

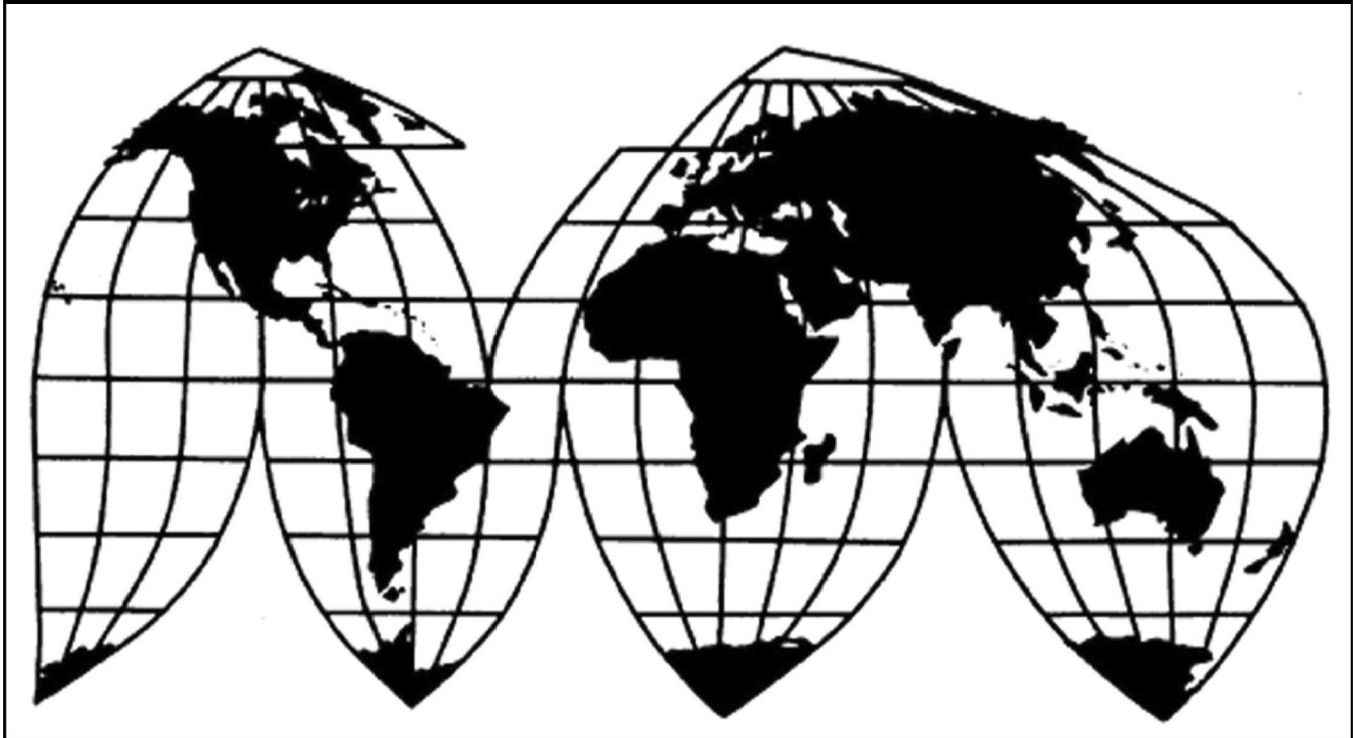
# Large Residential Washers from China

Investigation No. 731-TA-1306 (Review)

Publication 5343

August 2022

**U.S. International Trade Commission**



Washington, DC 20436

# U.S. International Trade Commission

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## UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1306 (Review)

Large Residential Washers from China

### **DETERMINATION**

On the basis of the record<sup>1</sup> developed in the subject five-year review, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that revocation of the antidumping duty order on large residential washers from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

### **BACKGROUND**

The Commission instituted this review on January 3, 2022 (87 FR 115, January 3, 2022) and determined on April 8, 2022, that it would conduct an expedited review (87 FR 38780, June 29, 2022).

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

## Views of the Commission

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Tariff Act”), that revocation of the antidumping duty order on Large Residential Washers (“LRWs”) from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

### I. Background

*Original Investigation.* Whirlpool Corporation (“Whirlpool”) filed an antidumping duty petition on LRWs from China on December 16, 2015.<sup>1</sup> In January 2017, the Commission determined that an industry in the United States was materially injured by reason of subject imports.<sup>2</sup> On February 6, 2017, the U.S. Department of Commerce (“Commerce”) published an antidumping duty order on imports of LRWs from China.<sup>3</sup>

*Current Review.* The Commission instituted this five-year review on January 3, 2022.<sup>4</sup> Whirlpool, a domestic producer of LRWs, filed the sole response to the Commission’s notice of institution.<sup>5</sup> In April 2022, the Commission determined that the domestic interested party group response was adequate and that the respondent interested party group response was

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<sup>1</sup> *Large Residential Washers from China*, Inv. No. 731-TA-1306 (Final), USITC Pub. 4666 (Jan. 2017) (“Original Determination”) at 1.

<sup>2</sup> Original Determination, USITC Pub. 4666 at 3.

<sup>3</sup> *Large Residential Washers From the People's Republic of China: Amended Final Affirmative Antidumping Duty Determination and Antidumping Duty Order*, 82 Fed. Reg. 9371 (Feb. 6, 2017).

<sup>4</sup> *Large Residential Washers From China; Institution of a Five-Year Review*, 87 Fed. Reg. 115 (Jan. 3, 2022).

<sup>5</sup> Whirlpool’s Confidential Response to the Notice of Institution, EDIS Doc. 762176 (Feb. 2, 2022) (“Response”); Whirlpool’s Confidential Supplemental Response, EDIS Doc. 763320 (Feb. 16, 2022).

inadequate.<sup>6</sup> Finding that no other circumstances warranted conducting a full review, the Commission determined to conduct an expedited review of the order.<sup>7</sup> On July 21, 2022, Whirlpool filed final comments in this review pursuant to 19 C.F.R. § 207.62(d).<sup>8</sup>

U.S. industry data are based on the information submitted by Whirlpool, which estimated that it accounted for \*\*\* of domestic production of LRWs in 2021 in its response to the notice of institution.<sup>9</sup> U.S. import data and related information are based on Commerce’s official import statistics.<sup>10</sup> Foreign industry data and related information are based on the information submitted by Whirlpool, information from the original investigation, and publicly available information.<sup>11</sup> Additionally, three purchasers responded to the adequacy phase questionnaire: \*\*\*.<sup>12</sup>

## **II. Domestic Like Product and Industry**

### **A. Domestic Like Product**

In making its determination under section 751(c) of the Tariff Act, the Commission defines the “domestic like product” and the “industry.”<sup>13</sup> The Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and

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<sup>6</sup> Explanation of Commission Determination of Adequacy, EDIS Doc. 769244 (Apr. 27, 2022).

<sup>7</sup> *Large Residential Washers from China; Scheduling of Expedited Five-Year Review*, 87 Fed. Reg. 38780 (June 29, 2022).

<sup>8</sup> Whirlpool’s Confidential Final Confidential Comments, EDIS Doc. 776048 (July 21, 2022) (“Final Comments”).

<sup>9</sup> Confidential Report (“CR”) and Public Report (“PR”) at Table I-2.

<sup>10</sup> See CR/PR at Table I-6.

<sup>11</sup> See CR/PR at I-28-31.

<sup>12</sup> CR/PR at D-3.

<sup>13</sup> 19 U.S.C. § 1677(4)(A).



uses with, the article subject to an investigation under this subtitle.”<sup>14</sup> The Commission’s practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.<sup>15</sup>

Commerce has defined the imported merchandise within the scope of the order under review as follows:

The products covered by this order are all large residential washers and certain parts thereof from the People's Republic of China.

For purposes of this order, the term “large residential washers” denotes all automatic clothes washing machines, regardless of the orientation of the rotational axis, with a cabinet width (measured from its widest point) of at least 24.5 inches (62.23 cm) and no more than 32.0 inches (81.28 cm), except as noted below.

Also covered are certain parts used in large residential washers, namely: (1) All cabinets, or portions thereof, designed for use in large residential washers; (2) all assembled tubs designed for use in large residential washers which incorporate, at a minimum: (a) a tub; and (b) a seal; (3) all assembled baskets designed for use in large residential washers which incorporate, at a minimum: (a) a side wrapper; (b) a base; and (c) a drive hub; and (4) any combination of the foregoing parts or subassemblies.

Excluded from the scope are stacked washer-dryers and commercial washers. The term “stacked washer-dryers” denotes distinct washing and drying machines that are built on a unitary frame and share a

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<sup>14</sup> 19 U.S.C. § 1677(10); *see, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Dep’t of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 Ct. Int’l Trade 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96<sup>th</sup> Cong., 1<sup>st</sup> Sess. 90-91 (1979).

<sup>15</sup> *See, e.g., Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

common console that controls both the washer and the dryer. The term “commercial washer” denotes an automatic clothes washing machine designed for the “pay per use” segment meeting either of the following two definitions:

(a) it contains payment system electronics; (b) it is configured with an externally mounted steel frame at least six inches high that is designed to house a coin/token operated payment system (whether or not the actual coin/token operated payment system is installed at the time of importation); (c) it contains a push button user interface with a maximum of six manually selectable wash cycle settings, with no ability of the end user to otherwise modify water temperature, water level, or spin speed for a selected wash cycle setting; and (d) the console containing the user interface is made of steel and is assembled with security fasteners; or

(a) it contains payment system electronics; (b) the payment system electronics are enabled (whether or not the payment acceptance device has been installed at the time of importation) such that, in normal operation, the unit cannot begin a wash cycle without first receiving a signal from a bona fide payment acceptance device such as an electronic credit card reader; (c) it contains a push button user interface with a maximum of six manually selectable wash cycle settings, with no ability of the end user to otherwise modify water temperature, water level, or spin speed for a selected wash cycle setting; and (d) the console containing the user interface is made of steel and is assembled with security fasteners.

Also excluded from the scope are automatic clothes washing machines that meet all of the following conditions: (1) Have a vertical rotational axis; (2) are top loading; (3) have a drive train consisting, *inter alia*, of (a) a permanent split capacitor (PSC) motor, (b) a belt drive, and (c) a flat wrap spring clutch.

Also excluded from the scope are automatic clothes washing machines that meet all of the following conditions: (1) Have a horizontal rotational axis; (2) are front loading; and (3) have a drive train consisting, *inter alia*, of (a) a controlled induction motor (CIM), and (b) a belt drive.

Also excluded from the scope are automatic clothes washing machines that meet all of the following conditions: (1) Have a horizontal rotational axis; (2) are front loading; and (3) have cabinet

width (measured from its widest point) of more than 28.5 inches (72.39 cm).<sup>16</sup>

The scope definition set out above is unchanged since the original investigation.<sup>17</sup>

LRWs are home appliances that remove soil from fabric, using water and detergent as the principal cleaning agents. All units feature wash, rinse, and spin cycles; have a cabinet width of at least 24.5 inches (62.23 cm) and no more than 32.0 inches (81.28 cm); and feature a rotational axis that is either vertical or horizontal. All LRWs feature a metal drum or basket into which laundry is loaded, a tub that holds water, a motor, a pump, and a user interface and control unit to set wash cycles. Single-family households are the principal consumers of LRWs.<sup>18</sup>

In the U.S. market, LRWs are typically produced and sold in two configurations, either with a vertical axis, generally referred to as “top load” LRWs, or with a horizontal axis, generally referred to as “front load.”<sup>19</sup> Top load LRWs feature a top loading door for loading clothes and contain a basket that spins on a vertical axis. A top load LRW contains either an agitator or an impeller, both of which facilitate the cleaning movement of clothes, water, and detergent inside the basket of the machine.<sup>20</sup> An agitator is a center post that projects from the bottom of the wash basket and is equipped with fins or vanes that create a washing action by rotating back and forth.<sup>21</sup> An impeller is a somewhat flat, rotating hub which does not contain a center

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<sup>16</sup> *Issues and Decision Memorandum for the Final Results of the Expedited Sunset Review of the Antidumping Duty Order on Large Residential Washers from the People’s Republic of China* (May 2, 2022) (“I&D Memo”) at 2-3.

<sup>17</sup> See Original Determination, USITC Pub. 4666 at 5-6.

<sup>18</sup> CR/PR at I-7.

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

<sup>20</sup> CR/PR at I-9.

<sup>21</sup> CR/PR at I-10.

post. It creates washing motion by rotating and creating currents in the water.<sup>22</sup> Front load LRWs feature a front-loading door and a drum that spins on a horizontal axis. The drums of front load LRWs fill only partly with water and clean through a process of lifting clothes to the top of the tub and dropping them into the water, and using the centrifugal force of the spinning drum.<sup>23</sup>

In addition to their principal configuration (front load or top load), LRWs are defined by product features such as energy efficiency, capacity, and appearance.<sup>24</sup> Front load LRWs generally consume less water and electricity during the wash cycle than top load LRWs. Because of the lower water and electricity consumption, all front load LRWs qualify as “high efficiency” and have been Energy Star certified before and after Energy Star efficiency standards were revised in January and February of 2018.<sup>25</sup> Most front load LRW load capacities are roughly equivalent to top load LRWs with an impeller but tend to have higher load capacities than top load LRWs with an agitator.<sup>26</sup>

LRWs are typically mass produced in a production plant.<sup>27</sup> For instance, Whirlpool assembles all the LRWs that it sells in the United States in its Clyde, Ohio, manufacturing plant.<sup>28</sup> Whirlpool manufactures the cabinets, basket drums, and tubs at the plant, and it

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<sup>22</sup> CR/PR at I-10.

<sup>23</sup> CR/PR at I-11.

<sup>24</sup> See CR/PR at I-12-15.

<sup>25</sup> CR/PR at I-11. The Environmental Protection Agency (“EPA”) and Department of Energy (“DOE”) assign the “Energy Star” designation, and revise the standards periodically based on federal minimum efficiency standards, technological advances, product availability, and when the market share for Energy Star rated LRWs reach or exceed 50 percent for a particular category of LRW. *Id.* at I-13.

<sup>26</sup> CR/PR at I-11.

<sup>27</sup> CR/PR at I-16.

<sup>28</sup> See CR/PR at I-16-19.

sources electrical parts, electronics, motors, and harnesses from third party suppliers. All these components are then assembled into the finished washer.<sup>29</sup>

In the original investigation, the Commission included out-of-scope front load residential washers with controlled induction motors and belt drives (“CIM/Belt washers”) in the domestic like product definition because they were produced domestically and the parties did not dispute that there was no clear dividing line between these washers and LRWs within the scope.<sup>30</sup> The Commission also considered whether to define two domestic like products, as argued by respondents, with one corresponding to finished LRWs and a separate domestic like product encompassing in-scope LRW parts.<sup>31</sup> Based on a semi-finished products analysis, the Commission found that record evidence supported the inclusion of LRW parts and finished washers within the same domestic like product definition.<sup>32</sup> The Commission acknowledged that LRW parts do not resemble LRWs, cannot wash clothes, and represent a small portion of the total value of a finished LRW, but observed that the vast majority of LRW parts are dedicated to the production of LRWs and that there is no significant separate market for LRW parts. Moreover, it observed that LRW parts are similar to LRWs in that all such parts can be found in every LRW and are essential to the proper functioning of LRWs, and that transforming the parts into finished LRWs is a matter of simple assembly.<sup>33</sup> Consequently, the Commission

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<sup>29</sup> CR/PR at I-19.

<sup>30</sup> Original Determination, USITC Pub. 4666 at 7 n.24; *see also Large Residential Washers from China*, Inv. No. 731-TA-1306 (Preliminary), USITC Pub. 4591 (Feb. 2016) at 10. CIM/Belt washers are encompassed by the second of the three exclusions in the scope definition.

<sup>31</sup> Original Determination, USITC Pub. 4666 at 7.

<sup>32</sup> Original Determination, USITC Pub. 4666 at 8-9.

<sup>33</sup> Original Determination, USITC Pub. 4666 at 9.

defined a single domestic like product consisting of LRW parts, in-scope finished LRWs, and front load residential CIM/Belt washers.<sup>34</sup>

In this review, Whirlpool agrees with the domestic like product definition adopted by the Commission in its original investigation.<sup>35</sup> The record contains no new information suggesting that the characteristics and uses of domestically produced LRWs have changed since the original investigation. We therefore define a single domestic like product consisting of LRW parts within the scope, in-scope finished LRWs, and out-of-scope front load residential CIM/Belt washers.

## **B. Domestic Industry**

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”<sup>36</sup> In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In this review, we must also determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude

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<sup>34</sup> Original Determination, USITC Pub. 4666 at 8-9.

<sup>35</sup> Response at 25.

<sup>36</sup> 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.<sup>37</sup> Exclusion of such a producer is within the Commission’s discretion based upon the facts presented in each investigation.<sup>38</sup>

In the original investigation, the Commission defined the domestic industry to include all U.S. producers of the domestic like product.<sup>39</sup>

In this review, Whirlpool does not raise any domestic industry arguments (and does not argue for exclusion of any U.S. producers pursuant to the related parties provision).<sup>40</sup> However, Whirlpool indicates that U.S. producers Haier U.S. Appliance Solutions, Inc. (“Haier”), LG Electronics USA, Inc. (“LG”), and Samsung Electronics Home Appliance America, LLC and Samsung Electronics America, Inc. (collectively, “Samsung”) are each affiliated with a Chinese

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<sup>37</sup> See *Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int’l Trade 1992), *aff’d without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int’l Trade 1989), *aff’d mem.*, 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int’l Trade 1987).

<sup>38</sup> The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

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

<sup>39</sup> Original Determination, USITC Pub. 4666 at 9. There were no issues pertaining to related parties in the original investigation. *Id.* at 9 n.37.

<sup>40</sup> Response at 25. Whirlpool indicates that Galanz Group (“Galanz”) acquired majority ownership and control of Whirlpool (China) Co., Ltd. (with washer production facilities in Anhui Province, China) in 2021. Response at 21 n.69. Whirlpool states that it is not an exporter to the United States of LRWs from China, nor is it related to such an exporter, and that it is neither an importer of LRWs from China, nor is it related to such an importer. *Id.* at 17 n.57.

producer of LRWs.<sup>41</sup> Consequently, Haier, LG, and Samsung may be related to “an exporter ... of the subject merchandise” so as to qualify as related parties under 19 U.S.C. § 1677(4)(B).

The record contains limited information concerning whether the Chinese producers related to Haier, LG, and Samsung exported LRWs to the United States during the 2016 to 2021 period of review (“POR”), or whether these U.S. producers imported subject LRWs during the POR. Although the record shows U.S. imports from China under the relevant HTS statistical reporting numbers for LRWs, Whirlpool states that it does not believe that the affiliate firms in China are currently exporting LRWs to the United States,<sup>42</sup> and that imports from China during the POR consisted entirely of out-of-scope washers.<sup>43</sup> Therefore, based on the facts available in the record of this review, we cannot determine whether Haier, LG, and Samsung are subject to the related parties provision.<sup>44</sup>

Accordingly, based on the limited information available, we define the domestic industry to include all domestic producers of the domestic like product.

### **III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time**

#### **A. Legal Standards**

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that

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<sup>41</sup> Response at 17.

<sup>42</sup> Response at 17.

<sup>43</sup> CR/PR at Table I-6 & note; Response at 17, 25.

<sup>44</sup> Even if Haier, LG, and Samsung were subject to the related parties provision, because these firms did not respond to the notice of institution, there are no data concerning their domestic operations in the record to exclude.



dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”<sup>45</sup> The SAA states that “under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.”<sup>46</sup> Thus, the likelihood standard is prospective in nature.<sup>47</sup> The U.S. Court of International Trade (“CIT”) has found that “likely,” as used in the five-year review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.<sup>48</sup>

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of

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<sup>45</sup> 19 U.S.C. § 1675a(a).

<sup>46</sup> SAA at 883-84. The SAA states that “{t}he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” *Id.* at 883.

<sup>47</sup> While the SAA states that “a separate determination regarding current material injury is not necessary,” it indicates that “the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked.” SAA at 884.

<sup>48</sup> See *NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int’l Trade 2003) (“‘likely’ means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)”), *aff’d mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 Ct. Int’l Trade 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 Ct. Int’l Trade 1402, 1404 nn.3, 6 (2002) (“more likely than not” standard is “consistent with the court’s opinion;” “the court has not interpreted ‘likely’ to imply any particular degree of ‘certainty’”); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 Ct. Int’l Trade 1059, 1070 (2002) (“standard is based on a likelihood of continuation or recurrence of injury, not a certainty”); *Usinor v. United States*, 26 Ct. Int’l Trade 767, 794 (2002) (“‘likely’ is tantamount to ‘probable,’ not merely ‘possible’”).

time.”<sup>49</sup> According to the SAA, a “‘reasonably foreseeable time’ will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”<sup>50</sup>

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to “consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated.”<sup>51</sup> It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).<sup>52</sup> The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission’s determination.<sup>53</sup>

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<sup>49</sup> 19 U.S.C. § 1675a(a)(5).

<sup>50</sup> SAA at 887. Among the factors that the Commission should consider in this regard are “the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities.” *Id.*

<sup>51</sup> 19 U.S.C. § 1675a(a)(1).

<sup>52</sup> 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings on the order under review. I&D Memo at 4.

<sup>53</sup> 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.<sup>54</sup> In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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.<sup>55</sup>

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.<sup>56</sup>

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<sup>54</sup> 19 U.S.C. § 1675a(a)(2).

<sup>55</sup> 19 U.S.C. § 1675a(a)(2)(A-D).

<sup>56</sup> See 19 U.S.C. § 1675a(a)(3). The SAA states that “{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.<sup>57</sup> All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.<sup>58</sup>

No respondent interested party participated in this expedited review. The record, therefore, contains limited new information with respect to the LRWs industry in China. There also is limited new information regarding the LRW market in the United States during the POR.

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<sup>57</sup> 19 U.S.C. § 1675a(a)(4).

<sup>58</sup> The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

Accordingly, for our determinations, we rely as appropriate on the facts available from the original investigation and the limited new information in the record of this review.<sup>59</sup>

## **B. Conditions of Competition and the Business Cycle**

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”<sup>60</sup> The following conditions of competition inform our determinations.

### **1. Demand Conditions**

*Original Investigation.* In the original investigation, the Commission observed that about two-thirds of demand for LRWs was driven by consumers needing to replace existing washers at the end of those products’ functional lives (replacement demand) with the remainder driven by home sales, renovations, and new construction.<sup>61</sup> The Commission also found that competition in the U.S. market occurs at the wholesale and retail levels and that five large retailers—Best Buy, hhgregg, Home Depot, Lowe’s, and Sears—together accounted for more than two-thirds of LRW sales, with buyers’ groups accounting for most of the balance.<sup>62</sup> The record indicated that apparent U.S. consumption increased by \*\*\* percent between 2013

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<sup>59</sup> We also rely as appropriate on publicly available information from the Commission’s proceeding for the extension of the LRWs safeguard measure, *Large Residential Washers: Extension of Action*, Inv. No. TA-201-076 (Extension) (“LRWs Safeguard Extension”), USITC Pub. 5144 (Dec. 2020).

<sup>60</sup> 19 U.S.C. § 1675a(a)(4).

<sup>61</sup> Original Determination, USITC Pub. 4666 at 14.

<sup>62</sup> Original Determination, USITC Pub. 4666 at 15.

and 2015, from \*\*\* units in 2013 to \*\*\* units in 2014 and \*\*\* units in 2015. It was \*\*\* percent higher in January-June 2016 (\*\*\* units) than in January-June 2015 (\*\*\* units).<sup>63</sup>

*Current Review.* There is no new information on the record indicating that the factors affecting demand for LRWs have significantly changed since the original investigation. Whirlpool asserts that demand for LRWs in the U.S. market has grown in recent years, including a sharp increase in demand during the COVID-19 pandemic.<sup>64</sup> Whirlpool expects \*\*\* and projects that demand growth will normalize in coming years with \*\*\*.<sup>65</sup> Apparent U.S. consumption of LRWs was approximately \*\*\* units in 2021, higher than the \*\*\* units in 2015.<sup>66</sup>

## **2. Supply Conditions**

*Original Investigation.* In the original investigation, the Commission observed that the domestic industry, which consisted of four domestic producers—Alliance, General Electric Appliances (“GE Appliances”), Staber Industries, Inc. (“Staber”), and Whirlpool—was the predominant supplier of LRWs to the U.S. market.<sup>67</sup> In 2015, the domestic industry accounted

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<sup>63</sup> Original Determination, USITC Pub. 4666 at 14; Confidential Original Determination, EDIS Doc. 602310 (“Confidential Original Determination”) at 19.

<sup>64</sup> Of the three responding U.S. purchasers, \*\*\*. CR/PR at D-3.

<sup>65</sup> Response at 24; Final Comments at 5.

<sup>66</sup> CR/PR at Table I-7 and note (based on Whirlpool’s estimate that domestic producers Haier (GE), LG, Samsung, and Alliance Laundry Systems, LLC (“Alliance”) produced \*\*\* units of LRWs domestically in 2021).

<sup>67</sup> Original Determination, USITC Pub. 4666 at 16.

for \*\*\* of apparent U.S. consumption, with Whirlpool alone accounting for \*\*\* of domestic production.<sup>68</sup> In June 2016, GE Appliances was sold to Haier, a Chinese company.<sup>69</sup>

The Commission observed that subject imports accounted for \*\*\* of apparent U.S. consumption in 2015, with LG and Samsung accounting for virtually all subject imports during the period of investigation (“POI”).<sup>70</sup> It also found that LG and Samsung had formerly imported LRWs from Korea and Mexico, respectively, but commenced production of LRWs in China and gradually replaced nonsubject LRWs from Korea and Mexico with subject LRWs from China at around the same time as Commerce imposed antidumping and countervailing duty orders on LRWs from Korea and Mexico in 2013.<sup>71</sup> The Commission noted that since the institution of the

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<sup>68</sup> Original Determination, USITC Pub. 4666 at 16; Confidential Original Determination at 22. The Commission observed that Whirlpool’s production facility operates as a foreign trade zone (“FTZ”) where it combines out-of-scope imported components with domestically produced components in order to minimize its tariff liability. It treated LRWs withdrawn from Whirlpool’s FTZ as domestically produced LRWs. Such withdrawals accounted for \*\*\* percent of Whirlpool’s U.S. shipments in 2015. Original Determination, USITC Pub. 4666 at 16-17; Confidential Original Determination at 22-23.

<sup>69</sup> Original Determination, USITC Pub. 4666 at 16.

<sup>70</sup> Original Determination, USITC Pub. 4666 at 16-17; Confidential Original Determination at 22.

<sup>71</sup> Original Determination, USITC Pub. 4666 at 17. The scope of *LRWs from Korea and Mexico* covered all LRWs within the scope of this review and additionally included LRWs that are: (1) top loading with a PSC motor, belt drive, and flat wrap spring clutch; (2) front loading with a CIM/belt drive; and (3) front loading with a cabinet width of more than 28.5 inches. *See Certain Large Residential Washers from Korea and Mexico*, Inv Nos. 701-TA-488 and 731-TA-1199-1200 (Final), USITC Pub. 4378 (Feb. 2013) at 5-6.

In 2019, Commerce revoked the antidumping and countervailing duty orders on imports of LRWs from Korea following negative five-year review determinations by the Commission, but continued the antidumping duty order on imports of LRWs from Mexico following affirmative five-year review determinations by Commerce and the Commission. *Large Residential Washers From Mexico and the Republic of Korea: Continuation of Antidumping Duty Order (Mexico) and Revocation of Antidumping and Countervailing Duty Orders (Korea)*, 84 Fed. Reg. 19763 (May 6, 2019); *Certain Large Residential Washers from Korea and Mexico*, Inv. Nos. 701-TA-488 and 731-TA-1199-1200 (Review), USITC Pub. 4882 (Apr. 2019).

original investigation of LRWs from China, LG and Samsung had shifted production of LRWs for export to the United States from China to Thailand and Vietnam.<sup>72</sup>

The Commission found that by the end of the POI, nonsubject imports supplied a \*\*\* small portion of the market, consisting largely of LRWs imported from Mexico by \*\*\* and LRWs imported from Korea by \*\*\*.<sup>73</sup> Nonsubject imports accounted for \*\*\* percent of apparent U.S. consumption in 2015.<sup>74</sup>

*Current Review.* The domestic industry was the largest source of supply to the U.S. market in 2021. Based on the information available, domestic producers' U.S. production was \*\*\* units in 2021, accounting for \*\*\* percent of apparent U.S. consumption.<sup>75</sup> Whirlpool estimates that it accounted for \*\*\* percent of domestic production of LRWs in 2021, while the five additional U.S. producers of LRWs (Alliance, Haier, LG, Samsung, and Staber) accounted for the balance.<sup>76</sup>

Subject imports were the smallest source of supply to the U.S. market in 2021. Although official import statistics, including LRWs and out-of-scope washers, indicate that subject imports were 798,640 units in 2021, accounting for \*\*\* percent of apparent U.S. consumption, Whirlpool asserts that these imports consisted entirely of out-of-scope washers.<sup>77</sup>

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<sup>72</sup> Original Determination, USITC Pub. 4666 at 17.

<sup>73</sup> Original Determination, USITC Pub. 4666 at 17; Confidential Original Determination at 24.

<sup>74</sup> Original Determination, USITC Pub. 4666 at 16; Confidential Original Determination at 22.

<sup>75</sup> *Derived from* CR/PR at Table I-7 and note.

<sup>76</sup> CR/PR at Table I-2; Response at Attach. 6. Whirlpool's 2021 production of LRWs was \*\*\* units. CR/PR at Table I-5. Whirlpool estimates that LG and Samsung, after commencing LRW production in the United States at newly opened manufacturing facilities in 2018, produced \*\*\* units and \*\*\* units in 2021, respectively. It also estimates that Haier produced \*\*\* units, Alliance produced \*\*\* units, and Staber produced \*\*\* units in 2021. Response at Attach. 6.

<sup>77</sup> CR/PR at Table I-6 and note.



Whirlpool is unaware of any imports of subject LRWs from China since imposition of the order on February 6, 2017,<sup>78</sup> and LG and Samsung, which accounted for virtually all imports of LRWs from China during the original investigation, subsequently moved their production of LRWs for the U.S. market from China to Thailand and Vietnam and also now produce LRWs in the United States.<sup>79</sup>

Nonsubject imports were the second largest source of supply to the U.S. washers market in 2021. According to official import statistics, nonsubject imports were 4.8 million units in 2021, accounting for \*\*\* percent of apparent U.S. consumption that year.<sup>80</sup> Since 2016, the largest sources of nonsubject imports have been Mexico, Thailand, and Vietnam.<sup>81</sup>

### **3. Substitutability and Other Conditions**

*Original Investigation.* In the original investigation, the Commission found that there was a moderate to high degree of substitutability between subject imports and domestically produced LRWs.<sup>82</sup> It also found that price was an important factor in purchasing decisions for LRWs, although non-price factors were also important.<sup>83</sup>

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<sup>78</sup> See Response at 17, 25.

<sup>79</sup> Original Determination, USITC Pub. 4666 at 17; CR/PR at Table I-4.

<sup>80</sup> CR/PR at Table I-7 and Table I-6 note. We recognize that nonsubject import volume may be overstated in 2021 due to the possible inclusion of LRW parts in the import data for assembled LRWs. See *id.* at Table I-6 note. Given that the increase in nonsubject imports from Thailand and Vietnam was accompanied by a substantial decline in the average unit value (“AUV”) of such imports, and that LG and Samsung produce LRWs in Thailand and Vietnam, the increase in nonsubject imports from Thailand and Vietnam may include parts for assembly into LRWs at LG’s and Samsung’s U.S. plants. *Id.*

<sup>81</sup> CR/PR at Table I-6.

<sup>82</sup> Original Determination, USITC Pub. 4666 at 19.

<sup>83</sup> Original Determination, USITC Pub. 4666 at 19.

The Commission found that industry pricing practices and the prevalence of discounting constituted further evidence that price was an important factor in the LRW market.<sup>84</sup> All responding domestic producers and importers engaged in discounting and a substantial portion of LRW sales were made at promotional prices during the POR.<sup>85</sup> Retailer flooring decisions were another factor the Commission observed to be driving sales of LRWs.<sup>86</sup> Most purchasers (retailers) reported factoring expected profits into their decisions about which LRW models would be allocated floor space and most reported that they usually or always floored LRW models offered at the lowest price for a given set of features.<sup>87</sup>

The Commission found that subject imports and the domestic like product were comparable in terms of non-price factors.<sup>88</sup> The record indicated that the U.S. LRW market encompassed a broad range of brands and models, with no LRW supplier possessing a clear edge over other LRW suppliers in terms of design, performance, features, innovations, and other non-price factors.<sup>89</sup>

Recognizing some differences in the types of LRWs that predominated U.S. shipments of subject imports in comparison to the domestic industry's U.S. shipments, with a greater proportion of U.S. imports consisting of front load LRWs, the Commission found that differences in product mix did not attenuate subject import competition to a significant

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<sup>84</sup> Original Determination, USITC Pub. 4666 at 20.

<sup>85</sup> Original Determination, USITC Pub. 4666 at 21.

<sup>86</sup> Original Determination, USITC Pub. 4666 at 19.

<sup>87</sup> Original Determination, USITC Pub. 4666 at 20-21.

<sup>88</sup> Original Determination, USITC Pub. 4666 at 21.

<sup>89</sup> Original Determination, USITC Pub. 4666 at 23.

degree.<sup>90</sup> As the Commission explained, subject imports of front load LRWs competed directly with domestically produced front load LRWs, and consumer cross-shopping between front load and top load LRW models resulted in competition between subject imports of front load LRWs and domestically produced top load LRWs.<sup>91</sup> Additionally, the Commission observed that lower prices on more fully featured subject imports adversely affected the sales volumes and prices of less fully featured domestically produced LRWs.<sup>92</sup>

*Current Review.* The record in this review contains no new information to indicate that the degree of substitutability between the domestic like product and subject imports or the importance of price in purchasing decisions has changed since the original investigation.<sup>93</sup> Accordingly, we again find that there is a moderate to high degree of substitutability between subject imports and domestically produced LRWs and that price continues to be an important factor in purchasing decisions for LRWs, among other important factors.

We observe that LRWs from China, as well as nonsubject imports, are currently subject to a global safeguard measure consisting of a tariff rate quota (“TRQ”) with an in-quota volume of 1.2 million units (allocated on a quarterly basis), an in-quota tariff rate of 14 percent, and an above-quota tariff rate of 30 percent, as proclaimed by the President under section 203 of the

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<sup>90</sup> Original Determination, USITC Pub. 4666 at 23.

<sup>91</sup> Original Determination, USITC Pub. 4666 at 23-24.

<sup>92</sup> Original Determination, USITC Pub. 4666 at 25.

<sup>93</sup> See Final Comments at 4-5. Whirlpool cites increasing production costs as a change in the conditions of competition. *Id.* at 4-5. Purchaser \*\*\* also reported that \*\*\*. CR/PR at D-3-4.

Trade Act of 1974.<sup>94</sup> This safeguard measure is scheduled to terminate on February 7, 2023.<sup>95</sup>

Subject imports are also subject to a 7.5 percent *ad valorem* duty under Section 301 of the Trade Act of 1974 (“section 301 duties”).<sup>96</sup>

### C. Likely Volume of Subject Imports

#### 1. The Original Investigation

In the original investigation, the Commission found that subject import volume increased from \*\*\* units in 2013 to \*\*\* units in 2015, a level \*\*\* percent higher than in 2013, and that subject import volume was \*\*\* percent higher in January-June 2016 (\*\*\* units) than in January-June 2015 (\*\*\* units).<sup>97</sup> Subject imports’ share of apparent U.S. consumption

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<sup>94</sup> CR/PR at I-7 and n.15. In October 2017, pursuant to an investigation instituted under Section 201 of the Trade Act of 1974 (“Section 201”), the Commission determined that LRWs were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to a domestic industry, and provided a report containing its serious injury findings and remedy recommendations to the President in December 2017. See *Large Residential Washers*, Inv. No. TA-201-076, USITC Pub. 4745 (Dec. 2017). Subsequently, on January 23, 2018, pursuant to Section 203 of the Trade Act of 1974, the President issued *Proclamation 9694* providing for annual TRQs for LRWs and certain covered parts, effective February 7, 2018, which would terminate after three years and one day. 83 Fed. Reg. 3553 (Jan. 25, 2018). On January 23, 2020, the President modified the TRQs’ quantitative limitations by allocating the within-quota quantities for the quota year on a quarterly basis, effective February 7, 2020. *Proclamation 9979*, 85 Fed. Reg. 5125 (Jan. 28, 2020). In December 2020, following receipt of a petition requesting extension of the safeguard measure, the Commission determined that action with respect to imports of LRWs continued to be necessary to prevent or remedy serious injury and that there was evidence that the domestic LRW industry was making a positive adjustment to import competition. LRWs Safeguard Extension, USITC Pub. 5144 (Dec. 2020) at 1. Subsequently, on January 14, 2021, the President issued *Proclamation 10133*, extending the safeguard measures on LRWs for two years, through February 7, 2023. 86 Fed. Reg. 6541 (Jan. 21, 2021); CR/PR at I-7 n.15.

<sup>95</sup> CR/PR at I-7.

<sup>96</sup> CR/PR at I-6 n.13; *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 85 Fed. Reg. 3741 (Jan. 22, 2020). LRWs imported from China are not subject to duties under Section 232 of the Trade Expansion Act of 1962, as amended (“Section 232”). However, stainless steel sheet and cold-rolled steel, raw materials for producing LRWs, were included among the articles subject to the additional 25-percent *ad valorem* duties under Section 232; and aluminum castings, a raw material for producing certain LRW parts, are subject to additional 10-percent *ad valorem* duties. CR/PR at I-6 n.14.

<sup>97</sup> Original Determination, USITC Pub. 4666 at 26; Confidential Original Determination at 37.

increased from \*\*\* percent in 2013 to \*\*\* percent in 2015; it was \*\*\* percent in January-June 2015 and \*\*\* percent in January-June 2016.<sup>98</sup> The Commission found that LG's and Samsung's increased imports of LRWs from China not only replaced nonsubject imports from Korea and Mexico but also captured market share from the domestic industry, which lost \*\*\* percentage points of market share during the 2013-2015 period.<sup>99</sup> The Commission concluded that the volume of subject imports and the increase in that volume were significant both in absolute terms and relative to consumption in the United States.<sup>100</sup>

## **2. The Current Review**

The information available on the volume of subject imports during the POR (official import statistics including LRWs and out-of-scope washers) show that subject imports declined substantially from 6.3 million units in 2016 to 618,489 units in 2020, before increasing to 798,640 units in 2021.<sup>101</sup> As discussed in section III.B.2 above, however, imports of washers from China during the POR likely consisted largely if not entirely of out-of-scope washers, given that Whirlpool is unaware of any imports of LRWs from China since imposition of the order and that LG and Samsung subsequently shifted their LRW production for the U.S. market away from China.<sup>102</sup> Thus, the order appears to have had a disciplining effect on subject import volume.

The record of this review indicates that subject producers in China have both the means and the incentive to increase shipments of subject merchandise to the U.S. market to significant

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<sup>98</sup> Original Determination, USITC Pub. 4666 at 26; Confidential Original Determination at 37.

<sup>99</sup> Original Determination, USITC Pub. 4666 at 26; Confidential Original Determination at 37-38.

<sup>100</sup> Original Determination, USITC Pub. 4666 at 27.

<sup>101</sup> CR/PR at Table I-6.

<sup>102</sup> Response at 17, 25; Original Determination, USITC Pub. 4666 at 17.

levels within a reasonably foreseeable time if the antidumping duty order was revoked. As previously stated, no importer, producer, or exporter of subject merchandise participated in this expedited review. In the original investigation, the record showed that the LRW industry in China had substantial capacity and projected excess capacity.<sup>103</sup> Although LG and Samsung subsequently shifted production of LRWs for the U.S. market from China to Thailand and Vietnam, Whirlpool submitted information indicating that there are currently 16 producers of washers in China, and estimates that these producers possessed an aggregate capacity of \*\*\* units in 2021.<sup>104</sup> Whirlpool also maintains that these producers have the ability to shift production from out-of-scope washers to LRWs, noting that all responding Chinese producers in the Commission's proceeding for the extension of the LRWs safeguard measure reported the ability to switch production between LRWs and other products using the same equipment and/or labor.<sup>105</sup>

The information available in this review also indicates that the subject industry is export oriented. In the original investigation, China was the leading country exporting washing machines.<sup>106</sup> Global Trade Atlas ("GTA") data concerning exports of household- or laundry-type washing machines with a dry linen capacity exceeding 10 Kg, a category that includes LRWs and out-of-scope products, indicates that China remained the world's largest exporter of such

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<sup>103</sup> Original Investigation Confidential Report INV-00-123, EDIS Doc. 598941 (Dec. 23, 2016) at Table VII-2. Data for the industry in China in the original investigation reflected only the production operations of LG and Samsung. *Id.* at VII-3.

<sup>104</sup> Response at 10, 17-21.

<sup>105</sup> Response at 9-10; *see also* LRWs Safeguard Extension, USITC Pub. 5144 at VI-12 n.11.

<sup>106</sup> Original Determination, USITC Pub. 4666 at Table VII-5.

washing machines throughout the POR.<sup>107</sup> China's global exports of washing machines totaled 6.3 million units in 2021, and the United States was the top export destination for washing machines from China that year.<sup>108</sup>

The information available also indicates that Chinese producers would have an incentive to export significant volumes of LRWs to the United States if the order was revoked. Based on GTA data furnished by Whirlpool, the AUV of out-of-scope washers exported from China to the United States was substantially higher than that of exports of washers from China to third country markets in 2021.<sup>109</sup> Moreover, several of the largest washer producers in China, including Haier, LG, Midea, and Samsung, have established distribution channels and customers in the United States for their washers, which would facilitate increased imports of LRWs from China if the order was revoked.<sup>110</sup> The Chinese producers' continued interest in serving the U.S. market is also demonstrated by the substantial volume of out-of-scope washers imported from China during the POR.<sup>111</sup>

The information available also indicates that LG and Samsung, which accounted for the vast majority of LRWs imported from China in the original investigation, maintain large washer production operations in China, with a combined capacity of \*\*\*.<sup>112</sup> LG and Samsung also

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<sup>107</sup> See CR/PR at Table I-9 and note.

<sup>108</sup> CR/PR at Table I-8.

<sup>109</sup> Response at 11 and Attach. 2.

<sup>110</sup> As discussed previously, Haier acquired U.S. producer GE Appliances in 2016. The record also indicates that Haier and Midea increased their exports to the United States of out-of-scope CIM/belt and PSC/clutch washers during the POR. Data provided by Whirlpool show that such imports increased from 72,083 units in 2017 to 695,868 units in 2021. See Response at Attachs. 1 and 5.

<sup>111</sup> See CR/PR at Table I-6; Response at 11. According to Whirlpool, these out-of-scope imports are largely from Haier and Midea, and they could convert their existing capacity to produce out-of-scope washers to capacity for the production of LRWs with "minimal modifications." Response at 12.

<sup>112</sup> Response at 18 & nn.61-62.

remained focused on serving the U.S. LRW market during the POR, using LRWs produced in their respective domestic production facilities and nonsubject imports.<sup>113</sup> In the safeguard extension proceeding for LRWs, the Commission found that LG and Samsung intended to continue importing LRWs even after their U.S. LRW production facilities were fully utilized, and were likely to rely on imports to grow their market share.<sup>114</sup> According to Whirlpool, LG and Samsung would likely use their existing washer production operations in China to export LRWs to the United States if the order was revoked, given evidence that their LRW production operations in Thailand and Vietnam will increasingly focus on serving local and regional markets; the advantageously low cost of cold-rolled steel, a major input in the production of LRWs, in China; and LG's and Samsung's history of transferring LRW production for the U.S. market to countries where such production is most economical.<sup>115</sup> We further observe that the termination of the safeguard measure on LRWs is scheduled in February 2023.<sup>116</sup>

Given the significant increase in subject import volume during the original investigation; the Chinese washer industry's substantial capacity and export orientation; the continued presence of substantial volumes of out-of-scope washers imported from China in the U.S. market during the POR; the existing U.S. distribution networks maintained by major Chinese producers; and the attractiveness of the U.S. market to Chinese LRW producers, we find that

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<sup>113</sup> See CR/PR at Tables I-4, I-6 note.

<sup>114</sup> LRWs Safeguard Extension, USITC Pub. 5144 at 10. Although LG announced a \$20.5 million investment to expand production at its U.S. production facility in April 2021, Whirlpool believes that LG and Samsung are fully utilizing their U.S. production capacity to produce LRWs, and would therefore need to rely on imports of LRWs to grow their market share. CR/PR at Table I-4; Response at 24-25, Attach. 6.

<sup>115</sup> See Response at 13-14, Attach. 4.

<sup>116</sup> See CR/PR at I-6-7.



the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the order was revoked.<sup>117</sup>

#### **D. Likely Price Effects**

##### **1. The Original Investigation**

The Commission began its price effects analysis by reiterating that the domestic like product and subject imports were moderately to highly substitutable and that price was an important consideration in purchasing decisions.<sup>118</sup> It observed that subject imports undersold the domestic like product in the vast majority of overall quarterly comparisons (100 of 110 or 90.9 percent) and in the vast majority of quarterly comparisons for each of the ten pricing products, at margins averaging 14.3 percent.<sup>119</sup> The Commission observed that the prevalence and magnitude of subject import underselling belied respondents' claim that subject imports possessed superior features and innovations, which would have been expected to command a price premium. It found that subject import underselling was significant and, given the moderate to high degree of substitutability and importance of price in purchasing decisions,

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<sup>117</sup> No responding purchaser reported that section 301 duties have affected the supply of, or demand for, subject imports, or that they anticipated such effects in the reasonably foreseeable future. See CR/PR at D-3-4.

We observe that the record in this expedited review contains no information concerning inventories of the subject merchandise. The record indicates that subject merchandise is not subject to antidumping or countervailing duty orders or investigations in markets other than the United States. CR/PR at I-29.

<sup>118</sup> Original Determination, USITC Pub. 4666 at 27.

<sup>119</sup> Original Determination, USITC Pub. 4666 at 30. The Commission found that the pricing data covered a range of typical LRW products and provided a reliable basis for apples-to-apples price comparisons based on specifically defined LRW models. *Id.* at 28-29.

that the significant underselling contributed to the market share shift from the domestic industry to subject imports during the POI.<sup>120</sup>

The Commission observed that domestic producer prices declined between the first and last quarters for which data were collected for pricing products \*\*\* and declined for products \*\*\* and \*\*\* prior to the last quarters.<sup>121</sup> It found that neither demand trends, with apparent U.S. consumption increasing throughout the POI, nor trends in the domestic industry's production costs, with the average cost of goods sold ("COGS") and ratio of COGS to net sales generally increasing during the POI, could explain the domestic industry's declining prices.<sup>122</sup> Consequently, the Commission found that subject imports depressed domestic like product prices to a significant degree. It concluded that subject imports had significant adverse price effects.<sup>123</sup>

## **2. The Current Review**

As discussed in Section III.B.3., we continue to find a moderate to high degree of substitutability between subject imports and domestically produced LRWs and that price is an important factor in purchasing decisions, among other important factors. Due to the expedited nature of this review, the record does not contain new product-specific pricing information. In light of the moderate to high degree of substitutability between subject imports and domestically produced LRWs, the importance of price in purchasing decisions, and the

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<sup>120</sup> Original Determination, USITC Pub. 4666 at 30.

<sup>121</sup> Original Determination, USITC Pub. 4666 at 31-32; Confidential Original Determination at 44-45.

<sup>122</sup> Original Determination, USITC Pub. 4666 at 32.

<sup>123</sup> Original Determination, USITC Pub. 4666 at 32.

likelihood of increased subject imports after revocation, subject imports would likely resume their underselling strategy from the original investigation to increase their market share in the United States if the order was revoked. This in turn would likely force domestic producers to reduce prices, forego necessary price increases, or lose market share to lower-priced subject imports. Given this, as well as the significant volume of subject imports and their adverse price effects in the original investigation, we find that the likely significant volume of subject imports would likely undersell the domestic like product and have significant price effects if the order was revoked.

## **E. Likely Impact**

### **1. The Original Investigation**

In the original investigation, the Commission found that subject imports had a significant impact on the domestic industry.<sup>124</sup> It reiterated that an increasing volume of subject imports captured \*\*\* percentage points of market share from the domestic industry between 2013 and 2015.<sup>125</sup> As a consequence, it found that the domestic industry suffered relatively weak U.S. shipment growth, flat production, and stagnant rates of capacity utilization even though strong demand growth should have improved these measures of industry performance, particularly given the competitiveness of the domestic industry's LRWs and substantial investments made during the POI.<sup>126</sup> The Commission further found that demand growth should have led to improvements in the domestic industry's financial performance.<sup>127</sup> Instead,

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<sup>124</sup> Original Determination, USITC Pub. 4666 at 35.

<sup>125</sup> Original Determination, USITC Pub. 4666 at 35; Confidential Original Determination at 51.

<sup>126</sup> See Original Determination, USITC Pub. 4666 at 33-35.

<sup>127</sup> Original Determination, USITC Pub. 4666 at 35.

the adverse price effects of subject imports contributed significantly to the industry's stagnant net sales revenues and worsening operating losses, net losses, and return on investment.<sup>128</sup>

The Commission observed that the domestic industry's relatively small increases in U.S. shipments and growing financial losses were especially notable in light of the substantial investments that Whirlpool and GE Appliances had made in new LRW models and platforms during the POI.<sup>129</sup>

The Commission rejected respondents' argument that the domestic industry was not injured because, in respondents' view, the industry's profits on matching dryer sales compensated for losses on LRW sales.<sup>130</sup> As the Commission explained, the focus of its injury analysis under the statute was on the domestic industry producing LRWs, not dryers.<sup>131</sup> The Commission also found no evidence in the record supporting respondents' assertion that Whirlpool and GE Appliances purposely priced their LRWs to sell at a loss on the expectation that profitable sales of matching dryers would compensate.<sup>132</sup> The Commission also rejected respondents' argument that GE Appliances' losses stemmed from its alleged neglect of its LRW business, noting GE Appliances' capital expenditures and research and development ("R&D") expenses during the POI.<sup>133</sup> Finally, the Commission rejected respondents' argument that

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<sup>128</sup> Original Determination, USITC Pub. 4666 at 35.

<sup>129</sup> Original Determination, USITC Pub. 4666 at 35.

<sup>130</sup> Original Determination, USITC Pub. 4666 at 36.

<sup>131</sup> Original Determination, USITC Pub. 4666 at 36.

<sup>132</sup> Original Determination, USITC Pub. 4666 at 36-37.

<sup>133</sup> Original Determination, USITC Pub. 4666 at 38-39.

Sears's declining fortunes explained Whirlpool's deteriorating financial performance, noting that Whirlpool's sales of LRWs to Sears had increased during the POI.<sup>134</sup>

The Commission also considered whether other factors had an impact on the domestic industry to ensure that it was not attributing to subject imports any injury from other factors. It found that nonsubject imports had a minor and declining presence in the U.S. market and did not explain the adverse effects attributed to subject imports.<sup>135</sup> The Commission concluded that the significant increase in subject import volume and market share and significant subject import underselling, which depressed domestic like product prices to a significant degree, adversely impacted the domestic industry.<sup>136</sup>

## 2. The Current Review

Due to the expedited nature of this review, the record contains limited information on the domestic industry's performance since the original investigation.

The information available (which relates only to Whirlpool, the only domestic producer to provide information) indicate that, in 2021, Whirlpool's capacity was \*\*\* units, its production was \*\*\* units, and its capacity utilization rate was \*\*\* percent.<sup>137</sup> The domestic industry's U.S. shipments were \*\*\* units, with a value of \$\*\*\*.<sup>138</sup> The industry's net sales were \$\*\*\*, its operating income was \$\*\*\*, and its operating income margin was \*\*\* percent.<sup>139</sup> The

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<sup>134</sup> Original Determination, USITC Pub. 4666 at 39.

<sup>135</sup> Original Determination, USITC Pub. 4666 at 38.

<sup>136</sup> Original Determination, USITC Pub. 4666 at 39.

<sup>137</sup> CR/PR at Table I-5. As indicated previously, Whirlpool estimates that of the five additional domestic producers, Haier produced \*\*\* units, Samsung produced \*\*\* units, LG produced \*\*\* units, Alliance produced \*\*\* units, and Staber produced \*\*\* units in 2021. Response at Attach. 6.

<sup>138</sup> CR/PR at Table I-5

<sup>139</sup> CR/PR at Table I-5.

domestic industry's performance was weaker in 2021 than in 2015 with respect to \*\*\*, but stronger with respect to \*\*\*.<sup>140</sup> This limited information is insufficient for us to make a finding as to whether the domestic industry is vulnerable to the continuation or recurrence of material injury if the order was revoked.

Based on the information available in this review, we find that revocation of the order would likely lead to a significant volume of subject imports that would likely undersell the domestic like product, leading subject imports to gain market share and/or have price-depressing or suppressing effects on the domestic like product. The likely significant volume of subject imports and their price effects would negatively affect the domestic industry's capacity, production, capacity utilization, shipments, market share, net sales values and quantities, employment levels, operating income, operating income margins, and capital investments. Consequently, we conclude that, if the order were to be revoked, subject imports would be likely to have an impact on the domestic industry within a reasonably foreseeable time.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute injury from other factors to subject imports. As discussed in section III.B.2 above, the information available indicates that nonsubject imports have increased their presence in the U.S. market since the original

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<sup>140</sup> See CR/PR at Table I-5. By comparison, in 2015, the domestic industry had capacity of \*\*\* units, production of \*\*\* units, capacity utilization of \*\*\* percent, U.S. shipments of \*\*\* units, net sales of \$\*\*\*, \*\*\*, and an operating income margin of \*\*\* percent. *Id.* We recognize that the data for the domestic industry's performance in 2021 is not directly comparable to the data for 2015 because Whirlpool, the only domestic producer to submit information in this review, accounted for approximately \*\*\* percent of U.S. LRW production in 2021, whereas the domestic industry data collected in the original investigation accounted for virtually all U.S. LRW production in 2015. *Id.* at I-19.

investigation. Nonetheless, the increasing presence of nonsubject imports did not prevent the domestic industry from improving its financial performance in 2021 relative to 2015.<sup>141</sup> Given the moderate to high degree of substitutability between subject imports and domestically produced LRWs, the importance of price in purchasing decisions, and the domestic industry's large market share in 2021, we find that the increase in low-priced subject imports that is likely after revocation would come, at least in part, at the expense of the domestic industry. Accordingly, we find that any effects of nonsubject imports would be distinct from the likely effects attributable to the subject imports.

Furthermore, we find that the present existence of the global safeguard measures do not prevent the likely injury to the domestic industry that we have found in the event of revocation of the subject order. We also note that the safeguard measures are scheduled to lapse as of February 2023, which is six months after the completion of this review, "a reasonably foreseeable time" under the operative statute.<sup>142</sup>

Accordingly, we conclude that if the antidumping duty order on LRWs from China was revoked, subject imports from China would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

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<sup>141</sup> CR/PR at Table I-5.

<sup>142</sup> See 19 U.S.C. §1675a(a)(1). The statute cautions that "[i]n making that determination, the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time." 19 U.S.C. §1675a(a)(5).

#### **IV. Conclusion**

For the above reasons, we determine that revocation of the antidumping duty order on LRWs from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.



# Information obtained in this review

## Background

On January 3, 2022, the U.S. International Trade Commission (“Commission”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),<sup>1</sup> that it had instituted a review to determine whether revocation of the antidumping duty order on large residential washers (“LRWs”) from China would likely lead to the continuation or recurrence of material injury to a domestic industry.<sup>2</sup> All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.<sup>3 4</sup> Table I-1 presents information relating to the background and schedule of this proceeding:

**Table I-1**  
**LRWs: Information relating to the background and schedule of this proceeding**

<b>Effective date</b>	<b>Action</b>
January 3, 2022	Notice of initiation by Commerce (87 FR 76, January 3, 2022)
January 3, 2022	Notice of institution by Commission (87 FR 115, January 3, 2022)
April 8, 2022	Scheduled date for Commission’s vote on adequacy
May 3, 2022	Scheduled date for Commerce’s results of its expedited review
June 2, 2022	Commission’s statutory deadline to complete expedited review
December 29, 2022	Commission’s statutory deadline to complete full review

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<sup>1</sup> 19 U.S.C. 1675(c).

<sup>2</sup> 87 FR 115. In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of a five-year review of the subject antidumping duty order. 87 FR 76, January 3, 2022. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission’s website ([www.usitc.gov](http://www.usitc.gov)).

<sup>3</sup> As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in the original investigation are presented in app. C.

<sup>4</sup> Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the domestic like product and the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

## Responses to the Commission’s notice of institution

### Individual responses

The Commission received one submission in response to its notice of institution in the subject review, filed on behalf of Whirlpool Corporation (“Whirlpool”), domestic producer of LRWs (referred to herein as “domestic interested party”).

A complete response to the Commission’s notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

**Table I-2**  
**LRWs: Summary of completed responses to the Commission’s notice of institution**

Interested party	Type	Number of firms	Coverage
U.S. producer	Domestic	1	***%

Note: The U.S. producer coverage figure presented is the domestic interested party’s estimate of its share of total U.S. production of LRWs during 2021. Domestic interested party’s response to the notice of institution, February 2, 2022, p. 24.

### Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full review from Whirlpool. Whirlpool requests that the Commission conduct an expedited review of the antidumping duty order on LRWs from China.<sup>5</sup>

## The original investigation

### The original investigation

The original investigation resulted from a petition filed on December 16, 2015, with Commerce and the Commission by Whirlpool, Benton Harbor, Michigan.<sup>6</sup> On December 15, 2016, Commerce determined that imports of LRWs from China were being sold at less than fair

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<sup>5</sup> Domestic interested party’s comments on adequacy, March 17, 2022, p. 2.

<sup>6</sup> Large Residential Washers from China, Inv. No. 731-TA-1306 (Final), USITC Publication 4666, January 2017 (“Original publication”), p. I-1.

value (“LTFV”).<sup>7</sup> The Commission determined on January 30, 2017, that the domestic industry was materially injured by reason of LTFV imports of LRWs from China.<sup>8</sup> On February 6, 2017, Commerce issued its antidumping duty order with the final weighted- average dumping margins ranging from 38.43 to 57.37 percent.<sup>9</sup>

## Previous and related investigations

The Commission has conducted a number of previous import relief investigations on LRWs or similar merchandise. Table I-3 presents information on previous and related investigations.

**Table I-3**  
**LRWs: Previous and related Commission proceedings and status of orders**

Date	Number(s)	Countries	Determination	Current Status of Order
2012	701-TA-488 and 731-TA-1199-1200	Korea and Mexico	Affirmative	Orders with respect to imports of LRWs from Korea revoked after first review, effective February 15, 2018, and order with respect to imports of LRWs from Mexico continued after first review, effective May 6, 2019. 84 FR 19763, May 6, 2019.
2017	TA-201-076	Global	Affirmative	Safeguard Measure extended through February 7, 2023. Applicable to all countries other than Australia, Canada, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Korea, Mexico, Nicaragua, Panama, Peru, and Singapore, and the beneficiary countries under the Caribbean Basin Economic Recovery Act

Source: U.S. International Trade Commission publications and Federal Register notices.

Note: “Date” refers to the year in which the investigation or review was instituted by the Commission.

<sup>7</sup> 81 FR 90776, December 15, 2016.

<sup>8</sup> 82 FR 9223, February 3, 2017.

<sup>9</sup> 82 FR 9371, February 6, 2017, as amended.

## Commerce's five-year review

Commerce announced that it would conduct an expedited review with respect to the order on imports of LRWs from China with the intent of issuing the final results of this review based on the facts available not later than May 3, 2022.<sup>10</sup> Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at <http://enforcement.trade.gov/frn/>. Issues and Decision Memoranda contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping duty order on imports of LRWs from China are noted in the sections titled "The original investigation" and "U.S. imports," if applicable.

## The product

### Commerce's scope

Commerce has defined the scope as follows:

*The products covered by this order are all large residential washers and certain parts thereof from the People's Republic of China.*

*For purposes of this order, the term "large residential washers" denotes all automatic clothes washing machines, regardless of the orientation of the rotational axis, with a cabinet width (measured from its widest point) of at least 24.5 inches (62.23 cm) and no more than 32.0 inches (81.28 cm), except as noted below.*

*Also covered are certain parts used in large residential washers, namely: (1) All cabinets, or portions thereof, designed for use in large residential washers; (2) all assembled tubs designed for use in large residential washers which incorporate, at a minimum: (a) a tub; and (b) a seal; (3) all*

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<sup>10</sup> Letter from Melissa Skinner, Senior Director, Office VII, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, February 22, 2022.

*assembled baskets designed for use in large residential washers which incorporate, at a minimum: (a) a side wrapper; (b) a base; and (c) a drive hub; and (4) any combination of the foregoing parts or subassemblies.*

*Excluded from the scope are stacked washer-dryers and commercial washers. The term "stacked washer-dryers" denotes distinct washing and drying machines that are built on a unitary frame and share a common console that controls both the washer and the dryer. The term "commercial washer" denotes an automatic clothes washing machine designed for the "pay per use" segment meeting either of the following two definitions:*

*(a) it contains payment system electronics; (b) it is configured with an externally mounted steel frame at least six inches high that is designed to house a coin/token operated payment system (whether or not the actual coin/token operated payment system is installed at the time of importation); (c) it contains a push button user interface with a maximum of six manually selectable wash cycle settings, with no ability of the end user to otherwise modify water temperature, water level, or spin speed for a selected wash cycle setting; and (d) the console containing the user interface is made of steel and is assembled with security fasteners; or*

*(a) it contains payment system electronics; (b) the payment system electronics are enabled (whether or not the payment acceptance device has been installed at the time of importation) such that, in normal operation, the unit cannot begin a wash cycle without first receiving a signal from a bona fide payment acceptance device such as an electronic credit card reader; (c) it contains a push button user interface with a maximum of six manually selectable wash cycle settings, with no ability of the end user to otherwise modify water temperature, water level, or spin speed for a selected wash cycle setting; and (d) the console containing the user interface is made of steel and is assembled with security fasteners.*

*Also excluded from the scope are automatic clothes washing machines that meet all of the following conditions: (1) Have a vertical rotational*

*axis; (2) are top loading; (3) have a drive train consisting, inter alia, of (a) a permanent split capacitor (PSC) motor, (b) a belt drive, and (c) a flat wrap spring clutch.*

*Also excluded from the scope are automatic clothes washing machines that meet all of the following conditions: (1) Have a horizontal rotational axis; (2) are front loading; and (3) have a drive train consisting, inter alia, of (a) a controlled induction motor (CIM), and (b) a belt drive.*

*Also excluded from the scope are automatic clothes washing machines that meet all of the following conditions: (1) Have a horizontal rotational axis; (2) are front loading; and (3) have cabinet width (measured from its widest point) of more than 28.5 inches (72.39 cm).<sup>11</sup>*

## **U.S. tariff treatment**

LRWs are currently provided for in subheading 8450.20.00<sup>12</sup> and imported under Harmonized Tariff Schedule of the United States (“HTS”) statistical reporting numbers 8450.20.0040 and 8450.20.0080, while specified parts of LRWs are provided for in subheadings 8450.90.20 or 8450.90.60. LRWs imported from China are imported into the U.S. market at a column 1-general duty rate of 1 percent *ad valorem*.<sup>13 14</sup> Parts and subassemblies covered by the scope of the order are classified under HTS subheading 8450.90.20, which provides for tubs and tub assemblies, and HTS subheading 8450.90.60, which provides for other parts. Both 8450.90.20 and 8450.90.60 have a general duty rate of 2.6 percent *ad valorem*. LRWs are

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<sup>11</sup> 82 FR 9371, February 6, 2017, as amended.

<sup>12</sup> HTS subheading 8450.20.00 describes the article as: “Household- or laundry-type washing machines, including machines which both wash and dry; parts thereof: Machines, each of a dry linen capacity exceeding 10 kg.” Harmonized Tariff Schedule of the United States (2022).

<sup>13</sup> LRWs and certain parts and components of LRWs imported from China are subject to the additional duty of 7.5 percent *ad valorem* duties under Section 301 of the Trade Act of 1974.

<sup>14</sup> LRWs imported from China were not included in the enumeration of iron and steel provisions that are subject the additional 25-percent *ad valorem* duties under Section 232 of the Trade Expansion Act of 1962, as amended. However, stainless steel sheet and cold-rolled steel, raw materials for producing LRWs, were included among the articles subject to the additional 25-percent *ad valorem* duties. LRWs produced in China were not included in the enumeration of aluminum provisions that are subject to the additional 10-percent *ad valorem* under Section 232 of the Trade Expansion Act of 1962, as amended. However, aluminum castings, a raw material for producing certain LRWs parts, such as the transmission, was included among the articles subject to the additional 10-percent *ad valorem* duties.

subject to an additional within-tariff-rate-quota (TRQ) duty rate of 14 percent *ad valorem* under heading 9903.45.01 and an over-TRQ duty rate of 30 percent *ad valorem* through February 7, 2023, as proclaimed by the President under section 203 of the Trade Act of 1974.<sup>15</sup> Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

## **Description and uses<sup>16</sup>**

LRWs are home appliances that remove soil from fabric, using water and detergent as the principal cleaning agents. All units feature wash, rinse, and spin cycles; have a cabinet width of at least 24.5 inches (62.23 cm) and no more than 32.0 inches (81.28 cm); and feature a rotational axis that is either vertical or horizontal. All LRWs feature a metal drum or basket into which laundry is loaded, a plastic tub that holds water, a motor, a pump, and a user interface and control unit to set wash cycles. Single-family households are the principal consumers of LRWs.

### **Configurations of LRWs in the U.S. market**

In the U.S. market, LRWs are currently typically produced and sold in two configurations, either with a vertical axis, generally referred to as “top load” LRWs, or with a horizontal axis, generally referred to as “front load” LRWs. The primary distinctions between these configurations of LRWs are based on the location of the loading door, the orientation of the axis, and the cleaning mechanics. Both configurations can be equipped with various features,

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<sup>15</sup> On January 23, 2018, the President issued Presidential Proclamation 9694 under Section 201 of the Trade Act of 1974 providing for tariff rate quotas (TRQ) for household-type (residential) washing machines (washing machines) and parts of washing machines, effective February 7, 2018. On January 23, 2020, the President issued Presidential Proclamation 9979 under Section 201 of the Trade Act of 1974 modifying the quantitative limitations applicable to imports of washers under HTS subheadings 8450.11.00 and 8450.20.00, by allocating the within-quota quantities for the quota year on a quarterly basis, effective with respect to washing machines entered for consumption, or withdrawn from warehouse for consumption, on or after February 7, 2020. On January 14, 2021, the President issued Presidential Proclamation 10133 extending trade remedy measures on large residential washers through February 7, 2023, and specifying annual quota limits and duty rates in the Annex. For more information regarding the safeguard measures, see Proclamation 10133, *To Continue Facilitating Positive Adjustment to Competition From Imports of Large Residential Washers*, 86 FR 6541, January 14, 2021. The extended safeguard measure imposes a TRQ on imports of LRWs with an in-quota volume level of 1.2 million units, allocated on a quarterly basis; an in-quota tariff rate of 15 percent in the fourth year, decreasing to 14 percent in the fifth year; and an above-quota tariff rate of 35 percent in the fourth year, decreasing to 30 percent in the fifth year. *Id.*

<sup>16</sup> Unless otherwise noted, this information is based on original publication, pp. I-11-I-18.

for instance, water heaters, different washing cycles, steam cleaning capabilities, and cabinet finishing. A general description of these LRW configurations follows.

### **Top load LRWs**

A top load LRW features a top loading door for loading clothes and contains a basket that spins on a vertical axis (see Figure I-1). Top load LRWs come equipped with a broad array of product features and are sold at a wide range of price points. The cleaning mechanics of a top load LRW consist of laundry being loaded into a basket that spins on a vertical axis. In order to further facilitate a cleaning motion, an agitator or impeller is placed in the center of the basket. The difference between these two cleaning technologies is explained further below.



**Figure I-1**  
**LRWs: Top load washers**



Source: Whirlpool. The washer on the left is more likely to contain an “agitator” as its means of moving clothes, water, and detergent around the basket whereas the washer on the right is more likely to contain an “impeller.”

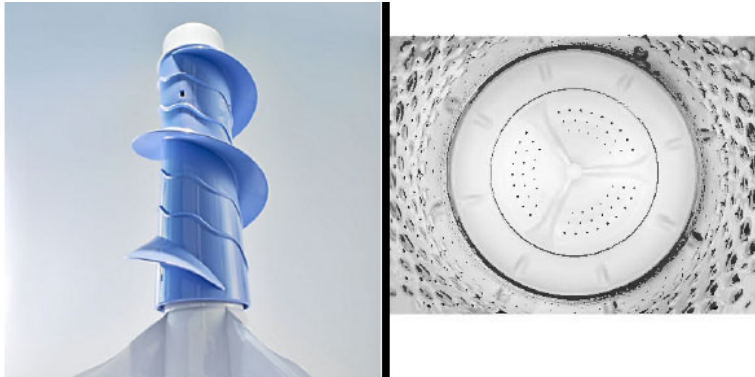
***Cleaning technology: agitator vs. impeller***

A top load LRW contains either an agitator or an impeller, both of which facilitate the cleaning movement of clothes, water, and detergent inside the basket of the machine.<sup>17</sup> Figure I-2 presents an example of an agitator and an impeller.

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<sup>17</sup> In April 2021, Whirlpool unveiled its top load washer with a removable agitator. This feature allows for the removal of the agitator post, allowing for the incorporation of both the agitator and impeller technologies into one washer. Cision PR Newswire, “Whirlpool Brand Unveils Industry-First Innovation Top Load Washer With 2 In 1 Removable Agitator,” April 14, 2021. <https://www.prnewswire.com/news-releases/whirlpool-brand-unveils-industry-first-innovation-top-load-washer-with-2-in-1-removable-agitator-301268247.html>.

**Figure I-2**  
**LRWs: An example of an agitator and an impeller**



Source: Whirlpool. An agitator (left). An impeller (right).

### ***Agitator***

An agitator is a center post that projects from the bottom of the wash basket and is equipped with fins or vanes that create a washing action by rotating back and forth. When a top load LRW with an agitator is set to clean a load of clothes, it first fills its tub with water and then creates the back and forth washing motion through the use of its agitator. The force of the agitator and its motion tend to treat fabrics more harshly than LRWs with impellers, because the agitator often twists and tangles clothes. LRWs with agitators tend to use more water and result in more energy being used to clean and dry a load than LRWs with impellers. Specifically, the agitator needs more water to operate effectively and generally spins clothes more slowly during the spin cycle, requiring longer use of a dryer and thus resulting in higher overall energy consumption. Because of the higher water and electricity consumption used by LRWs with an agitator, they are less likely to meet energy standards for “high-efficiency” or meet the Energy Star standard, although some agitator-based LRWs have qualified for Energy Star certification. LRWs with an agitator generally occupy the “value” segment of the market at lower price points. In anticipation of the more stringent energy efficiency standards that took effect on March 7, 2015, discussed below, Whirlpool redesigned its agitator-based top load LRWs to utilize shallow fill technology and HE agitators (or “agi-pellers”), which combine aspects of agitators and impellers.

### ***Impeller***

An impeller is a somewhat flat, rotating hub which does not contain a center post. It creates washing motion by rotating and creating currents in the water. Due to the lack of a

center post, impellers occupy less space in the basket; consequently, top load LRWs with impellers generally have higher capacities than agitator-based LRWs.

During the cleaning cycle of a top load LRW with an impeller, the tub fills only partly with water. Because so little water is used in the tub, a special detergent designated “HE” must be used. The HE detergent is formulated to create fewer suds, thereby minimizing the water necessary to rinse. Top load LRWs with an impeller also spin at higher speeds than top load LRWs with an agitator, thereby extracting more water before clothes go into the dryer, and thus reducing overall energy consumption. Because of the lower water and electricity consumption, many LRWs with an impeller qualified as “high efficiency” and were Energy Star certified under the energy efficiency standards prior to March 7, 2015. Even after the more stringent energy efficiency standards became effective on January 1, 2018, and February 5, 2018, these LRWs are more likely to meet high efficiency energy standards or meet the Energy Star standard, although not all models meet these standards.

#### **Front Load LRWs**

Front load LRWs feature a front-loading door for loading clothes and a drum that spins on a horizontal axis (see figure I-3). Front load LRWs are typically positioned at the premium end of the LRW market in terms of price and performance. They often come equipped with a broad variety of product features. The drums of front load LRWs fill only partly with water and clean clothes through a process of lifting them to the top of the tub and dropping them into the water by a “baffle” and using the centrifugal force of the spinning drum. Front load LRWs generally consume the least amount of water during the wash cycle and feature the fastest spinning speeds of all types of LRWs. Very fast spin cycles mean better moisture extraction compared even with top load LRWs with an impeller, thereby reducing drying time and overall energy consumption. Because of the lower water and electricity consumption, all front load LRWs qualified as “high efficiency” and were Energy Star certified under the energy efficiency standards before and after January 1, 2018, and February 5, 2018. Generally, front load LRWs work most effectively with low-foaming, HE detergent. Most front load LRW load capacities are roughly equivalent to top load LRWs with an impeller but tend to have higher load capacities than top load LRWs with an agitator. Although front load LRWs were known to develop mold and odors, causing some consumers to prefer top load washing machines, such problems have now been largely addressed by the industry.

**Figure I-3**  
**LRWs: Front load washer**



Source: Lowe's.

### **Product features**

Product features have become increasingly prevalent in the LRW marketplace, and are seen by many manufacturers as a means of maintaining competitiveness. These features can include energy efficiency, capacity, appearance (color, cabinet finishing, decorative elements, etc.), and new innovations such as noise reduction and steam cleaning. A number of the features of LRWs are explained below.

### **Energy efficiency**

Consumers may prefer energy efficiency as a factor in buying LRWs. Energy efficiency standards for LRWs are promulgated by three entities: (1) the Consortium for Energy Efficiency (“CEE”),<sup>18</sup> (2) the U.S. Environmental Protection Agency (“EPA”), and (3) the U.S. Department of Energy (“DOE”). All of these entities establish standards for identifying energy efficient LRWs based largely on two factors: (1) energy utilization and (2) water consumption of the washer. More specifically, energy utilization is calculated using the “integrated modified energy factor” (“IMEF”), which represents the number of cubic feet of laundry that can be washed with one

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<sup>18</sup> The CEE is a nonprofit agency that encourages greater adoption of energy-efficient products and services through the development of various initiatives. According to the CEE web site, members include utility companies, environmental groups, research organizations, and state energy offices in the United States and Canada. The agency also solicits input from manufacturers and both the U.S. Department of Energy and the Environmental Protection Agency. <http://www.cee1.org/content/about>, retrieved March 9, 2022.

kilowatt-hour of electricity taking into consideration the total energy consumption of the laundry cycle, which includes both washing and drying. The higher the IMEF number, the more laundry may be washed and dried with the same one kilowatt-hour of energy, and the higher the energy efficiency of the washer. Water consumption is calculated using the “integrated water factor” (“IWF”), which is defined as the gallons of water needed to wash each cubic foot of laundry.<sup>19</sup> The lower the IWF number, the less water is used to clean each cubic foot of laundry, and the higher the water efficiency of the washer. Based on the relative IMEF and IWF measures, the CEE categorizes LRWs into tiers of energy efficiency, with the third and advanced tiers reserved for the most energy efficient washers.

Also using IMEF and IWF measures, the EPA and the DOE assign the “Energy Star” classification to LRWs. In general, the EPA and DOE revise Energy Star standards periodically based on several factors, including changes to the Federal minimum efficiency standards,<sup>20</sup> technological advances which generate greater energy efficiencies, and product availability.<sup>21</sup>

Additionally, the EPA may revise these standards when the market share for Energy Star rated LRWs reach or exceed 50 percent for a particular category of LRW.<sup>22</sup> Major changes in U.S. energy efficiency standards for residential washers occurred in January 2011, March 2015, and January and February 2018. As shown in table I-3, the newer efficiency standards require large increases in the efficiency of top load LRWs to decrease the volume of water that can be used in the LRW wash and rinse cycles and to increase energy efficiency.

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<sup>19</sup> Prior to March 2015, CEE and Energy Star standards were calculated using the “modified energy factor” (“MEF”), which represents the number of cubic feet of laundry that can be washed with one kilowatt-hour of electricity and the “water factor” (“WF”)—the gallons of water needed to wash each cubic foot of laundry. Consortium for Energy Efficiency, Inc., “Super Efficient Home Appliance Initiative - February 2018,” February 2018, <https://library.cee1.org/content/cee-super-efficient-home-appliance-initiative-january-2017/>, retrieved March 9, 2022.

<sup>20</sup> Pursuant to the Energy Policy and Conservation Act of 1975, the U.S. Department of Energy (“DOE”) sets minimum energy efficiency standards for approximately 50 categories of appliances and equipment used in homes, businesses, and other applications, including LRWs. <https://energy.gov/eere/buildings/appliance-and-equipment-standards-program>, retrieved March 9, 2022. See U.S. Department of Energy, Energy Efficiency & Renewable Energy, *Saving Energy and Money with Appliance and Equipment Standards in the United States*, fact sheet, January 2017, <https://energy.gov/eere/buildings/downloads/appliance-and-equipment-standards-fact-sheet> for fact sheet at

[https://energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917\\_0.pdf](https://energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917_0.pdf), retrieved March 9, 2022.

<sup>21</sup> <https://energy.gov/eere/buildings/energy-star>, retrieved March 9, 2022.

<sup>22</sup> <https://energy.gov/eere/buildings/energy-star>, retrieved March 9, 2022.

**Table I-3  
LRWs: Energy efficiency standards**

<b>Standard</b>	<b>IMEF (Efficiency levels January 1, 2018 and February 5, 2018)</b>	<b>IWF (Efficiency levels January 1, 2018 and February 5, 2018)</b>	<b>IMEF (Efficiency levels March 7, 2015)</b>	<b>IWF (Efficiency levels March 7, 2015)</b>	<b>MEF (Efficiency levels January 1, 2011 to March 6, 2015)</b>	<b>WF (Efficiency levels January 1, 2011 to March 6, 2015)</b>
<b>Federal minimum:</b> Top load	1.57	6.5	1.29	8.4	1.26	9.5
<b>Federal minimum:</b> Front load	1.84	4.7	1.84	4.7	1.26	9.5
<b>Energy Star:</b> Top load	2.06	4.3	2.06	4.3	2.0	6.0
<b>Energy Star:</b> Front load	2.76	3.2	2.38	3.7	2.0	6.0
<b>CEE Tier 1</b>	2.76	3.2	2.38	3.7	2.0	6.0
<b>CEE Tier 2</b>	2.92	3.2	2.74	3.2	2.2	4.5
<b>CEE Tier 3</b>	Not published	Not published	2.92	3.2	2.4	4.0
<b>CEE Advanced Tier</b>	3.10	3.0	Not published	Not published	Not published	Not published

Source: U.S. Department of Energy, Energy and Water Conservation Standards, *Energy and water conservation standards and their compliance dates, clothes washers*, CFR 2021, title 10, volume 3, section 430.32; Energy Star, Clothes Washers Key Product Criteria as of April 22, 2021; Consortium for Energy Efficiency, High efficiency specifications for residential clothes washers, effective February 5, 2018.

Note: Federal energy efficiency minimums for residential clothes washers compliance dates began on January 1, 2018, and Energy Star standards and CEE standards on February 5, 2018.

Note: Federal energy efficiency minimums for residential clothes washers, ENERGY STAR, and CEE standards compliance dates began March 7, 2015.

Note: Federal energy efficiency minimums, Energy Star standards, and CEE ratings compliance dates began effective January 1, 2011.

### **Capacity**

Capacity refers to the volume of clothes an LRW can wash per load. Capacity is among the most sought after features for consumers, especially for large households. Capacity ranges for different types of LRWs vary. For example, top load LRWs with an agitator feature the lowest capacity and range from 2.5-3.9 cubic feet (“cf.”), while the capacity of front load LRWs and top load LRWs with an impeller range from 3.3-4.3 cf. and 3.5-6.2 cf. of capacity,

respectively. The DOE requires manufacturers to certify and declare the capacity of their LRWs at the time of sale. Samsung currently has the largest capacity LRW on the market at 6.0 cf.<sup>23</sup>

### **Appearance**

The appearance of LRWs can vary greatly. Color, cabinet finish, and decorative elements are examples of LRW features that may differ. LRWs are available in a variety of colors, but white appears on many models. For example, in March 2022, Home Depot’s online shopping website that includes search filters listed 85 washers in white, 34 in gray/silver, 14 in black, 8 in a stainless look, with fewer washers available in blue, champagne, and gold.<sup>24</sup>

### **Manufacturing process<sup>25</sup>**

#### **Development of product platforms**

Generally, the manufacture of LRWs begins with the design and production of a LRW “platform.” A platform is the basic frame from which multiple models are built with a variety of features. All producers of LRWs, Whirlpool, GE, LG, and Samsung, reported using “platforms” to develop product models. Samsung and LG view platforms as encompassing a broad engineering design that may be developed around a research and design project. A platform would have certain parameters for items such as drive systems, size, and design structure. Thus, models produced within a platform may have a particular width, such as 28 inches, but different features.

Whirlpool and GE stated that a platform is expected to last for an extended period of time, such as 10 to 20 years, or longer. A platform may be upgraded during its lifecycle, once every 2 to 3 years, and even 5 years. Samsung and LG stated that a platform likely will have a lifecycle of 5 to 30 years, but may be upgraded every 2 to 5 years.

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<sup>23</sup> Lowes, “Washing Machines,” <https://www.lowes.com/pl/Washing-machines-Washers-dryers-Appliances/4294857977>, retrieved March 9, 2022; Home Depot, “Washing Machines,” <https://www.homedepot.com/b/Appliances-Washers-Dryers-Washing-Machines/55-or-Greater/N-5yc1vZc3ovZ1z1bf4v?onDisplay=false>, retrieved March 9, 2022.

<sup>24</sup> The Home Depot <https://www.homedepot.com/b/Appliances-Washers-Dryers-Washing-Machines/25-3/3-35/35-4/4-45/N-5yc1vZc3ovZ2bcu0kZ2bcu0lZ2bcu0mZ2bcu0oZ1z1bf0pZ1z1bf4vZ1z1bf5c?NCNI-5&onDisplay=false>, retrieved March 9, 2022.

<sup>25</sup> Unless otherwise noted, this information is based on original publication, pp. I-19-I-23, as well as Large Residential Washers: Extension of Action, Inv. No. TA-201-076 (Extension), USITC Publication 5144, December 2020.

LRW manufacturers may have several platforms in operation at a given time. For example, Whirlpool has two to four platforms for its top load LRWs and one to two platforms for its front load LRWs. New platforms will overlap with the lifecycle of older platforms.

#### **Development of product models and “stock keeping units” (“SKUs”)**

A “model” is an LRW defined by various features or functionality. In the original investigation, Whirlpool, GE, LG, and Samsung agreed that a particular LRW model will typically have a lifecycle of 1-3 years.

Whirlpool, GE, LG, and Samsung also noted that terms “model” and “SKU” are generally synonymous. Whirlpool noted, however, that a model might have more than one SKU because that model is produced in more than one location or in different colors.

#### **Production process**

##### ***Whirlpool***

LRWs are typically mass produced in a production plant. Whirlpool produces all the LRWs that it sells in the United States in its Clyde, Ohio, manufacturing plant, which covers 2.4 million square feet.

Whirlpool produces all LRWs using the same manufacturing technology and processes. LRWs are produced through several distinct manufacturing processes that involve a wide variety of materials, which may be purchased in large quantities as cut, shaped, or painted pieces, or as component systems (figure I-4). The components for each module originate within five areas in the petitioner’s production plant, including materials receiving, cabinet assembly, fabrication support, plastics forming, and machining.



**Figure I-4**  
**LRWs: Production processes for LRWs**

**Operations in the plant**

- Materials receiving
- Cabinet forming
- Fabrication support: blanking, stamping, and forging of metal; and machining of metal bar stock
- Plastics forming



**LRW modules**

- Cabinetry
- Drive system
- Wash system
- Control system
- Exterior features
- Interior features
- Literature
- Labels
- Packaging



Assembly line



Finished LRW ready for shipping

Source: Original publication, p. I-21.

First, the materials department receives all purchased materials, including raw materials and purchased components, including pre-stamped metal blanks, injection molded parts, electrical subassemblies, printed literature and labels, and packaging materials. Then, the materials department will maintain inventories and deliver material to the appropriate fabrication department or directly to the assembly line.

During the cabinet assembly stage, the exterior metal shell of the washer is created, including the top, lid, and door. Raw metal blanks, which are formed from steel coils, are then stamped on metal stamping presses and then assembled if necessary. Some components are often pre-fabricated in the fabrication support department before being delivered to the cabinet assemblers. Cabinets and lids are then fabricated and processed through the paint department. Completed, painted cabinets and lids are then delivered to the final assembly lines. Washer doors are typically purchased as an assembly and delivered to the assembly line to be attached to the cabinet.

Next, the fabrication support department processes raw materials such as steel bar stock and coil sheet steel. Purchased steel bar stock is formed and machined into components of the wash systems and drive. Cold-rolled sheet steel is cut to the appropriate size, stamped, and formed using custom dies designed by the petitioner. The formed parts are cleaned and painted as necessary. Such fabricated steel components are used in the cabinet, drive and the wash unit assembly.

The plastics forming department processes raw plastic pellets or granules primarily into the plastic tubs used for the wash unit modules. The granules are melted and then injected into plastic molding equipment. The equipment uses molds to obtain the required geometry. Once the tubs are created through this process, they are delivered to the final assembly departments.

The wash system module consists of a basket (drum) and plastic tube joined together. This combines products from the fabrication and the plastics forming operations. The shell of the basket is made of steel that is stamped to shape and welded together. The fabrication of the basket is automated. The metal shell of the basket is fastened to the tube and shell to form the wash module.

LRW modules are designed in-house in Whirlpool and then produced by specialty producers. These include the drive system, LRW controls, literature, and labels. The drive system components, which include the motor, transmission, seals, metal, and plastic housings, are designed and sized by Whirlpool engineers. These components are purchased from specialized producers and then fabricated in other departments.

The controls, as well as interior and exterior feature components are designed by Whirlpool engineers and then supplied by specialty manufacturers. The company owns the dies for all feature components. Whirlpool also designs its own electronics hardware and software and then contracts with global suppliers for the production of electronic devices and assemblies.

Whirlpool produces cabinets, basket drums, and tubs at the Clyde facility. Whirlpool purchases electrical, electronics, motors, and harnesses from third party suppliers. Whirlpool sources its electronics from Mexico and Asia and sources its motors from the United States, Mexico, and overseas.

The final assembly consists of integrating the purchased parts and the self-produced subassemblies on an assembly line. All components are presented to the assembly line, which include the cabinet, wash unit, drive, control systems, interior and exterior features, literature, labels, and packaging. All these components are assembled in a defined order to construct the finished washer. The final product undergoes testing and inspection and is visually inspected for fit and finish.

The finished and inspected product is then transferred to the packaging area where labels are applied, literature is included, and the washer is packaged. Before the unit is automatically shrink-wrapped or packaged in a corrugated box, an external protective packaging is applied manually to the unit. The packaged unit is then shipped to a distribution center.

## **The industry in the United States**

### **U.S. producers**

During the final phase of the original investigation, the Commission received U.S. producer questionnaires from three firms, which accounted for virtually all production of LRWs in the United States during 2015.<sup>26</sup>

In response to the Commission's notice of institution in this current review, the domestic interested party provided a list of six known and currently operating U.S. producers of LRWs. One firm providing U.S. industry data in response to the Commission's notice of institution, Whirlpool, accounted for approximately \*\*\* percent of production of LRWs in the United States during 2021.<sup>27 28</sup>

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<sup>26</sup> Investigation Nos. 731-TA-1306 (Final): Large Residential Washers from China, Confidential Report, INV-OO-123, December 23, 2016 ("Original confidential report"), pp. III-1-2

<sup>27</sup> Domestic interested party's response to the notice of institution, February 2, 2022, p. 24.

<sup>28</sup> Whirlpool estimates Samsung's U.S. annual production in 2021 of the domestic like product to be 1.5 million units, LG's to be 1.2 million units, and GE's to be approximately 1.9 million units. Domestic interested party's (Whirlpool) response to the notice of institution, Attachment 6, February 2, 2022.

## Recent developments

Since the Commission’s original investigation, the following developments have occurred in the LRW industry. Table I-4 presents events in the U.S. industry since the original investigation.

**Table I-4**  
**LRWs: Recent developments in the U.S. industry**

Item	Firm	Event
Plant opening	LG	February 2017 – Announced it would build a \$250 million home appliance production facility near Clarksville, Tennessee, including for washing machines, opening in 2019.
Trade action	USITC	June 2017 – Instituted a section 201 safeguard investigation on global imports of LRWs.
Plant opening	Samsung	June 2017 – Announced it would invest \$380 million in an appliance production facility, including washing machines, in Newberry, South Carolina, with LRW production possible in 2018.
Trade action	USITC	December 2017 – Delivered its safeguard recommendations to the President
Trade action	U.S. Department of Commerce	January 2018 – Notice of initiation of five-year (sunset) reviews of certain LRWs from Korea and Mexico by Commerce (83 FT 100, January 2, 2018).
Trade action	USITC	January 2018 – Notice of institution of five0year (sunset) reviews of certain LRWs from Kore and Mexico by Commission (83 FT 145)
Energy standards	EnergyStar and CEE	January 2018 – New energy and water efficiency standards for LRWs became effective and surpass levels of 2015 requirements.
Plant opening	Samsung	January 2018 – Company begins commercial production of LRWs at its Newberry, South Carolina facility. In January 2018, Samsung began production with 800 employees, 20 presses and 11 injection molding machines.
Trade action	President of the United States	January and February 2018 – Issued Presidential Proclamation imposing the safeguard measure, a tariff-rate quota for three years and one day on imports of LRWs and certain parts thereof.
Plant opening	LG	October 2018 – Company begins U.S. production of LRWs.
Acquisition	GE Appliances	June 2018 – Announced the completion of the sale of its appliance division to Haier for \$5.6 billion.
Expansion	Samsung	March 2018 – Company expands to over 600-thousand square feet and opens second production line.
Expansion	Samsung	January 2019 – Company expands with the addition of a 200-thousand square foot facility to house the injection molding work.

Item	Firm	Event
Trade action	U.S. Department of Commerce	February 2019 – Tariff rate quota reset.
Trade action	USITC	April 2019 – Published determinations in full five-year (sunset) reviews: LRWs from Korea and Mexico (84 FT 18319)—affirmative (Mexico) and negative (Korea).
Trade action	U.S. Department of Commerce	May 2019 – Published continuation of antidumping order on LRWs from Mexico and terminated antidumping and countervailing duty orders on LRWs from Korea.
Expansion	Samsung	August 2019 – Company completes 280-thousand square foot expansion of the on-site warehouse to manage outbound shipments.
Expansion	Samsung	October 2019 – Company reached local production of one million washing machines. The facility has over 1.5 million square feet, employs more than 1,200 workers, and produces more than 20 different models of front-load and top-load LRWs. <sup>29</sup>
Trade action	President of the United States	January 2020 – Issued presidential proclamation implementing quarterly allocation of the tariff-rate quota.
Expansion	LG	August 2020 – Company reached local production of one million washing machines.
Trade action	President of the United States	January 2021 – Issued presidential proclamation that extended the safeguard measure and imposes a TRQ on imports of LRWs with an in-quota volume level of 1.2 million units, allocated on a quarterly basis; an in-quota tariff rate of 15 percent in the fourth year, decreasing to 14 percent in the fifth year; and an above-quota tariff rate of 35 percent in the fourth year, decreasing to 30 percent in the fifth year.

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<sup>29</sup> Samsung, “Samsung’s Road to Success in South Carolina,” <https://news.samsung.com/us/samsungs-road-to-success-south-carolina-seha-home-appliance-manufacturing-facility/>, retrieved March 9, 2022.

Item	Firm	Event
Expansion	LG	April 2021 – Company announced an additional investment of \$20.5 million to add another shift for manufacturing to help meet U.S. demand for washing machines. With an annual capacity to produce one million front- and top-load washers, LG claims that this one million square foot facility is the world’s most advanced integrated washing machine plant. <sup>30</sup>
New Model	Whirlpool	April 2021 – Company unveiled its top load washer with 2 in 1 removable agitator.

Source: Compiled from various cited sources.

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<sup>30</sup> LG, “LG Expands Tennessee Laundry Factory Operations to Support Unprecedented U.S. Demand,” <https://www.lg.com/us/press-release/lg-expands-tennessee-laundry-factory-operations-to-support-unprecedented-us-demand>, retrieved March 9, 2022.

## U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in the current five-year review.<sup>31</sup> Table I-5 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigation, and from Whirlpool in the current review.<sup>32</sup>

**Table I-5**  
**LRWs: Trade and financial data submitted by U.S. producers, by period**

Quantity in units; value in 1,000 dollars; unit value in dollars per unit; ratio is in percent

Item	Measure	2013	2014	2015	2021
Capacity	Quantity	***	***	***	***
Production	Quantity	***	***	***	***
Capacity utilization	Ratio	***	***	***	***
U.S. shipments	Quantity	***	***	***	***
U.S. shipments	Value	***	***	***	***
U.S. shipments	Unit value	***	***	***	***
Net sales	Value	***	***	***	***
COGS	Value	***	***	***	***
COGS to net sales	Ratio	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***
SG&A expenses	Value	***	***	***	***
Operating income or (loss)	Value	***	***	***	***
Operating income or (loss) to net sales	Ratio	***	***	***	***

Source: For the years 2013-15, data are compiled using data submitted in the Commission's original investigation. For the year 2021, data are compiled using data submitted by Whirlpool. Domestic interested party's response to the notice of institution, February 2, 2022, p. 24.

Note: For a discussion of data coverage, please see "U.S. producers" section.

<sup>31</sup> Individual company trade and financial data are presented in app. B.

<sup>32</sup> In the original investigation, responding U.S. producers included GE, Staber, and Whirlpool. Original publication, p. III-2. Data in the current review for 2021 is of Whirlpool's data only, as no other U.S. producer (GE, Staber, nor recent entrants such as LG or Samsung) submitted a response to the notice of institution.

## Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. In its original determination, the Commission defined a single domestic like product consisting of finished large residential washers within Commerce’s scope, parts of large residential washers within Commerce’s scope, and front load residential washers with a controlled induction motor and belt (“front load CIM/belt washers”) with a controlled induction motor and belt as encompassed by the second of the three exclusions in Commerce’s scope definition referencing “automatic clothes washing machines.”<sup>33</sup> The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties provision, the Commission may exclude a U.S. producer from the domestic industry for purposes of its injury determination if “appropriate circumstances” exist.<sup>34</sup> In its original determination, the Commission defined the domestic industry as all domestic producers of the like product.<sup>35</sup>

## U.S. imports

### U.S. importers

During the final phase of the original investigation, the Commission received U.S. importer questionnaires from three firms, which accounted for virtually all U.S. imports of LRWs from China during 2015.<sup>36</sup> Import data presented in the original investigation were based on questionnaire responses.<sup>37</sup>

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<sup>33</sup> 87 FR 115, January 3, 2022; original publication, pp. 7 n.24, 9.

<sup>34</sup> Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B). Whirlpool reported that domestic producers Haier/GE, LG, and Samsung are related to Chinese washer producers, but does not believe that the related Chinese washer producers are currently exporting subject LRWs to the United States. Domestic interested party’s response to the notice of institution, February 2, 2022, pp. 17. Whirlpool does not import LRWs from China and is not related to any importer or foreign producer of LRWs. *Id.* at p. 17 n.57.

<sup>35</sup> Original publication, p. 9.

<sup>36</sup> Original publication, pp. IV-1 through IV-2.

<sup>37</sup> The domestic interested party noted that it was not aware of any U.S. imports of LRWs from China since the imposition of the order in 2017. Domestic interested party’s response to the notice of

(continued...)



## U.S. imports

Table I-6 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2021 imports by quantity), including in-scope LRWs and out-of-scope front load CIM/belt washers and top load washers with a permanent split capacitor motor and flat wrap spring clutch (“top load PSC/clutch washers”).<sup>38</sup>

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institution, February 2, 2022, p. 17. During the original investigation, the Commission received responses to the U.S. importers’ questionnaire from three companies: Samsung Electronics America, Inc., LG Electronics USA, Inc., which together accounted for virtually all U.S. imports from China during 2015, and from Electrolux North America, Inc. Original publication, p. IV-1.

<sup>38</sup> Domestic interested party’s response to the notice of institution, February 2, 2022, p. 6 n.26, and Attachment 1.

**Table I-6**  
**LRWs: U.S. imports, by source and period**

Quantity in units; value in 1,000 dollars; unit value in dollars per unit

U.S. imports from	Measure	2016	2017	2018	2019	2020	2021
China	Quantity	6,293,754	3,987,420	3,690,477	741,255	618,489	798,640
Thailand	Quantity	381,808	1,565,737	733,015	558,960	659,133	1,707,129
Vietnam	Quantity	497,355	1,684,636	697,738	554,963	692,793	1,371,058
Mexico	Quantity	344,109	310,814	409,202	854,281	1,331,536	434,096
All other sources	Quantity	266,857	565,299	298,231	273,979	685,703	1,297,044
Nonsubject sources	Quantity	1,490,129	4,126,486	2,138,186	2,242,183	3,369,165	4,809,327
All import sources	Quantity	7,783,883	8,113,906	5,828,663	2,983,438	3,987,654	5,607,967
China	Value	872,476	158,108	212,251	160,260	197,497	330,562
Thailand	Value	140,921	511,815	275,998	213,717	234,054	322,132
Vietnam	Value	188,888	679,949	308,822	247,571	289,515	131,743
Mexico	Value	169,901	156,704	160,354	138,842	126,368	121,418
All other sources	Value	174,886	328,952	204,839	189,285	190,547	523,239
Nonsubject sources	Value	674,596	1,677,421	950,013	789,415	840,484	1,098,531
All import sources	Value	1,547,072	1,835,529	1,162,264	949,675	1,037,981	1,429,093
China	Unit value	138.63	39.65	57.51	216.20	319.32	413.91
Thailand	Unit value	369.09	326.88	376.52	382.35	355.09	188.70
Vietnam	Unit value	379.79	403.62	442.60	446.10	417.90	96.09
Mexico	Unit value	493.74	504.17	391.87	162.52	94.90	279.70
All other sources	Unit value	655.35	581.91	686.85	690.87	277.89	403.41
Nonsubject sources	Unit value	452.71	406.50	444.31	352.07	249.46	228.42
All import sources	Unit value	198.75	226.22	199.40	318.32	260.30	254.83

Source: Compiled from official Commerce statistics for HTS statistical reporting numbers 8450.20.0040; 8450.20.0080; 8450.20.0090, accessed February 10, 2022.

Note: Because of rounding, figure may not add to total shown.

Note: Does not include imports of Chinese-origin LRW parts. Domestic interested party's response to the notice of institution, February 2, 2022, attachment 1, and original publication, p. 23. Whirlpool believes that imports of residential washers from China consist of out-of-scope front load CIM/belt and top load PSC/clutch washers. *Id.* at pp. 17, 25.

Note: Nonsubject import volume appears to be overstated in 2021, given the sharp, unexplained increase in nonsubject imports from Thailand and Vietnam that year. Given that the increase in nonsubject imports from Thailand and Vietnam was accompanied by a substantial decline in the average unit value of such imports, and that LG and Samsung produce LRWs in Thailand and Vietnam, the increase in nonsubject imports from Thailand and Vietnam may include parts for assembly into LRWs at LG's and Samsung's U.S. plants.

## Apparent U.S. consumption and market shares

Table I-7 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares of LRWs.

**Table I-7**  
**LRWs: Apparent U.S. consumption and market shares, by source and period**

Quantity in units; value in 1,000 dollars; shares in percent

Source	Measure	2013	2014	2015	2021
U.S. producers	Quantity	***	***	***	***
China	Quantity	***	***	***	798,640
Nonsubject sources	Quantity	***	***	***	4,809,327
Total imports	Quantity	***	***	***	5,607,967
Apparent U.S. consumption	Quantity	***	***	***	***
U.S. producers	Value	***	***	***	***
China	Value	***	***	***	330,562
Nonsubject sources	Value	***	***	***	1,098,531
All import sources	Value	***	***	***	1,429,093
Apparent U.S. consumption	Value	***	***	***	***
U.S. producers	Share of quantity	***	***	***	***
China	Share of quantity	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***
All import sources	Share of quantity	***	***	***	***
U.S. producers	Share of value	***	***	***	***
China	Share of value	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***
All import sources	Share of value	***	***	***	***

Source: For the years 2013-15, data are compiled using data submitted in the Commission's original investigation. For the year 2021, U.S. producers' U.S. shipments are compiled from Whirlpool's response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting numbers 8450.20.0040; 8450.20.0080; 8450.20.0090, accessed February 10, 2022.

Note: Share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent.

Note: For the years 2013-15, apparent U.S. consumption is derived from U.S. shipments of imports, rather than U.S. imports.

Note: For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections.

Note: Nonsubject import volume appears to be overstated in 2021, given the sharp, unexplained increase in nonsubject imports from Thailand and Vietnam that year. Given that the increase in nonsubject imports

from Thailand and Vietnam was accompanied by a substantial decline in the average unit value of such imports, and that LG and Samsung produce LRWs in Thailand and Vietnam, the increase in nonsubject imports from Thailand and Vietnam may include parts for assembly into LRWs at LG's and Samsung's U.S. plants.

Note: Based on Whirlpool's estimate that GE, LG, Samsung, and Alliance produced \*\*\* units of LRWs domestically in 2021, apparent U.S. consumption was \*\*\* units, U.S. producers' market share was \*\*\* percent, subject import market share was \*\*\* percent, and nonsubject import market share was \*\*\* percent that year. Domestic interested party's response to the notice of institution, February 2, 2022, attachment 6.

## The industry in China

During the final phase of the original investigation, the Commission received foreign producer/exporter questionnaires from three firms, which accounted for the vast majority of production of LRWs in China during 2015, and virtually all exports of LRWs from China to the United States during 2015.<sup>39</sup>

Although the Commission did not receive responses from any respondent interested parties in this five-year review, the domestic interested party provided a list of sixteen possible producers of LRWs in China.<sup>40</sup>

In its response to the notice of institution, Whirlpool provided information that the Galanz Group, headquartered in China, acquired majority ownership and control of Whirlpool (China) Co., Ltd. (with washer production facilities in Anhui Province) in 2021.<sup>41</sup> Besides this, Whirlpool identified no other major developments in the Chinese industry since the imposition of the order.

Table I-8 presents export data for HS subheading 8450.20 ("Household- Or Laundry-Type Washing Machines, With A Dry Linen Capacity Exceeding 10 Kg"), a category that includes LRWs and out-of-scope products, from China (by export destination in descending order of quantity for 2020).

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<sup>39</sup> Original publication, p. VII-3.

<sup>40</sup> Domestic interested party's response to the notice of institution, February 2, 2022, p. 18-21.

<sup>41</sup> Domestic interested party's response to the notice of institution, February 2, 2022, p. 21.

**Table I-8**  
**Household- Or Laundry-Type Washing Machines, With A Dry Linen Capacity Exceeding 10 Kg:**  
**Exports from China by destination and period**

Quantity in units

Source	Measure	2016	2017	2018	2019	2020	2021
United States	Quantity	1,337,921	178,816	310,134	461,917	647,314	879,127
Mexico	Quantity	306,334	343,233	494,292	488,605	532,041	702,214
Brazil	Quantity	151,360	222,456	168,132	308,341	528,921	483,025
Thailand	Quantity	11,694	19,762	69,539	99,295	191,706	354,945
Saudi Arabia	Quantity	74,618	79,278	69,885	184,086	250,401	323,903
Japan	Quantity	30,599	60,929	82,818	159,879	190,686	290,560
Chile	Quantity	53,284	46,217	59,627	71,758	130,377	203,220
South Africa	Quantity	26,392	90,012	151,524	149,007	146,247	187,992
Malaysia	Quantity	38,085	45,079	58,811	95,866	138,457	180,627
South Korea	Quantity	190,535	156,550	140,553	115,725	122,068	157,046
Taiwan	Quantity	67,209	59,752	59,215	73,216	89,112	156,553
All other	Quantity	1,522,278	1,476,169	1,486,002	1,718,065	1,990,229	2,398,240
Total	Quantity	3,810,309	2,778,253	3,150,532	3,925,760	4,957,559	6,317,452

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 8450.20 ("Household- Or Laundry-Type Washing Machines, With A Dry Linen Capacity Exceeding 10 Kg"), accessed March 10, 2022. These data may be overstated as HS subheading 8450.20 may contain products outside the scope of this review (commercial washers and stacked washer-dryers).

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

## Third-country trade actions

Based on available information, LRWs from China have not been subject to other antidumping or countervailing duty investigations outside the United States.

## The global market

Whirlpool, LG, and Samsung, as well as Electrolux, are global producers of LRWs.<sup>42</sup> Production locations include the United States, China, South Korea (LG, Samsung), Mexico (Electrolux, Mabe, Whirlpool, and Samsung), Thailand (Electrolux, LG, and Samsung), Vietnam (Samsung and LG), Brazil (Whirlpool), and Colombia (Whirlpool). These companies export to a number of countries, including the United States, Canada, Mexico, Latin America, Australia, as well as Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, and Iraq. In addition to washers,

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<sup>42</sup> Other global producers of LRWs include Haier, Midea, Hisense, and Galanz, all producers with production facilities in China. Domestic interested party's response to the notice of institution, February 2, 2022, p. 10.

these companies also produce other out-of-scope major household appliances such as dryers, refrigerators, and cooking appliances.

The major producers of LRWs also compete in other countries against regional producers of residential washers. In Europe, such companies include Miele & Cie. KG, BSH Hausgeräte GmbH of the Bosch Group (Germany), and the Gorenje Group (Slovenia). Most European residential washer production has relocated from Western Europe to Eastern Europe (principally to Poland, Slovakia, and Serbia). In Japan, Panasonic is a major residential washer producer, but has shifted production to Southeast Asia. In Turkey, the company Arçelik A.Ş. is a major regional Middle East producer of residential washers.<sup>43</sup>

Tables I-9 and I-10 presents the largest global export sources of LRWs during 2016-19 (by export destination in descending order of quantity for 2019). In 2016, China was the leading global exporter of LRWs, followed by Thailand and Mexico.

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<sup>43</sup> Large Residential Washers from Korea and Mexico, Inv. No. 701-TA-488 and 731-TA-1199-1200 (Review), USITC Publication 4882, April 2019.

**Table I-9**  
**Household- Or Laundry-Type Washing Machines, With A Dry Linen Capacity Exceeding 10 Kg:**  
**Global exports by country and period**

Quantity in units

Source	Measure	2016	2017	2018	2019
China	Quantity	3,810,309	2,778,253	3,150,532	3,925,760
Thailand	Quantity	1,754,259	2,011,664	1,896,306	1,838,645
United States	Quantity	824,333	867,296	858,358	857,525
South Korea	Quantity	894,809	1,057,199	716,393	646,459
Mexico	Quantity	1,128,525	1,037,320	905,127	446,567
Italy	Quantity	35,730	33,961	51,751	162,764
Poland	Quantity	5,717	42,439	32,452	131,656
Vietnam	Quantity	N/A	N/A	102,065	102,328
Brazil	Quantity	71,502	81,049	97,389	82,536
Colombia	Quantity	46,986	36,039	33,128	70,858
Chile	Quantity	39,636	47,657	30,386	39,978
All other	Quantity	N/A	N/A	N/A	N/A
Total	Quantity	N/A	N/A	N/A	N/A

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 8450.20 ("Household- Or Laundry-Type Washing Machines, With A Dry Linen Capacity Exceeding 10 Kg"), accessed March 10, 2022. These data may be overstated as HS subheading 8450.20 may contain products outside the scope of this review (such as commercial washers and stacked washer-dryers).

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

Note: Comprehensive data for 2020, 2021, and all other sources are not available ("N/A").

**APPENDIX A**  
**FEDERAL REGISTER NOTICES**





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

Citation	Title	Link
87 FR 76 January 3, 2022	<i>Initiation of Five-Year (Sunset) Reviews</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2022-01-03/pdf/2021-28405.pdf">https://www.govinfo.gov/content/pkg/FR-2022-01-03/pdf/2021-28405.pdf</a>
87 FR 115 January 3, 2022	<i>Large Residential Washers from China; Institution of a Five-Year Review</i>	<a href="https://www.govinfo.gov/content/pkg/FR-2022-01-03/pdf/2021-28356.pdf">https://www.govinfo.gov/content/pkg/FR-2022-01-03/pdf/2021-28356.pdf</a>

**APPENDIX B**  
**COMPANY-SPECIFIC DATA**



## RESPONSE CHECKLIST FOR U.S. PRODUCERS

**Table B-1**

**LRWs: Response checklist for U.S. producers**

Yes = provided response; no = did not provide a response; NA = not available; not known = information was not known

Item	Whirlpool Corporation
<b>Nature of operation</b>	U.S. producer
<b>Statement of intent to participate</b>	Yes
<b>Statement of likely effects of revoking the order</b>	Yes
<b>U.S. producer list</b>	Yes
<b>U.S. importer/foreign producer list</b>	Yes
<b>List of 3-5 leading purchasers</b>	Yes
<b>List of sources for national/regional prices</b>	Not known
<b>Changes in supply/demand</b>	Yes

**Table B-2**

**LRWs: Trade and financial data submitted by U.S. producers, 2021**

Quantity in units, value in 1,000 dollars, share in percent

Item	Measure	Whirlpool Corporation
<b>Capacity</b>	Quantity	***
<b>Production</b>	Quantity	***
<b>Reported share of total U.S. production</b>	Share	***
<b>Commercial U.S. shipments</b>	Quantity	***
<b>Commercial U.S. shipments:</b>	Value	***
<b>Internal consumption and company transfers</b>	Quantity	***
<b>Internal consumption and company transfers</b>	Value	***
<b>Net sales</b>	Value	***
<b>COGS</b>	Value	***
<b>Gross profit or (loss)</b>	Value	***
<b>SG&amp;A expenses</b>	Value	***
<b>Operating income or (loss)</b>	Value	***

Note: The financial data are for fiscal year ended December 31, 2021.

Note: Reported share of total U.S. production is the firm's estimated share of total U.S. production as reported in the response to the NOI.

**APPENDIX C**  
**SUMMARY DATA**



**Table C-1**

**LRWs: Summary data concerning the U.S. market, 2013-15, January to June 2015, and January-June 2016**

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**Table C-2**

**LRWs: Summary data concerning the U.S. market for top load LRWs, 2013-15, January to June 2015, and January-June 2016**

\* \* \* \* \*

**Table C-3**

**LRWs: Summary data concerning the U.S. market for front load LRWs, 2013-15, January to June 2015, and January-June 2016**

\* \* \* \* \*





**APPENDIX D**  
**PURCHASER QUESTIONNAIRE RESPONSES**



As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from domestic interested parties and it named the following five firms as top purchasers of large residential washers: \*\*\*. Purchaser questionnaires were sent to these five firms and three firms (\*\*\*) provided responses, which are presented below.

1. Have there been any significant changes in the supply and demand conditions for large residential washers that have occurred in the United States or in the market for large residential washers in China since February 7, 2017?

<b>Purchaser</b>	<b>Yes / No</b>	<b>Changes that have occurred</b>
***	***	***
***	***	***
***	***	***

2. Do you anticipate any significant changes in the supply and demand conditions for large residential washers in the United States or in the market for large residential washers in China within a reasonably foreseeable time?

<b>Purchaser</b>	<b>Yes / No</b>	<b>Changes that have occurred</b>
***	***	*** .
***	***	*** .
***	***	*** .

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