratios and shares (percent)						
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

*** responding Chinese firms reported producing other products on the same equipment and machinery used to produce VSEs.

Exports

According to GTA, the leading export markets for engines from China are United States, Nigeria, Indonesia (table VII-4). During 2018, the United States was the top export market for engines from China, accounting for 38.2 percent, followed by Nigeria, accounting for 7.18 percent.

Table VII-4
Engines: China exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (units)		
United States	3,927,603	3,775,914	4,143,064
Nigeria	455,421	587,571	778,033
Indonesia	542,044	532,169	588,890
Brazil	131,873	238,881	336,647
Russia	317,234	323,650	321,001
Japan	374,920	351,647	302,608
Italy	232,211	344,592	287,170
Vietnam	354,721	336,160	266,732
Slovenia	261,405	186,964	248,521
All other destination markets	2,978,311	3,353,436	3,563,023
Total exports	9,575,743	10,030,984	10,835,689
	Value (1,000 dollars)		
United States	396,466	396,584	462,680
Nigeria	25,498	27,348	38,933
Indonesia	39,324	38,099	46,080
Brazil	10,431	16,394	23,095
Russia	28,198	22,773	29,754
Japan	43,946	41,603	38,057
Italy	19,240	24,114	22,444
Vietnam	18,669	17,876	13,768
Slovenia	13,504	9,899	14,553
All other destination markets	265,065	283,738	314,592
Total exports	860,340	878,428	1,003,957

Table continued on the next page.

Table VII-4--Continued
Engines: China exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per unit)		
United States	101	105	112
Nigeria	56	47	50
Indonesia	73	72	78
Brazil	79	69	69
Russia	89	70	93
Japan	117	118	126
Italy	83	70	78
Vietnam	53	53	52
Slovenia	52	53	59
All other destination markets	89	85	88
Total exports	90	88	93
	Share of quantity (percent)		
United States	41.0	37.6	38.2
Nigeria	4.8	5.9	7.2
Indonesia	5.7	5.3	5.4
Brazil	1.4	2.4	3.1
Russia	3.3	3.2	3.0
Japan	3.9	3.5	2.8
Italy	2.4	3.4	2.7
Vietnam	3.7	3.4	2.5
Slovenia	2.7	1.9	2.3
All other destination markets	31.1	33.4	32.9
Total exports	100.0	100.0	100.0

Source: GTIS/GTA database.

U.S. inventories of imported merchandise

Table VII-5 presents data on U.S. importers' reported inventories of VSEs. Inventories of imports from China increased from 2016-18, resulting in a net increase of *** percent during this period. Inventories of imports from China were approximately *** percent higher in interim 2019 compared to interim 2018. From 2016 to 2018, imports from nonsubject sources *** decreased each consecutive year for a net decline of *** percent. Inventories of imports from nonsubject sources, were lower in 2019 than interim 2018 levels by *** percent. Total U.S. importers' end-of-period inventories of imports from all sources increased by *** percent from 2016 to 2018, and were higher in interim 2019 than in interim 2018 by *** percent.

Table VII-5
Vertical shaft engines: U.S. importers' end-of-period inventories of imports by source, 2016-18, January to September 2018, and January to September 2019

Item	Calendar year			January to September	
	2016	2017	2018	2018	2019
	Inventories (units); Ratios (percent)				
Imports from China					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
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 VSEs from China after October 2019. These are presented in table VII-6.

Table VII-6
Vertical shaft engines: Arranged imports, October 2019 through September 2020

Item	Period				
	Oct-Dec 2019	Jan-Mar 2020	Apr-Jun 2020	Jul-Sept 2020	Total
	Quantity (units)				
Arranged U.S. imports from.--					
China	***	***	***	***	***
All other 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 antidumping or countervailing duty orders in orders in third-country markets on VSEs. However, on February 3, 2020, Argentina initiated an antidumping investigation on imports of certain weeding machines and lawnmowers with a motor, specifically products classified under HS code subheadings 8467.29.99 and 8433.11.00.[5] The products subject to the Argentinian investigation include riding mowers that would utilize a VSE covered by these investigations.

Information on nonsubject countries

Global Trade Atlas (GTA) publishes data on global exports of engines, including those for subheading 8407.90 (other engines) and 8409.91 (parts for spark-ignition, internal combustion engines).[6] However both of these subheadings are huge categories that, in addition to products covered by the scope of these investigations, also include many products outside the scope of these investigations.[7] Due to this data limitation, GTA data is not included. The other major known exporter of VSEs is Japan, who is also the world's third largest exporter under 8407.90.[8] Japan's engine exports are categorized by horsepower, with the statistical reporting number that includes VSEs totaling more than $213 million in exports in 2019.[9]

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[5] Global Trade Alert, "Argentina: Initiation of antidumping investigation on imports of certain lawnmowers and weeding machines from China," (accessed February 19, 2020), https://www.globaltradealert.org/intervention/78429/anti-dumping/argentina-initiation-of-antidumping-investigation-on-imports-of-certain-lawnmowers-and-weeding-machines-from-china.

[6] Data for 8409.91 is excluded because the subheading includes larger shares of nonsubject imports.

[7] For example, of U.S. imports under 8407.90, only 40.8 percent of imports are products covered by the scope of this investigation.

[8] Conference transcript, p. 110 (Stoel); Official exports statistics under HS subheading 8407.90 as reported by Japan Ministry of Finance in the Global Trade Atlas database, accessed February 13th, 2020

[9] Japanese statistical reporting number 8407.90.200 corresponds to, "spark-ignition reciprocating or rotary internal combustion piston engines with a rating of more than 3 horsepower," excluding engines for use in aircrafts, marine propulsion devices, or motor vehicles. Riding lawn mowers typically have a rating of 13-30 horsepower. Official exports statistics under HS subheading 8407.90.200 as reported by Japan Ministry of Finance in the Global Trade Atlas database, accessed February 13th, 2020; Surina, Echo, "How to Choose the Right Lawnmower," accessed February 21, 2020, https://home.howstuffworks.com/how-to-choose-the-right-lawnmower4.htm.

APPENDIX A

FEDERAL REGISTER NOTICES

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

Citation	Title	Link
85 FR 3945, January 23, 2020	*Vertical Shaft Engines From China; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-01-23/pdf/2020-01016.pdf
85 FR 8809, February 18, 2020	*Certain Vertical Shaft Engines Between 225cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-02-18/pdf/2020-03103.pdf
85 FR 8835, February 18, 2020	*Certain Vertical Shaft Engines Between 223cc and 999cc, and Parts Thereof From the People's Republic of China: Initiation of Countervailing Duty Investigation*	https://www.govinfo.gov/content/pkg/FR-2020-02-18/pdf/2020-03104.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

Subject: Vertical Shaft Engines from China

Inv. Nos.: 701-TA-637 and 731-TA-1471 (Preliminary)

Date and Time: February 5, 2020 - 9:30 a.m.

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

OPENING REMARKS:

In Support of Imposition (**Robert E. DeFrancesco, III**, Wiley Rein LLP)
In Opposition to Imposition (**Alexander Schaefer**, Crowell & Moring LLP)

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

King & Spalding LLP
Wiley Rein LLP
Washington, DC
on behalf of

Coalition of American Vertical Engine Producers

David Rodgers, Senior Vice President & President, Engines and Power Group, Briggs & Stratton Corporation

Jeffrey Coad, Vice President, Product Management and Marketing, Briggs & Stratton Corporation

Joshua Brown, Director of Sales, Briggs & Stratton Corporation

William Harrison, Director, Division Controller, Briggs & Stratton Corporation

John Booher, Senior Counsel, Regulatory, Compliance & Governmental Affairs, Briggs & Stratton Corporation

Brian Melka, President of Engines, Kohler Co.

Eric Hudak, Director of Product Marketing for Gasoline Engines, Kohler Co.

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

Dave Mauer, Vice President, Operations of Gasoline Engines, Kohler Co.

Amy Sherman, International Trade Analyst, Wiley Trade Analytics Group

Stephen J. Orava)
Stephen P. Vaughn)
Clinton R. Long) – OF COUNSEL
Robert E. DeFrancesco, III)
Elizabeth V. Baltzan)

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

Crowell & Moring LLP
Washington, DC
on behalf of

MTD Products Inc. ("MTD")

Steve Trumpler, Senior Vice President and General Manager,
Wheeled Products Division, MTD

Erik Krueger, Vice President, R & D and Engine Development, MTD

Ed Griffin, Supply Chain Director, MTD

Alexander Schaefer)
) – OF COUNSEL
Spencer Toubia)

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

Hogan Lovells US LLP
Washington, DC
on behalf of

The Toro Company

Bill Buenz, Commodity Manager, Engines, The Toro Company

Ross Hawley, Director of Marketing, The Toro Company

Mitchell Ginsburg, Associate Principal, Charles River Associates

Jonathan T. Stoel)
) – OF COUNSEL
Nicholas R. Sparks)

Grunfeld, Desiderio, Lebowitz, Silverman & Klestadt LLP
Washington, DC
on behalf of

Loncin Motor Co., Ltd.

Francis J. Sailer)
) – OF COUNSEL
Michael S. Holton)

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Stephen P. Vaughn**, King & Spalding LLP)
In Opposition to Imposition (**Jonathan T. Stoel**, Hogan Lovells US LLP; and
Alexander Schaefer, Crowell & Moring LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Vertical shaft engines: Summary data concerning the U.S. market, 2016-18, January to September 2018, and January to September 2019
(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			January to September		Calendar year			Jan-Sep
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. consumption quantity:									
Amount	***	***	***	***	***	▲***	▼***	▲***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
China	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources	***	***	***	***	***	▼***	▲***	▼***	▼***
All import sources	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▲***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
China	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▼***	▼***
All import sources	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. importers' U.S. shipments from:									
China:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▼***	▼***	▼***	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
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	***	***	***	***	***	▲***	▲***	▲***	▲***
Production quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Capacity utilization (fn1)	***	***	***	***	***	▲***	▼***	▲***	▼***
U.S. shipments:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▼***
Value	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▲***
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	***	***	***	***	***	▲***	▲***	▲***	▼***
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:

:s 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.