

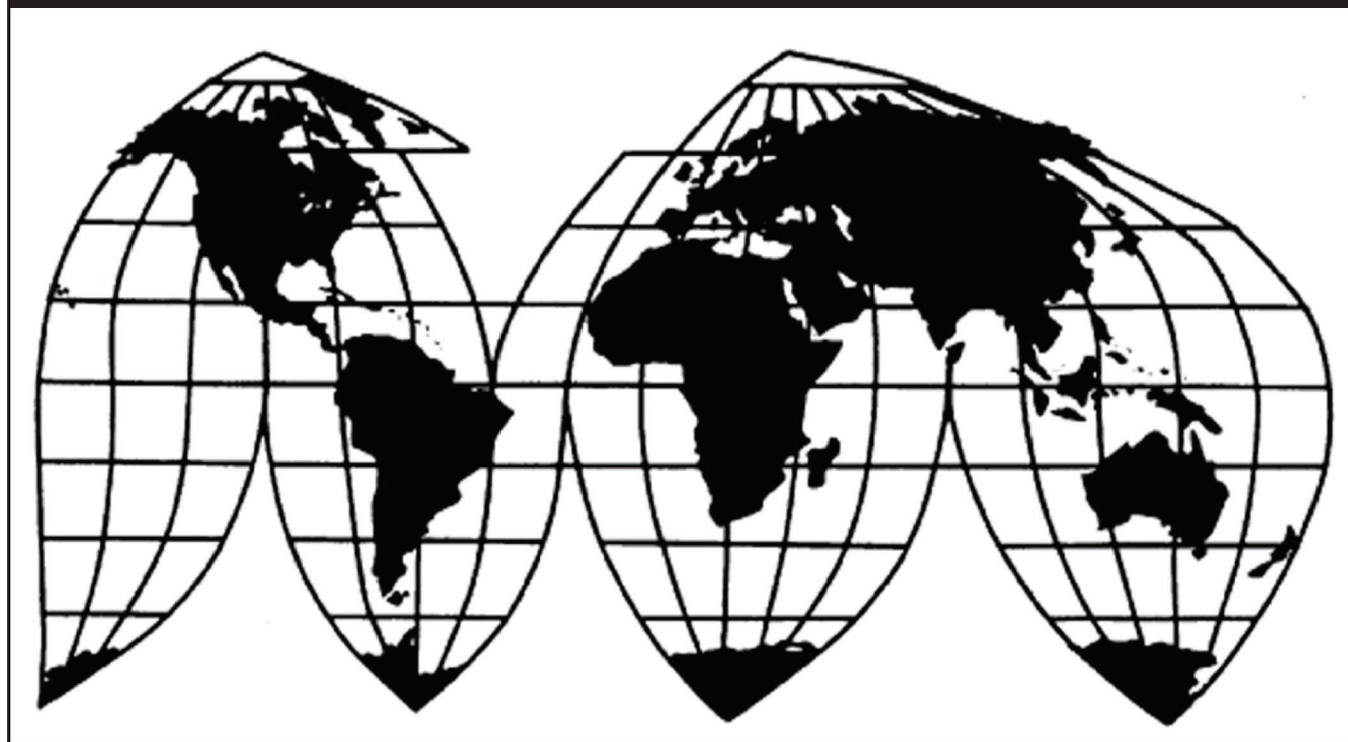
Large Residential Washers: Evaluation of the Effectiveness of Import Relief

Investigation No. TA-201-076 (Evaluation)

Publication 5453

August 2023

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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EXECUTIVE SUMMARY

Section 204(d) of the Trade Act of 1974 (the “Act”) requires the U.S. International Trade Commission (“Commission”), upon termination of a safeguard measure, to evaluate the effectiveness of the action in facilitating positive adjustment by the domestic industry to import competition, consistent with the reasons set out by the President in the report submitted to the Congress under section 203(b) of the Act. The safeguard action on large residential washers (“LRWs”) went into effect on February 7, 2018, and after one extension, terminated on February 7, 2023. The Commission is required to submit a report on the evaluation to the President and the Congress no later than 180 days after the day on which the relief action was terminated.

The safeguard measure went into effect following an investigation by the Commission pursuant to section 202 of the Act and the President's decision to impose the safeguard measure pursuant to section 203(a). The Commission's investigation, as described in its report submitted to the President pursuant to section 202(f) on December 4, 2017, found that LRWs and covered parts were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing a like or directly competitive article. On January 23, 2018, the President proclaimed the safeguard measure and transmitted a report to Congress under Section 203(b) of the Act describing the safeguard measure and the reasons for imposing it.

The President's report cited increased imports, the domestic industry's loss of market share and declining financial performance, and the undermining of antidumping and countervailing duty measures by the movement of LRW production to other countries by South Korean producers LG Electronics, Inc. (“LG Korea”) and Samsung Electronics, Inc. (“Samsung Korea”) as circumstances underlying the decision to apply the safeguard measure. Following imposition of the safeguard measure, LRW imports greatly declined, and the domestic industry gained market share and improved its financial performance during the 2018-22 period. Improvements in the domestic industry were largely driven by two new entrant U.S. producers, LG Electronics USA, Inc. (“LG USA”) and Samsung Electronics Home Appliances America, LLC (“Samsung”).¹ Performance indicators such as production, U.S. shipments, market share, total

¹ The term “new entrant” refers to those U.S. producers that started producing LRWs after the petition for section 201 relief was filed in 2017, including LG USA and Samsung. The term “continuous producers” refers to those U.S. producers that have been producing LRWs since before the petition for section 201 relief was filed in 2017, including Whirlpool Corporation (“Whirlpool”), Haier U.S. Appliances Solutions d/b/a GE Appliances (“GE Appliances”), and Alliance Laundry Systems LLC (“Alliance”).

sales value, the number of production and related workers (PRWs), and wages paid all increased for the new entrant U.S. producers but decreased for continuous producers during 2018-22.

The President's report to Congress also stated that the safeguard measure was designed to encourage LG Korea and Samsung Korea to follow through on their announcements to locate meaningful portions of their production line to the United States. Since imposition of the safeguard measure, LG USA and Samsung have reached or surpassed the capacity, production, investment, and/or employment milestones that LG Korea and Samsung Korea publicized when announcing in 2017 their opening of LRW facilities in the United States. Whirlpool and GE Appliances have also reported progress on some of the goals they identified in their adjustment plans that would help them more effectively compete with U.S. imports.

Finally, the President's report to Congress also stated that the additional duties under the safeguard measure would provide an impetus for importers to increase their prices, relieving downward pressure on prices in the U.S. market. After the safeguard measures was imposed, prices for imported and domestically produced LRWs have generally increased. Average unit values of U.S. shipments by the domestic industry and importers alike also increased between 2018 and 2022.

Background

Related antidumping and countervailing duty proceedings and orders

On December 30, 2011, Whirlpool Corporation ("Whirlpool") (Benton Harbor, Michigan) filed a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of imports of LRWs from South Korea and Mexico sold in the United States at less-than-fair-value ("LTFV") and subsidized by the government of South Korea. Following affirmative final determinations from the Department of Commerce ("Commerce") and the Commission, effective February 15, 2013, Commerce issued antidumping duty orders on imports of LRWs from Mexico and South Korea and a countervailing duty order on imports of LRWs from South Korea.²

On December 16, 2015, Whirlpool filed a second import injury petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of LRWs from China. Following affirmative final determinations from the

² Following the first five-year reviews of these orders, effective February 15, 2019, Commerce, based on the Commission's negative determinations, revoked the antidumping and countervailing duty orders on LRWs from South Korea, and effective May 6, 2019, Commerce issued a continuation of the antidumping duty order on imports of LRWs from Mexico.

Commission and Commerce, effective February 6, 2017, Commerce published an antidumping duty order on LRWs from China.³

Safeguard proceeding

On June 5, 2017, Whirlpool filed a petition under section 202 of the Act alleging that LRWs and parts thereof were being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. On December 4, 2017, the Commission completed its investigation and issued its report pursuant to section 202 of the Act. The Commission determined that LRWs and covered parts were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing a like or directly competitive article.⁴ Among other conclusions, the Commission found that the increase in imports led to lower prices and declining financial performance for the domestic industry. The report also contained recommended remedies to facilitate efforts by the domestic industry and its workers to make a positive adjustment to import competition.

Safeguard measure

On January 23, 2018, the President issued Presidential Proclamation 9694 which imposed a safeguard measure in the form of a tariff rate quota (“TRQ”) on imports of LRWs and covered parts for a period of 3 years and 1 day, effective February 7, 2018.⁵ The President’s report to Congress stated: “Sourcing of imports has switched among five countries, and in each instance, it was one of two producers – Samsung {Korea} or LG {Korea} -- that directed the movement. Each time, the companies changed locations for the purpose of increasing the penetration of their imported washers into the U.S. market. Today, both companies have

³ Following affirmative determinations in the five-year review by Commerce and the Commission, effective August 30, 2022, Commerce issued a continuation of the antidumping duty order on imports of LRWs from China.

⁴ The scope of these proceedings includes imports of LRWs and covered parts.

The “like or directly competitive domestic product” includes LRWs and covered parts as well as two out-of-scope products: (1) top load residential washers with a permanent split capacitor (“PSC”) motor (“PSC/belt top load”) and (2) front load residential washers with a controlled induction motor (“CIM”)/belt drive (“CIM/belt front load”). The two out-of-scope products are collectively referred to as “expansion merchandise.”

The term “select residential washers” includes in-scope LRWs (full units) and expansion merchandise (i.e., the like or directly competitive domestic product), excluding covered parts.

⁵ 83 FR 3553, January 25, 2018.

decided to locate at least some of their production in the United States. A robust and fair remedy will protect U.S. producers and encourage LG {Korea} and Samsung {Korea} to follow through on these efforts, and locate meaningful parts of their production line in the United States, rather than relying on imported parts and subassemblies.”

The measure subjected imports of LRWs in excess of 1.2 million units annually to additional tariffs of 50 percent in the first year, 45 percent in the second year, and 40 percent in the third year, with an in-quota tariff of 20 percent in the first year, 18 percent in the second year, and 16 percent in the third year. With respect to covered parts, imports in excess of 50,000 units were to be subject to an additional 50 percent tariff in the first year, imports in excess of 70,000 units were to be subject to a tariff of 45 percent in the second year, and imports in excess of 90,000 units were to be subject to a tariff of 40 percent in the third year, while no additional tariff would apply to goods within the in-quota quantity. The safeguard measure excluded imports from Canada and imports from WTO Member developing countries (as long as imports from a developing country did not exceed 3 percent of total imports and imports from all developing countries with an import share of less than 3 percent did not collectively exceed 9 percent of total imports).⁶ The TRQ contained no individual country allocations, and the in-quota quantity that received lower-duty or duty-free treatment was to reset annually. The first phased reduction of the safeguard measure took effect on February 7, 2019.

Safeguard monitoring proceeding and action

On February 15, 2019, the Commission instituted a proceeding for the purpose of preparing a report to the President and the Congress as required by section 204(a)(2) of the Act on the results of its monitoring of developments with respect to the domestic LRWs industry since the imposition of the safeguard measure. On August 7, 2019, the Commission issued its report. On January 23, 2020, the President issued Proclamation 9979, which updated the TRQ on LRWs from an annual allocation to a quarterly allocation of 300,000 washers per quarter beginning February 7, 2020.

⁶ On May 16, 2019, the President issued Proclamation 9887, which removed Turkey from the list of GSP beneficiary countries and modified the safeguard measure so that imports from Turkey were no longer excluded. Additionally, on May 31, 2019, the President issued Proclamation 9902, which removed India from the list of GSP beneficiary countries and modified the safeguard measure so that imports from India were no longer excluded.

Safeguard extension proceeding and action

On August 3, 2020, Whirlpool filed a petition requesting an extension of the relief action. The Commission issued questionnaires to collect data from the U.S. industry and U.S. importers of LRWs; U.S. industry data for the extension proceeding were based on the questionnaire responses of five U.S. producers of LRWs believed to have accounted for virtually all domestic production of LRWs in 2019, while U.S. import data were based on the questionnaire responses of five U.S. importers of LRWs believed to have accounted for virtually all U.S. imports of LRWs. On December 8, 2020, the Commission issued its extension determination and report pursuant to section 204(c) of the Act finding that the safeguard measure continued to be necessary to prevent or remedy the serious injury to the domestic industry and that there was evidence that the domestic industry was making a positive adjustment to import competition. On January 14, 2021, the President issued Proclamation 10133 extending the safeguard measure through February 7, 2023. The measure was continued with TRQs for two additional years but with lower tariffs in each year.

Evaluation proceeding

On February 7, 2023, the safeguard action imposed by the President terminated. As discussed above, Section 204(d) of the Act requires the Commission, following termination of a relief action, to evaluate the effectiveness of the action in facilitating positive adjustment by the domestic industry to import competition. As part of the required evaluation proceeding, the Commission issued questionnaires to collect data and other information from U.S. producers and U.S. importers of LRWs. As the Commission's prior extension proceeding had collected data covering the first two calendar years for which the safeguard measure was in place (i.e., 2018 and 2019), the Commission's evaluation proceeding collected data for the additional three full calendar years for which the safeguard measure was in place (i.e., 2020, 2021, and 2022).⁷ U.S. industry data collected during the evaluation proceeding are based on questionnaire responses of the same five firms that provided data during the extension proceeding and accounted for virtually all U.S. production of LRWs during 2022. U.S. import data from the evaluation proceeding are based on the questionnaire responses of the same five firms that provided importer data during the extension proceeding and that accounted for virtually all U.S. imports of LRWs during 2022. Section 204(d) of the Act requires that the Commission hold a public

⁷ Data and trends regarding the domestic industry, imports, apparent U.S. consumption, and market shares from 2018 to 2019 were examined by the Commission in the extension proceeding and are detailed in Appendix D. Data and trends from 2012 to 2017 were examined in prior phases of this safeguard proceeding and are also detailed in Appendix D.

hearing on the effectiveness of the action in this investigation under this subsection. The Commission held its hearing on June 1, 2023. Parties were asked to file requests to appear at the hearing by May 25, 2023. As no parties submitted requests, no one appeared to give testimony at the hearing. Additionally, no parties filed briefs in connection with the evaluation proceeding.

Market Developments

Demand for LRWs is driven primarily by consumers replacing existing washers at the end of their functional lives, with the remaining demand being driven by new construction and home sales. Overall, U.S. demand for LRWs increased since 2018. During the early part of the period (2018-2019), demand was relatively flat due to cooler replacement cycles (as consumers replaced LRWs purchased during the 2008-11 period of weak LRW demand coinciding with the Great Recession and its aftermath) and housing activity. However, demand increased during the COVID-19 pandemic as consumers spent more time in their homes. Data from the Commission's extension and evaluation proceedings on total apparent U.S. consumption reflect these general trends.⁸ Based on the data from the two proceedings, total apparent U.S. consumption, by value, of select residential washers⁹ plus covered parts increased modestly from 2017-19 and experienced larger increases in 2020 and 2021, with 2021 being the year with the highest level of total apparent U.S. consumption by value. Total apparent U.S. consumption by value decreased from 2021-22 but ended at an elevated level as compared to total apparent U.S. consumption levels in years 2017-20.

Exports from South Korea and Mexico to the United States began to decline following the issuance of antidumping duty orders on LRWs from South Korea and Mexico and the countervailing duty order on LRWs from South Korea in 2013. From 2012-13, LG Korea and Samsung Korea shifted LRW production for the U.S. market from South Korea to China. Samsung Korea also shifted LRW production from Mexico to China over this same period. As a result, exports from China to the United States increased beginning in 2012, but then declined beginning in 2016, during the pendency of the antidumping duty investigation on LRWs from China, which resulted in an antidumping duty order in 2017. Beginning in 2016, LG Korea and Samsung Korea again shifted production of LRWs intended for export to the U.S. market, this

⁸ Trends that include the years 2017, 2018, or 2019 are based on data presented in Large Residential Washers: Extension of Action, Inv. No. TA-201-076, December 2020, Confidential Report.

⁹ The term "select residential washers" is used to denote full washer units (i.e., LRWs) as well as the expansion merchandise, which consists of two types of washers that were not covered by the scope of the safeguard measure but were determined to be like or directly competitive products and therefore included in the definition of the domestic like product in the Commission's initial injury determination.

time from China to Vietnam and Thailand, resulting in an increase in exports to the United States from these countries.

Throughout the safeguard proceedings, the Commission collected data on U.S. imports and U.S. shipments of imports from the following sources: China, Mexico, South Korea, Thailand, Vietnam, and all other sources combined. Based on the data from the Commission's extension and evaluation proceedings, Vietnam and Thailand were the principal sources of U.S. imports of full units (LRWs plus expansion merchandise), consistent with reporting that LG Korea and Samsung Korea had shifted production to those countries following issuance of the antidumping duty order on LRWs from China (a modest portion of imports of full units from South Korea were also reported during the periods). With respect to covered parts, overall trends were similar except that China also represented a modest share of the value of imports of covered parts throughout the periods.

Following imposition of the safeguard measure in January 2018, overall U.S. imports of covered merchandise (i.e., LRWs plus covered parts) began a major decline. The total value of U.S. imports of covered merchandise decreased in each year between 2017 and 2022 with the total value of reported imports of covered merchandise ending over 90 percent lower in 2022 as compared to 2017. The value of U.S. imports of covered merchandise also experienced decreases in virtually all year-to-year comparisons by source. As noted above, the principal sources of U.S. imports of covered merchandise in 2022 were Vietnam, South Korea, and Thailand, with China representing a small portion of imports of covered parts.

Although U.S. imports of covered merchandise experienced a large overall decrease across the periods, the value of U.S. imports of expansion merchandise not covered by the safeguard measure was three times higher in 2022 as compared to 2018. For the total value of apparent consumption of select residential washers (i.e., LRWs plus expansion merchandise) and covered parts, U.S. producers' share of total apparent U.S. consumption was higher in 2022 as compared to 2018 but was somewhat offset by the rise in the value of U.S. shipments of imports of expansion merchandise. From 2020-22, continuous U.S. producers' share of the total value of apparent U.S. consumption of select residential washers and covered parts decreased somewhat while the share of total value of apparent U.S. consumption held by the new entrant U.S. producers increased.

Individual Firms' Adjustment Efforts

Pursuant to section 204(a)(1) of the Act, the Commission collected information concerning the progress and specific efforts made by workers and firms to make a positive adjustment to import competition. During the original safeguard investigation, Whirlpool and

GE Appliances submitted proposed adjustment plans. In their respective plans, Whirlpool indicated that it planned to make investments to update and expand its LRW offerings and to enhance the efficiency of its manufacturing and logistics operations, while GE Appliances stated that it planned to make investments in updated LRW offerings, human capital, and business process innovation.

Since imposition of the safeguard measure, Whirlpool made ***. Whirlpool also ***. However, Whirlpool ***.

GE Appliances stated that it ***. GE Appliances also ***.

Both LG USA and Samsung commenced LRW production in the United States in 2018. Samsung ***. LG USA ***. Both LG USA and Samsung have reported *** since imposition of the safeguard to compete effectively in the U.S. market. *** anticipate maintaining the complexity, intensity, and importance of their LRW production activities after termination of the safeguard.

As noted above, domestic producers described several factors that allegedly hindered their adjustment efforts. Whirlpool and GE contend that the sharp increase in U.S. imports and inventories held by importers prior to the February 7, 2018, imposition of the safeguard measure delayed the remedial effect of the measure. During the monitoring phase in 2019, all parties noted weakening demand and higher raw material costs as factors weighing on their

performance. During this current evaluation proceeding, parties noted in their questionnaire responses that while the COVID-19 pandemic positively affected demand, U.S. producers were negatively impacted by COVID-19 related supply chain issues, labor shortages, and shutdowns, as well as increased production costs.

Developments in the Domestic Industry

Since the safeguard measure was put in place in 2018, the domestic industry as a whole has increased capacity, production, U.S. shipments, market share, and employment; its financial performance improved, and prices for LRWs have been generally higher. However, capacity utilization has decreased and unit labor costs have increased.

Improvements in the domestic industry were largely driven by the two new entrant U.S. producers, LG USA and Samsung. Prior to implementation of the safeguard measure, LG Korea and Samsung Korea were serving the U.S. market with imports from several sources, including dumped imports from China and Mexico and dumped and subsidized imports from South Korea, as well as imports from Thailand and Vietnam that were never the subject of an antidumping or countervailing duty investigation. These companies shifted the countries of export as antidumping and countervailing duty orders were put in place throughout 2012-16 (see discussion on these shifts in the Market Developments section). In 2017, the year in which the safeguard investigation began, LG Korea and Samsung Korea announced plans to open LRW production facilities in the United States and committed to substantial production of LRWs in the United States during the course of the original safeguard investigation.

All U.S. producers reported expansions in their select residential washer operations since the safeguard measure was imposed and new entrant U.S. producers Samsung and LG USA commenced production of select residential washers in South Carolina and Tennessee, respectively, in 2018. While both firms experienced challenges during the ramping-up of their new facilities, resulting in slower-than-expected increases in production, both have since reached or surpassed their capacity, production, investment, and/or employment targets.

The U.S. industry's select residential washer capacity and production increased during 2018-22 as new entrant U.S. producers ramped up production. However, production did not keep pace with the increase in capacity, resulting in declining capacity utilization during the 2018-22 period. New entrant U.S. producers' select residential washer capacity increased during 2018-22, while continuous U.S. producers' select residential washer capacity fluctuated throughout the period, with an overall slight increase in 2022 compared to 2018. New entrant U.S. producers' select residential washer production increased every year from 2018 to 2022, while continuous U.S. producers' select residential washer production decreased irregularly

during this period. Continuous U.S. producers' capacity utilization decreased irregularly during 2018-22, while new entrant U.S. producers' capacity utilization increased irregularly during this period.

The U.S. industry's number of production-related workers (PRWs) and total wages paid increased during 2018-22, but total hours worked decreased and unit labor costs increased during the 2018-22 period. New entrant U.S. producers' number of PRWs and total wages paid increased during 2018-22, while continuous U.S. producers' number of PRWs and total wages paid decreased irregularly. New entrant U.S. producers' total hours worked increased irregularly during 2018-22, while continuous U.S. producers' total hours worked decreased irregularly. Unit labor costs were much higher for new entrant U.S. producers than continuous U.S. producers in 2018, as new entrants ramped up production, then unit labor costs notably dropped for new entrants in 2019 but were still higher than continuous U.S. producers' unit labor costs throughout 2018-22. Unit labor costs for both types of U.S. producers increased during 2019-22, as demand, and thus, production, declined, while wages increased.

Driven by the two new entrants, LG USA and Samsung, the U.S. industry's U.S. shipments and its share of apparent U.S. consumption of select residential washers increased by quantity (full units) and value during 2018-22. However, continuous U.S. producers' U.S. shipments and share of apparent U.S. consumption decreased by quantity (full units) and value.

The domestic U.S. industry's total sales value increased overall during 2018-22, increasing from 2018 through 2021, followed by a decline in 2022. Between 2018 and 2021 continuous U.S. producers' total sales value fluctuated and decreased in 2022 to its lowest level of the relief period. In contrast, new entrant U.S. producers' total sales value increased throughout the period as they ramped up production and increased U.S. shipments. At the gross and operating levels, the domestic industry's performance increased overall during 2018-22, improving between 2018 and 2021 and then declining in 2022. Continuous and new entrant U.S. producers reported improvements in their financial results during most of the relief period (2018 through 2021), largely reflecting increasing average unit sales value and lower and/or stable average unit COGS. At the beginning of the period, the poor financial performance of the new entrant U.S. producers largely reflected the start-up phase of their operations with their production and sales volume subsequently increasing throughout the rest of the relief period. In 2022, and notwithstanding continued increases in average unit sales value, continuous and new entrant U.S. producers reported declines in their gross profits and operating income, reflecting notably higher average unit COGS for both groups, which occurred in conjunction with a decline in continuous U.S. producers' sales volume and new entrant U.S. producers' modest increase in sales volume.

Generally, prices for domestically produced LRWs increased after the safeguard measures were imposed. Prices for U.S.-produced LRWs increased slightly during the early years of the period (2018 into early 2019), decreased through 2020, and increased again into 2022 to levels higher than in 2017, prior to the imposition of the safeguard.¹⁰ This increase partly reflects the domestic industry's efforts to cover the large increase in raw material costs in 2021 and 2022. The average unit values of U.S. shipments by the domestic industry also increased between 2018 and 2022.

¹⁰ Product-specific prices for imports are not available for full years 2020-22, although the average unit values of U.S. importers' U.S. shipments of LRWs generally increased from 2018 to 2022.

Part I: Introduction and overview

On February 7, 2023, the safeguard action imposed by the President on imports of large residential washers (“LRWs”) and parts thereof terminated. Section 204(d) of the Trade Act of 1974 (“the Act”) requires the U.S. International Trade Commission (“USITC” or “Commission”), following termination of a relief action, to evaluate the effectiveness of the action in facilitating positive adjustment by the domestic industry to import competition, consistent with the reasons set out by the President in the report submitted to the Congress under section 203(b) of the Act. The Commission is required to submit a report on the evaluation to the President and the Congress no later than 180 days after the day on which the relief action was terminated. Table I-1 presents information relating to the schedule of this evaluation proceeding.^{1 2}

Table I-1
LRWs: Information relating to the schedule of this evaluation proceeding

Effective date	Action
February 7, 2023	Termination of relief action
February 7, 2023	Commission’s institution and scheduling (86 FR 11474, February 23, 2023)
June 1, 2023	Commission’s hearing
August 7, 2023	Commission’s transmittal of report to the President and the Congress

Background

On June 5, 2017, a petition, as amended, was properly filed under section 202(a) of the Act (19 U.S.C. § 2552(a)) by Whirlpool Corporation (“Whirlpool”) (Benton Harbor, Michigan). The petition alleged that LRWs were being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. The Commission conducted an investigation under section 202(b)(1)(A) of the Act. Following receipt of the report from the Commission in December 2017 under section 202 of the Act (19 U.S.C. § 2252) containing an affirmative serious injury determination and remedy recommendations,³

¹ Pertinent Federal Register notices are referenced in appendix A and may be found at the Commission’s website (www.usitc.gov).

² Appendix B contains the calendar of the Commission’s public hearing. No one appeared to give testimony at the hearing.

³ Large Residential Washers, Inv. No. TA-201-076, USITC Publication 4745, December 2017 (“Safeguard publication”).

the President, on January 23, 2018, pursuant to section 203 of the Act (19 U.S.C. § 2253), issued Proclamation 9694.⁴ The Proclamation imposed a safeguard measure in the form of a tariff-rate quota on imports of LRWs for a period of 3 years and 1 day, effective February 7, 2018.

On February 15, 2019, the Commission instituted a proceeding for the purpose of preparing the report to the President and the Congress as required by section 204(a)(2) of the Act on the results of its monitoring of developments with respect to the domestic LRWs industry since the imposition of tariff-rate quotas on imports of LRWs.⁵ On August 7, 2019, the Commission issued its report of its monitoring of developments with respect to the domestic industry.⁶ Effective January 23, 2020, the President issued Proclamation 9979, implementing a quarterly allocation of the tariff-rate quota on imports of LRWs.⁷

On August 3, 2020, Whirlpool filed a petition requesting extension of the relief action in place on imports of LRWs.⁸ On December 8, 2020, the Commission issued its extension determination and report pursuant to section 204(c) of the Act (19 U.S.C. 2254(c)), finding that the safeguard measure continued to be necessary to prevent or remedy the serious injury to the domestic industry and that there was evidence that the domestic industry was making a positive adjustment to import competition.⁹ On January 14, 2021, the President issued Proclamation 10133,¹⁰ pursuant to section 203(e)(1)(B) of the Act (19 U.S.C. 2253(e)(1)(B)), extending the safeguard measure on LRWs through February 7, 2023.

⁴ 83 FR 3553, January 25, 2018. Presidential Documents are included in appendix A.

⁵ 84 FR 5715, February 22, 2019.

⁶ Large Residential Washers, Inv. No. TA-201-076, USITC Publication 4941, August 2019 (“Monitoring publication”).

⁷ 85 FR 5125, January 28, 2020.

⁸ 85 FR 48724, August 12, 2020.

⁹ Large Residential Washers: Extension of Action, Inv. No. TA-201-076, USITC Publication 5144, December 2020 (“Extension publication”).

¹⁰ 86 FR 6541, January 21, 2021.

The President's report to Congress

The statute governing this evaluation proceeding by the Commission (section 204(d) of the Trade Act of 1974, as amended) states that “{a}fter any action taken under section 2253 of this title has terminated, the Commission shall evaluate the effectiveness of the actions in facilitating positive adjustment by the domestic industry to import competition, consistent with the reasons set out by the President in the report submitted to the Congress under section 2253(b) of this title.”¹¹

The President's report under section 2253(b) (section 203(b) of the Trade Act of 1974, as amended) was transmitted to Congress on January 23, 2018. Before outlining the specific relief components of the safeguard measure, the President's report explained in pertinent part:

President Donald J. Trump has decided to impose a temporary safeguard measure on large residential washers (washers) to provide appropriate relief to U.S. producers of washers that have been injured by a recent surge in imports. . . .

From 2012 to 2016, imports of washers into the United States increased steadily, causing a substantial loss in market share to domestic producers. Domestic producers' financial performance declined precipitously. During this time, the Department of Commerce issued antidumping and countervailing duties on those imported washers benefiting from unfair-trade practices. In both cases, Korean producers LG and Samsung moved production to other countries, undermining relief intended for U.S. producers.

Sourcing of imports has switched among five countries, and in each instance, it was one of two producers -- Samsung or LG -- that directed the movement. Each time, the companies changed locations for the purpose of increasing the penetration of their imported washers into the U.S. market. Today, both companies have decided to locate at least some of their production in the United States. A robust and fair remedy will protect U.S. producers and encourage LG and Samsung to follow through on these efforts, and locate meaningful parts of their production line in

¹¹ 19 U.S.C. 2254(d)(1).

the United States, rather than relying on imported parts and subassemblies.

The Administration will monitor the state of the industry, including the efforts by Samsung and LG to bring their facilities to full production, to ensure that the safeguard measure is having its intended effect.¹²

In describing the in-quota duty, one component of the relief in the safeguard measure, the President's report further stated:

This duty will provide an impetus for importers to increase their prices, thereby relieving the downward pressure on prices that has led to a decline in domestic washer producers' financial performance. This action will facilitate the efforts of U.S. producers to adjust to import competition without placing an undue burden on U.S. consumers.¹³

¹² Report by the President to the United States Congress Pursuant to Section 203(b) of the Trade Act of 1974, as Amended, Regarding a Safeguard Measure on Imports of Large Residential Washers, transmitted to Speaker of the House Paul D. Ryan on January 23, 2018.

¹³ Report by the President to the United States Congress Pursuant to Section 203(b) of the Trade Act of 1974, as Amended, Regarding a Safeguard Measure on Imports of Large Residential Washers, transmitted to Speaker of the House Paul D. Ryan on January 23, 2018.

Organization of report

Part I of this report presents information on the related World Trade Organization (“WTO”) proceedings, previous and related investigations, summary data and data sources, U.S. market participants, and the subject merchandise. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Part IV presents information on the financial experience of U.S. producers. Part V presents information on U.S. imports, apparent consumption, and market shares. Part VI presents information on pricing data. Part VII presents information on the adjustment efforts of U.S. producers in connection with the safeguard measure.

Data and data trends discussed in this report encompass the period subsequent to the Commission’s extension proceeding, i.e., 2020-2022. Data and data trends regarding the domestic industry, imports, apparent U.S. consumption, and market shares from 2012 to 2019 were examined by the Commission in prior phases of this safeguard proceeding and detailed in the Commission’s prior publications; summary data for the earlier periods are provided in this report at Appendix D.

World Trade Organization proceedings

On May 14, 2018, South Korea requested consultations with the United States, pursuant to the World Trade Organization (“WTO”) dispute settlement understanding, concerning the global safeguard measure imposed by the United States on imports of LRWs.¹⁴ On May 25, 2018, Thailand requested to join the consultations, and the United States accepted Thailand’s request. Consultations were held on June 26, 2018. At South Korea’s request, the WTO Dispute Settlement Body (“DSB”) established a panel at its meeting on September 26, 2018.¹⁵

Following written submissions and panel meetings, on February 8, 2022, the DSB circulated the panel’s final report, which rejected certain of South Korea’s claims, including against aspects of the Commission’s serious injury investigation, the President’s chosen form of the safeguard measure, and whether the United States timely notified key decisional points in the safeguard investigation. However, the panel found that certain aspects of the Commission’s serious injury determination were inconsistent with U.S. obligations under the WTO Agreement on Safeguards. The panel also found that the United States acted inconsistently with the WTO Agreement on Safeguards by not providing South Korea with adequate opportunity for prior consultations.¹⁶

Following negotiations between the United States and South Korea seeking to resolve the dispute, the DSB adopted the panel report on April 28, 2023,¹⁷ and the parties simultaneously announced that they had reached a mutually agreed solution to terminate the dispute.¹⁸

¹⁴ WTO, “United States – Safeguard Measure on Imports of Large Residential Washers – Request for Consultations by the Republic of Korea,” WT/DS546/1; G/L/1235; G/SG/D52/1 (16 May 2018).

¹⁵ WTO, “Dispute Settlement Body – 26 September 2018 -- Minutes of Meeting,” WT/DSB/M/419 (8 February 2019) at Paragraph 7.4.

¹⁶ WTO, “United States – Safeguard Measure on Imports of Large Residential Washers – Report of the Panel,” WT/DS546/R (8 February 2022) at Paragraph 8.1.

¹⁷ WTO, “United States – Safeguard Measure on Imports of Large Residential Washers – Panel Report,” WT/DS/DS546/12 (1 May 2023). At the DSB meeting on April 28, 2023, the United States stated its disagreement with several of the panel’s findings, including its findings with respect to “unforeseen developments” and the Commission’s definition of the domestic industry.

¹⁸ WTO, “United States – Safeguard Measure on Imports of Large Residential Washers – Notification of a Mutually Agreed Solution,” WT/DS/DS546/13 (1 May 2023).

Previous and related investigations

Antidumping and countervailing duty investigations on LRWs

The Commission has conducted two import injury investigations concerning LRWs as summarized below.

LRWs from South Korea and Mexico (USITC Inv. Nos. 701-TA-488 and 731-TA-1199-1200)

On December 30, 2011, Whirlpool filed a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of imports of LRWs from South Korea and Mexico sold in the United States at less-than-fair-value (“LTFV”) and subsidized by the Government of South Korea. On December 26 and 27, 2012, the Department of Commerce (“Commerce”) determined that imports of certain LRWs from South Korea and Mexico, respectively, were being sold at LTFV and that countervailable subsidies were being provided to producers and exporters of LRWs from South Korea.¹⁹ On February 8, 2013, the Commission determined that the domestic industry was materially injured by reason of imports of certain LRWs from South Korea and Mexico sold at LTFV and subsidized by the Government of South Korea.²⁰ Effective February 15, 2013, Commerce issued antidumping and countervailing duty orders on those imports.^{21 22}

¹⁹ 77 FR 75988, December 26, 2012; 77 FR 76288, December 27, 2012. Dumping margins ranged from 9.29 to 82.41 percent for imports from South Korea and 36.52 to 72.41 percent for imports from Mexico. The subsidy rates ranged from 1.85 to 72.30 percent for imports from South Korea.

²⁰ 78 FR 10636, February 14, 2013.

²¹ 78 FR 11148, February 15, 2013; and 78 FR 11154, February 15, 2013.

²² The scope of the antidumping and countervailing duty orders on LRWs from South Korea and Mexico is broader than the scope of the safeguard measure on LRWs in that the orders covered three products specifically excluded from the safeguard measure: (1) top load LRWs with a permanent split capacitor motor, belt drive, and flat wrap spring clutch; (2) front load LRWs with a controlled induction motor and belt drive; and (3) front load LRWs with a cabinet width of more than 28.5 inches. Specifically, products covered by the orders are all large residential washers and certain subassemblies thereof. For purposes of the orders, the term “large residential washers” denotes all automatic clothes washing machines, regardless of the orientation of the rotational axis, except as noted below, 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).

Also covered in the scope covered by the South Korea and Mexico proceeding are certain subassemblies used in large residential washers, namely: (1) all assembled cabinets designed for use in large residential washers which incorporate, at a minimum: (a) at least three of the six cabinet surfaces and (b) a bracket; (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 (continued...)

On April 9, 2018, the Commission determined that it would conduct full five-year reviews of the orders on LRWs from South Korea and Mexico.²³ On May 10, 2018, Commerce determined that revocation of the antidumping duty order on imports of LRWs from Mexico would be likely to lead to continuation or recurrence of dumping.²⁴ On October 18, 2018, Commerce determined that revocation of the antidumping duty order on imports of LRWs from South Korea would be likely to lead to continuation or recurrence of dumping.²⁵ On April 24, 2019, the Commission completed reviews of the subject orders and determined that revocation of the antidumping and countervailing duty orders on LRWs from South Korea would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time and that revocation of the antidumping duty order on LRWs from Mexico would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.²⁶ Effective February 15, 2019, Commerce revoked the antidumping and countervailing duty orders on LRWs from South Korea, and effective May 6, 2019, Commerce issued a continuation of the antidumping duty order on imports of LRWs from Mexico.²⁷

Commerce has completed five administrative reviews regarding the antidumping duty order on LRWs from South Korea and completed one administrative review regarding the countervailing duty order on LRWs from South Korea. Commerce has completed nine administrative reviews regarding the antidumping duty order on LRWs from Mexico.²⁸ The results of these reviews are shown in tables I-2 through I-4.

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 subassemblies.

Excluded from the scope are stacked washer-dryers and commercial washers. Also excluded from the scope are automatic clothes washing machines with a vertical rotational axis and a rated capacity of less than 3.70 cubic feet.

²³ 83 FR 46757, September 14, 2018.

²⁴ 83 FR 21764, May 10, 2018.

²⁵ 83 FR 52803, October 18, 2018.

²⁶ Large Residential Washers from Korea and Mexico (Inv. Nos. 701-TA-488 and 731-TA-1199-1200 (Review), USITC Publication 4882, April 2019.

²⁷ 84 FR 19763, May 6, 2019.

²⁸ On April 11, 2023, Commerce initiated an administrative review of the antidumping duty order on LRWs from Mexico, for De C.V. Electrolux Home Products Inc.; Electrolux Home Products De Mexico, S.A.; and Electrolux Home Products, Corp. NV for the period February 1, 2022 through January 31, 2023. 88 FR 21609, April 11, 2023.

Table I-2**LRWs: Administrative reviews of the countervailing duty order on imports of LRWs from South Korea**

Date results published	Period of review	Producer or exporter	Subsidy rate (percent)
September 15, 2015, 80 FR 55336	6/5/2012—12/31/2013	Daewoo Electronics Corporation	81.91
September 15, 2015, 80 FR 55336	6/5/2012—12/31/2013	Samsung Electronics Co., Ltd	34.77

Source: Cited Federal Register notices.

Table I-3**LRWs: Administrative reviews of the antidumping duty order on imports of LRWs from South Korea**

Date results published	Period of review	Producer or exporter	Weighted average margin (percent)
September 15, 2015, 80 FR 55595	8/3/2012—1/31/2014	Daewoo Electronics Corporation	79.11
September 15, 2015, 80 FR 55595	8/3/2012—1/31/2014	LG Electronics, Inc.	1.52
November 5, 2015, 80 FR 68508 (amended final results)	8/3/2012—1/31/2014	LG Electronics, Inc.	1.38
September 15, 2015, 80 FR 55595	8/3/2012—1/31/2014	Samsung Electronics Co., Ltd.	82.35
September 12, 2016, 81 FR 62715	2/1/2014-1/31/2015	LG Electronics, Inc.	1.62
September 12, 2017, 82 FR 42788	2/1/2015—1/31/2016	LG Electronics, Inc.	0.00
January 31, 2018, 83 FR 4467	2/1/2016—1/31/2017	LG Electronics, Inc.	0.64
February 26, 2019, 84 FR 6131	2/1/2017—1/31/2018	LG Electronics, Inc.	0.00

Source: Cited Federal Register notices.

Table I-4**LRWs: Administrative reviews of the antidumping duty order on imports of LRWs from Mexico**

Date results published	Period of review	Producer or exporter	Weighted average margin (percent)
September 15, 2015 80 FR 55335	8/3/2012—1/31/2014	Electrolux Home Products Corp. NV/Electrolux Home Products de Mexico, S.A. de C.V. ("Electrolux")	6.45
November 5, 2015, 80 FR 68510 (amended final results)	8/3/2012—1/31/2014	Electrolux	6.22
September 12, 2016, 81 FR 62714	2/1/2014—1/31/2015	Electrolux	2.47
July 12, 2017, 82 FR 32169	2/1/2015—1/31/2016	Electrolux	3.67
March 19, 2018, 83 FR 11963	2/1/2016—1/31/2017	Electrolux	72.41
October 1, 2019, 84 FR 52063	2/1/2017—1/31/2018	Electrolux	2.25
December 16, 2020, 85 FR 81450	2/1/2018—1/31/2019	Electrolux	3.53
86 FR 67444, November 26, 2021	2/1/2019—1/31/2020	Electrolux	2.06
May 4, 2022, 87 FR 26341	2/1/2020—1/31/2021	Electrolux	0.00
May 18, 2023, 88 FR 31676	2/1/2021—1/31/2022	Electrolux	1.89

Source: Cited Federal Register notices.

Note: On April 18, 2018, Electrolux requested NAFTA binational panel review of Commerce's final results of the fourth administrative review of the antidumping duty order on LRWs from Mexico. On April 26, 2019, the Binational Panel issued its Interim Decision and Order in the matter of Large Residential Washers from Mexico. The Binational Panel affirmed in part and remanded in part the United States Department of Commerce's final determination in the antidumping 2016-2017 administrative review. 86 FR 23344, May 3, 2021.

LRWs from China (USITC Inv. No. 731-TA-1306)

On December 16, 2015, Whirlpool filed a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of LRWs from China. Following notification of a final determination by Commerce that imports of LRWs from China were being sold at LTFV, the Commission determined on January 30, 2017, that a domestic industry was materially injured by reason of LTFV imports of LRWs from China.²⁹ Commerce published an antidumping duty order on LRWs from China on February 6, 2017.³⁰

On April 8, 2022, the Commission determined that it would conduct an expedited review of the antidumping duty order on LRWs from China.³¹ On May 6, 2022, Commerce determined that revocation of the antidumping duty order on LRWs from China would be likely to lead to continuation or recurrence of dumping.³² On August 16, 2022, the Commission determined that revocation of the order would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.³³ Effective August 30, 2022, Commerce issued a continuation of the antidumping duty order on imports of LRWs from China.³⁴

The scope of the antidumping duty order on LRWs from China is identical to the scope of the safeguard measure on LRWs.³⁵

Dumping margins under this order are shown in Table I-5. There have been no administrative reviews since the imposition of the order on imports from China.

Table I-5
LRWs: Commerce's dumping margins for producers/exporters in China

Manufacturer/exporter	Dumping margin (percent)
LG Electronics/Nanjing LG-Panda Appliances	38.43
Samsung Electronics /Suzhou Samsung Electronics	57.37
All others	49.72

Source: 82 FR 9371, February 6, 2017.

²⁹ 82 FR 9223, February 3, 2017.

³⁰ 82 FR 9371, February 6, 2017.

³¹ 87 FR 38781, June 29, 2022.

³² 87 FR 27101, May 6, 2022.

³³ 87 FR 51446, August 22, 2022.

³⁴ 87 FR 52904, August 30, 2022.

³⁵ 82 FR 9371, February 6, 2017.

Antidumping and countervailing duty investigations on certain raw materials

Several antidumping duty and countervailing duty orders are also currently in effect on certain raw materials used in the production of LRWs as summarized below.

Cold-rolled steel

In 2016, Commerce issued antidumping duty and countervailing duty orders that covered imports of cold-rolled steel from Brazil, China, India, Japan, South Korea, and United Kingdom.³⁶ Following affirmative determinations in the five-year reviews by Commerce and the Commission with respect to the orders on China, India, Japan, South Korea, and the United Kingdom and negative determinations by the Commission with respect to the orders on Brazil, effective August 25, 2022, Commerce issued a continuation of the orders on imports of cold-rolled steel from China, India, Japan, South Korea, and the United Kingdom and revoked the orders on imports of cold-rolled steel from Brazil.³⁷ No other antidumping duty or countervailing duty orders on cold-rolled steel are currently in effect.

Stainless steel sheet and strip

Six antidumping duty and countervailing duty orders are currently in place on imports of stainless steel sheet and strip from Japan, South Korea, Taiwan, and China as summarized in table I-6.

³⁶ 81 FR 45956, July 14, 2016 (antidumping duty order on Japan); 81 FR 45960, July 14, 2016 (countervailing duty order on China); 81 FR 64436, September 20, 2016 (countervailing duty orders on Brazil, India, and South Korea); and 81 FR 64432, September 20, 2016 (antidumping duty orders on Brazil, India, South Korea, and the United Kingdom).

³⁷ 87 FR 52360, August 25, 2022.

Table I-6**Stainless steel sheet and strip: Previous and related Commission proceedings and status of orders**

Date	Number	Country	ITC Original Determination	Current Status of Order
1998	731-TA-800	Japan (antidumping duty)	Affirmative	Order date: 7/27/99. Order continued 10/3/17 following third five-year review. Fourth five-year review ongoing.
1998	701-TA-382	South Korea (countervailing duty)	Affirmative	Order date: 8/6/99. Order continued 10/3/17 following third five-year review. Fourth five-year review ongoing.
1998	731-TA-801	South Korea (antidumping duty)	Affirmative	Order date: 7/27/99. Order continued 10/3/17 following third five-year review. Fourth five-year review ongoing.
1998	731-TA-803	Taiwan (antidumping duty)	Affirmative	Order date: 7/27/99. Order continued 10/3/17 following third five-year review. Fourth five-year review ongoing.
2016	701-TA-557	China (antidumping duty)	Affirmative	Order date: 4/3/17. Order continued 11/4/22 following first five-year review.
2016	731-TA-1312	China (countervailing duty)	Affirmative	Order date: 4/3/17. Order continued 11/4/22 following first five-year review.

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.

Global Developments

After the United States imposed the antidumping duty orders on Mexico and South Korea and a countervailing duty order on South Korea in 2013, LG Electronics, Inc. (“LG Korea”) and Samsung Electronics, Inc. (“Samsung Korea”) shifted LRW production for the U.S. market from South Korea to China. Samsung Korea also moved LRW production from Mexico to China. As a result, China became the largest global supplier of LRWs during 2014-16. After the United States imposed the antidumping duty order on China in 2017, LG Korea and Samsung Korea shifted LRW production from China to Thailand and Vietnam.³⁸ Exports of LRWs from Mexico, South Korea, and China to the United States declined following the issuance of the orders.

Table I-7 presents the largest global export sources for Harmonized System (“HS”) subheading 8450.20 (household- or laundry-type washing machines with a dry linen capacity exceeding 10 Kg) from 2017-22 in descending order by value in 2022. From 2017-22, China’s share of global exports rose from 12.2 percent to 31.9 percent, with China being the largest global exporter from 2019-22. In 2017, Vietnam had been the largest global exporter, with 30.6 percent of global exports, but Vietnam’s share decreased irregularly throughout the period to 11.8 percent in 2022 (Vietnam was the third largest exporter in 2022). In 2022, South Korea was the second largest exporter, with 12.8 percent of 2022 global exports. Thailand was the fourth largest global exporter in 2022, with 9.0 percent of global exports. The United States was the fifth largest source of global exports in 2022, representing 7.8 percent of the 2022 total. The United States’ global export share also remained fairly stable from 2017-19, at between 6.6 and 9.5 percent. Lastly, Mexico was the sixth largest source of global exports in 2022, representing 4.4 percent of the global total.

³⁸ Samsung Korea had stated that its factories in Mexico and South Korea had produced washers for not only the U.S. market but also other countries. Each factory had kept most its facilities and continued to use them to produce washers for other markets, as well as other laundry products. Samsung Korea reported that the equipment in those factories was largely retained and that Samsung Korea reviews the efficiency of its global operations. Samsung Korea also previously stated that moving equipment is unusual and would be much more difficult for the types of metal presses and injection molding equipment installed at its new plant in Newberry, South Carolina. Monitoring publication, p. I-9.

Table I-7**Household- or laundry-type washing machines, with a dry linen capacity exceeding 10 Kg:
Global exports by major sources and period**

Value (1,000 dollars)

Exporter	2017	2018	2019	2020	2021	2022
China	542,668	596,765	738,176	980,529	1,374,967	1,332,800
South Korea	545,742	380,016	342,237	310,953	669,374	534,114
Vietnam	1,357,018	743,939	698,071	842,704	642,864	493,445
Thailand	435,734	392,758	424,356	401,045	427,231	377,900
United States	331,102	328,221	343,863	295,411	291,761	325,179
Mexico	393,144	312,174	158,393	135,180	181,885	183,976
Sweden	63,587	84,259	71,300	62,791	67,950	90,444
Poland	13,507	11,964	45,993	29,689	45,193	84,398
Czech Republic	99,393	107,873	96,221	70,799	84,253	82,741
Germany	82,861	77,996	76,218	60,349	60,879	69,650
Spain	61,763	67,775	60,626	37,568	51,064	54,983
Italy	28,393	29,073	60,691	43,604	39,877	33,533
All other exporters	476,079	485,596	510,162	454,043	477,073	517,270
All exporters	4,430,990	3,618,409	3,626,306	3,724,666	4,414,370	4,180,433

Table continued.

Table I-7 Continued**Household- or laundry-type washing machines, with a dry linen capacity exceeding 10 Kg:
Global exports by major sources and period**

Shares in percent

Exporter	2017	2018	2019	2020	2021	2022
China	12.2	16.5	20.4	26.3	31.1	31.9
South Korea	12.3	10.5	9.4	8.3	15.2	12.8
Vietnam	30.6	20.6	19.3	22.6	14.6	11.8
Thailand	9.8	10.9	11.7	10.8	9.7	9.0
United States	7.5	9.1	9.5	7.9	6.6	7.8
Mexico	8.9	8.6	4.4	3.6	4.1	4.4
Sweden	1.4	2.3	2.0	1.7	1.5	2.2
Poland	0.3	0.3	1.3	0.8	1.0	2.0
Czech Republic	2.2	3.0	2.7	1.9	1.9	2.0
Germany	1.9	2.2	2.1	1.6	1.4	1.7
Spain	1.4	1.9	1.7	1.0	1.2	1.3
Italy	0.6	0.8	1.7	1.2	0.9	0.8
All other exporters	10.7	13.4	14.1	12.2	10.8	12.4
All exporters	100.0	100.0	100.0	100.0	100.0	100.0

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 April 11, 2023, and official global imports statistics from Vietnam under HS subheading 8450.20 as reported by Global Trade Information Services, Inc., Global Trade Atlas, accessed April 17, 2023.

Note: Data are likely overstated with respect to in-scope merchandise and include non-covered products (e.g., commercial washers and stacked washer-dryers).

Summary data and data sources

A summary of data collected in this investigation is presented in appendix C, table C-1.³⁹ Summary data from the original safeguard proceeding, the safeguard monitoring proceeding, and the safeguard extension proceeding are presented in Appendix D. Except as noted, U.S. industry data are based on questionnaire responses of five firms that accounted for virtually all U.S. production of LRWs during 2022. U.S. imports are based on the questionnaire responses of five firms that accounted for virtually all U.S. imports of LRWs during 2022.

³⁹ The term “continuous producers” used in table C-1 and throughout the report refers to those U.S. producers that have been producing LRWs since before the petition for section 201 relief was filed in 2017, including Whirlpool, Haier U.S. Appliances Solutions d/b/a GE Appliances (“GE Appliances”), and Alliance Laundry Systems LLC (“Alliance”). The term “new entrants” refers to those U.S. producers that started producing LRWs after the petition for section 201 relief was filed in 2017, including LG Electronics USA, Inc. (“LG USA”) and Samsung Electronics Home Appliances America, LLC (“Samsung”).

U.S. market participants

U.S. producers

The Commission issued U.S. producers' questionnaires to six firms, five of which provided the Commission with information on their select residential washer operations.⁴⁰ These firms are believed to account for virtually all U.S. production of LRWs in 2022.⁴¹ Table I-8 lists U.S. producers of select residential washers, their production locations, and share of total U.S. production of select residential washers in 2022.

Table I-8
Select residential washers: U.S. producers, location of production, and share of reported production, 2022

Shares in percent

Firm	Production location(s)	Share of production
Alliance	Ripon, WI Manitowoc, WI	***
GE Appliances	Louisville, KY	***
Whirlpool	Clyde, OH	***
Continuous producers	Various	***
LG USA	Clarksville, TN	***
Samsung	Newberry, SC	***
New entrants	Various	***
All firms	Various	100.0

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

⁴⁰ In addition to in-scope merchandise (LRWs and covered parts), the like or directly competitive domestic product includes two out-of-scope products: (1) top load residential washers with a permanent split capacitor ("PSC") motor ("PSC/belt top load") and (2) front load residential washers with a controlled induction motor ("CIM")/belt drive ("CIM/belt front load"). These two out-of-scope products are collectively referred to as "expansion merchandise." The term "select residential washers" includes in-scope LRWs (full units) and expansion merchandise (i.e., the like or directly competitive domestic product, excluding covered parts).

⁴¹ *** did not submit a response to the U.S. producers' questionnaire but reported that it produced the following quantities of LRWs, in number of units: *** in 2018 and 2019, *** in 2020, *** in 2021, and *** in 2022. Emails from ***, September 28, 2020, and ***, March 22, 2023.

U.S. producers' ownership and related or affiliated firms

The Commission asked U.S. producers to identify their owners and any related or affiliated firms involved in the production or importation of LRWs; their responses are presented in table I-9. As shown, four U.S. producers (***) are related to foreign producers of LRWs, and three firms (***) are related to U.S. importers of LRWs. In addition, one U.S. producer's (***) U.S.-based parent company (***) imported covered merchandise, and one U.S. producer (***) imported residential washers (***) not covered by the safeguard measure.

Table I-9

Select residential washers: U.S. producers' ownership, related and/or affiliated firms

[illegible]

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

U.S. producers' profiles

*Alliance*⁴²

Alliance is a privately held corporation that was founded in 1908 and is headquartered in Ripon, Wisconsin. The company has manufacturing facilities in the United States, China, and the Czech Republic. The company produces washers and dryers for coin-operated laundries and multi-housing laundries, as well as residential washers. Alliance produces and markets its residential washers under the Speed Queen brand name. Alliance also manufactures products under the brand names Heusch, IPSO, Primus, and UniMac. Alliance reported ***, and the acquisition of Primus Company in 2014. In June 2015, Alliance announced that it had obtained \$400 million in financing to assist in growing the company in both North America and Europe. In June 2015, Alliance undertook a \$46 million expansion, including installation of a 1,500-ton transfer press for its Speed Queen residential washing machines. In May 2016, Alliance announced a \$62.6 million expansion of its manufacturing campus, adding 225,000 square feet for a new North America sales and marketing headquarters and the conversion of an existing warehouse into a manufacturing facility. In March 2018, Alliance also announced an investment of approximately \$50 million to build a new manufacturing plant in Thailand, with construction to begin in April 2018 and production to begin in early 2019. In August 2019, Alliance purchased an existing 330,000 square foot plant in Manitowoc, Wisconsin, and planned to invest \$30 million in the facility to produce washing machine parts for its Ripon facility beginning in September 2019. In April 2021, Alliance announced the acquisition of Chicago-based D&M Equipment Co., which would represent the Speed Queen brand.⁴³

⁴² Unless otherwise noted, information is from Extension publication, pp. III-1 – III-2.

⁴³ "Alliance Laundry Systems Announces Its Third Acquisition of 2021," PRNewswire, April 7, 2021. <https://www.prnewswire.com/news-releases/alliance-laundry-systems-announces-its-third-acquisition-of-2021-301264403.html>

GE Appliances⁴⁴

GE Appliances was a division of General Electric (“GE”) until June 2016, when it was sold to the Chinese company Qingdao Haier Co., Ltd. (“Haier”).

In 2010, GE Appliances initiated a \$150 million investment at its Louisville, Kentucky, facility (“Appliance Park”) to produce top load and front load LRWs in the United States. In 2012, GE Appliances began producing a broader range of top load LRWs at Appliance Park, where it had previously produced only top load LRWs with a capacity of under 3.7 cubic feet. In 2013, GE Appliances began production of front load LRWs at Appliance Park.

As part of a multi-year restructuring to focus on its core industrial businesses, in September 2014, GE announced that it was selling its appliances division to AB Electrolux of Stockholm, Sweden. The U.S. Department of Justice filed to stop the merger in July 2015, arguing that it would lead to less competition and higher prices for buyers of appliances. On December 7, 2015, GE announced that it had terminated its agreement to sell its appliances division to Electrolux and would pursue other options to sell the division. On January 15, 2016, GE announced that it had entered into a definitive agreement to sell its appliances division to Haier. On June 6, 2016, GE announced that it had completed the sale of its appliances division, GE Appliances, to Haier for \$5.6 billion. Thus, GE Appliances is currently a wholly owned subsidiary of Haier. The deal included the stake of 48.4 percent that GE Appliances owns in Mabe, a Mexican appliances company that manufactures washers. In October 2018, Haier announced that it would invest \$200 million to expand GE Appliance’s washer and dishwasher operations in Appliance Park.

The Haier Group is a large multinational manufacturer and distributor of electronics and home appliances headquartered in Qingdao, China. In 2017, Haier announced that it would expand its washer production in China by building a plant in Hefei, the capital of East China’s Anhui province, which has the ability to produce three million units annually. In 2019, Haier opened a plant in Naberezhnye Chelny, Russia, with capacity to produce 500,000 units of “small” residential washers annually.

In October 2021, GE Appliances announced that it would invest \$450 million at Appliance Park to boost capacity and launch new products.⁴⁵ The investment, which is expected

⁴⁴ Unless otherwise noted, information is from Extension publication, pp. III-2 – III-3.

⁴⁵ “GE Appliances announces \$450 million investment in Kentucky,” AP News, October 28, 2021. <https://apnews.com/article/business-kentucky-louisville-93098f433858a218d8dd7f1eac8bbfc7>

to add more than 1,000 new jobs by year-end 2023, includes an additional line shift for top load washers and the introduction of a new top load washer that includes a built-in voice assistant.⁴⁶

LG USA⁴⁷

LG Korea is headquartered in Seoul, Korea, and operates four business units: (1) home entertainment, (2) mobile communications, (3) home appliances and air solutions, and (4) vehicle components. LG Korea produces an array of products such as washing machines, flat panel televisions, mobile cellular devices, air conditioners, and refrigerators. The firm employs 75,000 employees worldwide and had reported global sales of 83.5 trillion Korean won (\$64.2 billion) in 2022.⁴⁸

Since 2012, LG Korea has produced LRWs within its home appliances and air solutions business unit in Korea and at its affiliates in China, Thailand, and Vietnam. The company began exporting LRWs from Thailand and Vietnam in ***.

In February 2017, LG Korea announced that it would open a U.S. production plant for LRWs in Clarksville, Tennessee. LG USA began production of subject LRWs in late 2018. Initial production began in October 2018, with plans to be ***. Although LG USA ***, LG USA produced *** units in 2019. LG USA's production of LRWs has since increased, reaching *** units in 2020 and 2021.⁴⁹ In April 2021, LG USA announced a \$20.5 million investment to expand its operations to meet U.S. demand for washing machines.⁵⁰

⁴⁶ "New details on GE Appliances' \$450 million investment in Louisville," GE Appliances press release, February 9, 2022. <https://pressroom.geappliances.com/news/new-details-on-ge-appliances-450-million-investment-in-louisville>

⁴⁷ Unless otherwise noted, information is from Extension publication, p. III-3, and Certain Large Residential Washers from Korea and Mexico, Investigation Nos. 701-TA-488 and 731-TA-1199-1200 (Review), Confidential Report, INV-RR-008, March 15, 2019.

⁴⁸ LG Korea, "Financial Information," undated, <https://www.lg.com/global/investor-relations-financial-info>, retrieved June 6, 2023.

⁴⁹ LG USA's U.S. producers' questionnaire response, II-6.

⁵⁰ "LG Expands Tennessee Laundry Factory Operations to Support Unprecedented U.S. Demand," LG press release, April 14, 2021. <https://www.lg.com/us/press-release/lg-expands-tennessee-laundry-factory-operations-to-support-unprecedented-us-demand>

Samsung⁵¹

Samsung Korea is headquartered in Gyeonggi-do, Korea, and offers LRWs under its “DX” (Device eXperience) division. This division also produces TVs, monitors, refrigerators, air conditioners, handheld products, telecommunications network systems, and computers.⁵² Samsung Korea and its subsidiaries reported global revenue of \$234.1 billion in 2022.⁵³ The firm produces LRWs in Korea, Mexico, China, Thailand, and Vietnam.

In June 2017, Samsung Korea announced that it would open a production site for LRWs in Newberry, South Carolina, stating it believed its Newberry plant, Samsung Electronics Home Appliances America, LLC (“Samsung”), would be fully operational in ***. Samsung is a fully integrated LRW manufacturing facility employing *** workers as of 2022.⁵⁴ Samsung’s LRW production has increased from *** units in 2018 to *** in 2022.⁵⁵ Samsung closed its Newberry plant temporarily multiple times in 2020 due to COVID-19.

As of June 2022, nearly \$500 million had been invested in Samsung, exceeding the \$380 million planned investment, and Samsung had produced over 4 million washing machines.⁵⁶

⁵¹ Unless otherwise noted, this section is from Extension publication, pp. III-3 – III-4.

⁵² Samsung, Financial Statements, Business Reports, March 7, 2023, <https://images.samsung.com/is/content/samsung/assets/global/ir/docs/2022-4q-Business-Report.pdf>, retrieved June 7, 2023.

⁵³ Samsung, Financial Statements, Full Year 2022, undated, https://images.samsung.com/is/content/samsung/assets/global/ir/docs/2022_con_quarter04_soi_1.pdf, retrieved June 7, 2023.

⁵⁴ Samsung’s U.S. producers’ questionnaire response, question II-9a.

⁵⁵ Samsung’s U.S. producers’ questionnaire response, II-6.

⁵⁶ “Samsung’s Newberry investment nears \$500 million,” Columbia Regional Business Report, June 6, 2022. <https://columbiabusinessreport.com/news/manufacturing/82162/>

Whirlpool⁵⁷

Whirlpool, founded in 1898 and headquartered in Benton Harbor, Michigan, is a manufacturer and marketer of home appliances. In 2022, it reported \$20 billion in annual net sales and 61,000 employees, globally.⁵⁸ The firm has 35 manufacturing facilities in 10 countries as of 2022.⁵⁹ Whirlpool reported its principal products are laundry appliances, refrigerators and freezers, cooking appliances, and dishwashers.⁶⁰ The firm reports earnings by geographic segment, which consist of North America, Latin America, EMEA (Europe, Middle East, and Africa), and Asia. The North American segment produces, markets, and distributes home appliances and portable appliances under a variety of brand names, primarily Whirlpool, Maytag, KitchenAid, Jenn-Air, Amana, Roper, Admiral, Affresh, Gladiator, Inglis, Estate, Acros, and Supermatic, and distributes primarily to retailers, distributors, and builders.

In 2010, Whirlpool began production of front load LRWs in the United States after investing \$100 million to expand its existing facility in Clyde, Ohio. Prior to 2010, Whirlpool supplied front load LRWs to the U.S. market from its facilities in Germany and Mexico.⁶¹ A wholly owned subsidiary, Whirlpool Overseas Manufacturing S.a.r.l. (“Whirlpool Mexico”), ceased exports of LRWs to the United States in July 2012, and currently produces LRWs for sale in non-U.S. markets. Whirlpool also has LRW production in Argentina, Brazil, China, India, and Colombia. The company maintains a large home appliance presence in Europe which includes residential washer production, but not LRW production. ***.⁶² More details can be found in parts III and VII of this report.

⁵⁷ Unless otherwise noted, this section is from Extension publication, p. III-4 – III-5.

⁵⁸ Whirlpool SEC Form 10-K issued February 10, 2023, p. 3.

⁵⁹ Ibid., p. 29

⁶⁰ Ibid., p. 6

⁶¹ Large Residential Washers from China, Inv. No. 731-TA-1306 (Final), USITC Publication 4666, January 2017 (“China final publication”), pp. III-2 – III-3.

⁶² Whirlpool’s U.S. Producers’ questionnaire response, II-2a.

U.S. importers

The Commission issued U.S. importers' questionnaires to 17 firms believed to be importers of LRWs, including all U.S. producers of LRWs. Usable questionnaire responses were received from five firms, representing virtually all U.S. imports of LRWs: Electrolux Home Products, Inc. ("Electrolux"); GE Appliances; LG Electronics Alabama, Inc. ("LG Alabama"); LG USA; and Samsung America.⁶³ As noted, three U.S. producers (***) are related to or are U.S. importers of LRWs.⁶⁴ Table I-10 shows responding importers' locations along with their shares of U.S. imports of LRWs (not including covered parts), as well as their shares of nonsubject imports of top load residential washers with a permanent split capacitor ("PSC") motor ("PSC/belt top load")⁶⁵ and front load residential washers with a controlled induction motor ("CIM")/belt drive ("CIM/belt front load").⁶⁶ As previously noted, PSC/belt top load and CIM/belt front load washers are collectively referred to as "expansion merchandise" and expansion washers plus LRWs are collectively referred to as "select residential washers." Table I-11 shows responding importers' locations and shares of U.S. imports of covered parts⁶⁷ in 2022.

⁶³ Additionally, six firms submitted responses certifying that they had not imported LRWs since January 1, 2020: ***.

⁶⁴ ***.

⁶⁵ These products, which are not within the scope, are automatic clothes washing machines that meet all the following conditions: (1) have a vertical rotational axis; (2) are top loading; (3) have a drive train consisting, inter alia, of (a) a PSC motor, (b) a belt drive, and (c) a flat wrap spring clutch. A "flat wrap spring clutch" is a flat metal spring that, when engaged, links abutted cylindrical pieces on the input shaft with the end of the concentric output shaft that connects to the drive hub. See the section entitled "Scope of the safeguard remedy". In the original safeguard proceeding, the Commission defined the like or directly competitive domestic product as all domestically produced LRWs and covered parts in addition to PSC/belt drive washers and CIM/belt drive washers. Safeguard publication, p. 10.

⁶⁶ These products, which are not within the scope, are automatic clothes washing machines that meet all 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 CIM, and (b) a belt drive. "Front loading" means that access to the basket is from the front of the washer. A CIM is an asynchronous, alternating current (AC), polyphase induction motor. See the section entitled "Scope of the safeguard remedy." In the original safeguard proceeding, the Commission defined the like or directly competitive domestic product as all domestically produced LRWs and covered parts in addition to PSC/belt drive washers and CIM/belt drive washers. Safeguard publication, p. 10.

⁶⁷ Covered parts 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. See the section entitled "Scope of the safeguard remedy".

Table I-10

Select residential washers: U.S. importers, their headquarters, and share of total imports within a given source by firm, 2022

Shares in percent

Firm	Headquarters	LRWs from China	LRWs from Mexico	LRWs from South Korea	LRWs from Thailand	LRWs from Vietnam
Electrolux	Charlotte, NC	***	***	***	***	***
GE Appliances	Louisville, KY	***	***	***	***	***
LG Alabama	Huntsville, AL	***	***	***	***	***
LG USA	Englewood Cliffs, NJ	***	***	***	***	***
Samsung America	Ridgefield Park, NJ	***	***	***	***	***
All firms	Various	***	***	100.0	100.0	100.0

Table continued.

Table I-10 Continued

Select residential washers: U.S. importers, their headquarters, and share of total imports within a given source by firm, 2022

Shares in percent

Firm	LRWs from all other sources	LRWs from any import source	PSC/belt top load	CIM/belt front load	Select residential washers
Electrolux	***	***	***	***	***
GE Appliances	***	***	***	***	***
LG Alabama	***	***	***	***	***
LG USA	***	***	***	***	***
Samsung America	***	***	***	***	***
All firms	100.0	100.0	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: Select residential washers include in-scope LRWs (full units) plus out-of-scope top load residential washers with PSC/belt drive/clutch, and out-of-scope front load residential washers with CIM/belt drive (i.e., the like or directly competitive domestic product, excluding covered parts). Data presented in this table do not include covered parts.

Table I-11

Covered parts: U.S. importers, their headquarters, and share of total imports within a given source by firm, 2022

Shares in percent

Firm	Headquarters	China	Mexico	South Korea	Thailand	Vietnam	All other sources	Any import source
Electrolux	Charlotte, NC	***	***	***	***	***	***	***
GE Appliances	Louisville, KY	***	***	***	***	***	***	***
LG Alabama	Huntsville, AL	***	***	***	***	***	***	***
LG USA	Englewood Cliffs, NJ	***	***	***	***	***	***	***
Samsung America	Ridgefield Park, NJ	***	***	***	***	***	***	***
All firms	Various	100.0	***	100.0	100.0	100.0	***	100.0

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

Note: Zeroes, null values, and undefined calculations are suppressed and shown as “---”.

As shown in table I-10, *** accounted for all U.S. imports of LRWs from *** in 2022 (*** units). *** also reported most U.S. imports of LRWs from *** in 2022; *** percent of imports from Thailand (*** units) and *** percent of imports from Vietnam (*** units). With respect to reasons for importing, *** indicated that ***.

*** accounted for the remainder of 2022 imports of LRWs from ***— *** percent of the imports from *** (*** units) and *** percent of the imports from *** (*** units). With respect to reasons for importing, *** indicated that it ***. *** reported *** from ***, which displays as *** percent of the imports of LRWs from all other sources in table I-10. *** of LRWs were reported from ***.

*** accounted for the vast majority of nonsubject imports of PSC/belt top load washers in 2022 (*** percent or *** units) with *** reporting the remainder (*** percent or *** units). *** reported that all its imports of PSC/belt top load washers were from its affiliate ***,

while *** reported its imports of PSC/belt top load washers were from ***. *** accounted for most imports of CIM/belt front load washers in 2022 (*** percent or *** units) with *** accounting for the remainder (*** percent or *** units). *** reported its imports of CIM/belt front load washers were from ***, while *** reported its imports of CIM/belt front load washers were from ***. *** indicated that ***).

When looking at imports of select residential washers in 2022 (i.e., combined in-scope LRWs and out-of-scope expansion washers), *** accounted for the most imports (*** percent of the total or *** units), followed by *** (*** percent or *** units), *** (*** percent or *** units), and Electrolux (*** percent or *** units). *** also reported a small number of imports of select residential washers in 2022 (*** percent of the total).

As shown in table I-11, *** of the five firms reported imports of covered parts in 2022: ***. With respect to reasons for importing, *** indicated that ***. *** reported imports of covered parts from ***. *** reported the most imports of parts from South Korea (*** percent of total imports from South Korea or *** parts). *** reported most of the imports of parts from *** — *** percent of imports of parts from China (*** parts), *** percent of imports of parts from Thailand (*** parts), and *** percent of imports of parts from Vietnam (*** parts). (*** imports of covered parts were reported from ***).

The product

Scope of the safeguard remedy

The President's remedy covered the following merchandise:⁶⁸

- (a) automatic clothes washing machines, regardless of the orientation of the rotational axis, each with a cabinet width (measured from its widest point) of at least 62.23 cm and no more than 81.28 cm;*
- (b) all cabinets, or portions thereof, designed for use in washers, and all assembled baskets designed for use in washers that incorporate, at a minimum, a side wrapper, a base, and a drive hub;*
- (c) all assembled tubs designed for use in washers that incorporate, at a minimum, a tub and a seal;*
- (d) any combination of the foregoing parts or subassemblies.*

Specifically excluded from the scope are

(A) all stacked washer-dryers and all commercial washers:

- (i) 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.*
- (ii) The term "commercial washer" denotes an automatic clothes washing machine designed for the "pay per use" segment meeting either of the following two definitions:*
 - (aa) (I) it contains payment system electronics;*
 - (II) it is configured with an externally mounted steel frame at least 15.24 cm 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);*
 - (III) 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*
 - (IV) the console containing the user interface is made of steel and is assembled with security fasteners; or*
 - (bb) (I) it contains payment system electronics;*
 - (II) 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*

⁶⁸ 83 FR 3553, January 25, 2018.

a bona fide payment acceptance device such as an electronic credit card reader;

(III) 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

(IV) the console containing the user interface is made of steel and is assembled with security fasteners.

(B) automatic clothes washing machines that meet all of the following conditions:

(i) they have a vertical rotational axis,

(ii) they are top loading; and

(iii) they have a drive train consisting, inter alia, of (aa) a permanent split capacitor motor, (bb) a belt drive and (cc) a flat wrap spring clutch.

(C) automatic clothes washing machines that meet all of the following conditions:

(i) they have a horizontal rotational axis;

(ii) they are front loading; and

(iii) they have a drive train consisting, inter alia, of (aa) a controlled induction motor and (bb) a belt drive.

(D) automatic clothes washing machines that meet all of the following conditions:

(i) they have a horizontal rotational axis;

(ii) they are front loading; and

(iii) they have cabinet width (measured from its widest point) of more than 72.39 cm.

Tariff-rate quota under the safeguard measure

In Presidential Proclamation 9694 issued on January 23, 2018, the President imposed a safeguard measure in the form of a tariff-rate quota (“TRQ”) on imports of LRWs and covered parts for a period of three years and one day, beginning February 7, 2018.⁶⁹ Imports of LRWs and covered parts from Canada were excluded from the measure. Imports of LRWs and covered parts from WTO Member developing countries were also excluded from the measure, as long as imports from the developing country did not exceed 3 percent of total imports and imports from all developing countries with an import share of less than 3 percent do not collectively exceed 9 percent of total imports. No individual country allocations were established for the in-quota quantity under the TRQ. The in-quota amount was to reset on an annual basis.

Under the safeguard measure, imports of LRWs in excess of 1.2 million units annually were to be subject to an additional tariff of 50 percent in the first year, 45 percent in the second year, and 40 percent in the third year, with an in-quota tariff of 20 percent in the first year, 18 percent in the second year, and 16 percent in the third year.⁷⁰ With respect to covered parts, imports in excess of 50,000 units were to be subject to an additional tariff of 50 percent in the first year, imports in excess of 70,000 units were to be subject to a tariff of 45 percent in the second year, and imports in excess of 90,000 units were to be subject to a tariff of 40 percent in the third year, while no additional duty would apply to goods within the in-quota quantity.⁷¹

On May 16, 2019, the President issued Proclamation 9887, which removed Turkey from the list of GSP beneficiary countries and modified the safeguard measure so that imports from Turkey were no longer excluded.⁷² On May 31, 2019, the President issued Proclamation 9902, which removed India from the list of GSP beneficiary countries and modified the safeguard measure so that imports from India were no longer excluded.⁷³

Subsequently, after issuance of the Commission’s monitoring report, the President issued Presidential Proclamation 9979 on January 23, 2020, modifying the TRQ for LRWs for the third quota year by allocating, on a quarterly basis, within-quota quantities of 300,000 washers

⁶⁹ 83 FR 3553, January 25, 2018.

⁷⁰ Ibid.

⁷¹ Ibid. Covered parts include (1) all cabinets or portions thereof; (2) all assembled tubs, incorporating at a minimum a tub and a seal; (3) all assembled baskets incorporating at a minimum a side wrapper, a base, and a drive hub, and (4) any combination of the foregoing parts or subassemblies. Ibid.

⁷² 84 FR 23425, May 21, 2019.

⁷³ 84 FR 26323, June 5, 2019.

per quarter, beginning February 7, 2020.⁷⁴ ⁷⁵ Following the Commission's extension report, the President continued the TRQs for two additional years but with lower tariffs in each year.⁷⁶ Table I-12 presents the tariff rates on safeguard measures on LRWs and covered parts.

Table I-12
LRWs: Safeguard measures on LRWs and covered parts

Item	February 7, 2018 - February 6, 2019	February 7, 2019 - February 6, 2020	February 7, 2020 - February 7, 2021	February 8, 2021 – February 7, 2022	February 8, 2022 – February 7, 2023
Duty on first 1.2 million units of imported finished washers (percent)	20.0	18.0	16.0	15.0	14.0
Duty on all subsequent imports of finished washers (percent)	50.0	45.0	40.0	35.0	30.0
Duty covered parts (percent)	50.0	45.0	40.0	35.0	30.0
Covered parts excluded from duty (units)	50,000	70,000	90,000	110,000	130,000

Note: Beginning February 7, 2020, the third quota year is allocated on a quarterly basis for LRWs, with within-quota quantities of 300,000 washers per quarter.

Source: 83 FR 3553, January 25, 2018; 85 FR 5125, January 28, 2020; HTS Subheadings 9903.45.01, 9903.45.02, 9903.45.05, and 9903.45.06 (Harmonized Tariff Schedule of the United States (2023)).

⁷⁴ 85 FR 5125, January 28, 2020.

⁷⁵ The quarterly TRQ for LRWs for the third quota year (February 7, 2020 – February 7, 2021) allocates the 1.2 million units as follows: 300,000 units from February 7, 2020 – May 6, 2020; 300,000 units from May 7, 2020 – August 6, 2020; 300,000 units from August 7, 2020 – November 6, 2020; 300,000 units from November 7, 2020 – February 6, 2021. 85 FR 5125, January 28, 2020.

⁷⁶ 85 FR 5125, January 28, 2020.

Tariff treatment

Based upon the scope of the safeguard measure, information available to the Commission indicates that the merchandise subject to the safeguard remedy is provided for in the Harmonized Tariff Schedule of the United States (“HTS”) subheading 8450.20.00 and is imported under statistical reporting numbers 8450.20.0040 and 8450.20.0080. Particular LRWs are provided for in HTS subheading 8450.11.00, while specified parts of LRWs are provided for in subheadings 8450.90.20 or 8450.90.60. The 2023 general rate of duty is 1.0 percent for HTS subheading 8450.20.00, 1.4 percent *ad valorem* for HTS subheading 8450.11.00, and 2.6 percent *ad valorem* for HTS subheadings 8450.90.20 and 8450.90.60.⁷⁷ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

⁷⁷ Under the safeguard measure, until its expiration on February 7, 2023, LRWs and covered parts imported under HTS subheadings 8450.11.00 or 8450.20.00 were subject to the quotas and tariff restrictions as shown in table I-12. 86 FR 6541, January 21, 2021.

Section 232

Steel

The relevant HTS subheadings within the scope of this safeguard remedy, 8450.20.00, 8450.11.00, 8450.90.20, and 8450.90.60, were not included in the enumeration of certain steel products subject to the additional 25-percent ad valorem duties under Section 232 of the Trade Expansion Act of 1962, as amended.⁷⁸ However, certain raw materials for producing LRWs, stainless steel sheet and cold-rolled steel, were included among the articles subject to the additional 25-percent ad valorem national-security duties.^{79 80 81}

⁷⁸ Presidential Proclamation 9705, March 8, 2018; 83 FR 11625, March 15, 2018.

⁷⁹ 83 FR 11625, March 15, 2018. See also HTS heading 9903.80.01 and U.S. notes 16(a) and 16(b) OR HTS heading 9903.85.01 and U.S. notes 19(a) and 19(b) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2022) Revision 8, USITC Publication 5345, July 2022 (“Publication 5345”), pp. 99-III-23–99-III-26, 99-III-293. U.S. Customs and Border Protection (“CBP”), “QB 23-601 2023 First Quarter Absolute Quota for Steel Mill Articles of Argentina, Brazil and South Korea,” December 12, 2022, <https://www.cbp.gov/trade/quota/bulletins/qb-23-601-2023>.

⁸⁰ Section 232 import duties on steel articles currently cover all countries of origin except Argentina, Australia, Brazil, Canada, Mexico, and South Korea. Imports from Australia, Canada, and Mexico are exempt from section 232 duties and quotas on steel articles, while imports originating in Argentina, Brazil, and South Korea are exempt from duties but are instead subject to absolute quotas. Imports from EU member countries (effective January 1, 2022), Japan (effective April 1, 2022), and the United Kingdom (effective June 1, 2022) are currently subject to tariff-rate quotas (“TRQs”) for steel articles, and imports that exceed the TRQ limits are subject to the section 232 tariffs. Section 232 import duties on steel articles originating in Turkey were temporarily raised from 25 percent to 50 percent, effective August 13, 2018, but restored to 25 percent effective May 21, 2019. In addition, section 232 duties on steel articles originating in Ukraine are suspended, effective June 1, 2022, to June 1, 2023. 83 FR 11625, March 15, 2018; 83 FR 13361, March 28, 2018; 83 FR 20683, May 7, 2018; 83 FR 25857, June 5, 2018; 83 FR 40429, August 15, 2018; 84 FR 23987, May 23, 2019; 87 FR 11, January 3, 2022; 87 FR 19351, April 1, 2022; 87 FR 33407, June 2, 2022; 87 FR 33591, June 3, 2022.

⁸¹ LG stated that the Section 232 tariffs had not affected its ability to source steel, nor have they affected its U.S. LRW operations. LG reported that it ***. Large Residential Washers: Monitoring Developments in the Domestic Industry, Inv. No. TA-204-013, August 2019. Confidential Report, (“Confidential Monitoring Report”), p. I-8.

Aluminum

The relevant HTS subheadings within the scope of this safeguard remedy, 8450.20.00, 8450.11.00, 8450.90.20, and 8450.90.60, were not included in the enumeration of such aluminum products that are subject to the additional 10-percent ad valorem national-security duties under Section 232 of the Trade Expansion Act of 1962, as amended.⁸² However, aluminum castings, a raw material for producing parts of LRWs, such as transmissions, were included among the articles subject to the additional duties.^{83 84 85}

Section 301

LRWs originating in China, classifiable under in-scope HTS subheadings 8450.11.00, 8450.20.00, 8450.90.20, and 8450.90.60 were part of the fourth enumeration of products subject to Section 301 duties (Tranche 4) subject to additional 10 percent *ad valorem* duties.⁸⁶

⁸² Presidential Proclamation 9704 of March 8, 2018; 83 FR 11619, December 19, 2018.

⁸³ 83 FR 11619, March 15, 2018. See also HTS heading 9903.85.01 and U.S. notes 19(a) and 19(b) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC Publication 5345, pp. 99-III-23–99-III-26, 99-III-293. U.S. Customs and Border Protection (“CBP”), “QB 23-702 2023 Absolute Quota Second Quarter Argentina,” March 10, 2023, <https://www.cbp.gov/trade/quota/bulletins/qb-23-702>; U.S. Customs and Border Protection (“CBP”), “QB 23-711 2023 First and Second Period Tariff Rate Quota (TRQ) for Aluminum Articles of European Union (EU) Member Countries,” March 6, 2023, <https://www.cbp.gov/trade/quota/bulletins/qb-23-711>; U.S. Customs and Border Protection (“CBP”), “QB 23-711 2023 First and Second Period Tariff Rate Quota (TRQ) for Aluminum Articles of European Union (EU) Member Countries,” March 6, 2023, <https://www.cbp.gov/trade/quota/bulletins/qb-23-711>;

⁸⁴ Section 232 import duties on aluminum articles currently cover all countries of origin except Argentina, Australia, Canada, and Mexico. Imports from Australia, Canada, and Mexico are exempt from section 232 duties and quotas on aluminum articles, while imports from Argentina are exempt from duties but are instead subject to absolute quotas. Imports from EU member countries (effective January 1, 2022) and the United Kingdom (effective June 1, 2022) are currently subject to tariff-rate quotas (“TRQs”) for aluminum articles, and imports that exceed the TRQ limits are subject to the section 232 tariffs. 83 FR 11619, March 15, 2018; 83 FR 13355, March 28, 2018; 83 FR 25849, June 5, 2018; 84 FR 23983, May 23, 2019; 85 FR 68709, October 27, 2020; 87 FR 1, January 3, 2022; 87 FR 33583, June 3, 2022.

⁸⁵ LG stated that it ***

⁸⁶ 84 FR 43304, August 20, 2019.

The additional duty rate for goods included Tranche 4 increased from 10 to 15 percent on August 30, 2019.⁸⁷ On February 14, 2020, the additional duty rate decreased from 15 percent to 7.5 percent.⁸⁸ Certain inputs into LRWs may also be subject to additional Section 301 duties.

The like or directly competitive product

To determine whether an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury or the threat thereof, the Commission first defines “the domestic industry producing an article like or directly competitive with the imported article.”⁸⁹ When assessing what constitutes the product(s) that is/are like or directly competitive with the imported article(s), the Commission takes into account such factors as (1) the physical properties of the article, (2) its customs treatment, (3) its manufacturing process (i.e., where and how it is made), (4) its uses, and (5) the marketing channels through which the product is sold. In its safeguard determination, the Commission found that domestically produced LRWs, top load PSC/belt/clutch washers, front load CIM/belt washers, and covered parts were like the imported LRWs and covered parts within the scope of the investigation. Accordingly, the Commission defined the like or directly competitive domestic product as all domestically produced LRWs, top load PSC/belt/clutch washers, front load CIM/belt washers, and covered parts.⁹⁰

⁸⁷ 84 FR 45821, August 30, 2019.

⁸⁸ 85 FR 3741, January 22, 2020.

⁸⁹ 19 U.S.C. § 2252(b)(1)(A).

⁹⁰ The Commission found that domestically produced “out-of-scope” top load PSC/belt drive washers and front load CIM/belt drive washers, both produced by Alliance Laundry Systems, were like, or at least directly competitive with, imports of LRWs within the scope of the investigation. Although imports of these products were expressly excluded from the scope, Whirlpool argued that the Commission should define the like product to include such products, as the Commission had done in its previous antidumping duty investigation regarding LRWs from China, and respondents did not disagree. Noting one difference being that these out-of-scope washers did not possess the high spin speeds or vibration reduction technology of in-scope LRWs possessing direct drive systems, the Commission considered the five factors listed above and found that overall there was a preponderance of similarities (e.g., same customs treatment, same general manufacturing process, and same uses, ***) between top load PSC/belt drive washers and front load CIM/belt drive washers and other LRWs. Safeguard publication, pp. 15-16.

Description and applications⁹¹

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 cabin 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 the 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, 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. To further facilitate cleaning motion, an agitator or impeller is placed in the center of the basket. The difference between these two cleaning technologies is explained as follows.

⁹¹ Extension publication, p. I-24 –I-28.

Figure I-1
LRWs: Top load washers

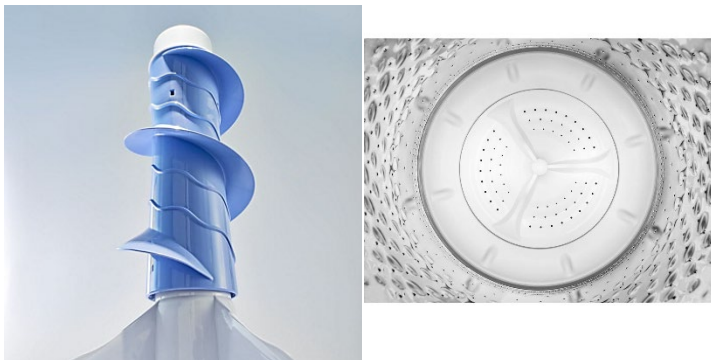


Source: Whirlpool. The washer on the left is more likely to contain an agitator as a means of moving clothes, water, and detergent around the basket. The washer on the right is more likely to contain an impeller.

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 machine's basket. Figure I-2 presents an example of an agitator and an impeller.

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



Source: Whirlpool. An agitator (left) and 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 using 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 “agipellers”), 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 than LRWs with agitators, 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 previously 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 features⁹²

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. Several the features of LRWs are explained below.

Energy Efficiency

Consumers may consider 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”),⁹³ (2) the U.S. Environmental Protection Agency (“EPA”), and (3) the U.S. Department of Energy (“DOE”). All these entities establish standards for identifying energy efficient LRWs based largely on two factors: (1) energy utilization and (2) water consumption. 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 kilowatt-hour of electricity, taking into consideration the total energy consumption of the entire 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.⁹⁴ 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.

⁹² Unless otherwise noted, this section is from the Extension publication.

⁹³ 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 U.S. Environmental Protection Agency. Consortium for Energy Efficiency, Inc., “About,” <https://cee1.org/content/about>, retrieved April 25, 2023.

⁹⁴ 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—January 2017,” January 2017, <https://library.cee1.org/content/cee-super-efficient-home-appliance-initiative-january-2017/>, retrieved April 25, 2023.

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,⁹⁵ technological advances which generate greater energy efficiencies, and product availability.⁹⁶ 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. 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-14 and table I-15, the newer efficiency standards required 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.

⁹⁵ Pursuant to the Energy Policy and Conservation Act of 1975, the DOE sets minimum energy efficiency standards for approximately 50 categories of appliances and equipment used in homes, businesses, and other applications, including LRWs. U.S. Department of Energy, “Appliance and Equipment Standards Program,” retrieved April 25, 2023.

<https://www.energy.gov/eere/buildings/appliance-and-equipment-standards-program/>. See U.S. Department of Energy, Energy Efficiency and Renewable Energy, *Saving Energy and Money with Appliance and Equipment Standards in the United States*, fact sheet, January 2017, <https://www.energy.gov/eere/buildings/articles/appliance-and-equipment-standards-fact-sheet>, retrieved April 25, 2023.

⁹⁶ U.S. Department of Energy, “Energy Star,” <https://www.energy.gov/eere/buildings/energy-star>, retrieved April 25, 2023.

Table I-13

LRWs: Energy efficiency standards (IMEF), January 1, 2021 to Present.
Integrated modified energy factor standards, 2011–23

In cubic feet of laundry that can be washed with one kilowatt-hour of energy; N/A = not applicable; n.p. = not published.

Standard	Efficiency levels, January 1, 2011, to Present	Efficiency levels, March 7, 2015	Efficiency levels, January 1, 2018 to February 5, 2018	Efficiency levels, April 22, 2021 to Present
Federal Minimum: Top load	1.26	1.29	1.57	1.57
Federal Minimum: Front load	1.26	1.84	N/A	1.84
Energy Star: Top load	2	2.06	2.06	2.06
Energy Star: Front load	2	2.38	2.76	2.76
CEE Tier 1	2	2.38	2.76	2.76
CEE Tier 2	2.2	2.74	2.92	2.92
CEE Tier 3	2.4	2.92	n.p.	n.p.
CEE Advanced Tier	n.p.	n.p.	3.1	3.1

Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, *Energy Conservation Program: Energy Conservation Standards for Residential Clothes Washers*, 88 FR 13520, March 3, 2023; Extension publication, p. I-30.

Table I-14

**LRWs: Water efficiency standards (IWF), January 1, 2011 to March 3, 2023:
Integrated water factor standards, 2011–23**

In gallons needed to clear one cubic foot of laundry; N/A = not applicable; n.p. = not published.

Standard	Efficiency levels, January 1, 2011 to March 6, 2015	Efficiency levels, March 7, 2015	Efficiency levels, January 1, 2018 to February 5, 2018	Efficiency levels, April 22, 2021 to Present
Federal Minimum: Top load	9.5	8.4	6.5	6.5
Federal Minimum: Front load	9.5	4.7	N/A	4.7
Energy Star: Top load	6.0	4.3	4.3	4.3
Energy Star: Front load	6.0	3.7	3.2	3.2
CEE Tier 1	6.0	3.7	3.2	3.2
CEE Tier 2	4.5	3.2	3.2	3.2
CEE Tier 3	4.0	3.2	n.p.	n.p.
CEE Advanced Tier	n.p.	n.p.	3.0	3.0

Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Energy Conservation Program: Energy Conservation Standards for Residential Clothes Washers, 88 F.R. 13520, March 3, 2023

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 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., respectively. The DOE requires manufacturers to certify and declare the capacity of their LRWs at the time of sale. Producers of LRWs endeavor to increase the capacity of their LRWs offerings. Whirlpool currently has the largest capacity residential washing machine on the market at 6.2 cf.⁹⁷ LG USA has the second-largest capacity residential washing machine on the market at 5.8 cf, followed by Samsung at 5.6 cf.⁹⁸

Appearance

The appearance of LRWs can vary greatly, including with respect to color, cabinet finish, and decorative elements.

⁹⁷ Dimensions may vary. Lowe’s, “Whirlpool High Efficiency Steam Cycle Impeller Top-Load Washer (White) Energy Star,” <https://www.lowes.com/pd/Whirlpool-6-2-cu-ft-High-Efficiency-Top-Load-Washer-White-ENERGY-STAR/1000060973>, retrieved July 11, 2023; Sears, “Kenmore Elite 31643 6.2 Cu. Ft. Top Load Washer W/ Steam & Triple Action Impeller - Metallic Silver,”

⁹⁸ LG, “Front-load Washers,” <https://www.lg.com/us/front-load-washers>, retrieved April 25, 2023; Samsung, “All Washers,” <https://www.samsung.com/us/home-appliances/washers/all-washers/?capacity=%3E5.0+cu.+ft.>, retrieved April 25, 2023.

LRW platforms⁹⁹

Generally, the manufacture of LRWs involves 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. 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 Appliances 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. Samsung stated, and LG agreed, that a platform likely will have a lifecycle of 5 to 30 years but may be upgraded every 2 to 5 years. LRW manufacturers may have several platforms in operation at a given time and 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 *Large Residential Washers from China*, Whirlpool, GE Appliances, LG, and Samsung agreed that a particular LRW model will typically have a lifecycle of 1-3 years.¹⁰⁰ Whirlpool, GE Appliances, 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.

⁹⁹ Unless otherwise noted, this section is from the Extension publication.

¹⁰⁰ China final publication, p. I-19.

Production process

Generally, there are three main stages to the LRW production process: fabrication, subassembly, and assembly. The fabrication stage involves pressing and molding metal and plastic to form component pieces. The subassembly stage involves assembling or manufacturing pumps, transmission, and tub parts, and painting these parts. The assembly stage involves mounting the pump, transmission, and other subassembly components to form the finished unit. Finally, the finished LRW is packaged and labeled for shipping.¹⁰¹

However, within this general process, manufacturing processes can differ based on levels of automation, the number of prefabricated components, and the scale of operations at a facility. Therefore, this section discusses the manufacturing process separately for certain U.S. LRW producers.

Whirlpool¹⁰²

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 *** units in 2022.¹⁰³ 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. The components for each module originate within five areas in Whirlpool's production plant— materials receiving, cabinet assembly, fabrication support, plastics forming, and machining.

First, the materials department receives all purchased materials, including raw materials and purchased components. The materials department maintains 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 assembled, if necessary. Some components are prefabricated 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

¹⁰¹ Made How, "Washing Machine," www.madehow.com/Volume-1/Washing-Machine.html, retrieved June 6, 2023.

¹⁰² Extension publication, p. I-32.

¹⁰³ Whirlpool's U.S. producer's questionnaire response, II-3a.

doors are typically purchased as an assembly and delivered to the assembly line to be attached to the cabinet.

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 to obtain the required geometry.

Once the tubs are created, 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 by 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 combined 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 to produce electronic devices and assemblies.

Whirlpool produces cabinets, basket drums, and tubs at the Clyde facility. Whirlpool purchases electrical components, 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. Whirlpool stated that *** percent of its LRW components are sourced from the United States and that Whirlpool's Clyde facility is a Foreign Trade Zone.¹⁰⁴

The final assembly consists of integrating the purchased parts and the self-produced subassemblies on an assembly line. The components are assembled in a defined order to

¹⁰⁴ Confidential Monitoring Report, p. I-27.

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. The packaged unit is then shipped to a distribution center.

Samsung¹⁰⁵

Samsung began commercial production of LRWs at its Newberry, South Carolina facility in January 2018. Samsung *** units in 2022.¹⁰⁶ This facility has over 1.5 million square feet. Samsung's Newberry operations are ***.¹⁰⁷ Samsung ***. ***. Samsung has a variety of equipment that is used during the production of its LRWs, ***. Samsung uses ***. The front load washers have a *** while the top load washers have a ***. The backs of the LRW tubs produced in Newberry are ***.

LG USA¹⁰⁸

LG USA began commercial production of LRWs at its Clarksville, Tennessee, facility in October 2018. LG USA *** units in 2022.¹⁰⁹ The main factory building is approximately 1 million square feet with 4 additional support buildings for security, utilities,

¹⁰⁵ Extension publication, p. I-35.

¹⁰⁶ Samsung's U.S. producers' questionnaire response, II-6.

¹⁰⁷ Confidential Monitoring Report, p. I-28.

¹⁰⁸ Confidential Monitoring Report, p. I-29.

¹⁰⁹ LG USA's U.S. producers' questionnaire response, II-3a.

EPS, and hazardous materials storage and recycling. LG USA currently has two main assembly and several sub assembly lines for its top load and front load washers. It also has four parts production departments: press, injection, paint, and EPS. The press department produces *** different parts and has an automated quick die change-out. LG USA's plastic injection department includes ***. LG USA notes that its main assembly line is operated using an intelligent manufacturing system, which is the highest level of systems integration and automation of any LG USA LRW facility, all of which is controlled from an integrated control center. LG USA's EPS department produces inhouse packaging material.¹¹⁰

¹¹⁰ Monitoring publication, p. I-29.

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

U.S. market characteristics

Four firms account for the vast majority of U.S. supply of LRWs: GE Appliances, LG USA, Samsung, and Whirlpool. New entrants LG USA and Samsung primarily imported LRWs during 2017, but the majority of their U.S. shipments were domestically produced during 2018-2022. LRWs are sold mostly to retailers. Suppliers of LRWs compete on the basis of price, as well as on discounts and flooring space at retailers.¹ Apparent U.S. consumption of selected residential washers, by quantity, fluctuated during 2020-2022, but decreased overall by *** percent.²

In this proceeding, three of five U.S. producers (***) reported that there had been significant changes in the product range, product mix, or marketing of LRWs since February 7, 2018. *** reported that the safeguard measures restricted its supply of imported LRWs, thereby limiting its ability to offer a full range of LRW products. *** reported that there have been continued launches of new products and platforms since 2018, and *** reported that consumer demand has shifted back to agitator style top load washers, that there is increased demand for front load washers, and that there is demand for more features, such as sanitizing.

Supply and demand considerations

Changes in U.S. supply

Table II-1 summarizes supply information for U.S. producers of LRWs.

¹ Safeguard publication, p. V-1.

² Data regarding apparent U.S. consumption from 2012 to 2019, examined by the Commission in prior phases of this safeguard proceeding, are provided in this report at Appendix D.

Table II-1
Select residential washers: U.S. producers' supply information

Quantity in units; ratios and shares in percent; count in number of firms reporting

Factor	Measure	United States
Capacity 2020	Quantity	***
Capacity 2022	Quantity	***
Capacity utilization 2020	Ratio	***
Capacity utilization 2022	Ratio	***
Ending inventories 2020	Ratio	***
Ending inventories 2022	Ratio	***
Home market 2022	Share	***
Non-US export markets 2022	Share	***
Ability to shift production	Count	***

Note: Responding U.S. producers accounted for virtually all of U.S. production of LRWs in 2022. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "U.S. market participants".

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

Domestic production

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

U.S. producers' capacity utilization decreased as capacity increased steadily and production fluctuated, but decreased overall, during 2020 to 2022. U.S. producers reported that their major export market was Canada. Most U.S. producers (** of 5) reported that they cannot produce other products on the same equipment as LRWs, although ** reported that ** on the same equipment.³ Factors affecting U.S. producers' ability to shift production include the investment of time, money, and specialized equipment. ** stated that some employees may be capable of shifting to a different production line, but the products produced on those lines are not easily shifted.

³ U.S. producers ** indicated that they could not produce other products on the same equipment used to produce LRWs but did report ** (see part III for more information).

All five U.S. producers and three of four importers reported that the availability of U.S.-produced LRWs in the U.S. market had changed since February 7, 2018. Firms reported that availability of domestically produced LRWs increased due to LG USA and Samsung's new production facilities. U.S. producer *** reported that the pandemic increased U.S. demand for LRWs and as a result, it added shifts and increased its production. Two of three responding U.S. producers (both ***) reported that they anticipate changes in U.S. availability, citing plans to expand production and the overall macroeconomic climate. Both responding importers reported that they did not anticipate changes.

Imports

All five U.S. producers and two of three importers reported that the availability of imports had changed since February 7, 2018, citing the safeguard measures that restricted imports and supply chain disruptions related to the COVID-19 pandemic. One of two responding importers (***) reported that it anticipates that the ability to serve U.S. demand with imports will improve with the termination of the safeguard measures.

Supply constraints

Two of five U.S. producers (***) reported that they had refused, declined, or been unable to supply LRWs since February 7, 2018, citing raw material and labor issues during the COVID-19 pandemic. *** reported that while it had not declined any placed orders, it did experience extended delivery times during the COVID-19 pandemic. *** reported that while it had *** to meet demand, its ability to meet all U.S. demand for LRWs was inhibited by the safeguard measures, and that ***.

Changes in U.S. demand

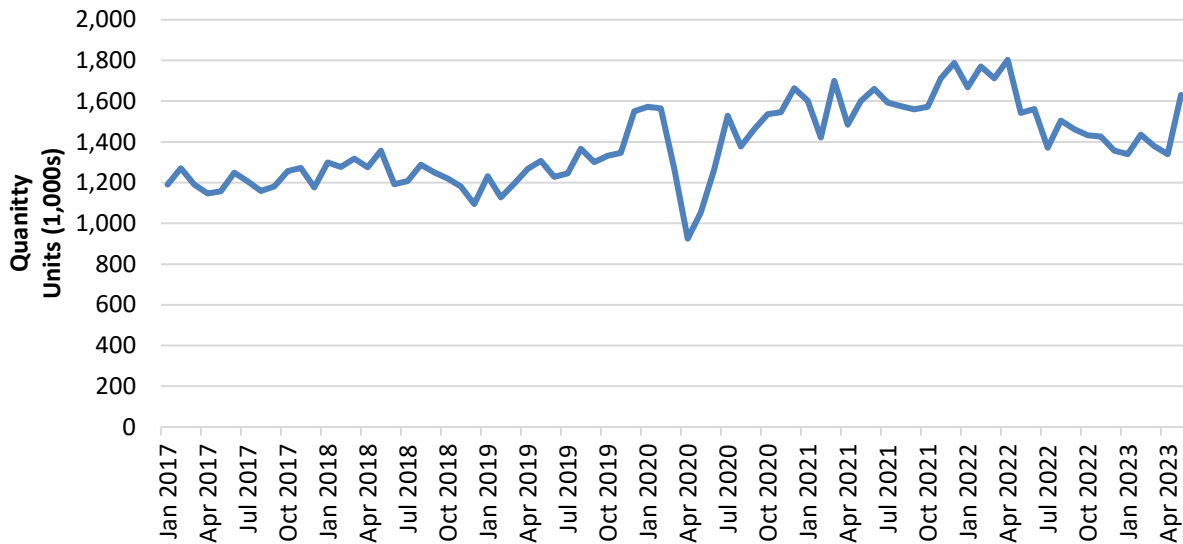
During the safeguard investigation, the Commission found that about two-thirds of demand for LRWs is driven by consumers needing to replace existing washers at the end of their functional lives, known as "replacement demand,"⁴ with the balance driven by home sales, renovations, and new construction.⁵ The U.S. housing market has fluctuated since 2017,

⁴ A Whirlpool official testified that LRWs are replaced approximately every eight to ten years and estimated that approximately 60 to 70 percent of overall demand is for LRW replacement. Extension hearing transcript, p. 95 (Liotine).

⁵ Safeguard publication, p. V-13.

showing some declines over 2018 and in early 2019 followed by a sharp increase in late 2019. There was a sharp decrease in early 2020, but housing starts rose again to nearly late 2019 levels by August 2020. Overall, U.S. housing starts increased by 13.3 percent from January 2017 to December 2022 (figure II-1 and table II-2).

Figure II-1
U.S. housing starts: New privately owned housing units started, monthly, seasonally adjusted annual rate, January 2017-May 2023



Source: U.S. Census Bureau, http://www.census.gov/construction/nrc/historical_data/index.html, retrieved June 22, 2023.

Table II-2

U.S. housing starts: New privately owned housing units started, monthly, seasonally adjusted annual rate, January 2017-May 2023

Quantity in 1,000 units

Month	2017	2018	2019	2020	2021	2022	2023
January	1,190	1,299	1,232	1,572	1,602	1,669	1,340
February	1,271	1,277	1,128	1,565	1,422	1,771	1,436
March	1,190	1,318	1,195	1,267	1,700	1,713	1,380
April	1,146	1,276	1,267	925	1,484	1,803	1,340
May	1,157	1,357	1,307	1,054	1,600	1,543	1,631
June	1,249	1,192	1,228	1,266	1,661	1,561	---
July	1,206	1,208	1,245	1,529	1,593	1,371	---
August	1,159	1,288	1,367	1,377	1,576	1,505	---
September	1,181	1,250	1,300	1,463	1,560	1,463	---
October	1,257	1,221	1,332	1,537	1,572	1,432	---
November	1,273	1,181	1,346	1,545	1,712	1,427	---
December	1,177	1,095	1,551	1,663	1,787	1,357	---

Source: U.S. Census Bureau, http://www.census.gov/construction/nrc/historical_data/index.html, retrieved June 22, 2023.

Demand trends

Firms were asked how demand within the United States and outside of the United States had changed since February 7, 2018. Four of five U.S. producers and three of four importers reported that there had been an increase in U.S. demand (table II-3). *** reported that overall demand in the United States changed and that after the COVID-19 pandemic, demand increased. *** reported that demand increased for LRWs except during 2022, and *** reported that the market for LRWs is larger, and while demand is higher than in 2018, it has fallen since 2021. *** reported that demand fluctuated, declining overall since 2018, and that the COVID-19 pandemic contributed to volatile demand conditions since 2020. Two U.S. producers and one importer reported that demand outside of the United States had fluctuated.

Table II-3

LRWs: Count of firms' responses regarding overall domestic and foreign demand, by firm type

Count in number of firms reporting

Market	Firm type	Increase	No change	Decrease	Fluctuate
Domestic demand	U.S. producers	4	0	0	1
Domestic demand	Importers	3	1	0	0
Foreign demand	U.S. producers	1	0	0	2
Foreign demand	Importers	0	1	0	1

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

Firms were also asked how they expected demand within and outside of the United States to change in the future. Two of five U.S. producers (***) anticipate increasing U.S. demand, *** anticipates a decrease in U.S. demand, reporting that demand will follow the overall health of the U.S. economy and may continue to fall if prices increase further, and *** anticipate fluctuating U.S. demand. Two U.S. producers anticipate fluctuating demand outside the United States, and one expects increased demand outside of the United States as markets continue to grow.

Firms were asked if there had been any changes in the business cycles or conditions of competition for LRWs since February 7, 2018. *** reported that increasing raw material costs and safeguard measures have raised prices and that incumbent domestic suppliers have benefited, and added that demand for LRWs increased during the COVID-19 pandemic as more consumers were staying at home and that it responded to the increased demand with additional shifts and increased production ***. *** reported that demand conditions were uneven throughout the safeguard period, including due to volatility resulting from the COVID-19 pandemic. *** reported that there had been increased messaging around durability and warranties. *** reported that demand increased significantly during the COVID-19 pandemic between 2020 and 2022, but that it expected demand to fall in 2023.

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

In the safeguard investigation, the Commission defined the domestic industry as all domestic producers of LRWs, covered parts, and expansion merchandise (i.e., PSC/belt drive/clutch top load washers and CIM/belt drive front load washers), consistent with its definition of the like or directly competitive domestic product.¹ The information in this section of the report was compiled from responses to the Commission's domestic producers' questionnaire by five firms, which accounted for virtually all U.S. production of covered merchandise during 2022.

¹ Safeguard publication, p. 27. In the safeguard investigation, the Commission found that domestically produced LRWs, covered parts, PSC/belt drive/clutch top load washers, and CIM/belt drive front load washers were like the imported LRWs and covered parts within the scope of the investigation. See *id.*, pp. 13-25. Accordingly, the Commission defined the like or directly competitive domestic product as all domestically produced LRWs, covered parts, PSC/belt drive/clutch top load washers, and CIM/belt drive front load washers. *Id.*, p. 25. As used in this report, the term "select residential washers" includes in-scope LRWs (full units), out-of-scope top load residential washers with PSC/belt drive/clutch, and out-of-scope front load residential washers with CIM/belt drive (i.e., the like or directly competitive domestic product, excluding covered parts).

The term "domestic industry" is defined in section 202(c)(6)(A)(i) of the Trade Act, 19 U.S.C. § 2252(c)(6)(A)(i), as "the producers as a whole of the like or directly competitive article or those producers whose collective production of the like or directly competitive article constitutes a major proportion of the total domestic production of such article."

Developments in the U.S. LRW industry

Since January 1, 2017 (the year in which the section 202(a) petition was filed), there have been several developments affecting the U.S. LRW industry, including (1) the startup of two new U.S. producers; (2) the issuing and revocation of antidumping duty orders on LRWs; (3) the issuing, extension, and termination of a safeguard measure on LRWs; (4) promulgation of stricter energy efficiency and water use standards for LRWs; and (5) imposition of tariffs on certain inputs into LRW production following Section 232 and Section 301 investigations.

Two new U.S. producers, Samsung and LG USA, began producing LRWs in 2018. Samsung began producing LRWs in January 2018 at a plant in Newberry, South Carolina, and has since produced over four million washing machines and invested nearly \$500 million in its plant, exceeding its \$380 million planned investment.² LG USA began producing LRWs in October 2018 at a plant in Clarksville, Tennessee, and has since reached an annual production capacity of 1.2 million units and employs over 900 people.³

In February 2017, an antidumping duty order was imposed on LRWs from China. Subsequently, affiliates of LG Korea and Samsung Korea shifted their sources of LRWs for export to the United States from China to Thailand and Vietnam. Following the Commission's safeguard determination, the President imposed a safeguard measure on imports of LRWs, effective February 7, 2018, in the form of a tariff-rate quota and quarterly allocation of the tariff-rate quota took effect January 23, 2020. On January 14, 2021, following a request for extension of relief filed by Whirlpool and the Commission's extension determination, the President extended the safeguard measure through February 7, 2023. In May 2019, Commerce revoked the antidumping and countervailing duty orders on LRWs from South Korea, while continuing the antidumping duty order on LRWs from Mexico, pursuant to the Commission's determinations in the five-year reviews of the orders.⁴

Stricter energy efficiency and water use standards for LRWs went into effect in 2018. Finally, as discussed in greater detail in Part I, tariffs were imposed on imports of certain inputs into LRW production following investigations under Section 232 and Section 301.

² "Samsung's Newberry investment nears \$500 million," Columbia Regional Business Report, June 6, 2022. <https://columbiabusinessreport.com/news/manufacturing/82162/>

³ "LG Home Appliance Factor in United States Receives Prestigious 'Lighthouse' Status," PRNewswire, January 18, 2023. <https://www.prnewswire.com/news-releases/lg-home-appliance-factory-in-united-states-receives-prestigious-lighthouse-status-301725011.html>

⁴ As noted in Part I, the scope of the antidumping and countervailing duty orders on LRWs from South Korea and Mexico is broader than the scope of the safeguard measure on LRWs. See p. I-7, n. 21 for more details.

Table III-1 presents major developments in the domestic LRW industry since January 1, 2017.

Table III-1
LRWs: Important industry events since January 1, 2017

Date	Item	Entity	Event
January 2017	Contract	GE Appliances	Reached tentative agreement with the union for a new contract; the union subsequently approved the four-year contract.
February 2017	Antidumping Duty	Commerce	Antidumping duty order issued on LRWs from China.
February 2017	Plant Opening	LG Korea	Announced it would build a \$250 million home appliance production facility near Clarksville, TN, including for washing machines, opening in 2019.
June 2017	Safeguard	USITC	Instituted a section 201 safeguard investigation on global imports of LRWs.
June 2017	Plant Opening	Samsung Korea	Announced it would invest \$380 million in an appliance production facility, including washing machines, in Newberry, SC, with LRW production possible in 2018.
December 2017	Safeguard	USITC	Delivered its safeguard recommendations to the President.
January 2018	Antidumping Duty	Commerce	Notice of initiation of five-year (sunset) reviews of orders on certain LRWs from South Korea and Mexico by Commerce (83 FR 100, January 2, 2018).
January 2018	Antidumping Duty	USITC	Notice of institution of five-year reviews of orders on certain LRWs from South Korea and Mexico by Commission (83 FR 145).
January 2018	Industry Standards	EnergyStar and CEE	New, more stringent energy and water efficiency standards for LRWs became effective.
January 2018 and February 2018	Safeguard	President	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, effective February 7, 2018.
January 2018	Plant Opening	Samsung	Began manufacturing LRWs at Newberry, SC, in January 2018.
April 2018	Antidumping Duty	North America Free Trade Agreement	Electrolux filed an appeal with NAFTA Secretariat of Commerce's final antidumping duty administrative review determination regarding LRWs from Mexico (83 FR 19221).
May 2018	Antidumping Duty	Commerce	Published final results of expedited five-year review of the antidumping duty order on LRWs from Mexico (83 FR 21764).

Table continued.

Table III-1 Continued
LRWs: Important industry events since January 1, 2017

	Item	Entity	Event
May 2018	Safeguard	WTO	South Korea requested consultations under WTO dispute settlement process with the United States concerning the safeguard measure (DS546).
August 2018	Safeguard	WTO	South Korea requested the establishment of a Dispute Settlement Body (“DSB”) panel (DS546).
September 2018	Safeguard	WTO	Established a DSB panel (DS546).
October 2018	Antidumping Duty	Commerce	Published final results of full five-year review of the antidumping duty order on LRWs from South Korea (83 FR 52803).
October 2018	Expansion	GE Appliances	Announced a \$200 million investment to expand capacity to manufacture laundry and dishwashing appliances at its Kentucky plant.
October 2018	Plant Opening	LG USA	Began manufacturing LRWs in Clarksville, TN.
February 2019	Safeguard	Commerce	Tariff rate quota reset.
April 2019	Antidumping Duty	USITC	Published determinations in full five-year (sunset) reviews: LRWs from South Korea and Mexico (84 FR 18319)--affirmative (Mexico) and negative (South Korea).
May 2019	Antidumping Duty	Commerce	Published continuation of antidumping duty order on LRWs from Mexico and terminated antidumping and countervailing duty orders on LRWs from South Korea.
January 2020	Safeguard	President	Issued presidential proclamation implementing quarterly allocation of the tariff-rate quota.
January 2021	Safeguard	President	Issued presidential proclamation extending the LRW safeguard measure to February 7, 2023.
April 2021	Expansion	LG USA	Announced a \$20.5 million investment to expand manufacturing capacity and an additional shift to manufacture washing machines at the Clarksville, TN factory.
February 2022	Safeguard	WTO	WTO panel issued final report on February 8, 2022, in dispute over U.S. safeguard measure on LRWs.
January 2023	Expansion	LG USA	Announced the addition of a dryer manufacturing line at the Clarksville, TN plant.
April 2023	Safeguard	WTO	DSB adopted panel report on April 28, 2023, and the United States and South Korea reached an agreement to terminate the dispute.

Source: Compiled from various sources.

Producers in the United States were asked to report any change in the character of their operations or organization relating to the production of LRWs since February 7, 2018 (the effective date of the safeguard relief measures). All of the domestic producers indicated that they had experienced such changes, as presented in table III-2.

Table III-2
LRWs: U.S. producers' reported changes in operations, since February 7, 2018

Item	Firm name and narrative response on changes in operations
Plant openings	***
Plant openings	***
Expansions	***
Expansions	***
Expansions	***
Expansions	***
Expansions	***

Table continued.

Table III-2 Continued**LRWs: U.S. producers' reported changes in operations, since February 7, 2018**

Item	Firm name and narrative response on changes in operations
Prolonged shutdowns or curtailments	***
Other	***

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

U.S. production, capacity, and capacity utilization

Table III-3 presents U.S. producers' installed and practical overall capacity, production, and capacity utilization on the same machinery used to produce select residential washers.⁵ Overall installed capacity increased 4.5 percent and overall practical capacity increased 6.2 percent during 2020-22.⁶ ⁷ Overall production on machinery used to produce select residential washers increased 9.2 percent from 2020 to 2021, then decreased 13.2 percent from 2021 to 2022, for an overall 5.2 percent decrease during 2020-22.⁸ Increased capacity and decreased

⁵ As noted above, the term "select residential washers" includes in-scope LRWs (full units), out-of-scope top load residential washers with PSC/belt drive/clutch, and out-of-scope front load residential washers with CIM/belt drive (i.e., the like or directly competitive domestic product, excluding covered parts).

⁶ The increase in overall installed and practical capacity was driven by *** and ***. U.S. Producers' Questionnaire responses, II-3a, and email from ***, April 14, 2023.

⁷ Data and data trends regarding the domestic industry's U.S. production, capacity, and capacity utilization between 2012 and 2019 were examined and discussed by the Commission in prior phases of this safeguard proceeding, and summary data for that period are provided in this report at Appendix D.

⁸ The decrease in overall production was driven by *** over the 2020-22 period. ***, *** U.S. Producers' questionnaire response, II-2b.

production resulted in a 4.9 percentage point decrease in overall installed capacity utilization and a 6.3 percentage point decrease in overall practical capacity from 2020 to 2022.

Table III-3

Select residential washers: U.S. producers' installed and practical overall capacity and production on the same equipment as select residential washers, by period

Capacity and production in units; utilization in percent

Item	Measure	2020	2021	2022
Installed overall	Capacity	16,569,641	16,838,880	17,316,053
Installed overall	Production	8,745,500	9,545,895	8,289,191
Installed overall	Utilization	52.8	56.7	47.9
Practical overall	Capacity	14,877,177	15,494,524	15,803,090
Practical overall	Production	8,745,500	9,545,895	8,289,191
Practical overall	Utilization	58.8	61.6	52.5
Practical select residential washers	Capacity	13,354,698	13,876,214	14,317,054
Practical select residential washers	Production	8,280,902	8,991,110	7,817,669
Practical select residential washers	Utilization	62.0	64.8	54.6

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

Note: Information presented in this table encompasses (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Table III-4 presents U.S. producers' reported constraints to practical overall capacity to produce select residential washers, including production bottlenecks, existing labor force, and supply of material inputs, since February 7, 2018, as presented in table III-4.

Table III-4

Select residential washers: U.S. producers' reported constraints to practical overall capacity

Item	Firm name and narrative response on constraints to practical overall capacity
Production bottlenecks	***
Production bottlenecks	***
Production bottlenecks	***
Existing labor force	***
Existing labor force	***
Existing labor force	***
Supply of material inputs	***
Supply of material inputs	***
Supply of material inputs	***
Supply of material inputs	***

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

Table III-5 and figure III-1 present U.S. producers' production, capacity, and capacity utilization of select residential washers. Continuous producers' capacity to produce select residential washers increased by *** percent, while new entrants' capacity increased by *** percent, for an overall 7.2 percent increase in all U.S. producers' capacity during 2020-22.

U.S. production of select residential washers increased by 8.6 percent from 2020 to 2021, then decreased by 13.1 percent from 2021 to 2022, for an overall 5.6 percent decrease during 2020-22. Continuous producers' production of select residential washers decreased by *** percent, while new entrant producers' production increased by *** percent during 2020-22.

Capacity utilization for select residential washers increased by 2.8 percentage points from 2020 to 2021, then decreased by 10.2 percentage points from 2021 to 2022, for an overall 7.4 percentage point decrease during 2020-22. New entrant producers' combined capacity utilization (ranging from *** to *** percent during 2020-22) was higher than continuous producers' combined capacity utilization (ranging from *** to *** percent).

*** accounted for the largest share of production of select residential washers during 2020-22, but its share decreased by *** percentage points, while all other U.S. producers' shares increased. New entrant producers' share of production of select residential washers increased and continuous producers' share decreased by *** percentage points, respectively, during 2020-22.

Two producers, ***, reported toll agreements with other firms related to the production of LRWs. *** reported toll agreements with ***. *** reported toll agreements with ***,⁹

⁹ *** U.S. producers' questionnaire response, II-11.

Table III-5
Select residential washers: Firm-by-firm average production capacity, by period

Capacity

Capacity in units

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All U.S. producers	13,354,698	13,876,214	14,317,054

Table continued.

Table III-5 Continued
Select residential washers: Firm-by-firm production, by period

Production

Production in units

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All U.S. producers	8,280,902	8,991,110	7,817,669

Table continued.

Table III-5 Continued
Select residential washers: Firm-by-firm capacity utilization, by period

Capacity utilization

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All U.S. producers	62.0	64.8	54.6

Table continued.

Table III-5 Continued

Select residential washers: Firm-by-firm share of production, by period

Share of production

Share in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All U.S. producers	100.0	100.0	100.0

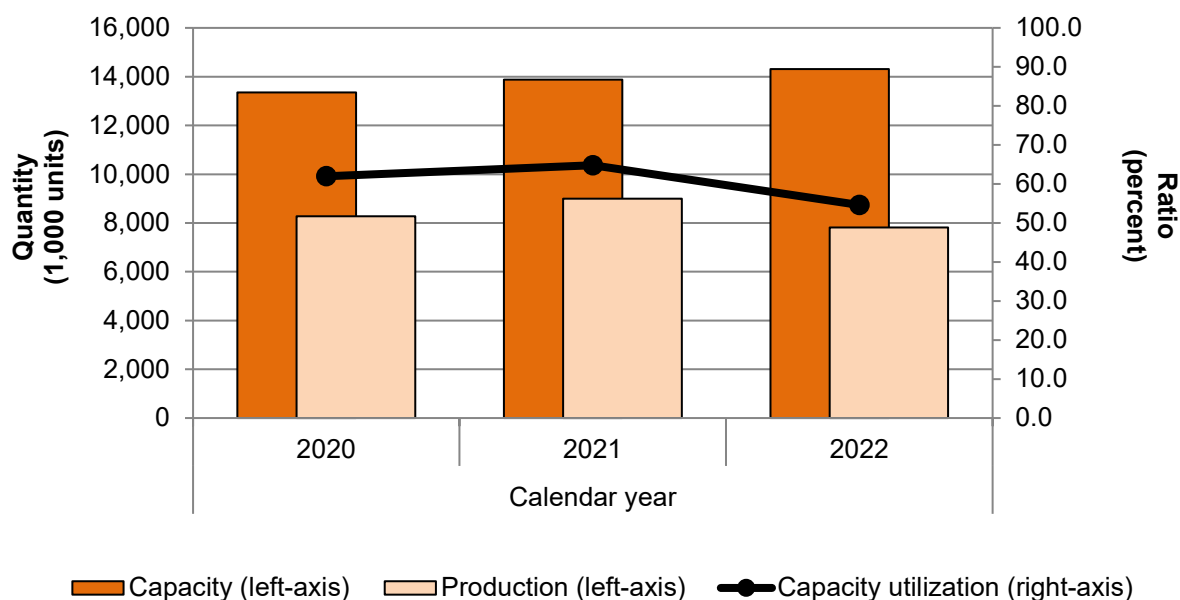
Source: Compiled from data submitted in response to Commission questionnaires.

Note: Capacity utilization ratio represents the ratio of the U.S. producer's production to its production capacity.

Note: Information presented in this table encompasses (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Figure III-1

Select residential washers: U.S. producers' production, capacity, and capacity utilization, by period



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

Note: Information presented in this figure encompasses (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Alternative products

Table III-6 presents U.S. producers' overall production on the same equipment as select residential washers. During 2020-22, the vast majority (over 90 percent) of production using shared capacity with other products consisted of select residential washers. *** were produced on the same machinery used to produce select residential washers.

Table III-6
Select residential washers: U.S. producers' overall production on the same equipment as select residential washers, by period

Quantity in units; share in percent

Product	Measure	2020	2021	2022
Select residential washers	Quantity	8,280,902	8,991,110	7,817,669
Commercial washers	Quantity	***	***	***
Stacked washers	Quantity	***	***	***
Extra-wide washers	Quantity	***	***	***
Other products	Quantity	***	***	***
Total products other than select residential washers	Quantity	***	***	***
All products on same machinery	Quantity	***	***	***
Select residential washers	Share	***	***	***
Commercial washers	Share	***	***	***
Stacked washers	Share	***	***	***
Extra-wide washers	Share	***	***	***
Other products	Share	***	***	***
Total products other than select residential washers	Share	***	***	***
All products on same machinery	Share	100.0	100.0	100.0

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

Note: Information presented in this table encompasses (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Foreign-trade zone production activities

In 2012, Whirlpool applied to the Foreign-Trade Zone Board to create a foreign trade subzone that would encompass its entire Clyde, Ohio, manufacturing facility.¹⁰

Whirlpool reported that, commencing in 2013, it admits into the foreign-trade zone (“FTZ”) duty free foreign status¹¹ non-covered LRW parts and components from various countries, allowing it to minimize tariff liability (***).¹² ***.

GE Appliances maintains an FTZ at its Louisville, Kentucky, manufacturing facility, ***. GE Appliances explains that the FTZ ***.¹³ Like Whirlpool, GE Appliances admits into the FTZ ***.¹⁴ ¹⁵

¹⁰ Foreign-trade zones are secure areas under the supervision of CBP that are considered outside the customs territory of the United States for the purposes of duty payment. Authority for establishing these facilities is granted by the Foreign-Trade Zones Board under the Foreign-Trade Zones Act of 1934, as amended (19 U.S.C. 81a-81u), and the Board’s regulations (15 C.F.R. Part 400). The Executive Secretariat of the Board is located within Enforcement and Compliance division of the U.S. Department of Commerce. *76th Annual Report of the Foreign-Trade Zones Board to the U.S. Congress of the United States*, August 2015, p. 1. Whirlpool’s FTZ subzone is 8I, located in Clyde, Ohio. It is a subzone of FTZ 8, Toledo—Lucas County Port Authority.

¹¹ Foreign status merchandise is imported merchandise which has not been properly released from CBP custody in the U.S. Customs territory. *Foreign-Trade Zones Manual*, U.S. Customs and Border Protection, Publication no. 0000-0559A (2011), p. 55.

¹² Non-covered other parts reported by Whirlpool include: ***.

¹³ GE Appliances’ U.S. Producers’ Questionnaire response, II-12a.

¹⁴ Confidential Monitoring Report, p. III-8, fn. 8.

¹⁵ GE Appliances’ FTZ admissions include ***. GE Appliances explained that its FTZ admissions ***. PFS is a zone status whereby merchandise is classified and appraised, with duties and taxes determined, at the time the status is elected. Once chosen, the privileged foreign status cannot be changed. *Foreign-Trade Zones Manual*, U.S. Customs and Border Protection, Publication no. 0000-0559A (2011), p. 242.

Pursuant to FTZ regulations, production activities¹⁶ must be approved by the FTZ board and U.S. Customs entries must be made for finished goods that utilized foreign components in their production when they leave the FTZ for U.S. consumption. According to these same FTZ regulations, the country of origin of the finished good for Customs purposes is the country of origin of the highest-value foreign component, regardless of the number of foreign components or U.S. content.¹⁷

*** imports for consumption withdrawn from the FTZ are the LRWs produced in the FTZ, manufactured using imports of non-covered LRW parts.¹⁸ Due to the nature of these shipments, U.S. shipments of LRWs exiting Whirlpool's or GE Appliances' FTZs have not been deemed U.S. imports and are treated as U.S.-produced LRWs.

Table III-7 presents U.S. producers' withdrawals from FTZs during the 2020-22 period. As shown, *** were of non-covered parts as LRWs.

¹⁶ Under FTZ regulations, "manufacturing" means any production activities that result in a substantial transformation of a foreign article to a new and different article having a different name, character, and use, or which causes a change in its HTS classification of the merchandise or in its eligibility for entry for consumption. *Foreign-Trade Zones Manual*, U.S. Customs and Border Protection, Publication no. 0000-0559A (2011), p. 102.

¹⁷ Large Residential Washers from China, Inv. No. 731-TA-1306 (Preliminary), USITC Publication 4591, February 2016, p. III-7, fn. 29.

¹⁸ See Large Residential Washers: Extension of Action, Inv. No. TA-201-076, December 2020, Confidential Report, INV-SS-136, p. III-12.

Table III-7**Covered and other LRW parts: U.S. producers' withdrawals from U.S. foreign trade zones as an import for consumption, by product type and period**

Quantities in units; values in 1,000 dollars; unit values in dollars per unit; shares in percent

Item	Measure	2020	2021	2022
Foreign status covered parts as LRWs	Quantity	***	***	***
Foreign status other parts as LRWs	Quantity	***	***	***
All foreign status inputs as LRWs	Quantity	***	***	***
Foreign status covered parts as LRWs	Value	***	***	***
Foreign status other parts as LRWs	Value	***	***	***
All foreign status inputs as LRWs	Value	***	***	***
Foreign status covered parts as LRWs	Unit value	***	***	***
Foreign status other parts as LRWs	Unit value	***	***	***
All foreign status inputs as LRWs	Unit value	***	***	***
Foreign status covered parts as LRWs	Share of quantity	***	***	***
Foreign status other parts as LRWs	Share of quantity	***	***	***
All foreign status inputs as LRWs	Share of quantity	100.0	100.0	100.0
Foreign status covered parts as LRWs	Share of value	***	***	***
Foreign status other parts as LRWs	Share of value	***	***	***
All foreign status inputs as LRWs	Share of value	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: Withdrawals from U.S. foreign trade zones represent U.S. imports for consumption of the foreign status inputs used in the production of U.S. produced LRWs. These withdrawals are classified for Customs purposes as the finished good (i.e., LRWs) but only cover the dollar value of the foreign-origin inputs imported into the zone and used to produce the finished good.

U.S. producers' shipments

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments of select residential washers. U.S. shipments, by quantity, accounted for over *** percent of total shipments during the 2020-22 period.¹⁹ By quantity, U.S. shipments increased by 7.2 percent from 2020 to 2021, then decreased by 8.6 percent from 2021 to 2022, for an overall 2.1 percent decrease in U.S. shipments during 2020-22. By value, U.S. shipments increased by 14.0 percent from 2020 to 2021, then decreased by 3.6 percent from 2021 to 2022, for an overall 9.9 percent increase in U.S. shipments during 2020-22. Four firms (***) reported exports to ***.

Table III-8
Select residential washers: U.S. producers' shipments, by destination and period

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

Item	Measure	2020	2021	2022
U.S. shipments	Quantity	7,648,202	8,197,981	7,491,291
Export shipments	Quantity	***	***	***
Total shipments	Quantity	***	***	***
U.S. shipments	Value	3,313,529	3,778,632	3,642,062
Export shipments	Value	***	***	***
Total shipments	Value	***	***	***
U.S. shipments	Unit value	433	461	486
Export shipments	Unit value	***	***	***
Total shipments	Unit value	***	***	***
U.S. shipments	Share of quantity	***	***	***
Export shipments	Share of quantity	***	***	***
Total shipments	Share of quantity	100.0	100.0	100.0
U.S. shipments	Share of value	***	***	***
Export shipments	Share of value	***	***	***
Total shipments	Share of value	100.0	100.0	100.0

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

Note: Information presented in this table encompasses select residential washers, *i.e.*, (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

¹⁹ Data and data trends regarding the domestic industry's U.S. shipments from 2012 to 2019 were examined and discussed by the Commission in prior safeguard proceedings, and summary data for that period are provided in this report at Appendix D.

Table III-9 presents U.S. producers' U.S. shipments of select residential washers by shipment type. Commercial U.S. shipments accounted for the majority (over *** percent, by quantity) of U.S. shipments during 2020-22. By quantity, U.S. commercial shipments increased by *** percent from 2020 to 2021, then decreased by *** percent from 2021 to 2022, for an overall *** percent decrease in U.S. commercial shipments during 2020-22. By value, U.S. commercial shipments increased by *** percent from 2020 to 2021, then decreased by *** percent from 2021 to 2022, for an overall *** percent increase in U.S. commercial shipments during 2020-22.

*** reported transfers to related firms²⁰ and *** reported internal consumption.²¹

²⁰ ***. Email from ***, April 2, 2023, and *** U.S. Producers' Questionnaire response, II-10.

²¹ ***'s internal consumption consisted of ***. Email from ***, April 20, 2023.

Table III-9**Select residential washers: U.S. producers' U.S. shipments, by shipment type and period**

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

Item	Measure	2020	2021	2022
Commercial U.S. shipments	Quantity	***	***	***
Internal consumption	Quantity	***	***	***
Transfers to related firms	Quantity	***	***	***
U.S. shipments	Quantity	7,648,202	8,197,981	7,491,291
Commercial U.S. shipments	Value	***	***	***
Internal consumption	Value	***	***	***
Transfers to related firms	Value	***	***	***
U.S. shipments	Value	3,313,529	3,778,632	3,642,062
Commercial U.S. shipments	Unit value	***	***	***
Internal consumption	Unit value	***	***	***
Transfers to related firms	Unit value	***	***	***
U.S. shipments	Unit value	433	461	486
Commercial U.S. shipments	Share of quantity	***	***	***
Internal consumption	Share of quantity	***	***	***
Transfers to related firms	Share of quantity	***	***	***
U.S. shipments	Share of quantity	100.0	100.0	100.0
Commercial U.S. shipments	Share of value	***	***	***
Internal consumption	Share of value	***	***	***
Transfers to related firms	Share of value	***	***	***
U.S. shipments	Share of value	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: Information presented in this table encompasses select residential washers, *i.e.*, (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Table III-10 and figure III-2 present U.S. producers' U.S. shipments of select residential washers by type of producer. U.S. shipments of select residential washers produced by continuous producers accounted for the majority (***) of U.S. shipments in each year during 2020-22, but lost *** percentage points of its share, by quantity, and *** percentage points, by value, during 2020-22. U.S. shipments of select residential washers produced by continuous producers decreased *** percent in quantity and *** percent in value during 2020-22, while U.S. shipments of select residential washers produced by new entrant producers increased *** percent in quantity and *** percent in value.

Table III-10
Select residential washers: U.S. producers' U.S. shipments, by type of producer and period

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

Item	Measure	2020	2021	2022
Continuous producers	Quantity	***	***	***
New entrants	Quantity	***	***	***
All U.S. producers	Quantity	7,648,202	8,197,981	7,491,291
Continuous producers	Value	***	***	***
New entrants	Value	***	***	***
All U.S. producers	Value	3,313,529	3,778,632	3,642,062
Continuous producers	Unit value	***	***	***
New entrants	Unit value	***	***	***
All U.S. producers	Unit value	433	461	486
Continuous producers	Share of quantity	***	***	***
New entrants	Share of quantity	***	***	***
All U.S. producers	Share of quantity	100.0	100.0	100.0
Continuous producers	Share of value	***	***	***
New entrants	Share of value	***	***	***
All U.S. producers	Share of value	100.0	100.0	100.0

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

Note: Information presented in this table encompasses select residential washers, *i.e.*, (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Figure III-2

Select residential washers: U.S. producers' U.S. shipment quantities and average unit values, by type of producer and period

* * * * *

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

Note: Information presented in this figure encompasses select residential washers, *i.e.*, (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

Table III-11 presents U.S. producers' U.S. shipments of select residential washers by washer type. ***, reported U.S. shipments of washers other than LRWs (PSC/belt top load washers) during 2020-22.

Table III-11

Select residential washers: U.S. producers' U.S. shipments of washers, by washer type and period

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

Item	Measure	2020	2021	2022
LRWs	Quantity	***	***	***
PSC/belt top load washers	Quantity	***	***	***
CIM/belt front load washers	Quantity	***	***	***
All select residential washers	Quantity	7,648,202	8,197,981	7,491,291
LRWs	Value	***	***	***
PSC/belt top load washers	Value	***	***	***
CIM/belt front load washers	Value	***	***	***
All select residential washers	Value	3,313,529	3,778,632	3,642,062
LRWs	Unit value	***	***	***
PSC/belt top load washers	Unit value	***	***	***
CIM/belt front load washers	Unit value	***	***	***
All select residential washers	Unit value	433	461	486
LRWs	Share of quantity	***	***	***
PSC/belt top load washers	Share of quantity	***	***	***
CIM/belt front load washers	Share of quantity	***	***	***
All select residential washers	Share of quantity	100.0	100.0	100.0
LRWs	Share of value	***	***	***
PSC/belt top load washers	Share of value	***	***	***
CIM/belt front load washers	Share of value	***	***	***
All select residential washers	Share of value	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Table III-12 presents U.S. producers' commercial U.S. shipments of covered parts,²² which were reported by ***.

Table III-12

Covered parts: U.S. producers' commercial U.S. shipments of covered parts, by period

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

Item	Measure	2020	2021	2022
Covered parts	Quantity	***	***	***
Covered parts	Value	***	***	***
Covered parts	Unit value	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires

Note: These data do not include internally consumed covered parts that are used in the production of completed LRWs by the reporting companies.

²² Refer to the section titled "Scope of the safeguard remedy" in Part I for a description of the parts that are covered by the scope of the safeguard remedy.

U.S. producers' inventories

Table III-13 presents U.S. producers' end-of-period inventories of select residential washers and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments of select residential washers.²³ Inventories and the associated ratios increased during 2020-21, then decreased during 2021-22 to levels lower than 2020 levels. Inventories increased by 26.9 percent from 2020 to 2021, then decreased by 51.7 percent from 2021 to 2022, for an overall 38.7 percent decrease during 2020-22.²⁴ The inventory to U.S. production ratio increased 1.0 percentage point from 2020 to 2021, then decreased 3.0 percentage points from 2021 to 2022, for an overall 2.0 percentage point decrease during 2020-22.

Table III-13

Select residential washers: U.S. producers' inventories and their ratio to select items, by period

Quantity in units; ratio in percent

Item	2020	2021	2022
End-of-period inventory quantity	483,416	613,258	296,236
Inventory ratio to U.S. production	5.8	6.8	3.8
Inventory ratio to U.S. shipments	6.3	7.5	4.0
Inventory ratio to total shipments	***	***	***

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

Note: Information presented in this table encompasses select residential washers, *i.e.*, (1) LRWs as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers. Data presented do not include parts covered by the safeguard measure.

²³ Summary data regarding the domestic industry's end-of-period inventories from 2012 to 2019 are provided in this report at Appendix D.

²⁴ Each of the U.S. producers' inventories followed the aggregate inventory trends throughout 2020-22, with the exception of ***, which reported a *** percent decrease in inventories from 2020 to 2021, then a *** percent increase in inventories from 2021 to 2022, for an overall *** percent increase in inventories during 2020-22. ***.

U.S. employment, wages, and productivity

Table III-14 shows U.S. producers' employment-related data for select residential washers and covered parts (i.e., the like or directly competitive domestic product). Production and related workers (PRWs), total hours worked, and wages paid all increased between 2020 and 2021, then decreased between 2021 and 2022, with overall increases during the 2020-22 period.^{25 26} The number of PRWs increased by 8.0 percent from 2020 to 2021, then decreased by 4.6 percent from 2021 to 2022, for an overall 3.1 percent increase during 2020-22. Hourly wages and unit labor costs increased during 2020-22, by 10.3 percent and 17.2 percent, respectively.²⁷ Productivity increased by 25.8 units per 1,000 hours from 2020 to 2021, then decreased by 78.8 units per 1,000 hours from 2021 to 2022, for an overall decrease in productivity during 2020-22 of 52.9 units per 1,000 hours.

Table III-14

Select residential washers and covered parts: U.S. producers' employment related information, by period

Item	2020	2021	2022
Production and related workers (PRWs) (number)	5,427	5,862	5,593
Total hours worked (1,000 hours)	9,183	9,693	9,210
Hours worked per PRW (hours)	1,692	1,654	1,647
Wages paid (\$1,000)	255,964	293,255	283,178
Hourly wages (dollars per hour)	\$27.87	\$30.25	\$30.75
Productivity (units per 1,000 hours)	901.8	927.6	848.8
Unit labor costs (dollars per unit)	\$30.91	\$32.62	\$36.22

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

Note: Information presented in this table encompasses (1) LRWs and covered parts, as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers.

²⁵ ***. U.S. Producers' Questionnaire response, II-9a.

²⁶ Data and data trends regarding the domestic industry's employment-related factors from 2012 to 2019 were examined by the Commission in prior phases of this safeguard proceeding and summary data for that period are provided in this report at Appendix D.

²⁷ ***. U.S. Producers' Questionnaire response, II-9a.

Table III-15 presents continuous producers' employment-related data for select residential washers and covered parts. PRWs, total hours worked, and wages paid all increased between 2020 and 2021, then decreased between 2021 and 2022, with overall decreases during the 2020-22 period.²⁸ The number of PRWs increased by *** percent from 2020 to 2021, then decreased by *** percent from 2021 to 2022, for an overall *** percent decrease during 2020-22. Hours worked per PRW decreased by *** percent during 2020-22. Hourly wages and unit labor costs increased during 2020-22, by *** percent and *** percent, respectively. Productivity increased by *** units per 1,000 hours between 2020 and 2021, then decreased by *** units per 1,000 hours between 2021 and 2022, for an overall decrease in productivity by *** units per 1,000 hours during 2020-22.

Table III-15
Select residential washers and covered parts: Continuous producers' employment related information, by period

Item	2020	2021	2022
Production and related workers (PRWs) (number)	***	***	***
Total hours worked (1,000 hours)	***	***	***
Hours worked per PRW (hours)	***	***	***
Wages paid (\$1,000)	***	***	***
Hourly wages (dollars per hour)	***	***	***
Productivity (units per 1,000 hours)	***	***	***
Unit labor costs (dollars per unit)	***	***	***

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

Note: Information presented in this table encompasses (1) LRWs and covered parts, as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers.

²⁸ *** reported decreases in PRWs and hours worked during 2020-22, with *** accounting for the majority of these decreases, while *** was the only continuous producer that reported an increase in PRWs and hours worked during 2020-22.

Table III-16 presents new entrant producers' employment-related data for select residential washers and covered parts. PRWs, total hours worked, hours worked per PRW, and wages paid all increased during the 2020-22 period,²⁹ by *** percent, *** percent, *** percent, and *** percent, respectively. Hourly wages increased by *** percent from 2020 to 2021, then returned to 2020 levels from 2021 to 2022. Productivity increased by *** units per 1,000 hours from 2020 to 2021, then decreased by *** units per 1,000 hours from 2021 to 2022, for an overall decrease in productivity by *** units per 1,000 hours during 2020-22. Unit labor costs decreased by *** percent from 2020 to 2021, then increased by *** percent from 2021 to 2022, for an overall *** percent increase during 2020-22.

Table III-16

Select residential washers and covered parts: New entrant producers' employment related information, by period

Item	2020	2021	2022
Production and related workers (PRWs) (number)	***	***	***
Total hours worked (1,000 hours)	***	***	***
Hours worked per PRW (hours)	***	***	***
Wages paid (\$1,000)	***	***	***
Hourly wages (dollars per hour)	***	***	***
Productivity (units per 1,000 hours)	***	***	***
Unit labor costs (dollars per unit)	***	***	***

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

Note: Information presented in this table encompasses (1) LRWs and covered parts, as specified by the safeguard measure, (2) top load PSC/belt drive/clutch washers and (3) front load CIM/belt drive washers.

²⁹ *** reported an increase in the number of PRWs and total hours worked during 2020-22, while *** reported a decrease.

Table III-17 presents U.S. producers' workforce evolution since 2017 and anticipated work force evolution. With the exception of ***,³⁰ all U.S. producers reported an increase (greater than 2 percent) in the number of PRWs dedicated to the production of select residential washers from 2017 to 2022. *** anticipate an increase (greater than 2 percent) in the number of PRWs dedicated to the production of select residential washers from 2022 to 2025, while *** anticipate maintaining (i.e., an increase or decrease of less than 2 percent) the number of PRWs between 2022 and 2025.

Table III-17
Select residential washers and covered parts: Count of firms' responses regarding workforce evolution

Count in number of firms reporting

Item	Increased	Maintained	Decreased
Work force evolution	4	1	0
Anticipated work force evolution	2	3	0

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

³⁰ ***. ***'s U.S. Producers' Questionnaire response, II-9b.

Table III-18 presents U.S. producers' narrative responses on actual and anticipated work force evolution.

Table III-18

Select residential washers and covered parts: U.S. producers' narrative responses to actual (between 2017 and 2022) and anticipated (between 2022 and 2025) work force evolution

Item	Firm name and narrative response on work force evolution
Actual work force evolution (increase)	***
Actual work force evolution (increase)	***
Actual work force evolution (increase)	***
Actual work force evolution (increase)	***
Actual work force evolution (decrease)	***
Anticipated work force evolution (maintain)	***
Anticipated work force evolution (increase)	***
Anticipated work force evolution (maintain)	***
Anticipated work force evolution (maintain)	***
Anticipated work force evolution (increase)	***

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

New entrant producers' production related activities

Table III-19 presents new entrant producers' explanations of their production processes that occur in the United States to produce finished select residential washers as they relate to 2022 operations.

Table III-19

Select residential washers: New entrant producers' detailed explanation of domestic activities, by firm

Firm	Narrative response on domestic activities
***	***
***	***

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

Table III-20 presents new entrant producers' descriptions of the extent, nature, and complexity of their select residential washer production related activities in 2022 and how these factors, as they relate to select residential washer operations, have changed since 2017. *** anticipate maintaining (i.e., an increase or decrease of less than 2 percent) the complexity, intensity, and importance of their select residential washers production activities by 2025.

Table III-20

Select residential washers: New entrant producers' responses regarding production related activities and complexity of operations, by factor and firm

Factor	Firm name and accompanying narrative response on production related activities and complexity of operations
Capital investments	***
Capital investments	***
Value added	***
Employment	***
Employment	***
Quantity, type, and sources of parts	***
Complexity of operations	***
Complexity of operations	***

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

Table III-21 presents new entrant producers' descriptions of their global business model and how they intend to serve the U.S. market in the near future given the expiration of the safeguard measures on February 7, 2023.

Table III-21

Select residential washers: New entrant producers' descriptions of their global business model and intent to serve the U.S. market after safeguard termination

Firm	Narrative response on global business model and intent to serve U.S. market
LG USA	***
Samsung	***

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

Part IV: Financial Experience of U.S. producers

Background¹

Five U.S. producers—Alliance, GE Appliances, LG USA, Samsung, and Whirlpool—reported financial results and related information on their U.S. select residential washers operations. All U.S. producers had operations throughout the evaluation period with LG USA and Samsung being relatively new entrants, having started U.S. manufacturing in November 2018 and January 2018, respectively. In the relevant tables and text below, “new entrants” refer to LG USA and Samsung, while “continuous producers” refer to Alliance, GE Appliances, and Whirlpool. The financial results reported by U.S. producers are based on information from accounting systems designed to generate/report overall financial results on a U.S. GAAP basis and were reported for calendar-year periods.

With regard to events/activity impacting their operations during the period, *** continuous U.S. producers reported some degree of expansion activity and/or large-scale changes to platforms (see Part III of this report). While new entrants also reported expansion and related investment activity, they differed in terms of when and the extent to which they ***.² All U.S. producers reported that their operations and financial results were impacted, at least to some extent, by COVID-19 and related mitigation efforts (see table IV-12).

¹ The following abbreviations may be used in the tables and/or text of this section: generally accepted accounting principles (“GAAP”), fiscal year (“FY”), net sales (“NS”), cost of goods sold (“COGS”), selling, general, and administrative expenses (“SG&A expenses”), average unit values (“AUVs”), research and development (“R&D”), and return on assets (“ROA”).

² ***. Email with attachment from *** to USITC staff, April 13, 2023. ***. Email with attachment from *** to USITC staff, April 17, 2023.

Figure IV-1 presents firm-specific shares of total 2022 net sales quantity of select residential washers.

Figure IV-1

Select residential washers: U.S. producers' share of net sales quantity in 2022, by firm

* * * * *

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

Operations on select residential washers

Table IV-1 and table IV-2, respectively, present income-and-loss data on select residential washers and corresponding AUV (dollars per unit) percentage and unit changes.³ Appendix E presents selected company-specific financial information.⁴

³ In conjunction with the relatively wide range of company-specific select residential washers average sales values and costs (see table E-1), as well as product mix that changed to some extent during the period, the utility of a variance analysis is limited. Accordingly, a variance analysis is not presented in this section of the report.

⁴ Financial data and data trends for the U.S. industry from 2012 to 2019 were examined and discussed by the Commission in prior phases of this safeguard proceeding, and summary data for that period are provided in this report in Appendix D.

Table IV-1**Select residential washers: U.S. producers' results of operations, by item and period**

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

Item	Measure	2020	2021	2022
Commercial sales	Quantity	***	***	***
Internal consumption	Quantity	***	***	***
Transfers to related firms	Quantity	***	***	***
Total net sales	Quantity	***	***	***
Commercial sales	Value	***	***	***
Internal consumption	Value	***	***	***
Transfers to related firms	Value	***	***	***
Total net sales	Value	***	***	***
COGS: Total material input costs	Value	1,780,135	2,160,567	2,304,113
COGS: Direct labor	Value	187,108	224,618	230,482
COGS: Other factory costs	Value	734,179	744,480	856,373
COGS: Total	Value	2,701,422	3,129,665	3,390,968
Gross profit or (loss)	Value	***	***	***
SG&A expenses	Value	485,272	518,755	516,331
Operating income or (loss)	Value	***	***	***
Interest expense	Value	10,604	5,912	18,600
All other expenses	Value	4,481	3,851	5,426
All other income	Value	4,753	7,787	6,270
Net income or (loss)	Value	***	***	***
Depreciation expense included above	Value	131,782	122,561	124,487
Estimated cash flow from operations	Value	***	***	***
COGS: Total material input costs	Ratio to NS	***	***	***
COGS: Direct labor	Ratio to NS	***	***	***
COGS: Other factory costs	Ratio to NS	***	***	***
COGS: Total	Ratio to NS	***	***	***
Gross profit or (loss)	Ratio to NS	***	***	***
SG&A expenses	Ratio to NS	***	***	***
Operating income or (loss)	Ratio to NS	***	***	***
Net income or (loss)	Ratio to NS	***	***	***
COGS: Total material input costs	Share	65.9	69.0	67.9
COGS: Direct labor	Share	6.9	7.2	6.8
COGS: Other factory costs	Share	27.2	23.8	25.3
COGS: Total	Share	100.0	100.0	100.0

Table continued.

Table IV-1 Continued**Select residential washers: U.S. producers' results of operations, by item and period**

Unit values in dollars per LRW; count in number of firms reporting

Item	Measure	2020	2021	2022
Commercial sales	Unit value	***	***	***
Internal consumption	Unit value	***	***	***
Transfers to related firms	Unit value	***	***	***
Total net sales	Unit value	***	***	***
COGS: Total material input costs	Unit value	***	***	***
COGS: Direct labor	Unit value	***	***	***
COGS: Other factory costs	Unit value	***	***	***
COGS: Total	Unit value	***	***	***
Gross profit or (loss)	Unit value	***	***	***
SG&A expenses	Unit value	***	***	***
Operating income or (loss)	Unit value	***	***	***
Net income or (loss)	Unit value	***	***	***
Operating losses	Count	***	***	***
Net losses	Count	***	***	***
Data	Count	5	5	5

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

Note: Shares represent the share of COGS. Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers but does not include covered parts. See table IV-3 in this section regarding commercial sales of covered parts.

Table IV-2**Select residential washers: Changes in AUVs between comparison periods**

Changes in percent

Item	2020-22	2020-21	2021-22
Commercial sales	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
COGS: Total material input costs	***	***	***
COGS: Direct labor	***	***	***
COGS: Other factory costs	***	***	***
COGS: Total	***	***	***

Table continued.

Table IV-2 Continued**Select residential washers: Changes in AUVs between comparison periods**

Changes in dollars per unit

Item	2020-22	2020-21	2021-22
Commercial sales	***	***	***
Internal consumption	***	***	***
Transfers to related firms	***	***	***
Total net sales	***	***	***
COGS: Total material input costs	***	***	***
COGS: Direct labor	***	***	***
COGS: Other factory costs	***	***	***
COGS: Total	***	***	***
Gross profit or (loss)	***	***	***
SG&A expenses	***	***	***
Operating income or (loss)	***	***	***
Net income or (loss)	***	***	***

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

Note: Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers but does not include covered parts. Period changes preceded by a “▲” represent an increase, while period changes preceded by a “▼” represent a decrease.

Net sales

Most U.S. producers reported either primarily commercial sales (***) or exclusively commercial sales (***). The exception was ***, which reported *** transfers to related firms.⁵

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⁵ ***.

⁶ ***. USITC auditor notes.

Quantity

In 2021, *** U.S. producers reported relatively large increases in sales quantity, offsetting the decline in sales quantity reported by ***, the *** company reporting a sales quantity decline in that year. In 2022, the decline in the U.S. industry's total sales quantity, to its lowest level of the 2020-2022 period, reflects a continued decline in *** sales quantity, which was even larger than that of the preceding year. *** also reported declining sales quantities in 2022. *** were the *** U.S. producers to report increases in sales quantity in 2022.

Value

Total sales value followed the same directional pattern noted above for sales quantity, increasing in 2021 and then declining somewhat in 2022. Notwithstanding the relatively large decline in sales quantity in 2022, the decline in total sales value was offset to some extent by the continued increase in average sales value. As shown in table IV-2, the U.S. industry's overall average sales value increased by similar percentages in 2021 and 2022 with *** U.S. producers reporting the same directional pattern of higher average sales values throughout the period (see Table E-1). The ***, which reported a decline in average sales value in 2021.

While *** U.S. producer (***) indicated that changes in product mix were an important contributor to the pattern of higher average commercial sales value during the period,⁷ *** generally indicated that other factors were

⁷ ***. Email with attachment from *** to USITC staff, April 13, 2023.

more important.^{8 9 10 ***} reported the highest and lowest company-specific average sales values, respectively, throughout the period (see Table E-1).

Cost of goods sold and gross profit or loss

Material input costs

Total material input costs account for the largest share of total COGS, ranging from 65.9 percent of total COGS (2020) to 69.0 percent (2021) (see table IV-1). While company-specific shares of underlying inputs varied, other material inputs (** percent of the U.S. industry's total 2022 material input costs) was the largest overall category, followed by plastic (** percent), electronic components (** percent), steel (non-stainless) (** percent), purchased covered parts and/or other semi-finished material inputs (** percent), and stainless steel (** percent).¹¹

⁸ ***. Email from *** to USITC staff, April 14, 2023.

⁹ ***. Email with attachment from *** to USITC staff, April 13, 2023.

¹⁰ ***. Email from *** to USITC staff, April 14, 2023.

¹¹ USITC auditor notes. These subcategory percentages are based on company-specific shares of 2022 material input costs multiplied by company-specific 2022 material input costs. When summed and divided by overall U.S. industry total 2022 material input costs, these shares are no longer specific to a single company. With the ***, which reported on the high end of the range, stainless steel and steel (non-stainless) generally reflected broadly similar company-specific shares of 2022 material input costs: stainless steel ranging from ** percent (**) to ** percent (**); steel (non-stainless) ranging from ** percent (**) to ** percent (**). For the other input subcategories, the reported information indicated a wider range in terms of company-specific share of 2022 material input costs: plastic ranging from ** percent (**) to ** percent (**); electronic components ranging from ** percent (**) to ** percent (**); purchased covered parts and/or other semi-finished material inputs, reported by ** U.S. producers, ranging from ** percent (**) and ** percent (**); and other material inputs ranging from ** percent (**) to ** percent (**). Ibid. Note: *** reported that its other raw material inputs include **. *** U.S. producer questionnaire, section III-9c (note 1).

In terms of the geographic origin of material inputs (domestic versus imported), U.S. producers reported a relatively wide range, as measured by share of 2022 material input costs; continuous U.S. producers reporting *** shares of domestic origin inputs compared to new entrants: *** (**% percent of 2022 material input costs), *** (**% percent), and *** (**% percent); *** and *** reporting *** percent and *** percent, respectively.¹² As indicated by these domestic origin input shares, *** U.S. producers, whether continuous or new entrant, consumed imported inputs. The extent to which the safeguard measure applied to imported inputs varied by company.¹³

*** U.S. producers reported increasing average total material input costs in 2021 and 2022 (see table E-1).^{14 15}

Direct labor and other factory costs

The smallest primary category of COGS was direct labor, ranging from 6.8 percent of COGS (2022) to 7.2 percent (2021). On an overall basis, the U.S. industry's average direct labor

¹² As noted in Part III of this report, *** were the *** U.S. producers to report that they engaged in tolling activity as tollees. ***. *** U.S. producer questionnaire, sections II-11 and III-9c.

¹³ *** reported that *** of their imported inputs, which accounted for *** percent and *** percent of 2022 material input costs, respectively, were subject to the safeguard measure. In contrast, *** reported that *** of their imported inputs, which accounted for *** percent and *** percent of 2022 material input costs, respectively, were subject to the safeguard measure. *** reported that imported inputs subject to the safeguard measure accounted for *** percent of 2022 material input costs and that imported inputs not subject to the safeguard measure accounted for *** percent. *** U.S. producer questionnaires, section III-9d.

¹⁴ *** were at the higher end of the range of company-specific average material input costs throughout the period (see table E-1). *** reported the lowest average total material input cost throughout the period.

¹⁵ Reflecting *** percent and *** percent of their 2022 total COGS respectively, *** were the *** U.S. producers to report purchasing inputs from related suppliers. *** identified the relevant inputs and related suppliers as follows: ***. *** U.S. producer questionnaire, sections III-6 and III-7a. *** identified the relevant inputs and related suppliers as follows: ***. *** U.S. producer questionnaire, sections III-6 and III-7a.

cost increased in 2021 and 2022 but was directionally *** on a company-specific basis (see table E-1).

The second largest primary component of COGS was other factory costs, ranging from 23.8 percent of COGS (2021) to 27.2 percent (2020). On an overall basis, average other factory costs declined in 2021 and then increased in 2022. Directionally, changes in company-specific average other factory costs were *** in 2021 but *** in 2022 with *** U.S. producers reporting increases in average other factory costs. As shown in table E-1, *** reported the lowest average other factory costs throughout the period; ***.¹⁶ Among the large volume U.S. producers (i.e., ***), *** alternated in terms of which reported the highest company-specific average other factory costs.¹⁷

Since *** U.S. producers reported increases in capacity utilization in 2021 and *** reported declines in 2022 (see Part III of this report), the pattern of decreasing and then increasing average other factory costs can, at least to some extent, be attributed to changes in capacity utilization and corresponding fixed cost absorption.¹⁸

Gross profit or loss

The U.S. industry generated gross profit throughout the period, which increased on an absolute basis in 2021 and then declined in 2022. Overall gross profit ratio (total gross profit

¹⁶ *** U.S. producer questionnaire, sections III-10a-b. When considering average conversion cost (direct labor plus other factory costs), *** also reported the lowest company-specific average conversion cost (see table E-1).

¹⁷ ***. *** U.S. producer questionnaire, sections III-9f, III-10a-b. Email with attachment from *** to USITC staff, April 13, 2023. ***. *** U.S. producer questionnaire, sections III-10a-b, III-11.

¹⁸ ***. Email from *** to USITC staff, April 14, 2023.

divided by total sales value) was at its highest level in 2020, and contracted modestly in 2021 and then more substantially in 2022. As shown in table IV-2, the contractions in the U.S. industry's gross profit ratio in 2021 and 2022 reflect percentage increases in average COGS that exceeded corresponding percentage increases in average sales value.

On a company-specific basis, *** U.S. producers reported positive gross profit throughout the period (see table E-1) with ***, in contrast with the overall U.S. industry pattern noted above, reporting increasing gross profit in 2021 along with expanding gross profit ratios. The ***, which reported a decline in total gross profit and gross profit ratio in 2021, and ***, which reported an increase in total gross profit in 2021 but a decline in corresponding gross profit ratio. Like the other U.S. producers, *** reported declines in total gross profit and gross profit ratio in 2022.

SG&A expenses and operating income or loss

The U.S. industry's total SG&A expenses increased in 2021 and then declined in 2022, remaining above the level reported in 2020. On a company-specific basis, *** U.S. producers reported increasing total SG&A expenses in 2021 and then were more directionally mixed in 2022. *** was the *** U.S. producer to report declines in total SG&A expenses throughout the period.

The U.S. industry's SG&A expense ratio (total SG&A expenses divided by total sales value) remained within a relatively narrow range, declining modestly in 2021 and then increasing in 2022 but remaining below the 2020 level. While *** reported more notable declines and increases in their SG&A expense ratios, respectively, *** U.S. producers did not report substantial changes in their SG&A expense ratios (see Table E-1).¹⁹

In 2020 and 2021, the U.S. industry's gross profit ratio exceeded its SG&A expense ratio, yielding operating income in those years. In 2022, the modest increase in the U.S. industry's

¹⁹ ***. *** U.S. producer questionnaire, section III-10. Email with attachment from *** to USITC staff, April 13, 2023. Email from *** to USITC staff, May 1, 2023.

SG&A expense ratio, in conjunction with the more substantial contraction in gross profit ratio, yielded an overall operating loss. On a company-specific basis *** U.S. producers reported operating income in 2020 and 2021 (the *** being ***, which reported an operating loss in 2020) followed by a mix of positive and negative operating results in 2022: *** reporting operating losses;^{20 21} *** reporting lower but still positive operating income.^{22 23}

Interest expense, other expenses and income, and net income or loss

With the ***, U.S. producers reported varying amounts of interest expense, other expenses, and other income: *** accounting for the majority of total reported interest expense (*** percent), *** accounting for the majority of total other expenses (*** percent), and *** accounting for the majority of total net

²⁰ ***. Email with attachment from *** to USITC staff, April 13, 2023..

²¹ ***. Email from *** to USITC staff, April 14, 2023.

²² ***. Email from *** to USITC staff, April 14, 2023.

²³ ***. *** U.S. producer questionnaire, section II-2a. Email with attachment from *** to USITC staff, April 13, 2023. ***. Ibid.

other income (***) percent). As shown in table IV-1, interest expense represents the largest non-operating item.

To the extent that total interest expense and other expenses exceeded corresponding other income in each year, the U.S. industry's net results were lower compared to operating results throughout the period. Directionally, however, operating and net results followed the same pattern: increasing in 2021 and declining in 2022.

Covered parts

Table IV-3 presents U.S. producers' operations on commercially sold covered parts and table IV-4 presents U.S. producers' operations on select residential washers and commercially sold covered parts. *** were the *** U.S. producers to report commercial sales of covered parts.²⁴

Given the relatively small total value of commercially sold covered parts, the U.S. industry's financial results, whether measured in terms of select residential washers and commercially sold covered parts or select residential washers only, are essentially the same.

Table IV-3

Covered parts: Results of operations of U.S. producers on commercially sold covered parts, by item and period

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

Item	Measure	2020	2021	2022
Commercial sales	Quantity	***	***	***
Commercial sales	Value	***	***	***
Operating income or (loss)	Value	***	***	***
Operating income or (loss)	Ratio to NS	***	***	***

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

²⁴ *** U.S. producer questionnaires, section III-9g.

Table IV-4

Select residential washers and covered parts: Results of operations of U.S. producers on select residential washers and commercially sold covered parts, by item and period

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

Item	Measure	2020	2021	2022
Total net sales – select residential washers	Quantity	***	***	***
Total commercial sales - covered parts	Quantity	***	***	***
Total net sales - select residential washers and covered parts	Quantity	***	***	***
Total net sales - select residential washers	Value	***	***	***
Total commercial sales - covered parts	Value	***	***	***
Total net sales – select residential washers and covered parts	Value	***	***	***
Operating income or (loss) - select residential washers	Value	***	***	***
Operating income or (loss) - covered parts	Value	***	***	***
Total operating income or (loss) - select residential washers and covered parts	Value	***	***	***
Operating income or (loss) - select residential washers	Ratio to NS	***	***	***
Operating income or (loss) - covered parts	Ratio to NS	***	***	***
Total operating income or (loss) - select residential washers and covered parts	Ratio to NS	***	***	***

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

Note: Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers; and covered parts.

Capital expenditures and research and development expenses

Table IV-5 and table IV-7 present capital expenditures and R&D expenses, respectively, by firm. Tables IV-6 and table IV-8 present corresponding narrative explanations regarding the nature, focus, and significance of their capital expenditures and R&D expenses, respectively.

Table IV-5

Select residential washers: U.S. producers' capital expenditures, by firm and period

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table IV-5 Continued

Select residential washers: U.S. producers' capital expenditures, by firm and period

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

Note: Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers.

Table IV-6

Select residential washers: U.S. producers' narrative descriptions of their capital expenditures, by firm

Firm	Narrative on capital expenditures
Alliance	***
GE Appliances	***
LG USA	***
Samsung	***
Whirlpool	***

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

Table IV-7**Select residential washers: U.S. producers' R&D expenses, by firm and period**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

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

Note: Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers.

Table IV-8**Select residential washers: U.S. producers' narrative descriptions of their R&D expenses, by firm**

Firm	Narrative on R&D expenses
Alliance	***
GE Appliances	***
LG USA	***
Samsung	***
Whirlpool	***

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

Assets and return on assets

Table IV-9 presents data on the U.S. producers' total net assets and table IV-10 presents their operating ROA.²⁵ ²⁶ Table IV-11 presents U.S. producers' narrative information regarding major asset categories.

²⁵ The operating ROA is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value on a product-specific basis.

²⁶ ***. Email from *** to USITC staff, April 14, 2023. USITC auditor notes.

Table IV-9
Select residential washers: U.S. producers' total net assets, by firm and period

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	1,972,658	1,991,307	1,665,486

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

Note: Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers.

Table IV-10
Select residential washers: U.S. producers' ROA, by firm and period

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

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

Note: Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers.

Table IV-11**Select residential washers: U.S. producers' narrative descriptions of their total net assets, by firm**

Firm	Narrative on total net assets
Alliance	***
GE Appliances	***
LG USA	***
Samsung	***
Whirlpool	***

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

Table IV-12 provides the U.S. producers' narrative responses regarding the effects of COVID-19 on financial performance.

Table IV-12**Select residential washers: U.S. producers' narrative descriptions relating to the effects of COVID-19 on financial performance, by firm**

Firm	Narrative on the effects of COVID-19 on financial performance
Alliance	***
GE Appliances	***
LG USA	***
Samsung	***

Table continued.

Table IV-12 Continued

Select residential washers: U.S. producers' narrative descriptions relating to the effects of COVID-19 on financial performance, by firm

Firm	Narrative
Whirlpool	***

Source: Compiled from data submitted in response to Commission questionnaires

Part V: U.S. imports, apparent U.S. consumption, and market shares

U.S. imports

U.S. imports of select residential washers

As noted in part I, U.S. importers questionnaire responses were received from five firms, representing virtually all U.S. imports of LRWs: Electrolux; GE Appliances; LG USA (and its affiliated firm LG Alabama); and Samsung America. Table V-1 and figure V-1 present information based on questionnaire responses on U.S. imports of LRWs (i.e., covered merchandise limited to full units), expansion merchandise (i.e., PSC/belt top load and CIM/belt front load washers), and select residential washers (i.e., LRWs plus expansion merchandise). Total U.S. imports of LRWs decreased from more than *** units in 2020 with a value of \$*** to *** units in 2022 with a value of \$*** (representing a decrease of *** percent by quantity and *** percent by value across the period). The principal import sources of LRWs during the period were South Korea, Thailand, and Vietnam (no imports of LRWs were reported from China and virtually no imports were reported from Mexico or other sources during the period). Imports of LRWs from Thailand and South Korea decreased irregularly from 2020-22, while imports from Vietnam decreased each year across the period.¹

As noted in part I, *** accounted for *** U.S. imports of LRWs from South Korea (*** units) and most of the reported U.S. imports of LRWs from *** in 2022; *** percent of imports from Thailand (*** units) and *** percent of imports from Vietnam (*** units). *** indicated that ***. *** accounted for the remainder of 2022 imports of LRWs from ***; *** percent of imports from *** (*** units) and *** percent of imports from *** (*** units). *** indicated that it ***.

¹ Data and data trends regarding imports of LRWs and covered parts from 2012 to 2019 were examined and discussed by the Commission in prior phases of this safeguard proceeding, and summary data for that period are provided in this report at Appendix D.

***.

U.S. imports of expansion merchandise increased irregularly from 2020-22. Imports of expansion merchandise increased from *** units with a value of \$*** in 2020 to *** units with a value of \$*** in 2021 (an increase of *** percent by quantity and *** percent by value) and then decreased to *** units with a value of \$*** in 2022 (representing decreases of *** percent by quantity and *** percent by value from 2021-22 but increases of *** percent by quantity and *** percent by value overall 2020-22). *** reported imports of PSC/belt top load washers from *** in China and imports of CIM/belt front load washers from its *** in Mexico and Italy. *** reported imports of CIM/belt front load washers from *** in China. *** reported imports of PSC/belt top load washers from its *** in Mexico and Thailand. Lastly, *** reported imports of PSC/belt top load washers from its *** in Thailand.

The average unit value of imports of LRWs sourced from Thailand was the lowest among foreign suppliers during each year of the period (aside from 2020, the one year for which a small number of imports from Mexico were reported). Comparatively, the average unit value of imports of LRWs was the highest among foreign suppliers for imports from South Korea during each year of the period, consistent with *** reporting that ***. The average unit value of reported imports from Vietnam was comparable to that of South Korea in 2022 (\$*** per unit as compared to \$*** per unit), while imports from Thailand were lower at \$*** per unit that year. Overall, the average unit value of imports of LRWs decreased *** percent from 2020-21 and then increased *** percent from 2021-22 for a total decrease across the period of *** percent (ending at \$*** per unit). The average unit value of imports of expansion merchandise from all sources increased irregularly by *** percent from 2020-22 (decreasing *** percent from 2020-21 and then increasing *** percent from 2021-22).

Taken together, total U.S. imports of select residential washers decreased irregularly, 36.7 percent by quantity and 29.4 percent by value, from 2020-22. In 2020, U.S. importers reported 2.1 million units of imports of select residential washers (with a value of \$819.0 million), of which *** units were in-scope LRWs. In 2022, total reported imports of select residential washers had decreased to 1.3 million units (with a value of \$578.1 million), of which approximately *** units were of in-scope LRWs. Average unit values of select

residential washers also increased irregularly (decreasing 9.9 percent from 2020-21 and then increasing 23.8 percent from 2021-22 for an overall increase of 11.6 percent across the period).

Table V-1
Select residential washers: U.S. imports, by product, source, and period

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

Product and source	Measure	2020	2021	2022
LRWs: China	Quantity	***	***	***
LRWs: Mexico	Quantity	***	***	***
LRWs: South Korea	Quantity	***	***	***
LRWs: Thailand	Quantity	***	***	***
LRWs: Vietnam	Quantity	***	***	***
LRWs: All other sources	Quantity	***	***	***
LRWs: All import sources	Quantity	***	***	***
Expansion washers: All import sources	Quantity	***	***	***
All select residential washers: All import sources	Quantity	2,091,482	2,415,228	1,322,997
LRWs: China	Value	***	***	***
LRWs: Mexico	Value	***	***	***
LRWs: South Korea	Value	***	***	***
LRWs: Thailand	Value	***	***	***
LRWs: Vietnam	Value	***	***	***
LRWs: All other sources	Value	***	***	***
LRWs: All import sources	Value	***	***	***
Expansion washers: All import sources	Value	***	***	***
All select residential washers: All import sources	Value	818,968	852,491	578,060
LRWs: China	Unit value	***	***	***
LRWs: Mexico	Unit value	***	***	***
LRWs: South Korea	Unit value	***	***	***
LRWs: Thailand	Unit value	***	***	***
LRWs: Vietnam	Unit value	***	***	***
LRWs: All other sources	Unit value	***	***	***
LRWs: All import sources	Unit value	***	***	***
Expansion washers: All import sources	Unit value	***	***	***
All select residential washers: All import sources	Unit value	392	353	437

Table continued.

Table V-1 Continued**Select residential washers: U.S. imports, by product, source, and period**

Shares and ratios in percent; ratios represent the ratio to U.S. production

Product and source	Measure	2020	2021	2022
LRWs: China	Share of quantity	***	***	***
LRWs: Mexico	Share of quantity	***	***	***
LRWs: South Korea	Share of quantity	***	***	***
LRWs: Thailand	Share of quantity	***	***	***
LRWs: Vietnam	Share of quantity	***	***	***
LRWs: All other sources	Share of quantity	***	***	***
LRWs: All import sources	Share of quantity	***	***	***
Expansion washers: All import sources	Share of quantity	***	***	***
All select residential washers: All import sources	Share of quantity	100.0	100.0	100.0
LRWs: China	Share of value	***	***	***
LRWs: Mexico	Share of value	***	***	***
LRWs: South Korea	Share of value	***	***	***
LRWs: Thailand	Share of value	***	***	***
LRWs: Vietnam	Share of value	***	***	***
LRWs: All other sources	Share of value	***	***	***
LRWs: All import sources	Share of value	***	***	***
Expansion washers: All import sources	Share of value	***	***	***
All select residential washers: All import sources	Share of value	100.0	100.0	100.0
LRWs: China	Ratio	***	***	***
LRWs: Mexico	Ratio	***	***	***
LRWs: South Korea	Ratio	***	***	***
LRWs: Thailand	Ratio	***	***	***
LRWs: Vietnam	Ratio	***	***	***
LRWs: All other sources	Ratio	***	***	***
LRWs: All import sources	Ratio	***	***	***
Expansion washers: All import sources	Ratio	***	***	***
All select residential washers: All import sources	Ratio	25.3	26.9	16.9

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure V-1
Select residential washers: U.S. import quantities and average unit values, by product type and period

* * * * *

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

U.S. imports of covered parts

Table V-2 presents U.S. imports of covered parts, by source, from 2020-22. As noted in part I, *** of the five responding firms reported imports of covered parts in 2022: *** (additionally, *** reported imports of *** parts from South Korea in 2020). With respect to reasons for importing, *** indicated that ***. *** reported imports of covered parts from ***; there were *** imports of covered parts reported from ***). In 2022, *** reported the majority of imports of parts from ***; *** percent of the imports of parts from China (*** parts), *** percent of the imports of parts from Thailand (*** parts), and *** percent of the imports of parts from Vietnam (*** parts). *** reported the majority of imports of parts from South Korea (*** percent of total imports from South Korea or *** parts) in 2022.

In each year of the period, a plurality of parts by both quantity and value were imported from South Korea, which represented between *** and *** percent of the quantity and between *** and *** percent of the value of imported covered parts from 2020-22. Vietnam was the second leading source of imports of covered parts by both quantity and value across the period, representing between *** and *** percent of the quantity and between *** and *** percent of the value of imported covered parts from 2020-22. Thailand represented between *** and *** percent of the quantity and between *** and *** percent of the value of the annual shares of the imported parts from 2020-22. China was a relatively small source of covered parts in each of the years, representing between *** and *** percent of the share by quantity and between *** and *** percent of the share by value. The average unit value for imports of covered parts across all sources by year ranged from \$*** to \$*** per part.

Table V-2**Covered parts: U.S. imports of covered parts as inputs to washers, by source and period**

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

Source	Measure	2020	2021	2022
China	Quantity	***	***	***
Mexico	Quantity	***	***	***
South Korea	Quantity	***	***	***
Thailand	Quantity	***	***	***
Vietnam	Quantity	***	***	***
All other sources	Quantity	***	***	***
All import sources	Quantity	***	***	***
China	Value	***	***	***
Mexico	Value	***	***	***
South Korea	Value	***	***	***
Thailand	Value	***	***	***
Vietnam	Value	***	***	***
All other sources	Value	***	***	***
All import sources	Value	***	***	***
China	Unit value	***	***	***
Mexico	Unit value	***	***	***
South Korea	Unit value	***	***	***
Thailand	Unit value	***	***	***
Vietnam	Unit value	***	***	***
All other sources	Unit value	***	***	***
All import sources	Unit value	***	***	***

Table continued.

Table V-2 Continued**Covered parts: U.S. imports of covered parts as inputs to washers, by source and period**

Shares and ratios in percent

Source	Measure	2020	2021	2022
China	Share of quantity	***	***	***
Mexico	Share of quantity	***	***	***
South Korea	Share of quantity	***	***	***
Thailand	Share of quantity	***	***	***
Vietnam	Share of quantity	***	***	***
All other sources	Share of quantity	***	***	***
All import sources	Share of quantity	100.0	100.0	100.0
China	Share of value	***	***	***
Mexico	Share of value	***	***	***
South Korea	Share of value	***	***	***
Thailand	Share of value	***	***	***
Vietnam	Share of value	***	***	***
All other sources	Share of value	***	***	***
All import sources	Share of value	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Value data shown as "0" represent values greater than zero, but less than 500 dollars. Ratios not provided since it would compare covered parts to full units.

Imports within and exceeding the tariff-rate quota

Tables V-3 and V-4 present imports within and exceeding the tariff-rate quota (TRQ) during 2020-22 for LRWs (i.e., covered merchandise limited to full units) and covered parts, respectively, as reported in questionnaire data.² As discussed in Part I, beginning February 7, 2020, the tariff-rate quota for LRWs shifted from an annual allocation to a quarterly allocation of 300,000 complete units per quarter,³ while the tariff-rate quota for covered parts remained annual.⁴

*** accounted for virtually all⁵ imports of LRWs from 2020-22, with *** companies reporting imports in every quarter from 2020-22. *** reported importing LRWs above the quota level in *** of the twelve quarters, and *** reported importing LRWs above the quota level in *** of the twelve quarters. No above-quota imports were reported by any company in four of the twelve quarters. More imports above the quota level were reported in 2021 than in 2020, with *** units reported above the quota for 2021 as compared to *** units reported above the quota for 2020, but virtually zero imports were reported above the quota level in 2022. The quarter with the highest reported imports of LRWs above the quota was 2021 Q3, with *** units reported for that period.

*** accounted for the vast majority of imports of covered parts from 2020-22, and *** companies reported imports of covered parts in *** quarters from 2020-22.⁶ *** reported imports above the quota level in ***

² Imports of LRWs from 2012 to 2019, and imports subject to the safeguard measure in 2018 and 2019, were discussed in prior phases of the Commission's safeguard proceeding, and summary data for those periods are provided in this report at Appendix D.

³ The quarterly TRQ for the third quota year (February 7, 2020 – February 7, 2021) allocated the 1.2 million units as follows: 300,000 units from February 7, 2020 – May 6, 2020; 300,000 units from May 7, 2020 – August 6, 2020; 300,000 units from August 7, 2020 – November 6, 2020; and 300,000 units from November 7, 2020 – February 6, 2021. 85 FR 5125, January 28, 2020. The Commission collected quarterly data on a calendar basis. As such, there is a timing mismatch between data as reported in questionnaires on the TRQ quarterly quota periods.

⁴ The allocations for covered parts were 90,000 covered parts for the period covering February 7, 2020 through February 7, 2021, 110,000 parts for the period covering February 8, 2021 through February 7, 2022, and 130,000 parts for the period covering February 8, 2022 to February 7, 2023. See HTS Subheadings 9903.45.01, 9903.45.02, 9903.45.05, and 9903.45.06 of Harmonized Tariff Schedule of the United States (2023). The Commission collected quarterly data on a calendar basis. As such, there is a timing mismatch between data as reported in questionnaires and the annual TRQ quota periods.

⁵ *** also reported ***.

⁶ *** also reported importing covered parts in *** of the twelve quarters, with imports above the quota level reported for *** of those quarters.

of the twelve quarters, while *** reported imports above the quota level in *** of the twelve quarters. Overall, imports were reported above the quota level in *** of the twelve quarters. Like complete LRWs, more imports of covered parts were reported above the quota level in 2021 than in 2020 or 2022 (with *** parts imported above the quota in 2021 as compared to *** parts imported above the quota in 2020 and *** parts imported above the quota in 2022).

Table V-3
LRWs: Imports by TRQ level of complete LRWs, by quarter

Quantity in units

Period	In quota	Above quota	All imports
2020 Q1 (Jan-Mar)	***	***	***
2020 Q2 (Apr-Jun)	***	***	***
2020 Q3 (Jul-Sep)	***	***	***
2020 Q4 (Oct-Dec)	***	***	***
2021 Q1 (Jan-Mar)	***	***	***
2021 Q2 (Apr-Jun)	***	***	***
2021 Q3 (Jul-Sep)	***	***	***
2021 Q4 (Oct-Dec)	***	***	***
2022 Q1 (Jan-Mar)	***	***	***
2022 Q2 (Apr-Jun)	***	***	***
2022 Q3 (Jul-Sep)	***	***	***
2022 Q4 (Oct-Dec)	***	***	***

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

Note: Covered parts are not included in the data displayed for LRWs in this table.

Note: The quarterly TRQ periods lasted for three months beginning on February 7 of each year. The Commission collected quarterly data on a calendar basis. As such, there is a timing mismatch between data as reported in questionnaires and the quarterly TRQ periods.

Table V-4
Covered parts: Imports by annual TRQ level of covered parts

Quantity in units

TRQ level	2020	2021	2022
In quota	***	***	***
Above quota	***	***	***
All imports	***	***	***

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

Note: The annual TRQ periods for parts began on February 7 of each year. The Commission collected data on a calendar basis. As such, there is a timing mismatch between data as reported in questionnaires and the annual TRQ periods.

U.S. importers' inventories

Table V-5 presents data for U.S. importers' end-of-period inventories of imports of LRWs held in the United States.⁷ *** accounted for all end-of-period inventories of LRWs during the period. From 2020-22, the vast majority of end-of-period inventories reported originated from South Korea, Thailand, and Vietnam (*** also reported minimal end-of-period inventories of imports from China), and no end-of-period inventories of imports from Mexico or other sources were reported during the period). *** accounted for all end-of-period inventories of imports from South Korea, and *** companies reported end-of-period inventories from Thailand and Vietnam. End-of-period inventory levels from South Korea, Thailand, and Vietnam all decreased across the period, by ***, ***, and *** percent, respectively. Imports from all three sources experienced their largest year-over-year decreases between 2021 and 2022 (with decreases of ***, ***, and *** percent, respectively).

Overall, end-of-period inventories of imports from all sources decreased *** percent across the period (end-of-period inventory levels decreased *** percent from 2020-21 and then experienced a much greater decrease of *** percent from 2021-22). Inventories of imports from all sources as a ratio to imports, to U.S. shipments of imports, and to total shipments of imports all decreased irregularly over the period. End-of-period inventories of imports from all sources as a ratio to imports remained relatively stable across the period (increasing *** percentage points from 2020-21 and then decreasing *** percentage points from 2021-22, resulting in an overall decrease of *** percentage points across the period and ending at a ratio of *** percent). Inventories of imports from all sources as a ratio to U.S. shipments of imports increased *** percentage points from 2020-21 and the decreased *** percentage points from 2021-22, resulting in an overall decrease of *** percentage points and ending at a ratio of *** percent. Lastly, the ratio of inventories of imports from all sources to total shipments of imports also decreased irregularly across the period (from *** percent in 2020 to *** percent in 2022).

⁷ Summary U.S. importers' inventory data from the original safeguard proceeding, the safeguard monitoring proceeding, and the safeguard extension proceeding are presented in Appendix D.

Table V-5**LRWs: U.S. importers' inventories and their ratio to select items, by source and period**

Quantity in units; ratios in percent

Measure	Source	2020	2021	2022
Inventories quantity	China	***	***	***
Ratio to imports	China	***	***	***
Ratio to U.S. shipments of imports	China	***	***	***
Ratio to total shipments of imports	China	***	***	***
Inventories quantity	Mexico	***	***	***
Ratio to imports	Mexico	***	***	***
Ratio to U.S. shipments of imports	Mexico	***	***	***
Ratio to total shipments of imports	Mexico	***	***	***
Inventories quantity	South Korea	***	***	***
Ratio to imports	South Korea	***	***	***
Ratio to U.S. shipments of imports	South Korea	***	***	***
Ratio to total shipments of imports	South Korea	***	***	***
Inventories quantity	Thailand	***	***	***
Ratio to imports	Thailand	***	***	***
Ratio to U.S. shipments of imports	Thailand	***	***	***
Ratio to total shipments of imports	Thailand	***	***	***
Inventories quantity	Vietnam	***	***	***
Ratio to imports	Vietnam	***	***	***
Ratio to U.S. shipments of imports	Vietnam	***	***	***
Ratio to total shipments of imports	Vietnam	***	***	***
Inventories quantity	All other sources	***	***	***
Ratio to imports	All other sources	***	***	***
Ratio to U.S. shipments of imports	All other sources	***	***	***
Ratio to total shipments of imports	All other sources	***	***	***
Inventories quantity	Any import source	***	***	***
Ratio to imports	Any import source	***	***	***
Ratio to U.S. shipments of imports	Any import source	***	***	***
Ratio to total shipments of imports	Any import source	***	***	***

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeros, null values, and undefined calculations are suppressed and shown as "---".

U.S. importers' imports subsequent to December 31, 2022

The Commission requested importers to indicate whether they had imported or arranged for imports of complete LRWs, covered parts, or expansion merchandise for delivery between December 31, 2022 and December 31, 2023. Table V-6 shows the reported arranged imports of LRWs and expansion merchandise for 2023 by quarter, and table V-7 shows arranged imports of covered parts for 2023 by quarter.

*** reported arranged imports of more than *** units of LRWs for 2023 (no other importer reported arranged imports of LRWs). The plurality of reported 2023 arranged imports of LRWs were to be sourced from Vietnam (*** percent of the 2023 total), followed by Thailand (*** percent of the 2023 total) and South Korea (*** percent of the 2023 total). *** also reported arranged imports from other sources, comprising *** percent of the 2023 total. No arranged imports of LRWs from any other source were reported for the period.

*** also reported combined arranged imports of more than *** expansion washer units for 2023 (no other importer reported arranged imports of expansion merchandise). ***. *** reported *** percent of arranged imports of expansion merchandise for 2023, with *** representing the remainder. In total, importers reported arranged imports of more than *** select residential washer units for 2023.

With respect to arranged imports of covered parts as shown in table V-7, *** reported that they planned to collectively import *** parts in 2023 (no other U.S. importer reported arranged imports of covered parts). *** reported *** percent of the total arranged imports of parts with *** representing the remainder. *** reported its arranged imports of parts would mostly be sourced from *** (*** percent of its total), *** (*** percent of its total), and *** (*** percent of its total), with imports from *** representing the remainder. *** reported *** percent of its arranged imports of covered parts would be sourced from ***, *** percent would be from ***, and *** percent would be from ***, with *** representing the remainder. In total, *** percent of arranged imports of covered parts were reported as planned to be sourced from ***, followed by *** percent from ***, and *** percent from ***, with *** representing the remainder.

Table V-6**Select residential washers: Arranged imports, by product, source, and period**

Quantity in units

Product and source	Jan-Mar 2023	Apr-Jun 2023	Jul-Sept 2023	Oct-Dec 2023	Total
LRWs: China	***	***	***	***	***
LRWs: Mexico	***	***	***	***	***
LRWs: South Korea	***	***	***	***	***
LRWs: Thailand	***	***	***	***	***
LRWs: Vietnam	***	***	***	***	***
LRWs: All other sources	***	***	***	***	***
LRWs: All import sources	***	***	***	***	***
Expansion merchandise: All import sources	***	***	***	***	***
Select residential washers: All import sources	***	***	***	***	***

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

Note: LRW data only display full units and do not include covered parts.

Table V-7**Covered parts: Arranged imports, by source and period**

Quantity in units

Source	Jan-Mar 2023	Apr-Jun 2023	Jul-Sept 2023	Oct-Dec 2023	Total
China	***	***	***	***	***
Mexico	***	***	***	***	***
South Korea	***	***	***	***	***
Thailand	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Apparent U.S. consumption and market shares

Tables V-8 through V-12 and figures V-2 through V-6 display apparent U.S. consumption and market shares broken out as follows: for LRWs, expansion merchandise, and select residential washers by quantity (table V-8 and figure V-2) and value (table V-9 and figure V-3); for covered parts by quantity (table V-10 and figure V-4) and value (table V-11 and figure V-5); and for select residential washers plus covered parts by value (table V-12 and figure V-6).

Select residential washers

Table V-8 and figure V-2 present data on apparent U.S. consumption and U.S. market shares for LRWs, expansion merchandise, and select residential washers by quantity. U.S. producers' shipments are also broken out between shipments of select residential washers made by continuous U.S. producers (i.e., Whirlpool, GE Appliances, and Alliance) and new entrants (i.e., LG and Samsung).

Overall apparent U.S. consumption of select residential washers increased from 9.7 million units in 2020 to 10.5 million units in 2021 before decreasing to 9.0 million units in 2022 (representing an increase of 8.3 percent from 2020-21 and a decrease of 14.9 percent from 2021-22, for an overall decrease of 7.8 percent across the period).⁸ Continuous U.S. producers held the largest share of apparent U.S. consumption in each year of the period, between *** and *** percent of the quantity of total shipments (although their share decreased *** percentage points from 2020-22). New entrant U.S. producers held the *** share of apparent U.S. consumption by quantity in each year of the period, representing between *** and *** percent of apparent U.S. consumption by quantity (their share of apparent U.S. consumption increased *** percentage points from 2020-22). Despite U.S. producers' combined U.S. shipments decreasing irregularly from 2020-22, they gained market share over the period (from 78.6 percent in 2020 to 83.5 percent in 2022, for an increase of 4.9 percentage points from 2020-22).

U.S. importers' U.S. shipments of LRWs as a share of the total apparent U.S. consumption by quantity decreased from *** percent in 2020 to *** percent in 2022 (a decrease of *** percentage points). The principal sources of shipments of imported LRWs during the period were ***. *** held the largest share of apparent U.S. consumption by import source in 2020 and 2022, with *** and *** percent

⁸ Summary data regarding the apparent U.S. consumption and market shares from 2012 to 2019 examined by the Commission in the prior phases of this safeguard proceeding are provided in this report at Appendix D.

of total apparent U.S. consumption by quantity in those years. *** held the largest share of apparent U.S. consumption in 2021 with *** percent. *** held between *** and *** percent of apparent U.S. consumption market share by quantity across the period.

Shipments of imports of expansion merchandise gained market share (from *** percent in 2020 to *** percent in 2022; a gain of *** percentage points) as shipments of expansion washers increased *** percent overall from 2020-22.

Table V-8
Select residential washers: Apparent U.S. consumption and market shares based on quantity, by source and period

Quantity in units; shares in percent

Source	Measure	2020	2021	2022
Continuous U.S. producers	Quantity	***	***	***
New entrant U.S. producers	Quantity	***	***	***
All U.S. producers	Quantity	7,648,202	8,197,981	7,491,291
LRWs: China	Quantity	***	***	***
LRWs: Mexico	Quantity	***	***	***
LRWs: South Korea	Quantity	***	***	***
LRWs: Thailand	Quantity	***	***	***
LRWs: Vietnam	Quantity	***	***	***
LRWs: All other sources	Quantity	***	***	***
LRWs: All import sources	Quantity	***	***	***
Expansion merchandise: All import sources	Quantity	***	***	***
Select residential washers: All import sources	Quantity	2,084,717	2,345,872	1,482,755
All sources	Quantity	9,732,919	10,543,853	8,974,046
Continuous U.S. producers	Share	***	***	***
New entrant U.S. producers	Share	***	***	***
All U.S. producers	Share	78.6	77.8	83.5
LRWs: China	Share	***	***	***
LRWs: Mexico	Share	***	***	***
LRWs: South Korea	Share	***	***	***
LRWs: Thailand	Share	***	***	***
LRWs: Vietnam	Share	***	***	***
LRWs: All other sources	Share	***	***	***
LRWs: All import sources	Share	***	***	***
Expansion merchandise: All import sources	Share	***	***	***
Select residential washers: All import sources	Share	21.4	22.2	16.5
All sources	Share	100.0	100.0	100.0

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

Note: Shares and ratios shown as “0.0” represent values greater than zero, but less than “0.05” percent. Zeroes, null values, and undefined calculations are suppressed and shown as “---”.

Note: The data in this table only include full units and do not include covered parts.

Figure V-2

Select residential washers: Apparent U.S. consumption based on quantity, by source and period

* * * * *

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

Note: The data in this figure only include full units and do not include covered parts.

Table V-9 and figure V-3 present data on apparent U.S. consumption and U.S. market shares for LRWs, expansion merchandise, and select residential washers by value. U.S. producers' shipments are again broken out between shipments made by continuous U.S. producers and new entrants.

Overall apparent U.S. consumption of select residential washers increased by value from \$4.4 billion in 2020 to \$5.1 billion in 2021 and then decreased to \$4.5 billion in 2022 (representing an increase of 16.2 percent from 2020-21 and a decrease of 10.8 percent from 2021-22, for an overall increase of 3.6 percent from 2020-22). Apparent U.S. consumption decreased irregularly across the period as measured by quantity, but it increased irregularly across the period when measured by value.

Continuous U.S. producers held the *** share of apparent U.S. consumption in each year of the period when measured by value, with between *** and *** percent of U.S. shipments (although their share decreased *** percentage points from 2020-22). The new entrants held the *** share of apparent U.S. consumption by value in each year of the period, with between *** and *** percent of apparent U.S. consumption (new entrants' share of apparent U.S. consumption increased by *** percentage points from 2020-22 when measured by value as opposed to by quantity). The U.S. producers combined gained market share by value from 2020-22 (from 76.0 percent in 2020 to 80.5 percent in 2022, for an increase of 4.6 percentage points from 2020-22).

U.S. importers' U.S. shipments of LRWs as a share of total apparent U.S. consumption by value decreased from *** percent in 2020 to *** percent in 2022 (a decrease of *** percentage points). The principal sources of shipments of imported LRWs during the period were ***. *** held the largest share of the value of apparent U.S. consumption by import source in each year of the period, with between *** and *** percent of the market share of total select residential washer shipments. *** held the second largest share in 2020 and 2021, with *** and *** percent of market share in those years, respectively. South Korea's market share was between *** and *** percent of the value of select residential washer shipments over the period.

Shipments of imports of expansion merchandise also gained market share (from *** percent in 2020 to *** percent in 2022; a gain of *** percentage points) when measured by value as shipments of expansion merchandise increased *** percent overall from 2020-22 by value.

Table V-9**Select residential washers: Apparent U.S. consumption and market shares based on value, by source and period**

Value in 1,000 dollars; shares in percent

Source	Measure	2020	2021	2022
Continuous U.S. producers	Value	***	***	***
New entrant U.S. producers	Value	***	***	***
All U.S. producers	Value	3,313,529	3,778,632	3,642,062
LRWs: China	Value	***	***	***
LRWs: Mexico	Value	***	***	***
LRWs: South Korea	Value	***	***	***
LRWs: Thailand	Value	***	***	***
LRWs: Vietnam	Value	***	***	***
LRWs: All other sources	Value	***	***	***
LRWs: All import sources	Value	***	***	***
Expansion merchandise: All import sources	Value	***	***	***
Select residential washers: All import sources	Value	1,049,243	1,292,755	879,490
All sources	Value	4,362,772	5,071,387	4,521,552
Continuous U.S. producers	Share	***	***	***
New entrant U.S. producers	Share	***	***	***
All U.S. producers	Share	76.0	74.5	80.5
LRWs: China	Share	***	***	***
LRWs: Mexico	Share	***	***	***
LRWs: South Korea	Share	***	***	***
LRWs: Thailand	Share	***	***	***
LRWs: Vietnam	Share	***	***	***
LRWs: All other sources	Share	***	***	***
LRWs: All import sources	Share	***	***	***
Expansion merchandise: All import sources	Share	***	***	***
Select residential washers: All import sources	Share	24.0	25.5	19.5
All sources	Share	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Note: The data in this table only include full units and do not include covered parts.

Figure V-3

Select residential washers: Apparent U.S. consumption based on value, by source and period

* * * * *

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

Note: The data in this figure only include full units and do not include covered parts.

Covered parts

Table V-10 and figure V-4 display apparent U.S. consumption and market shares for covered parts by quantity and table V-11 and figure V-5 display apparent U.S. consumption and market shares for covered parts by value. U.S. producers' U.S. shipments are again broken out between U.S. shipments made by continuous U.S. producers and by new entrants.

Overall apparent U.S. consumption of covered parts decreased from over *** parts with a value of \$*** in 2020 to less than *** parts with a value of \$*** in 2021 to less than *** parts with a value of \$*** in 2022, for an overall decrease of *** percent by quantity and *** percent by value across the period. U.S. shipments of covered parts reported by U.S. producers decreased *** percent by quantity and *** percent by value from 2020-22 (from over *** parts in 2020 with a value of \$*** to *** parts with a value of \$*** in 2022). U.S. shipments of covered parts reported by U.S. importers decreased *** percent by quantity and *** percent by value from 2020-22 (from over *** parts with a value of \$*** in 2020 to less than *** parts with a value of \$*** in 2022).

U.S. shipments of covered parts by U.S. importers had a *** market share than that of U.S. shipments of covered parts made by U.S. producers in each year of the period (as measured by both quantity and value). Shares of total apparent U.S. consumption held by U.S. shipments of imports were between *** and *** percent of the quantity and between *** and *** percent of the value.

In each year, South Korea was the leading source of U.S. shipments of imported parts by quantity, with between *** and *** percent market share (its market share by value was between *** and *** percent). Vietnam was the largest import source by value in two of the three years with market shares between *** and *** percent (its share by quantity was between *** and *** percent). Thailand's market share was between *** and *** percent by quantity and between *** and *** percent by value. China's market share was between *** and *** percent by quantity and between *** and *** percent by value. Mexico's market share was less than half a percent by both quantity and value in each year of the period.

Table V-10**Covered parts: Apparent U.S. consumption and market shares based on quantity, by source and period**

Quantity in units; shares in percent

Source	Measure	2020	2021	2022
Continuous U.S. producers	Quantity	***	***	***
New entrant U.S. producers	Quantity	***	***	***
All U.S. producers	Quantity	***	***	***
China	Quantity	***	***	***
Mexico	Quantity	***	***	***
South Korea	Quantity	***	***	***
Thailand	Quantity	***	***	***
Vietnam	Quantity	***	***	***
All other sources	Quantity	***	***	***
All import sources	Quantity	***	***	***
All sources	Quantity	***	***	***
Continuous U.S. producers	Share	***	***	***
New entrant U.S. producers	Share	***	***	***
All U.S. producers	Share	***	***	***
China	Share	***	***	***
Mexico	Share	***	***	***
South Korea	Share	***	***	***
Thailand	Share	***	***	***
Vietnam	Share	***	***	***
All other sources	Share	***	***	***
All import sources	Share	***	***	***
All sources	Share	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure V-4

Covered parts: Apparent U.S. consumption based on quantity, by source and period

* * * * *

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

Table V-11**Covered parts: Apparent U.S. consumption and market shares based on value, by source and period**

Value in 1,000 dollars; shares in percent

Source	Measure	2020	2021	2022
Continuous U.S. producers	Value	***	***	***
New entrant U.S. producers	Value	***	***	***
All U.S. producers	Value	***	***	***
China	Value	***	***	***
Mexico	Value	***	***	***
South Korea	Value	***	***	***
Thailand	Value	***	***	***
Vietnam	Value	***	***	***
All other sources	Value	***	***	***
All import sources	Value	***	***	***
All sources	Value	***	***	***
Continuous U.S. producers	Share	***	***	***
New entrant U.S. producers	Share	***	***	***
All U.S. producers	Share	***	***	***
China	Share	***	***	***
Mexico	Share	***	***	***
South Korea	Share	***	***	***
Thailand	Share	***	***	***
Vietnam	Share	***	***	***
All other sources	Share	***	***	***
All import sources	Share	***	***	***
All sources	Share	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---". Value data shown as "0" represent values greater than zero, but less than 500 dollars.

Figure V-5

Covered parts: Apparent U.S. consumption based on value, by source and period

* * * * *

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

Select residential washers and covered parts by value

Table V-12 and figure V-6 display apparent U.S. consumption and market shares for select residential washers by value with the value of covered parts added to the totals (apparent U.S. consumption and markets shares for select residential washers and covered parts are not presented by quantity as full units and parts are not comparable quantity measurements). U.S. producers' shipments are broken out between shipments made by continuous U.S. producers and new entrants.

As the total value of covered parts is small in comparison to the total value of complete washers, the overall apparent consumption and market share trends shown in table V-12 and figure V-6 are similar to those shown in table V-9 and figure V-3 (the total value of select residential washers in 2022 was over \$*** in 2022 and the total value of reported covered parts shipments was \$***).

The total value of select residential washers and covered parts increased from \$*** in 2020 to \$*** in 2021 before decreasing to \$*** in 2022 (representing an increase of *** percent from 2020-21 and a decrease of *** percent from 2021-22, for an overall increase of *** percent from 2020-22).

U.S. producers' share of total apparent consumption increased from *** percent in 2020 to *** percent in 2022, a gain of *** percentage points. The market share by value of shipments of imports of LRWs and covered parts decreased from *** percent in 2020 to *** percent in 2022, a decrease of *** percentage points across the period. The market share by value of shipments of imports of expansion merchandise increased from *** percent in 2020 to *** percent in 2022, a gain of *** percentage points.

By import source, Vietnam had the highest market share by value of total shipments of select residential washers and covered parts, at between *** and *** percent from 2020-22. Thailand had the second highest market share, at between *** and *** percent. South Korea had the second highest market share in 2022, at *** percent. The market shares held by shipments of imports China and Mexico were less than half a percent in each year of the period.

Table V-12

Select residential washers and covered parts: Apparent U.S. consumption and market shares based on value, by source and period

Value in 1,000 dollars; shares in percent

Source	Measure	2020	2021	2022
Continuous U.S. producers	Value	***	***	***
New entrant U.S. producers	Value	***	***	***
All U.S. producers	Value	***	***	***
LRWs and covered parts: China	Value	***	***	***
LRWs and covered parts: Mexico	Value	***	***	***
LRWs and covered parts: South Korea	Value	***	***	***
LRWs and covered parts: Thailand	Value	***	***	***
LRWs and covered parts: Vietnam	Value	***	***	***
LRWs and covered parts: All other sources	Value	***	***	***
LRWs and covered parts: All import sources	Value	***	***	***
Expansion merchandise: All import sources	Value	***	***	***
Select residential washers and covered parts: All import sources	Value	***	***	***
All sources	Value	***	***	***
Continuous U.S. producers	Share	***	***	***
New entrant U.S. producers	Share	***	***	***
All U.S. producers	Share	***	***	***
LRWs and covered parts: China	Share	***	***	***
LRWs and covered parts: Mexico	Share	***	***	***
LRWs and covered parts: South Korea	Share	***	***	***
LRWs and covered parts: Thailand	Share	***	***	***
LRWs and covered parts: Vietnam	Share	***	***	***
LRWs and covered parts: All other sources	Share	***	***	***
LRWs and covered parts: All import sources	Share	***	***	***
Expansion merchandise: All import sources	Share	***	***	***
Select residential washers and covered parts: All import sources	Share	***	***	***
All sources	Share	100.0	100.0	100.0

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

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

Figure V-6

Select residential washers and covered parts: Apparent U.S. consumption based on value, by source and period

* * * * *

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

Part VI: Pricing data

Factors affecting prices

Raw material costs

Raw materials used to produce LRWs include cold-rolled and stainless steel, copper, aluminum, plastic, propylene, crude oil, and rubber.¹ Raw material costs, as a share of U.S. producers' total COGS, declined from *** percent in 2017 to *** percent in 2019,² but increased during 2020-22 from *** percent to *** percent.

The price of steel increased during January 2017 through December 2022 (figure VI-1). The price of cold-rolled sheet increased sharply beginning in early 2021 and peaked in mid-2022, and the price of coil steel increased sharply, peaking in the third quarter of 2021. Overall prices for both cold-rolled sheet and coil were 50-75 percent higher in May 2023 than in January 2017.

Figure VI-1

Raw material costs: U.S. price indexes of cold-rolled steel coil and stainless steel cold-rolled sheet, monthly, January 2017-May 2023

* * * * *

Source: ***, accessed June 2023.

Note: A combination of U.S. antidumping and countervailing duty orders on stainless steel sheet and strip from China entered into effect in April 2017. Tariffs on imported steel products as a result of the section 232 investigation on steel entered into effect in March 2018.

¹ Safeguard publication, p. V-1.

² Extension publication, p. VII-1.

Table VI-1

Raw material costs: U.S. price indexes of cold-rolled steel coil and stainless steel cold-rolled sheet, monthly, January 2017-May 2023

Indexed prices (January 2017=100)

Product	Month	2017	2018	2019	2020	2021	2022	2023
SS sheet	January	***	***	***	***	***	***	***
SS sheet	February	***	***	***	***	***	***	***
SS sheet	March	***	***	***	***	***	***	***
SS sheet	April	***	***	***	***	***	***	***
SS sheet	May	***	***	***	***	***	***	***
SS sheet	June	***	***	***	***	***	***	---
SS sheet	July	***	***	***	***	***	***	---
SS sheet	August	***	***	***	***	***	***	---
SS sheet	September	***	***	***	***	***	***	---
SS sheet	October	***	***	***	***	***	***	---
SS sheet	November	***	***	***	***	***	***	---
SS sheet	December	***	***	***	***	***	***	---
CR coil	January	***	***	***	***	***	***	***
CR coil	February	***	***	***	***	***	***	***
CR coil	March	***	***	***	***	***	***	***
CR coil	April	***	***	***	***	***	***	***
CR coil	May	***	***	***	***	***	***	***
CR coil	June	***	***	***	***	***	***	---
CR coil	July	***	***	***	***	***	***	---
CR coil	August	***	***	***	***	***	***	---
CR coil	September	***	***	***	***	***	***	---
CR coil	October	***	***	***	***	***	***	---
CR coil	November	***	***	***	***	***	***	---
CR coil	December	***	***	***	***	***	***	---

Source: ***, accessed June 2023.

Note: A combination of U.S. antidumping and countervailing duty orders on stainless steel sheet and strip from China entered into effect in April 2017. Tariffs on imported steel products as a result of the section 232 investigation on steel entered into effect in March 2018.

Note: Prices shown for "SS sheet" cover stainless steel grade 304 cold-rolled sheet, fob mill; and for "CR coil" cover steel cold rolled coil, fob mill.

Price data

The Commission requested U.S. producers to provide quarterly data for the total quantity and f.o.b. value of the following LRWs products shipped to unrelated U.S. customers during January 2020-December 2022.³

Product 1.--Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 3.7 cubic feet but less than 4.2 cubic feet; water heater included; steam cycle(s) included; no LCD display; white finish.

Product 2.--Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.2 cubic feet but less than 4.7 cubic feet; no water heater included; no steam cycle(s) included; no LCD display; white finish.

Product 3.--Top loading, Energy Star rated washer; impeller; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; no water heater included; no steam cycle included; lid includes clear or tinted window; white finish.

Product 4.--Top loading, Energy Star rated; impeller; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; water heater included; steam cycle included; lid includes clear or tinted window; white finish.

Product 5.--Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.2 cubic feet but less than 4.7 cubic feet; water heater included; steam cycle(s) included; no LCD display; white finish.

Product 6.--Top loading, Energy Star rated washer; direct drive; impeller; rated DOE capacity greater than or equal to 4.2 cubic feet but less than 4.7 cubic feet; no water heater included; no steam cycle(s) included; solid opaque lid; white finish.

³ These products are the same for which price data were collected during the extension phase. During the original safeguard investigation, pricing data were collected for the first six pricing products. During the monitoring phase, pricing products 7 and 8 were added, and during the extension phase, pricing products 9 and 10 were added. Quarterly pricing data for products 1-6 from the original safeguard proceeding, covering 2012 through first-quarter 2017, are included in this report in Appendix D. Quarterly pricing data for products 1-8 from the monitoring proceeding, covering 2016 through first-quarter 2019, are detailed in the Confidential Monitoring Report at Tables III-27 through III-34. Quarterly pricing data for all 10 products, covering 2017 through first-half 2020, are detailed in the Confidential Extension Report at tables VII-1 through VII-10.

Product 7--Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; water heater included; steam cycle(s) included; no LCD display; white finish.

Product 8--Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; water heater included; steam cycle(s) included; no LCD display; non-white finish.

Product 9-- Top loading, Energy Star rated washer; impeller; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; no water heater included; no steam cycle included; lid includes clear or tinted window; non-white finish.

Product 10-- Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than 4.2 cubic feet but less than 4.7 cubic feet; water heater included; steam cycle(s) included; no LCD display; non-white finish.

Four U.S. producers (***)⁴ provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.⁵ Pricing data reported by these firms accounted for approximately 35.1 percent of U.S. producers' shipments of LRWs. Price data are presented in tables VI-2 and VI-3 and figure VI-2. No price data were reported for pricing products 1, 4, or 6.

⁴ ***. This is consistent with how pricing was reported in the extension phase. See email with ***, April 26, 2023.

⁵ Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

Table VI-2

LRWs: Weighted-average f.o.b. prices and quantities of domestic products 2, 3, 5, and 7, by quarter, January 2020-December 2022

Prices in dollars; quantity in units

Period	Product 2 Price	Product 2 quantity	Product 3 price	Product 3 quantity	Product 5 price	Product 5 quantity	Product 7 price	Product 7 quantity
2020 Q1	***	***	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***	***	***

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

Note: Product 2: Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.2 cubic feet but less than 4.7 cubic feet; no water heater included; no steam cycle(s) included; no LCD display; white finish.

Product 3: Top loading, Energy Star rated washer; impeller; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; no water heater included; no steam cycle included; lid includes clear or tinted window; white finish.

Product 5: Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.2 cubic feet but less than 4.7 cubic feet; water heater included; steam cycle(s) included; no LCD display; white finish.

Product 7: Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; water heater included; steam cycle(s) included; no LCD display; white finish.

Table VI-3

LRWs: Weighted-average f.o.b. prices and quantities of domestic products 8, 9, and 10, by quarter, January 2020-December 2022

Prices in dollars; quantity in units

Period	Product 8 price	Product 8 quantity	Product 9 price	Product 9 quantity	Product 10 price	Product 10 quantity
2020 Q1	***	***	***	***	***	***
2020 Q2	***	***	***	***	***	***
2020 Q3	***	***	***	***	***	***
2020 Q4	***	***	***	***	***	***
2021 Q1	***	***	***	***	***	***
2021 Q2	***	***	***	***	***	***
2021 Q3	***	***	***	***	***	***
2021 Q4	***	***	***	***	***	***
2022 Q1	***	***	***	***	***	***
2022 Q2	***	***	***	***	***	***
2022 Q3	***	***	***	***	***	***
2022 Q4	***	***	***	***	***	***

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

Note: Product 8: Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; water heater included; steam cycle(s) included; no LCD display; non-white finish.

Product 9: Top loading, Energy Star rated washer; impeller; rated DOE capacity greater than or equal to 4.7 cubic feet but less than 5.2 cubic feet; no water heater included; no steam cycle included; lid includes clear or tinted window; non-white finish.

Product 10: Front loading, Energy Star rated washer; direct drive; rated DOE capacity greater than 4.2 cubic feet but less than 4.7 cubic feet; water heater included; steam cycle(s) included; no LCD display;

Figure VI-2

LRWs: Weighted-average f.o.b. prices and quantities of domestic products, by product and quarter, January 2020-December 2022

* * * * *

Note: For descriptions of pricing products, see pp. VII-2-3.

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

Price trends

Prices increased during January 2020-December 2022. Table VI-4 summarizes the price trends by product. As shown in the table, domestic price increases ranged from *** percent to ***.⁶

Table VI-4
LRWs: Summary of weighted-average f.o.b. prices for U.S.-produced products, by product

Prices in dollars per unit; Quantity in units; Change in percent

Product	Number of quarters	Quantity	Low price	High price	First quarter price	Last quarter price	Change over period
Product 2	***	***	***	***	***	***	***
Product 3	***	***	***	***	***	***	***
Product 5	***	***	***	***	***	***	***
Product 7	***	***	***	***	***	***	***
Product 8	***	***	***	***	***	***	***
Product 9	***	***	***	***	***	***	***
Product 10	***	***	***	***	***	***	***

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

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

Indexed U.S. producer prices during January 2020 through December 2022 are shown in figure VI-3 and table VI-5. U.S. prices increased overall during the period, although the prices of several pricing products dipped in mid-2021.

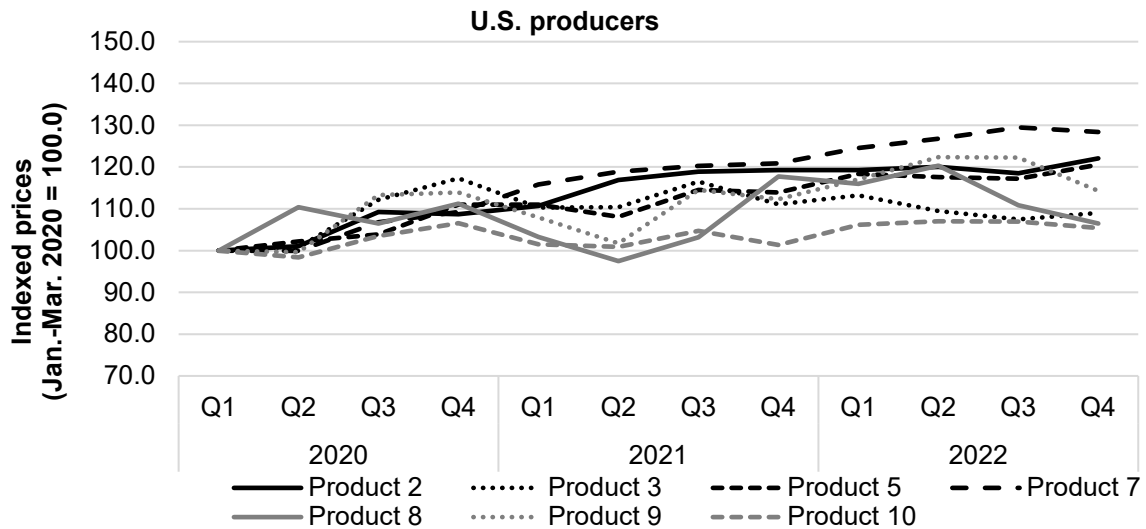
⁶ The weighted-average f.o.b. prices for the U.S.-produced products referenced in table VI-4 in the first quarter of 2018 (during which the safeguard measures initially went into effect) were as follows (dollars per unit):

Product 2: ***
 Product 3: ***
 Product 5: ***
 Product 7: ***
 Product 8: ***
 Product 9: ***
 Product 10: ***

Confidential Extension Report at tables, VII-2, VII-3, VII-5, VII-7, VII-8, VII-9 and VII-10.

Figure VI-3

LRWs: Indexed U.S. producer prices, by product, January 2020-December 2022



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

Table VI-5

LRWs: Indexed U.S. producer prices, by product, January 2020-December 2022

Indexed prices (Jan.-Mar. 2020=100)

Period	Product 2	Product 3	Product 5	Product 7	Product 8	Product 9	Product 10
2020 Q1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2020 Q2	101.0	100.7	102.2	99.9	110.4	99.6	98.4
2020 Q3	109.2	112.1	103.9	106.8	106.5	113.3	103.5
2020 Q4	108.7	117.3	111.0	109.2	111.2	113.9	106.6
2021 Q1	110.7	110.3	111.0	115.9	103.2	107.9	101.5
2021 Q2	116.9	110.4	108.1	118.9	97.5	101.8	100.9
2021 Q3	118.9	116.5	114.5	120.3	103.2	114.5	104.7
2021 Q4	119.3	111.1	113.9	120.9	117.7	112.3	101.3
2022 Q1	119.2	113.2	118.4	124.6	116.0	117.0	106.2
2022 Q2	120.1	109.4	117.6	126.8	120.3	122.4	107.0
2022 Q3	118.5	107.5	117.2	129.5	110.9	122.2	107.0
2022 Q4	122.1	109.0	120.6	128.4	106.5	114.3	105.4

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

Part VII: Adjustment efforts and interested party comments on the safeguard

Information on U.S. producers' adjustment plans, post-relief efforts, and comments on the significance of the safeguard relief and their ability to compete after safeguard termination are presented in this section of the report.

Adjustment plans and post-relief efforts

Following the vote on injury in the Commission's safeguard investigation, two U.S. producers submitted proposed adjustment plans for implementation in the event of appropriate import relief. Those plans by GE Appliances and Whirlpool are reproduced verbatim below. In this evaluation proceeding, U.S. producers were asked to describe efforts made by the firm and/or its workers since February 7, 2018 to compete more effectively, including the expenditure involved and the competitive advantage acquired. In addition, U.S. producers that submitted adjustment plans were asked to discuss reasons why any specific adjustment actions included in the plans have not been implemented. The U.S. producers' responses on their post-relief efforts are provided below.

GE Appliances' adjustment plan¹

Updated offerings

*This includes new platforms, products, feature innovations, and the lines to produce each. It also includes the R&D needed to bring each to market. During the import relief period GE Appliances would plan to invest \$*** in expanding its range of LRW platforms. This activity would take place concurrently with ***. The investment would support a range of functions needed to ***, including design, R&D, and manufacturing. GE Appliances would also plan to *** add specific capabilities, as well as *** lines, as appropriate.*

¹ Confidential Monitoring Report, pp. IV-1-5. GE Appliance's adjustment plan is reproduced verbatim. References to the hearing refer to the remedy hearing held in connection with the original safeguard investigation.

Human capital investment

*This category breaks further down into two subcategories: (a) training for hourly workers; and (b) training for managerial, supervisory, and design staff. The overall goal is to increase skills toward efficiency gains in production, design, and execution. This category builds upon and expands efficiencies and synergies already in place. As part of the investments discussed in Category 1 above, GE Appliances would need to invest in ***. These human capital investments would be focused on delivering the right skills to the right personnel, in order to further drive overall manufacturing efficiency. Some portion of these human capital investments would be targeted toward expanding and further developing the technical staff that drive the design and innovation of new products and features, toward building upon an already competitive position in product offerings.*

Business process innovation

*Closely tied to Human Capital Investment (Category 2, above), this category focuses on continued and increased innovation toward product design and feature innovation, while continuing to drive out costs at every opportunity. GE Appliances would plan to complement investments in the other two categories with innovation-targeted investments of \$***. The purpose of these investments is to increase efficiency ***. Remaining oriented toward relieving the tension between the need to innovate and the necessity of controlling costs via developing *** is key to continuing to deliver quality, innovative products in a cost-effective manner.*

GE Appliance's post-relief efforts

GE Appliances was asked in this proceeding to describe (1) any efforts made by the firm and/or its workers since February 7, 2018, to compete more effectively, (2) the year in which the effort was made, (3) the expenditure involved, and (4) the specific competitive advantage acquired (e.g., increased production, cost reduction, quality improvement, increased market share or sales, etc.). GE Appliances provided the following answer:

***.²

GE Appliances specified during the safeguard extension proceedings:

***.³

GE Appliances was also asked to discuss reasons why any specific adjustment actions have not been implemented. GE Appliances responded:

***.⁴

² GE Appliances' U.S. producers' questionnaire response, question II-2d.

³ Confidential Extension Report, p. VIII-2.

⁴ GE Appliances' U.S. producers' questionnaire response, question II-2c.

Whirlpool's adjustment plan⁵

Plans to update and expand product lineup

Revisiting Project Opportunities That Were Canceled or Curtailed During the POI

*At the hearing and in its questionnaire responses, Whirlpool described several washer product projects — valued at \$*** — that were canceled, curtailed, or rejected due to the serious injury caused by imports. Whirlpool remains committed to revisiting all of these investment opportunities upon the issuance of safeguard relief.*

*AMAX Project: In 2016, Whirlpool was forced to abort its plan to produce “jumbo” capacity front load washers. The estimated value of this investment is \$***, and it represents more than *** direct jobs on a new flexible production line. Whirlpool intends to revisit the business case for this project when safeguard relief is granted.*

*ATLANTIS 2.0 Project: Earlier this year, Whirlpool was forced to reject a \$*** investment proposal for *** — including ***. While the current pricing environment does not support a return on this proposed investment, Whirlpool expects that effective safeguard relief will enable it to revisit the business case for the project, which would facilitate increased production and corresponding job growth.*

*ADVANTAGE Project: In 2016, Whirlpool was forced to curtail the launch of its “jumbo” capacity top load washers — the most innovative washers in the industry — because the uneconomic pricing environment made it virtually impossible to even floor these models. If safeguard relief is granted, Whirlpool intends to revisit the business opportunity to complete this product launch. The incremental value of this investment is approximately \$*** and will lead to increased capacity utilization.*

⁵ Confidential Monitoring Report, pp. IV-1-5. Whirlpool's adjustment plan is reproduced verbatim. References to the hearing refer to the remedy hearing held in connection with the original safeguard investigation.

Evaluating Plans to Launch New Product Platforms and Innovations to Drive Future Competitiveness.

*If an appropriate safeguard remedy is implemented, Whirlpool stands ready to evaluate new product platform investments totaling more than \$***. These platform investments — which would ensure that ***— would promote Whirlpool’s continued future competitiveness in the washer industry and lead to greater choice with respect to washer features and innovation.*

**** Projects: At the hearing, Samsung Korea touted the uniqueness of its “FlexWash” model, which was launched in March 2017, i.e., the last month of the safeguard investigation’s POI. Whirlpool has ***. First, Whirlpool has ***. Second, Whirlpool is also ***.*

**** Washers: At the hearing, LG Korea touted the purported uniqueness of its “SideKick” pedestal washer model. But Whirlpool ***. Import competition at uneconomic price levels has ***.*

**** Washers: Whirlpool expects that, with the benefit of safeguard relief, it should be able to *** to develop new designs and tooling. This investment*

would likely add up to *** direct jobs and significantly increase ***.

*** Platform: Finally, if safeguard relief is granted, Whirlpool will review a ***.

Plans to enhance manufacturing and logistics efficiencies

While the Clyde plant is already the most efficient washer plant in the world — and manufacturers from the auto sector and other industries commonly “benchmark” to Clyde in order to gauge their own efficiency — Whirlpool is always pursuing manufacturing improvements in order to remain as cost competitive as possible. To that end, appropriate safeguard relief will create an environment in which Whirlpool can explore new opportunities for incremental improvements in its manufacturing and logistics that ensure Clyde remains a cutting-edge facility in the future.

*If safeguard relief is granted, Whirlpool will ***. The details include: ***.*

*Each aspect of this plan has been deferred as the economics of the washers business has crumbled in the last few years due to increasing volumes of low-priced imports. If safeguard relief is imposed, Whirlpool estimates that ****

***.⁶ These opportunities will also ensure that Clyde manufacturing continues to remain on the cutting edge when it comes to ***. The implementation of these opportunities will itself create American jobs but, more importantly, also ensure Clyde and its employees can deliver sustained manufacturing and product leadership going forward.

Finally, Whirlpool will evaluate the opportunity for a ***. Once again, these opportunities will deliver smart automation and a connected workplace that drives further efficiencies and equips Clyde's workforce for sustainable success in the future.

Whirlpool's post-relief efforts

Whirlpool was asked in this proceeding to describe (1) any efforts made by your firm and/or its workers since February 7, 2018 to compete more effectively, (2) the year in which the effort was made, (3) the expenditure involved, and (4) the specific competitive advantage acquired (e.g., increased production, cost reduction, quality improvement, increased market share or sales, etc.). Whirlpool was also asked to discuss reasons why any specific adjustment actions included in the above plans have not been implemented. Whirlpool's answer is reproduced in its entirety below:

* * * * *

⁶ Although not yet in the planning, further efficiencies may potentially be realized through ***.

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

*** 7

LG USA's post-relief efforts

Since implementation of the safeguard measures on February 7, 2018, LG USA reported:

*** 8

During the safeguard extension proceedings, in response to whether LG USA had made any efforts to increase product availability or product offerings since February 7, 2018, LG USA reported:

*** 9

⁷ Whirlpool's U.S. Producers' questionnaire response, II-2d and Attachment 1.

⁸ LG USA's U.S. Producers' questionnaire response, II-2d.

⁹ Confidential Extension Report, p. VIII-15.

Samsung's post-relief efforts

Since implementation of the safeguard measures on February 7, 2018, Samsung reported the following post-relief efforts:

***¹⁰

Alliance's post-relief efforts

Alliance reported that it *** undertaken any efforts to compete more effectively in the U.S. market for LRWs since implementation of the safeguard measure on February 7, 2018.

¹⁰ Samsung's U.S. Producers' questionnaire response, II-2d.

Significance of relief

U.S. producers were asked to describe the significance of the tariff-rate quotas, in terms of their effect on the firms' operations in a number of categories. U.S. producers' responses are presented in table VII-1.

Table VII-1

Covered merchandise: U.S. producers' reported significance of relief, since February 7, 2018, by operational category

Operational Category	Firm name and narrative response on significance of relief
Production and trade	***
Production and trade	***
Production and trade	***

Table continued.

Table VII-1 Continued

Covered merchandise: U.S. producers' reported significance of relief, since February 7, 2018, by operational category

Operational category	Firm name and narrative response on significance of relief
Production and trade	***
Financial performance	***
Financial performance	***
Financial performance	***
Financial performance	***

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

Note: The production and trade operational category is defined as production capacity, production shipments, inventories, and employment. The financial performance operational category is defined as return on investment, ability to generate capital to finance the modernization of domestic plant(s) and equipment, or ability to maintain existing levels of expenditures for research and development.

Note: U.S. producer *** is not included in the table because it responded *** to all categories.

Note: U.S. producers were also asked about the tariff rate quotas' effect on changes in their collective bargaining agreements. ***.

Ability to compete after safeguard termination

U.S. producers were asked to explain whether they would be able to compete successfully with imports after termination of the safeguard actions. Their responses are presented in table VII-2.

Table VII-2

Covered merchandise: U.S. producers' reported ability to compete after safeguard termination

Firm	Narrative response on ability to compete after safeguard termination
***	***
***	***
***	***
***	***

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

Note: *** is not included in the table because it did not provide a narrative response. It did, however, check *** to whether it would be able to compete successfully with imports after termination of the safeguard actions.

APPENDIX A

FEDERAL REGISTER NOTICE AND PRESIDENTIAL DOCUMENTS

FEDERAL REGISTER NOTICE

The Commission makes available notices relevant to its proceedings on its website, www.usitc.gov. The following table presents the Federal Register notice issued by the Commission during the current proceeding.

Citation	Title	Link
88 FR 11474, February 23, 2023	<i>Title Large Residential Washers: Evaluation of the Effectiveness of Import Relief</i>	https://www.govinfo.gov/content/pkg/FR-2023-02-23/pdf/2023-03686.pdf

PRESIDENTIAL COVER LETTER AND REPORT TO CONGRESS

115th Congress, 2d Session - - - - - House Document 115-92

TO FACILITATE POSITIVE ADJUSTMENT TO COMPETITION FROM IMPORTS OF CERTAIN CRYSTALLINE SILICON PHOTOVOLTAIC CELLS (WHETHER OR NOT PARTIALLY OR FULLY ASSEMBLED INTO OTHER PRODUCTS) AND FOR OTHER PURPOSES

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

DOCUMENTS TO THE CONGRESS THAT DESCRIBE THE SAFEGUARD ACTIONS PROCLAIMED ON IMPORTS OF LARGE RESIDENTIAL WASHERS AND CERTAIN CRYSTALLINE SILICON PHOTOVOLTAIC CELLS (WHETHER OR NOT PARTIALLY OR FULLY ASSEMBLED INTO OTHER PRODUCTS), PURSUANT TO 19 U.S.C. 2253(b); PUBLIC LAW 93-618, SEC. 203(b); (88 STAT. 2015)



JANUARY 25, 2018.—Message and accompanying papers referred to the Committee on Ways and Means and ordered to be printed

U.S. GOVERNMENT PUBLISHING OFFICE

79-011

WASHINGTON : 2018

THE WHITE HOUSE,
Washington, January 23, 2018.

Hon. PAUL D. RYAN,
Speaker of the House of Representatives,
Washington, DC.

DEAR MR. SPEAKER: In accordance with section 203(b) of the Trade Act of 1974, as amended (the “Act”), I hereby transmit documents to the Congress that describe the safeguard actions that I have proclaimed on imports of large residential washers and certain crystalline silicon photovoltaic cells (whether or not partially or fully assembled into other products), pursuant to the authority vested in me by the Constitution and the laws of the United States, including section 203(a)(1) of the Act, and the reasons for taking these actions.

Sincerely,

DONALD J. TRUMP.

TO FACILITATE POSITIVE ADJUSTMENT TO COMPETITION FROM
IMPORTS OF LARGE RESIDENTIAL WASHERS

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

1. On December 4, 2017, the United States International Trade Commission (ITC) transmitted to the President a report (the “ITC Report”) on its investigation under section 202 of the Trade Act of 1974, as amended (the “Trade Act”) (19 U.S.C. 2252), with respect to imports of large residential washers (“washers”). The product subject to the ITC’s investigation and determination excluded certain washers described in the ITC Notice of Institution, 82 *Fed. Reg.* 27075 (June 13, 2017), and listed in subdivision (c)(2) of Note 17 in the Annex to this proclamation.

2. The ITC reached an affirmative determination under section 202(b) of the Trade Act (19 U.S.C. 2252(b)) that the following products are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat of serious injury, to the domestic industries producing like or directly competitive articles:

(a) washers; and

(b) certain washer parts, including (i) all cabinets, or portions thereof, designed for use in washers; (ii) all assembled tubs designed for use in washers which incorporate, at a minimum, a tub and a seal; (iii) all assembled baskets designed for use in washers which incorporate, at a minimum, a side wrapper, a base, and a drive hub; and (iv) any combination of the foregoing parts or sub-assemblies.

3. Pursuant to section 311(a) of the North American Free Trade Agreement Implementation Act (the “NAFTA Implementation Act”) (19 U.S.C. 3371(a)), the ITC made findings as to whether imports from Canada and Mexico, considered individually, account for a substantial share of total imports and contribute importantly to the serious injury, or threat thereof, caused by imports. The ITC made negative findings of contribution to injury with respect to imports of washers from Canada and Mexico.

4. The ITC transmitted to the President its recommendations made pursuant to section 202(e) of the Trade Act (19 U.S.C. 2252(e)) with respect to the actions that, in its view, would address the serious injury, or threat of serious injury, to the domestic industry and be most effective in facilitating the efforts of the industry to make a positive adjustment to import competition.

5. Pursuant to section 203 of the Trade Act (19 U.S.C. 2253), and after taking into account the considerations specified in section 203(a)(2) of the Trade Act (19 U.S.C. 2253(a)(2)) and the ITC Re-

port, I have determined to implement action of a type described in section 203(a)(3) of the Trade Act (19 U.S.C. 2252(a)(3)) (a “safeguard measure”), with regard to the following washers and covered washer parts:

(a) washers provided for in subheadings 8450.11.00 and 8450.20.00 in the Annex to this proclamation;

(b) all cabinets, or portions thereof, designed for use in washers, and all assembled baskets designed for use in washers that incorporate, at a minimum, a side wrapper, a base, and a drive hub, provided for in subheading 8450.90.60 in the Annex to this proclamation;

(c) all assembled tubs designed for use in washers that incorporate, at a minimum, a tub and a seal, provided for in subheading 8450.90.20 in the Annex to this proclamation;

(d) any combination of the foregoing parts or subassemblies, provided for in subheadings 8450.90.20 or 8450.90.60 in the Annex to this proclamation.

6. Pursuant to section 312(a) of the NAFTA Implementation Act (19 U.S.C. 3372(a)), I have determined after considering the ITC Report that (a) imports from Canada of washers and covered washer parts, considered individually, do not account for a substantial share of total imports and do not contribute importantly to the serious injury or threat of serious injury found by the ITC; and (b) imports from Mexico of washers and covered washer parts, considered individually, account for a substantial share of total imports and have contributed importantly to the serious injury or threat of serious injury found by the ITC. Accordingly, pursuant to section 312(b) of the NAFTA Implementation Act (19 U.S.C. 3372(b)), I have excluded washers and covered washer parts that are the product of Canada from the actions I am taking under section 203 of the Trade Act.

7. Pursuant to section 203 of the Trade Act, the action I have determined to take shall be a safeguard measure in the form of:

(a) a tariff-rate quota on imports of washers described in subparagraph (a) of paragraph 5 of this proclamation, imposed for a period of 3 years plus 1 day, with unchanging within-quota quantities, annual reductions in the rates of duties entered within those quantities in the second and third years, and annual reductions in the rates of duty applicable to goods entered in excess of those quantities in the second and third years; and

(b) a tariff-rate quota on imports of covered washer parts described in subparagraphs (b), (c), and (d) of paragraph 5 of this proclamation, imposed for a period of 3 years plus 1 day, with increasing within-quota quantities and annual reductions in the rates of duty applicable to goods entered in excess of those quantities in the second and third years.

8. This safeguard measure shall apply to imports from all countries, except for products of Canada and except as provided in paragraph 9 of this proclamation.

9. This safeguard measure shall not apply to imports of any product described in paragraph 5 of this proclamation of a developing country that is a Member of the World Trade Organization (WTO), as listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation, as long as such a country’s share of total imports of the

product, based on imports during a recent representative period, does not exceed 3 percent, provided that imports that are the product of all such countries with less than 3 percent import share collectively account for not more than 9 percent of total imports of the product. If I determine that a surge in imports of a product described in paragraph 5 of this proclamation of a developing country that is a WTO Member results in imports of that product from that developing country exceeding either of the thresholds described in this paragraph, the safeguard measure shall be modified to apply to such product from such country.

10. The in-quota quantity in each year under the tariff-rate quotas described in paragraph 7 of this proclamation shall be allocated among all countries except those countries the products of which are excluded from such tariff-rate quota pursuant to paragraphs 8 and 9 of this proclamation.

11. Pursuant to section 203(a)(1)(A) of the Trade Act (19 U.S.C. 2253(a)(1)(A)), I have determined that this safeguard measure will facilitate efforts by the domestic industry to make a positive adjustment to import competition and provide greater economic and social benefits than costs. If I determine that further action is appropriate and feasible to facilitate efforts by the domestic industry to make a positive adjustment to import competition and to provide greater economic and social benefits than costs, or if I determine that the conditions under section 204(b)(1) of the Trade Act (19 U.S.C. 2254(b)(1)) are met, I shall reduce, modify, or terminate the action established in this proclamation accordingly. In addition, if I determine within 30 days of the date of this proclamation, as a result of consultations between the United States and other WTO Members pursuant to Article 12.3 of the WTO Agreement on Safeguards, that it is necessary to reduce, modify, or terminate the safeguard measure, I shall proclaim the corresponding reduction, modification, or termination of the safeguard measure within 40 days.

12. If I determine that a surge in imports of covered washer parts described in subparagraphs (b), (c), and (d) of paragraph 5 of this proclamation undermines the effectiveness of the safeguard measure, the safeguard measure shall be modified by imposing a quantitative restriction in lieu of the tariff-rate quota.

13. Section 604 of the Trade Act (19 U.S.C. 2483), authorizes the President to embody in the Harmonized Tariff Schedule of the United States (HTS) the substance of the relevant provisions of that Act, and of other acts affecting import treatment, and actions thereunder, including the removal, modification, continuance, or imposition of any rate of duty or other import restriction.

Now, therefore, I, DONALD J. TRUMP, President of the United States of America, acting under the authority vested in me by the Constitution and the laws of the United States, including but not limited to sections 203 and 604 of the Trade Act, section 312 of the NAFTA Implementation Act (19 U.S.C. 3372), and section 301 of title 3, United States Code, do proclaim that:

(1) In order to establish increases in duty and a tariff-rate quota on imports of the washers and covered washer parts described in paragraph 5 of this proclamation (other than excluded products), subchapter III of chapter 99 of the HTS is modified as provided in

the Annex to this proclamation. Any merchandise subject to the safeguard measure that is admitted into U.S. foreign trade zones on or after 12:01 a.m. eastern standard time, on February 7, 2018, must be admitted as “privileged foreign status” as defined in 19 CFR 146.41, and will be subject upon entry for consumption to any quantitative restrictions or tariffs related to the classification under the applicable HTS subheading.

(2) Imports of washers and covered washer parts that are the product of Canada shall be excluded from the safeguard measure established in this proclamation, and such imports shall not be counted toward the tariff-rate quota limits that trigger the over-quota rates of duty.

(3) Except as provided in clause (4) below, imports of washers and covered washer parts that are the product of WTO Member developing countries, as listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation, shall be excluded from the safeguard measure established in this proclamation, and such imports shall not be counted toward the tariff-rate quota limits that trigger the over-quota rates of duties.

(4) If, after the safeguard measure established in this proclamation takes effect, the United States Trade Representative (USTR) determines that:

(a) the share of total imports of the product of a country listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation exceeds 3 percent,

(b) imports of the product from all listed countries with less than 3 percent import share collectively account for more than 9 percent of total imports of the product, or

(c) a country listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation is no longer a developing country for purposes of this proclamation; the USTR is authorized, upon publication of a notice in the *Federal Register*, to revise subdivision (b)(2) of Note 17 in the Annex to this proclamation to remove the relevant country from the list or suspend operation of that subdivision, as appropriate.

(5) If, after the safeguard measure established in this proclamation takes effect, the USTR determines that the out-of-quota quantity in units of covered washer parts entered under the tariff lines in chapter 99 enumerated in the Annex to this proclamation has increased by an unjustifiable amount and undermines the effectiveness of the safeguard measure, the USTR is authorized, upon publishing a notice of such determination in the *Federal Register*, to modify the HTS provisions created by the Annex to this proclamation so as to modify the tariff-rate quota on covered washer parts with a quantitative restriction on covered washer parts at a level that the USTR considers appropriate.

(6) Any provision of previous proclamations and Executive Orders that is inconsistent with the actions taken in this proclamation is superseded to the extent of such inconsistency.

(7) The modifications to the HTS made in this proclamation, including the Annex hereto, shall be effective with respect to goods entered, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 7, 2018, and shall continue in effect as provided in the Annex to this proclamation,

unless such actions are earlier expressly reduced, modified, or terminated. One year from the termination of the safeguard measure established in this proclamation, the U.S. note and tariff provisions established in the Annex to this proclamation shall be deleted from the HTS.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-third day of January, in the year of our Lord two thousand eighteen, and of the Independence of the United States of America the two hundred and forty-second.

DONALD J. TRUMP.

ANNEX

**MODIFICATIONS TO CHAPTER 99 OF
THE HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES**

Effective with respect to goods entered, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 7, 2018, and through 11:59 p.m. eastern standard time on February 7, 2021, subchapter III of chapter 99 of the Harmonized Tariff Schedule of the United States (HTS) is hereby modified by inserting in numerical sequence the following new U.S. note and provisions:

- “17. (a) Subheadings 9903.45.01 through 9903.45.06 and any superior texts thereto establish temporary modifications applicable to entries of goods described herein and classified in the enumerated provisions of chapter 84 of the tariff schedule. Whenever any such subheading specifies that the annual aggregate quantity of such goods shall not exceed the quantity established under the terms of this note, when such goods are not the product of a country enumerated in subdivision (b) of this note, any entry of such goods that is in excess of the quantity specified for such provision shall be entered under the over-quota subheading set forth herein for such goods. All such goods shall be subject to duty as provided herein, and such duties shall be cumulative and imposed in addition to the rate of duty established for any such goods in chapter 84 of the tariff schedule.
- (b) For the purposes of this note and the application of subheadings 9903.45.01 through 9903.45.06, inclusive, the following countries shall not be subject to the rates of duty and tariff-rate quotas provided for herein:
- (1) Canada; and
 - (2) the following developing countries that are members of the World Trade Organization:
Afghanistan, Albania, Algeria, Angola, Armenia, Azerbaijan, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Burma, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Brazzaville), Congo (Kinshasa), Côte d’Ivoire, Djibouti, Dominica, Ecuador, Egypt, Eritrea, Ethiopia, Fiji, Gabon, The Gambia, Georgia, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, India, Indonesia, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kosovo, Kyrgyzstan, Lebanon, Lesotho, Liberia, Macedonia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mauritius, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Paraguay, Philippines, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tomé and Príncipe, Senegal, Serbia, Sierra Leone, Solomon Island, Somalia, South Africa, South Sudan, Sri Lanka, Suriname, Swaziland, Tanzania, Timor-Leste, Togo, Tonga, Tunisia, Turkey, Tuvalu, Uganda, Ukraine, Uzbekistan, Vanuatu, Yemen (Republic of), Zambia and Zimbabwe.

- (c) (1) For the purposes of subheadings 9903.45.01 and 9903.45.02 of this subchapter, “household-type (residential) washing machines, including machines which both wash and dry, whether or not with a dry linen capacity exceeding 10 kg” (such goods provided for in subheadings 8450.11.00 and 8450.20.00 and reported under statistical reporting numbers 8450.11.0040, 8450.11.0080, 8450.20.0040 and 8450.20.0080, respectively, on the effective date of this note) shall include the following goods: automatic clothes washing machines, regardless of the orientation of the rotational axis, each with a cabinet width (measured from its widest point) of at least 62.23 cm and no more than 81.28 cm, except as provided in this note.
- (2) Subheadings 9903.45.01 and 9903.45.02 shall not apply to the washing machines specified below:
 - (A) all stacked washer-dryers and all commercial washers:
 - (i) 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.
 - (ii) The term “commercial washer” denotes an automatic clothes washing machine designed for the “pay per use” segment meeting either of the following two definitions:
 - (aa) (I) it contains payment system electronics;
 - (II) it is configured with an externally mounted steel frame at least 15.24 cm 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);
 - (III) 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
 - (IV) the console containing the user interface is made of steel and is assembled with security fasteners; or
 - (bb) (I) it contains payment system electronics;
 - (II) 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

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from a bona fide payment acceptance device such as an electronic credit card reader;

(III) 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

(IV) the console containing the user interface is made of steel and is assembled with security fasteners.

- (B) automatic clothes washing machines that meet all of the following conditions:
 - (i) they have a vertical rotational axis,
 - (ii) they are top loading; and
 - (iii) they have a drive train consisting, *inter alia*, of (aa) a permanent split capacitor motor, (bb) a belt drive and (cc) a flat wrap spring clutch.
- (C) automatic clothes washing machines that meet all of the following conditions:
 - (i) they have a horizontal rotational axis;
 - (ii) they are front loading; and
 - (iii) they have a drive train consisting, *inter alia*, of (aa) a controlled induction motor and (bb) a belt drive.
- (D) automatic clothes washing machines that meet all of the following conditions:
 - (i) they have a horizontal rotational axis;
 - (ii) they are front loading; and
 - (iii) they have cabinet width (measured from its widest point) of more than 72.39 cm.

- (d) For purposes of subheading 9903.45.01 of this subchapter, the duty rate in the Rates of Duty 1-General subcolumn (and in the Rates of Duty 2 column, as provided therein) for goods entered under such subheading, and not the product of a country enumerated in subdivision (b) of this note, shall be as follows, with the duty rates set

forth herein applied in addition to those applicable under subheading 8450.11.00 or 8450.20.00:

If entered during the period from
February 7, 2018 through February 6, 2019 20%

If entered during the period from
February 7, 2019 through February 6, 2020 18%

If entered during the period from
February 7, 2020 through February 7, 2021 16%.

- (e) For purposes of subheading 9903.45.02 of this subchapter, the duty rate in the Rates of Duty 1-General subcolumn (and in the Rates of Duty 2 column, as provided therein) for goods entered under such subheading, and not the product of a country enumerated in subdivision (b) of this note, shall be as follows, with the duty rates set forth herein applied in addition to those applicable under subheading 8450.11.00 or 8450.20.00:

If entered during the period from
February 7, 2018 through February 6, 2019 50%

If entered during the period from
February 7, 2019 through February 6, 2020 45%

If entered during the period from
February 7, 2020 through February 7, 2021 40%.

- (f) For purposes of subheadings 9903.45.05 and 9903.45.06 of this subchapter, the term “parts of household-type (residential) washing machines” shall include the following goods provided for in subheading 8450.90.20 or 8450.90.60 of the tariff schedule:
- (1) all cabinets, or portions thereof, provided for in subheading 8450.90.60 and designed for use in the washing machines defined in subdivision (c) of this note, the foregoing which incorporate, at a minimum, (A) a side wrapper, (B) a base and (C) a drive hub;
 - (2) all assembled tubs provided for in subheading 8450.90.20 and designed for use in such washing machines defined in such subdivision (c) which incorporate, at a minimum: (A) a tub and (B) a seal; and
 - (3) any combination of the foregoing parts or subassemblies, provided for in subheading 8450.90.20 or 8450.90.60.
- (g) For the purposes of subheading 9903.45.05 of this subchapter, the annual aggregate quantity of all parts of household-type (residential) washing machines, as defined in subdivision (f) above, that is eligible to enter under such subheading in any of the periods enumerated below shall be as follows:

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If entered during the period from
February 7, 2018 through February 6, 201950,000 units

If entered during the period from
February 7, 2019 through February 6, 202070,000 units

If entered during the period from
February 7, 2020 through February 7, 202190,000 units.

- (h) For purposes of subheading 9903.45.06 of this subchapter, the duty rate in the Rates of Duty 1-General subcolumn (and in the Rates of Duty 2 column, as provided therein) for goods entered in any of the periods enumerated below shall be as follows, with the duty rates set forth herein applied in addition to those applicable under subheading 8450.90.20 or 8450.90.60, as appropriate:

If entered during the period from
February 7, 2018 through February 6, 2019 50%

If entered during the period from
February 7, 2019 through February 6, 2020 45%

If entered during the period from
February 7, 2020 through February 7, 202140%.

Heading/ Subheading	Article description	Rates of Duty	
		1	2
		General	Special
9903.45.01	Household-type (residential) washing machines, including machines which both wash and dry, whether or not with a dry linen capacity exceeding 10 kg (as defined in note 17(c) to this subchapter and provided for in subheading 8450.11.00 or 8450.20.00), when entered from a country other than a country enumerated in note 17(b) to this subchapter: If entered in an annual aggregate quantity not exceeding 1,200,000 units, under the terms of such note.....	The duty rate provided in note 17(d) to this subchapter	The duty rate provided in note 17(d) to this subchapter + 35%
9903.45.02	Other.....	The duty rate provided in note 17(e) to this subchapter	The duty rate provided in note 17(e) to this subchapter + 35%
9903.45.05	Parts of household-type (residential) washing machines (such machines described in subheading 9903.45.01 and 9903.45.02 and defined in note 17(c) to this subchapter), such parts provided for in subheading 8450.90.20 or 8450.90.60 and enumerated in note 17(f) to this subchapter, when entered from a country other than a country specified in note 17(b) to this subchapter: If entered in an annual aggregate quantity not exceeding the quantity specified in note 17(g) to this subchapter, under the terms of such note.....	No change	No change
9903.45.06	Other.....	The duty rate set forth in note 17(h) to this subchapter	The duty rate set forth in note 17(h) to this subchapter + 40%.

**REPORT SUBMITTED TO THE UNITED STATES CONGRESS
PURSUANT TO SECTION 203(b) OF THE TRADE ACT OF 1974, AS AMENDED,
REGARDING A SAFEGUARD MEASURE ON IMPORTS OF LARGE RESIDENTIAL WASHERS**

INTRODUCTION

President Donald J. Trump has decided to impose a temporary safeguard measure on large residential washers (washers) to provide appropriate relief to U.S. producers of washers that have been injured by a recent surge in imports. He provides this relief in response to the unanimous determination by the independent, bipartisan United States International Trade Commission (“ITC”) that increased imports of washers are a substantial cause of serious injury to U.S. washer producers. This action is consistent with the President’s commitment to enforce U.S. trade laws to help maintain the competitiveness of American manufacturing, provide well-paying jobs for American workers, and sustain a robust economy for American communities.

From 2012 to 2016, imports of washers into the United States increased steadily, causing a substantial loss in market share to domestic producers. Domestic producers’ financial performance declined precipitously. During this time, the Department of Commerce issued antidumping and countervailing duties on those imported washers benefiting from unfair-trade practices. In both cases, Korean producers LG and Samsung moved production to other countries, undermining relief intended for U.S. producers.

Sourcing of imports has switched among five countries, and in each instance, it was one of two producers – Samsung or LG – that directed the movement. Each time, the companies changed locations for the purpose of increasing the penetration of their imported washers into the U.S. market. Today, both companies have decided to locate at least some of their production in the United States. A robust and fair remedy will protect U.S. producers and encourage LG and Samsung to follow through on these efforts, and locate meaningful parts of their production line in the United States, rather than relying on imported parts and subassemblies.

World Trade Organization (WTO) rules expressly allow for the type of temporary safeguard measures announced today, and have done so for 70 years. Many of our trading partners – including the EU, China, and India – have exercised their right to apply safeguard measures on a wide variety of products. The last time the United States imposed safeguard measures, then with respect to a number of steel products, the steel industry was able to restructure successfully.

The Administration will monitor the state of the industry, including the efforts by Samsung and LG to bring their facilities to full production, to ensure that the safeguard measure is having its intended effect. This relief is intended to last for three years and one day.

RELIEF COMPONENTS

Finished washers. Imports will be subject to a tariff-rate quota (TRQ). The in-quota volume will be set at 1.2 million units, which will be subject to a 20 percent additional duty. The out-of-

quota duty will be 50 percent. The quota level and out-of-quota tariff rate are set at levels recommended by the ITC. The in-quota duty is at the level recommended by a plurality of the Commissioners. This duty will provide an impetus for importers to increase their prices, thereby relieving the downward pressure on prices that has led to a decline in domestic washer producers' financial performance. This action will facilitate the efforts of U.S. producers to adjust to import competition without placing an undue burden on U.S. consumers.

Covered parts of washers. Imports of covered parts (cabinets, tubs, baskets, and combinations of those parts) will be subject to a TRQ. The in-quota volume will be set at 50,000 units, with no increase in duties for imports below the in-quota level. The out-of-quota additional duty will be 50 percent.

Duration and phase down. As recommended by the ITC (and requested by the petitioner in this case), the relief will remain in place for three years. Consistent with U.S. law and WTO rules, the duties will be phased down during the period the measure is in effect. The in-quota duty on finished washers will be reduced to 18 percent in the second year of relief, and 16 percent in the third year. The out-of-quota duty on both finished washers and parts will be reduced to 45 percent in the second year of relief, and 40 percent in the third year.

Free Trade Agreement (FTA) partners. The President determined that Canada did not account for a substantial share of total imports, and did not contribute importantly to serious injury. In accordance with the North American Free Trade Agreement Implementation Act, he excluded Canada from the relief. The President determined that Mexico accounted for a substantial share of total imports, and contributed importantly to serious injury. In accordance with the North American Free Trade Agreement Implementation Act, he did not exclude Mexico from the relief. In light of the frequency with which Samsung and LG switched import sources, the President decided that it was not appropriate to exclude other FTA partners from the relief.

Imports from developing countries. Consistent with WTO rules, the President will exclude from this relief imports from those developing countries that exported only small numbers of washers to the United States and that are WTO Members.

Surge protection. The President will closely monitor imports, and has reserved the discretion to impose safeguard measures on products from excluded developing countries if imports of those products surge during the duration of relief. The President has also reserved the discretion to replace the TRQ on parts with a quantitative measure if imports of parts increase to a level that undermines the effectiveness of the relief.



PROCLAMATION 9694: IMPOSITION OF SAFEGUARD

Presidential Documents

Proclamation 9694 of January 23, 2018

To Facilitate Positive Adjustment to Competition From Imports of Large Residential Washers

By the President of the United States of America

A Proclamation

1. On December 4, 2017, the United States International Trade Commission (ITC) transmitted to the President a report (the “ITC Report”) on its investigation under section 202 of the Trade Act of 1974, as amended (the “Trade Act”) (19 U.S.C. 2252), with respect to imports of large residential washers (“washers”). The product subject to the ITC’s investigation and determination excluded certain washers described in the ITC Notice of Institution, 82 *FR* 27075 (June 13, 2017), and listed in subdivision (c)(2) of Note 17 in the Annex to this proclamation.

2. The ITC reached an affirmative determination under section 202(b) of the Trade Act (19 U.S.C. 2252(b)) that the following products are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat of serious injury, to the domestic industries producing like or directly competitive articles:

(a) washers; and

(b) certain washer parts, including (i) all cabinets, or portions thereof, designed for use in washers; (ii) all assembled tubs designed for use in washers which incorporate, at a minimum, a tub and a seal; (iii) all assembled baskets designed for use in washers which incorporate, at a minimum, a side wrapper, a base, and a drive hub; and (iv) any combination of the foregoing parts or subassemblies.

3. Pursuant to section 311(a) of the North American Free Trade Agreement Implementation Act (the “NAFTA Implementation Act”) (19 U.S.C. 3371(a)), the ITC made findings as to whether imports from Canada and Mexico, considered individually, account for a substantial share of total imports and contribute importantly to the serious injury, or threat thereof, caused by imports. The ITC made negative findings of contribution to injury with respect to imports of washers from Canada and Mexico.

4. The ITC transmitted to the President its recommendations made pursuant to section 202(e) of the Trade Act (19 U.S.C. 2252(e)) with respect to the actions that, in its view, would address the serious injury, or threat of serious injury, to the domestic industry and be most effective in facilitating the efforts of the industry to make a positive adjustment to import competition.

5. Pursuant to section 203 of the Trade Act (19 U.S.C. 2253), and after taking into account the considerations specified in section 203(a)(2) of the Trade Act (19 U.S.C. 2253(a)(2)) and the ITC Report, I have determined to implement action of a type described in section 203(a)(3) of the Trade Act (19 U.S.C. 2252(a)(3)) (a “safeguard measure”), with regard to the following washers and covered washer parts:

(a) washers provided for in subheadings 8450.11.00 and 8450.20.00 in the Annex to this proclamation;

(b) all cabinets, or portions thereof, designed for use in washers, and all assembled baskets designed for use in washers that incorporate, at a

minimum, a side wrapper, a base, and a drive hub, provided for in subheading 8450.90.60 in the Annex to this proclamation;

(c) all assembled tubs designed for use in washers that incorporate, at a minimum, a tub and a seal, provided for in subheading 8450.90.20 in the Annex to this proclamation;

(d) any combination of the foregoing parts or subassemblies, provided for in subheadings 8450.90.20 or 8450.90.60 in the Annex to this proclamation.

6. Pursuant to section 312(a) of the NAFTA Implementation Act (19 U.S.C. 3372(a)), I have determined after considering the ITC Report that (a) imports from Canada of washers and covered washer parts, considered individually, do not account for a substantial share of total imports and do not contribute importantly to the serious injury or threat of serious injury found by the ITC; and (b) imports from Mexico of washers and covered washer parts, considered individually, account for a substantial share of total imports and have contributed importantly to the serious injury or threat of serious injury found by the ITC. Accordingly, pursuant to section 312(b) of the NAFTA Implementation Act (19 U.S.C. 3372(b)), I have excluded washers and covered washer parts that are the product of Canada from the actions I am taking under section 203 of the Trade Act.

7. Pursuant to section 203 of the Trade Act, the action I have determined to take shall be a safeguard measure in the form of:

(a) a tariff-rate quota on imports of washers described in subparagraph (a) of paragraph 5 of this proclamation, imposed for a period of 3 years plus 1 day, with unchanging within-quota quantities, annual reductions in the rates of duties entered within those quantities in the second and third years, and annual reductions in the rates of duty applicable to goods entered in excess of those quantities in the second and third years; and

(b) a tariff-rate quota on imports of covered washer parts described in subparagraphs (b), (c), and (d) of paragraph 5 of this proclamation, imposed for a period of 3 years plus 1 day, with increasing within-quota quantities and annual reductions in the rates of duty applicable to goods entered in excess of those quantities in the second and third years.

8. This safeguard measure shall apply to imports from all countries, except for products of Canada and except as provided in paragraph 9 of this proclamation.

9. This safeguard measure shall not apply to imports of any product described in paragraph 5 of this proclamation of a developing country that is a Member of the World Trade Organization (WTO), as listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation, as long as such a country's share of total imports of the product, based on imports during a recent representative period, does not exceed 3 percent, provided that imports that are the product of all such countries with less than 3 percent import share collectively account for not more than 9 percent of total imports of the product. If I determine that a surge in imports of a product described in paragraph 5 of this proclamation of a developing country that is a WTO Member results in imports of that product from that developing country exceeding either of the thresholds described in this paragraph, the safeguard measure shall be modified to apply to such product from such country.

10. The in-quota quantity in each year under the tariff-rate quotas described in paragraph 7 of this proclamation shall be allocated among all countries except those countries the products of which are excluded from such tariff-rate quota pursuant to paragraphs 8 and 9 of this proclamation.

11. Pursuant to section 203(a)(1)(A) of the Trade Act (19 U.S.C. 2253(a)(1)(A)), I have determined that this safeguard measure will facilitate efforts by the domestic industry to make a positive adjustment to import competition and provide greater economic and social benefits than costs. If I determine that further action is appropriate and feasible to facilitate efforts by the domestic industry to make a positive adjustment to import competition

and to provide greater economic and social benefits than costs, or if I determine that the conditions under section 204(b)(1) of the Trade Act (19 U.S.C. 2254(b)(1)) are met, I shall reduce, modify, or terminate the action established in this proclamation accordingly. In addition, if I determine within 30 days of the date of this proclamation, as a result of consultations between the United States and other WTO Members pursuant to Article 12.3 of the WTO Agreement on Safeguards, that it is necessary to reduce, modify, or terminate the safeguard measure, I shall proclaim the corresponding reduction, modification, or termination of the safeguard measure within 40 days.

12. If I determine that a surge in imports of covered washer parts described in subparagraphs (b), (c), and (d) of paragraph 5 of this proclamation undermines the effectiveness of the safeguard measure, the safeguard measure shall be modified by imposing a quantitative restriction in lieu of the tariff-rate quota.

13. Section 604 of the Trade Act (19 U.S.C. 2483), authorizes the President to embody in the Harmonized Tariff Schedule of the United States (HTS) the substance of the relevant provisions of that Act, and of other acts affecting import treatment, and actions thereunder, including the removal, modification, continuance, or imposition of any rate of duty or other import restriction.

NOW, THEREFORE, I, DONALD J. TRUMP, President of the United States of America, acting under the authority vested in me by the Constitution and the laws of the United States, including but not limited to sections 203 and 604 of the Trade Act, section 312 of the NAFTA Implementation Act (19 U.S.C. 3372), and section 301 of title 3, United States Code, do proclaim that:

(1) In order to establish increases in duty and a tariff-rate quota on imports of the washers and covered washer parts described in paragraph 5 of this proclamation (other than excluded products), subchapter III of chapter 99 of the HTS is modified as provided in the Annex to this proclamation. Any merchandise subject to the safeguard measure that is admitted into U.S. foreign trade zones on or after 12:01 a.m. eastern standard time, on February 7, 2018, must be admitted as “privileged foreign status” as defined in 19 CFR 146.41, and will be subject upon entry for consumption to any quantitative restrictions or tariffs related to the classification under the applicable HTS subheading.

(2) Imports of washers and covered washer parts that are the product of Canada shall be excluded from the safeguard measure established in this proclamation, and such imports shall not be counted toward the tariff-rate quota limits that trigger the over-quota rates of duty.

(3) Except as provided in clause (4) below, imports of washers and covered washer parts that are the product of WTO Member developing countries, as listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation, shall be excluded from the safeguard measure established in this proclamation, and such imports shall not be counted toward the tariff-rate quota limits that trigger the over-quota rates of duties.

(4) If, after the safeguard measure established in this proclamation takes effect, the United States Trade Representative (USTR) determines that:

(a) the share of total imports of the product of a country listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation exceeds 3 percent,

(b) imports of the product from all listed countries with less than 3 percent import share collectively account for more than 9 percent of total imports of the product, or

(c) a country listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation is no longer a developing country for purposes of this proclamation;

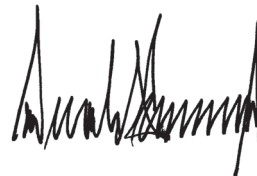
the USTR is authorized, upon publication of a notice in the *Federal Register*, to revise subdivision (b)(2) of Note 17 in the Annex to this proclamation to remove the relevant country from the list or suspend operation of that subdivision, as appropriate.

(5) If, after the safeguard measure established in this proclamation takes effect, the USTR determines that the out-of-quota quantity in units of covered washer parts entered under the tariff lines in chapter 99 enumerated in the Annex to this proclamation has increased by an unjustifiable amount and undermines the effectiveness of the safeguard measure, the USTR is authorized, upon publishing a notice of such determination in the *Federal Register*, to modify the HTS provisions created by the Annex to this proclamation so as to modify the tariff-rate quota on covered washer parts with a quantitative restriction on covered washer parts at a level that the USTR considers appropriate.

(6) Any provision of previous proclamations and Executive Orders that is inconsistent with the actions taken in this proclamation is superseded to the extent of such inconsistency.

(7) The modifications to the HTS made in this proclamation, including the Annex hereto, shall be effective with respect to goods entered, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 7, 2018, and shall continue in effect as provided in the Annex to this proclamation, unless such actions are earlier expressly reduced, modified, or terminated. One year from the termination of the safeguard measure established in this proclamation, the U.S. note and tariff provisions established in the Annex to this proclamation shall be deleted from the HTS.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-third day of January, in the year of our Lord two thousand eighteen, and of the Independence of the United States of America the two hundred and forty-second.



ANNEX

**MODIFICATIONS TO CHAPTER 99 OF
THE HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES**

Effective with respect to goods entered, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 7, 2018, and through 11:59 p.m. eastern standard time on February 7, 2021, subchapter III of chapter 99 of the Harmonized Tariff Schedule of the United States (HTS) is hereby modified by inserting in numerical sequence the following new U.S. note and provisions:

“17. (a) Subheadings 9903.45.01 through 9903.45.06 and any superior texts thereto establish temporary modifications applicable to entries of goods described herein and classified in the enumerated provisions of chapter 84 of the tariff schedule. Whenever any such subheading specifies that the annual aggregate quantity of such goods shall not exceed the quantity established under the terms of this note, when such goods are not the product of a country enumerated in subdivision (b) of this note, any entry of such goods that is in excess of the quantity specified for such provision shall be entered under the over-quota subheading set forth herein for such goods. All such goods shall be subject to duty as provided herein, and such duties shall be cumulative and imposed in addition to the rate of duty established for any such goods in chapter 84 of the tariff schedule.

(b) For the purposes of this note and the application of subheadings 9903.45.01 through 9903.45.06, inclusive, the following countries shall not be subject to the rates of duty and tariff-rate quotas provided for herein:

(1) Canada; and

(2) the following developing countries that are members of the World Trade Organization:

Afghanistan, Albania, Algeria, Angola, Armenia, Azerbaijan, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Burma, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Brazzaville), Congo (Kinshasa), Côte d'Ivoire, Djibouti, Dominica, Ecuador, Egypt, Eritrea, Ethiopia, Fiji, Gabon, The Gambia, Georgia, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, India, Indonesia, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kosovo, Kyrgyzstan, Lebanon, Lesotho, Liberia, Macedonia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mauritius, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Paraguay, Philippines, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tomé and Príncipe, Senegal, Serbia, Sierra Leone, Solomon Island, Somalia, South Africa, South Sudan, Sri Lanka, Suriname, Swaziland, Tanzania, Timor-Leste, Togo, Tonga, Tunisia, Turkey, Tuvalu, Uganda, Ukraine, Uzbekistan, Vanuatu, Yemen (Republic of), Zambia and Zimbabwe.

Annex, page 2

- (c) (1) For the purposes of subheadings 9903.45.01 and 9903.45.02 of this subchapter, “household-type (residential) washing machines, including machines which both wash and dry, whether or not with a dry linen capacity exceeding 10 kg” (such goods provided for in subheadings 8450.11.00 and 8450.20.00 and reported under statistical reporting numbers 8450.11.0040, 8450.11.0080, 8450.20.0040 and 8450.20.0080, respectively, on the effective date of this note) shall include the following goods: automatic clothes washing machines, regardless of the orientation of the rotational axis, each with a cabinet width (measured from its widest point) of at least 62.23 cm and no more than 81.28 cm, except as provided in this note.
- (2) Subheadings 9903.45.01 and 9903.45.02 shall not apply to the washing machines specified below:
- (A) all stacked washer-dryers and all commercial washers:
- (i) 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.
- (ii) The term “commercial washer” denotes an automatic clothes washing machine designed for the “pay per use” segment meeting either of the following two definitions:
- (aa) (I) it contains payment system electronics;
- (II) it is configured with an externally mounted steel frame at least 15.24 cm 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);
- (III) 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
- (IV) the console containing the user interface is made of steel and is assembled with security fasteners; or
- (bb) (I) it contains payment system electronics;
- (II) 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

Annex, page 3

from a bona fide payment acceptance device such as an electronic credit card reader;

(III) 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

(IV) the console containing the user interface is made of steel and is assembled with security fasteners.

(B) automatic clothes washing machines that meet all of the following conditions:

- (i) they have a vertical rotational axis,
- (ii) they are top loading; and
- (iii) they have a drive train consisting, *inter alia*, of (aa) a permanent split capacitor motor, (bb) a belt drive and (cc) a flat wrap spring clutch.

(C) automatic clothes washing machines that meet all of the following conditions:

- (i) they have a horizontal rotational axis;
- (ii) they are front loading; and
- (iii) they have a drive train consisting, *inter alia*, of (aa) a controlled induction motor and (bb) a belt drive.

(D) automatic clothes washing machines that meet all of the following conditions:

- (i) they have a horizontal rotational axis;
- (ii) they are front loading; and
- (iii) they have cabinet width (measured from its widest point) of more than 72.39 cm.

(d) For purposes of subheading 9903.45.01 of this subchapter, the duty rate in the Rates of Duty 1-General subcolumn (and in the Rates of Duty 2 column, as provided therein) for goods entered under such subheading, and not the product of a country enumerated in subdivision (b) of this note, shall be as follows, with the duty rates set

Annex, page 4

forth herein applied in addition to those applicable under subheading 8450.11.00 or 8450.20.00:

If entered during the period from
February 7, 2018 through February 6, 2019 20%

If entered during the period from
February 7, 2019 through February 6, 2020 18%

If entered during the period from
February 7, 2020 through February 7, 2021 16%.

- (e) For purposes of subheading 9903.45.02 of this subchapter, the duty rate in the Rates of Duty 1-General subcolumn (and in the Rates of Duty 2 column, as provided therein) for goods entered under such subheading, and not the product of a country enumerated in subdivision (b) of this note, shall be as follows, with the duty rates set forth herein applied in addition to those applicable under subheading 8450.11.00 or 8450.20.00:

If entered during the period from
February 7, 2018 through February 6, 2019 50%

If entered during the period from
February 7, 2019 through February 6, 2020 45%

If entered during the period from
February 7, 2020 through February 7, 2021 40%.

- (f) For purposes of subheadings 9903.45.05 and 9903.45.06 of this subchapter, the term “parts of household-type (residential) washing machines” shall include the following goods provided for in subheading 8450.90.20 or 8450.90.60 of the tariff schedule:

(1) all cabinets, or portions thereof, provided for in subheading 8450.90.60 and designed for use in the washing machines defined in subdivision (c) of this note, the foregoing which incorporate, at a minimum, (A) a side wrapper, (B) a base and (C) a drive hub;

(2) all assembled tubs provided for in subheading 8450.90.20 and designed for use in such washing machines defined in such subdivision (c) which incorporate, at a minimum: (A) a tub and (B) a seal; and

(3) any combination of the foregoing parts or subassemblies, provided for in subheading 8450.90.20 or 8540.90.60.

- (g) For the purposes of subheading 9903.45.05 of this subchapter, the annual aggregate quantity of all parts of household-type (residential) washing machines, as defined in subdivision (f) above, that is eligible to enter under such subheading in any of the periods enumerated below shall be as follows:

Annex, page 5

If entered during the period from
February 7, 2018 through February 6, 201950,000 units

If entered during the period from
February 7, 2019 through February 6, 202070,000 units

If entered during the period from
February 7, 2020 through February 7, 202190,000 units.

- (h) For purposes of subheading 9903.45.06 of this subchapter, the duty rate in the Rates of Duty 1-General subcolumn (and in the Rates of Duty 2 column, as provided therein) for goods entered in any of the periods enumerated below shall be as follows, with the duty rates set forth herein applied in addition to those applicable under subheading 8450.90.20 or 8450.90.60, as appropriate:

If entered during the period from
February 7, 2018 through February 6, 2019 50%

If entered during the period from
February 7, 2019 through February 6, 2020 45%

If entered during the period from
February 7, 2020 through February 7, 2021 40%.

Annex, page 6

Heading/ Subheading	Article description	Rates of Duty		
		1		2
		General	Special	
9903.45.01	Household-type (residential) washing machines, including machines which both wash and dry, whether or not with a dry linen capacity exceeding 10 kg (as defined in note 17(c) to this subchapter and provided for in subheading 8450.11.00 or 8450.20.00), when entered from a country other than a country enumerated in note 17(b) to this subchapter: If entered in an annual aggregate quantity not exceeding 1,200,000 units, under the terms of such note.....	The duty rate provided in note 17(d) to this subchapter		The duty rate provided in note 17(d) to this subchapter + 35%
9903.45.02	Other.....	The duty rate provided in note 17(e) to this subchapter		The duty rate provided in note 17(e) to this subchapter + 35%
9903.45.05	Parts of household-type (residential) washing machines (such machines described in subheading 9903.45.01 and 9903.45.02 and defined in note 17(c) to this subchapter), such parts provided for in subheading 8450.90.20 or 8450.90.60 and enumerated in note 17(f) to this subchapter, when entered from a country other than a country specified in note 17(b) to this subchapter: If entered in an annual aggregate quantity not exceeding the quantity specified in note 17(g) to this subchapter, under the terms of such note.....	No change		No change
9903.45.06	Other.....	The duty rate set forth in note 17(h) to this subchapter		The duty rate set forth in note 17(h) to this subchapter + 40%".

PROCLAMATION 9979:
SAFEGUARD MODIFICATIONS BASED ON MONITORING REPORT

Federal Register

Vol. 85, No. 18

Tuesday, January 28, 2020

Presidential Documents

Title 3—

Proclamation 9979 of January 23, 2020

The President

To Further Facilitate Positive Adjustment to Competition From Imports of Large Residential Washers

By the President of the United States of America

A Proclamation

1. On January 23, 2018, pursuant to section 203 of the Trade Act of 1974, as amended (the “Trade Act”) (19 U.S.C. 2253), I issued Proclamation 9694, which imposed a safeguard measure for a period of 3 years plus 1 day comprising both a tariff-rate quota (TRQ) on imports of large residential washers (washers) provided for in subheadings 8450.11.00 and 8450.20.00 of the Harmonized Tariff Schedule of the United States (HTS) and a TRQ on covered washer parts provided for in subheadings 8450.90.20 and 8450.90.60 of the HTS. I exempted covered imports from Canada and certain designated beneficiary countries under the Generalized System of Preferences from the application of the measure.

2. On August 7, 2019, the United States International Trade Commission (USITC) issued its report pursuant to section 204(a)(2) of the Trade Act (19 U.S.C. 2254(a)(2)), on the results of its monitoring of developments with respect to the domestic washers industry (USITC, Large Residential Washers: Monitoring Developments in the Domestic Industry, No. TA–204–013). In its report, the USITC found that imports peaked in November and December of 2017, just before the safeguard measure was imposed, and again in February and March of 2019, at the opening of the second TRQ period. More recent data from U.S. Customs and Border Protection indicate that the number of imported units exceeded the 1.2-million-unit annual limit qualifying for the in-quota rate well before the end of the year in the first year of the measure and in less than 3 months in the second year of the measure.

3. Section 204(b)(1)(B) of the Trade Act (19 U.S.C. 2254(b)(1)(B)) authorizes the President, upon petition of the majority of the representatives of the domestic industry, to reduce, modify, or terminate an action taken under section 203 of the Trade Act when the President determines that the domestic industry has made a positive adjustment to import competition.

4. After taking into account the information provided in the USITC’s report, and after receiving a petition from the representative of the majority of the domestic industry, I have determined that the domestic industry has begun to make positive adjustment to import competition but that, despite that adjustment, increased imports of washers at peak times of the year have impaired the effectiveness of the action I proclaimed in 2018 under section 203 of the Trade Act, and modification of the action is warranted.

5. Section 204(b)(2) of the Trade Act (19 U.S.C. 2254(b)(2)) also authorizes the President to take such additional action under section 203 of the Trade Act as may be necessary to eliminate any circumvention of any action previously taken under such section. Pursuant to section 203(a)(3)(B) of the Trade Act (19 U.S.C. 2253(a)(3)(B)), the President may proclaim a TRQ on the imported article.

6. I have further determined that additional action is necessary to eliminate circumvention of the TRQ by ensuring that within-quota quantities of imports of washers are spread throughout the year, thus eliminating the possibility

that importers' concentration of imports of washers in a limited period would distort the quantity of washers in the U.S. market and undermine the positive effect of the TRQ on the domestic industry's adjustment to import competition. Accordingly, I have decided to allocate, on a quarterly basis, within-quota quantities of 1.2 million washers during the third year of the action, beginning February 7, 2020.

7. Section 604 of the Trade Act (19 U.S.C. 2483) authorizes the President to embody in the HTS the substance of the relevant provisions of that Act, and of other acts affecting import treatment, and actions thereunder, including the removal, modification, continuance, or imposition of any rate of duty or other import restriction.

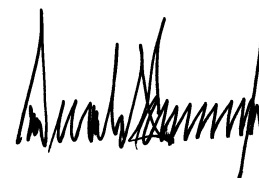
NOW, THEREFORE, I, DONALD J. TRUMP, President of the United States of America, acting under the authority vested in me by the Constitution and the laws of the United States, including but not limited to sections 203, 204, and 604 of the Trade Act, do proclaim that:

(1) In order to modify 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 third quota year on a quarterly basis, subchapter III of chapter 99 of the HTS is modified as set forth in the Annex to this proclamation.

(2) Any provision of previous proclamations and Executive Orders that is inconsistent with the actions taken in this proclamation is superseded to the extent of such inconsistency.

(3) The modifications to the HTS made by this proclamation, including the Annex hereto, shall be effective with respect to goods entered for consumption, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 7, 2020, and shall continue in effect as provided in the Annex to this proclamation, unless such actions are earlier expressly reduced, modified, or terminated. One year from the termination of the safeguard measure established in this proclamation, the U.S. note and tariff provisions established in the Annex to this proclamation shall be deleted from the HTS.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-third day of January, in the year of our Lord two thousand twenty, and of the Independence of the United States of America the two hundred and forty-fourth.



ANNEX**TO MODIFY CERTAIN PROVISIONS OF CHAPTER 99 OF THE HARMONIZED
TARIFF SCHEDULE OF THE UNITED STATES**

Effective with respect to goods entered for consumption, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 7, 2020, subchapter III of chapter 99 of the Harmonized Tariff Schedule of the United States is modified as provided herein:

1. U.S. note 17(d) to such subchapter III is modified by deleting the phrase “For purposes of” and by inserting in lieu thereof the phrase “Subject to the provisions of subdivision (i) of this note, for purposes of”.

2. The following new subdivision (i) is inserted in alphabetical sequence in U.S. note 17:

- “(i) For the purposes of subheading 9903.45.01 of this subchapter, the aggregate quantity of all household-type (residential) washing machines, as defined in subdivision (c) above, that is eligible to enter under such subheading in any of the periods enumerated below shall be as follows:
- | | |
|---|----------------|
| If entered during the period from
February 7, 2020 through May 6, 2020..... | 300,000 units |
| If entered during the period from
May 7, 2020 through August 6, 2020..... | 300,000 units |
| If entered during the period from
August 7, 2020 through November 6, 2020..... | 300,000 units |
| If entered during the period from
November 7, 2020 through February 7, 2021..... | 300,000 units” |

3. The article description of subheading 9903.45.01 is modified to read as follows:

“If entered in an aggregate quantity, in any quarterly period specified in note 17(i) to this subchapter, not exceeding 300,000 units in any such quarterly period, under the terms of such note”.

PROCLAMATION 10133: SAFEGUARD EXTENSION

Presidential Documents

Title 3—

Proclamation 10133 of January 14, 2021

The President

To Continue Facilitating Positive Adjustment to Competition From Imports of Large Residential Washers

By the President of the United States of America

A Proclamation

1. On January 23, 2018, pursuant to section 203 of the Trade Act of 1974, as amended (the “Trade Act”) (19 U.S.C. 2253), I issued Proclamation 9694, which imposed a safeguard measure for a period of 3 years plus 1 day comprising both a tariff-rate quota (TRQ) on imports of large residential washers (washers) provided for in subheadings 8450.11.00 and 8450.20.00 of the Harmonized Tariff Schedule of the United States (HTS) and a TRQ on covered washer parts provided for in subheadings 8450.90.20 and 8450.90.60 of the HTS. I exempted covered imports from Canada and certain designated beneficiary countries under the Generalized System of Preferences (GSP) from the application of the measure.

2. On May 16, 2019, I issued Proclamation 9887, which removed Turkey from the list of GSP beneficiary countries, and modified the safeguard measure so that imports from Turkey were no longer excluded. On May 31, 2019, I issued Proclamation 9902, which removed India from the list of GSP beneficiary countries, and modified the safeguard measure so that imports from India were no longer excluded.

3. On August 7, 2019, the United States International Trade Commission (ITC) issued its report pursuant to section 204(a)(2) of the Trade Act (19 U.S.C. 2254(a)(2)), on the results of its monitoring of developments with respect to the domestic washers industry (ITC, Large Residential Washers: Monitoring Developments in the Domestic Industry, No. TA–204–013). After taking into account the information provided in the ITC’s report and receiving a petition from the representative of the majority of the domestic industry, I determined that the domestic industry had begun to make positive adjustment to import competition but that, despite that adjustment, increased imports of washers at peak times of the year impaired the effectiveness of the action I proclaimed in Proclamation 9694. On January 23, 2020, pursuant to sections 204(b)(1)(B) and 204(b)(2) of the Trade Act (19 U.S.C. 2254(b)(1)(B) and (b)(2)), I issued Proclamation 9979 to modify the action I took in Proclamation 9694 by allocating on a quarterly basis, within-quota quantities of 1.2 million units during the third year of the action, beginning February 7, 2020.

4. On December 8, 2020, in response to a petition by the representatives of the domestic industry, the ITC issued its determination and report pursuant to section 204(c) of the Trade Act (19 U.S.C. 2254(c)), finding that the safeguard measure I imposed continues to be necessary to prevent or remedy the serious injury to the domestic industry, and that there is evidence that the domestic industry is making a positive adjustment to import competition (ITC, Large Residential Washers: Extension of Action, No. TA–201–076 (Extension)).

5. Section 203(e)(1)(B) of the Trade Act (19 U.S.C. 2253(e)(1)(B)) authorizes the President, after receiving an affirmative determination from the ITC pursuant to section 204(c) of the Trade Act (19 U.S.C. 2254(c)), to extend the effective period of any action taken under section 203 of the Trade Act if the President determines that the action continues to be necessary

to prevent or remedy the serious injury and there is evidence that the domestic industry is making a positive adjustment to import competition.

6. Pursuant to section 203(e)(1)(B) of the Trade Act (19 U.S.C. 2253(e)(1)(B)), I have determined that the action continues to be necessary to prevent or remedy the serious injury to the domestic washers industry and there is evidence that the domestic washers industry is making a positive adjustment to import competition, and I have further determined to extend the safeguard measure proclaimed in Proclamation 9694, as modified, as follows:

(a) continuation of the tariff-rate quota on imports of washers described in paragraph 1 of this proclamation for an additional period of 2 years, with unchanging within-quota quantities, annual reductions in the rates of duties entered within those quantities in the fourth and fifth years, and annual reductions in the rates of duty applicable to goods entered in excess of those quantities in the fourth and fifth years; and

(b) continuation of the tariff-rate quota on imports of covered washer parts described in paragraph 1 of this proclamation for an additional period of 2 years, with increasing within-quota quantities and annual reductions in the rates of duty applicable to goods entered in excess of those quantities in the fourth and fifth years.

7. As provided in Proclamation 9694, as modified by Proclamations 9887 and 9902, this safeguard measure shall apply to imports from all countries, except for products of Canada and except as provided in paragraph 8 of this proclamation.

8. As I further provided in Proclamation 9694, as modified by Proclamations 9887 and 9902, this safeguard measure shall not apply to imports of any product described in paragraph 1 of this proclamation of a developing country that is a Member of the World Trade Organization (WTO), as listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation, as long as such country's share of total imports of the product, based on imports during a recent representative period, does not exceed 3 percent, provided that imports that are the product of all such countries with less than 3 percent import share collectively account for not more than 9 percent of total imports of the product. If I determine that a surge in imports of a product described in paragraph 1 of this proclamation of a developing country that is a WTO Member results in imports of that product from that developing country exceeding either of the thresholds described in this paragraph, the safeguard measure shall be modified to apply to such product from such country. In addition, if I determine within 60 days of the date of this proclamation, as a result of consultations between the United States and other WTO Members pursuant to Article 12.3 of the WTO Agreement on Safeguards, that it is necessary to modify the terms of extension of the safeguard measure, or to terminate the safeguard measure, I shall proclaim the corresponding modification or termination within 40 days of the date of my determination.

9. As I further provided in Proclamation 9694, the in-quota quantity in each year under the tariff-rate quota described in subparagraph (a) of paragraph 6 of this proclamation shall be allocated on a quarterly basis as provided for in Proclamation 9979.

10. Section 604 of the Trade Act (19 U.S.C. 2483) authorizes the President to embody in the HTS the substance of the relevant provisions of that Act, and of other acts affecting import treatment, and actions thereunder, including the removal, modification, continuance, or imposition of any rate of duty or other import restriction.

NOW, THEREFORE, I, DONALD J. TRUMP, President of the United States of America, acting under the authority vested in me by the Constitution and the laws of the United States, including but not limited to sections 203, 204, and 604 of the Trade Act, do proclaim that:

(1) In order to extend the measure applicable to imports of washers and covered parts described in paragraph 1 of this proclamation, subchapter

III of chapter 99 of the HTS is modified as set forth in the Annex to this proclamation. Any merchandise subject to the safeguard measure that is admitted into United States foreign trade zones on or after 12:01 a.m., eastern standard time, on February 8, 2021, must be admitted as “privileged foreign status” as defined in 19 CFR 146.41, and will be subject upon entry for consumption to any tariffs or quantitative restrictions related to the classification under the applicable HTS subheading.

(2) Imports of washers and covered washer parts that are the product of Canada shall continue to be excluded from the safeguard measure extended by this proclamation, and such imports shall not be counted toward the tariff-rate quota limits that trigger the over-quota rates of duty.

(3) Except as provided in clause (4) below, imports of washers and covered washer parts that are the product of WTO Member developing countries, as listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation, shall continue to be excluded from the safeguard measure extended by this proclamation, and such imports shall not be counted toward the tariff-rate quota limits that trigger the over-quota rates of duties.

(4) If, after the extension proclaimed herein is in effect, the United States Trade Representative (USTR) determines that:

(a) the share of total imports of the product of a country listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation exceeds 3 percent;

(b) imports of the product from all listed countries with less than 3 percent import share collectively account for more than 9 percent of total imports of the product; or

(c) a country listed in subdivision (b)(2) of Note 17 in the Annex to this proclamation is no longer a developing country for purposes of this proclamation;

the USTR is authorized, upon publication of a notice in the *Federal Register*, to revise subdivision (b)(2) of Note 17 in the Annex to this proclamation to remove the relevant country from the list or suspend operation of that subdivision, as appropriate.

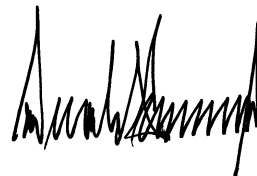
(5) If, after the extension proclaimed herein is in effect, the USTR determines that the out-of-quota quantity in units of covered washer parts entered under the tariff lines in chapter 99 enumerated in the Annex to this proclamation has increased by an unjustifiable amount and undermines the effectiveness of the safeguard measure, the USTR is authorized, upon publication of a notice in the *Federal Register* of such determination, to modify the HTS provisions created by the Annex to this proclamation so as to modify the tariff-rate quota on covered washer parts with a quantitative restriction on covered washer parts at a level that the USTR considers appropriate.

(6) In order to continue allocating, on a quarterly basis, the within-quota quantities of the TRQ limits applicable to imports of washers under HTS subheadings 8450.11.00 and 8450.20.00, subchapter III of chapter 99 of the HTS is modified as set forth in the Annex to this proclamation. These allocations shall continue in effect as provided in the Annex to this proclamation, unless such actions are earlier expressly reduced, modified, or terminated.

(7) One year from the termination of the safeguard measure established in this proclamation, the U.S. note and tariff provisions established in the Annex to this proclamation shall be deleted from the HTS.

(8) Any provision of previous proclamations and Executive Orders that is inconsistent with the actions taken in this proclamation is superseded to the extent of such inconsistency.

IN WITNESS WHEREOF, I have hereunto set my hand this fourteenth day of January, in the year of our Lord two thousand twenty-one, and of the Independence of the United States of America the two hundred and forty-fifth.

A handwritten signature in black ink, appearing to be "Donald Trump", located on the right side of the page.

ANNEX

1. U.S. note 17(d) to subchapter III of chapter 99 of the Harmonized Tariff Schedule of the United States (HTSUS) is amended by inserting the following provisions at the end of subdivision (d):

“If entered during the period from
February 8, 2021 through February 7,
2022.....15%
If entered during the period from
February 8, 2022 through February 7,
2023.....14%”.

2. U.S. note 17(e) to subchapter III of chapter 99 of the HTSUS is amended by inserting the following provisions at the end of subdivision (e):

“If entered during the period from
February 8, 2021 through February 7,
2022.....35%
If entered during the period from
February 8, 2022 through February 7,
2023.....30%”.

3. U.S. note 17(g) to subchapter III of chapter 99 of the HTSUS is amended by inserting the following provisions at the end of subdivision (g):

“If entered during the period from
February 8, 2021 through February 7,
2022.....110,000 units
If entered during the period from
February 8, 2022 through February 7,
2023.....130,000 units”.

4. U.S. note 17(h) to subchapter III of chapter 99 of the HTSUS is amended by inserting the following provisions at the end of subdivision (h):

“If entered during the period from
February 8, 2021 through February 7,
2022.....35%
If entered during the period from
February 8, 2022 through February 7,
2023.....30%”.

5. U.S. note 17(i) to subchapter III of chapter 99 of the HTSUS is amended by inserting the following provisions at the end of subdivision (i):

“If entered during the period from
February 8, 2021 through May 7,
2021.....300,000 units
If entered during the period from
May 8, 2021 through August 7,
2021.....300,000 units
If entered during the period from
August 8, 2021 through November 7,
2021.....300,000 units
If entered during the period from
If entered during the period from
November 8, 2021 through February 7,
2022.....300,000 units
If entered during the period from

February 8, 2022 through May 7,
2022.....300,000 units
If entered during the period from
May 8, 2022 through August 7,
2022.....300,000 units
If entered during the period from
August 8, 2022 through November 7,
2022.....300,000 units
If entered during the period from
November 8, 2022 through February 7,
2023.....300,000 units”.

6. Effective with respect to goods entered for consumption, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 8, 2021:
 - a. the “Rates of Duty 1-General” column of subheading 9903.45.01 is modified by deleting “20%” and by inserting “15%” in lieu thereof;
 - b. the “Rates of Duty 1-General” column of subheading 9903.45.02 is modified by deleting “50%” and by inserting “35%” in lieu thereof; and
 - c. the “Rates of Duty 1-General” column of subheading 9903.45.06 is modified by deleting “50%” and by inserting “35%” in lieu thereof.
7. Effective with respect to goods entered for consumption, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on February 8, 2022:
 - a. the “Rates of Duty 1-General” column of subheading 9903.45.01 is modified by deleting “15%” and by inserting “14%” in lieu thereof;
 - b. the “Rates of Duty 1-General” column of subheading 9903.45.02 is modified by deleting “35%” and by inserting “30%” in lieu thereof; and
 - c. the “Rates of Duty 1-General” column of subheading 9903.45.06 is modified by deleting “35%” and by inserting “30%” in lieu thereof.

APPENDIX B

HEARING CALENDAR

CALENDAR OF PUBLIC HEARING

Subject: Large Residential Washers: Evaluation of the Effectiveness of
Import Relief
Inv. Nos.: 201-076 (Evaluation)
Date and Time: June 1, 2023 - 9:30 a.m.

The hearing in connection with this investigation was held in the Main Hearing Room (Room 101), 500 E Street, SW, Washington, D.C.

No one appeared to give testimony at the hearing. See official transcript of the hearing for Chairman Johanson's full statement.

APPENDIX C
SUMMARY DATA

Table C-1

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	Calendar year			Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) and covered parts:						
U.S. consumption value:						
Amount.....	***	***	***	▲ ***	▲ ***	▼ ***
Producers' share (fn1):						
Continuous producers' share.....	***	***	***	▼ ***	▼ ***	▼ ***
New entrant producers' share.....	***	***	***	▲ ***	▲ ***	▲ ***
All U.S. producers' share.....	***	***	***	▲ ***	▼ ***	▲ ***
Importers' share (fn1):						
China.....	***	***	***	▼ ***	▼ ***	▼ ***
Mexico.....	***	***	***	▼ ***	▼ ***	▲ ***
South Korea.....	***	***	***	▼ ***	▲ ***	▼ ***
Thailand.....	***	***	***	▼ ***	▼ ***	▼ ***
Vietnam.....	***	***	***	▼ ***	▼ ***	▼ ***
All other sources.....	***	***	***	▲ ***	***	▲ ***
All import sources: Covered	***	***	***	▼ ***	▼ ***	▼ ***
Expansion washers: All import sources....	***	***	***	▲ ***	▲ ***	▲ ***
All residential washers and parts.....	***	***	***	▼ ***	▲ ***	▼ ***
Select residential washers (i.e., full units):						
U.S. consumption quantity:						
Amount.....	9,732,919	10,543,853	8,974,046	▼(7.8)	▲8.3	▼(14.9)
Producers' share (fn1):						
Continuous producers' share.....	***	***	***	▼ ***	▼ ***	▼ ***
New entrant producers' share.....	***	***	***	▲ ***	▲ ***	▲ ***
All U.S. producers' share.....	78.6	77.8	83.5	▲4.9	▼(0.8)	▲5.7
Importers' share (fn1):						
LRWs: China.....	***	***	***	▼ ***	▲ ***	▼ ***
LRWs: Mexico.....	***	***	***	***	***	***
LRWs: South Korea.....	***	***	***	▼ ***	▲ ***	▼ ***
LRWs: Thailand.....	***	***	***	▼ ***	▼ ***	▼ ***
LRWs: Vietnam.....	***	***	***	▼ ***	▼ ***	▼ ***
LRWs: All other sources.....	***	***	***	▲ ***	***	▲ ***
LRWs: All import sources.....	***	***	***	▼ ***	▼ ***	▼ ***
Expansion washers: All import sources....	***	***	***	▲ ***	▲ ***	▼ ***
All select residential washers imports....	21.4	22.2	16.5	▼(4.9)	▲0.8	▼(5.7)
U.S. consumption value:						
Amount.....	4,362,772	5,071,387	4,521,552	▲3.6	▲16.2	▼(10.8)
Producers' share (fn1):						
Continuous producers' share.....	***	***	***	▼ ***	▼ ***	▼ ***
New entrant producers' share.....	***	***	***	▲ ***	▲ ***	▲ ***
All U.S. producers' share.....	76.0	74.5	80.5	▲4.6	▼(1.4)	▲6.0
Importers' share (fn1):						
LRWs: China.....	***	***	***	▼ ***	▲ ***	▼ ***
LRWs: Mexico.....	***	***	***	***	***	***
LRWs: South Korea.....	***	***	***	▼ ***	▲ ***	▼ ***
LRWs: Thailand.....	***	***	***	▼ ***	▼ ***	▼ ***
LRWs: Vietnam.....	***	***	***	▼ ***	▼ ***	▼ ***
LRWs: All other sources.....	***	***	***	▲ ***	***	▲ ***
LRWs: All import sources.....	***	***	***	▼ ***	▼ ***	▼ ***
Expansion washers: All import sources....	***	***	***	▲ ***	▲ ***	▲ ***
All select residential washers imports....	24.0	25.5	19.5	▼(4.6)	▲1.4	▼(6.0)

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	Calendar year			Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Covered parts (i.e., less than full unit):						
U.S. consumption quantity:						
Amount.....	***	***	***	▼***	▼***	▼***
Producers' share (fn1):						
Continuous producers' share.....	***	***	***	▲***	▲***	▲***
New entrant producers' share.....	***	***	***	▲***	▲***	▼***
All U.S. producers' share.....	***	***	***	▲***	▲***	▼***
Importers' share (fn1):						
China.....	***	***	***	▼***	▲***	▼***
Mexico.....	***	***	***	▲***	▲***	▲***
South Korea.....	***	***	***	▼***	▼***	▲***
Thailand.....	***	***	***	▼***	▲***	▼***
Vietnam.....	***	***	***	▲***	▲***	▲***
All other sources.....	***	***	***	***	***	***
Covered parts: All import sources:.....	***	***	***	▼***	▼***	▲***
U.S. consumption value:						
Amount.....	***	***	***	▼***	▼***	▼***
Producers' share (fn1):						
Continuous producers' share.....	***	***	***	▲***	▲***	▼***
New entrant producers' share.....	***	***	***	▼***	▲***	▼***
All U.S. producers' share.....	***	***	***	▲***	▲***	▼***
Importers' share (fn1):						
China.....	***	***	***	▼***	▼***	▼***
Mexico.....	***	***	***	▲***	▲***	▲***
South Korea.....	***	***	***	▼***	▼***	▼***
Thailand.....	***	***	***	▼***	▼***	▼***
Vietnam.....	***	***	***	▲***	▼***	▲***
All other sources.....	***	***	***	***	***	***
Covered parts: All import sources:.....	***	***	***	▼***	▼***	▲***
Select residential washers (i.e., full units) :						
U.S. importers' U.S. shipments of imports from:						
LRWs: China:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▼***	▲***	▼***
Ending inventory quantity.....	***	***	***	▼***	▼***	***
LRWs: Mexico:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
LRWs: South Korea:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▼***	▼***	▼***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	Calendar year			Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) :						
Continued U.S. importers' U.S. shipments of imports from:						
LRWs: Thailand:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▼***	▲***	▼***
LRWs: Vietnam:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▼***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▼***	▼***	▼***
LRWs: All other sources:						
Quantity.....	***	***	***	▲***	***	▲***
Value.....	***	***	***	▲***	***	▲***
Unit value.....	***	***	***	▲***	***	▲***
Ending inventory quantity.....	***	***	***	***	***	***
LRWs: All import sources:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▼***	▼***	▼***
Expansion washers: All import sources:						
Quantity.....	***	***	***	▲***	▲***	▼***
Value.....	***	***	***	▲***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▼***	▲***	▼***
Select residential washers: All import sources:						
Quantity.....	2,084,717	2,345,872	1,482,755	▼(28.9)	▲12.5	▼(36.8)
Value.....	1,049,243	1,292,755	879,490	▼(16.2)	▲23.2	▼(32.0)
Unit value.....	\$503	\$551	\$593	▲17.9	▲9.5	▲7.6
Ending inventory quantity.....	***	***	***	▼***	▲***	▼***
Covered parts (i.e., less than full unit):						
U.S. importers' U.S. shipments of imports from:						
Covered parts: China:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▼***	▼***
Unit value.....	***	***	***	▼***	▼***	▲***
Ending inventory quantity.....	***	***	***	▲***	▼***	▲***
Covered parts: Mexico:						
Quantity.....	***	***	***	***	▼***	▲***
Value.....	***	***	***	***	▼***	▲***
Unit value.....	***	***	***	***	▲***	▼***
Ending inventory quantity.....	***	***	***	▼***	▼***	▼***
Covered parts: South Korea:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▼***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▼***	▼***	▲***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	Calendar year			Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Covered parts (i.e., less than full unit):						
Continued U.S. importers' U.S. shipments of imports from:						
Covered parts: Thailand:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▼***	▼***
Unit value.....	***	***	***	▲***	▼***	▲***
Ending inventory quantity.....	***	***	***	▼***	▼***	▲***
Covered parts: Vietnam:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▼***	▲***
Unit value.....	***	***	***	▲***	▼***	▲***
Ending inventory quantity.....	***	***	***	▲***	▲***	▼***
Covered parts: All other sources:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
Covered parts: All import sources:						
Quantity.....	***	***	***	▼***	▼***	▼***
Value.....	***	***	***	▼***	▼***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	▼***	▼***	▲***
Select residential washers (i.e., full units) and covered parts:						
Value of U.S. importers' U.S. shipments of imports from:						
China.....	***	***	***	▼***	▼***	▼***
Mexico.....	***	***	***	***	▼***	▲***
South Korea.....	***	***	***	▼***	▲***	▼***
Thailand.....	***	***	***	▼***	▲***	▼***
Vietnam.....	***	***	***	▼***	▼***	▼***
All other sources.....	***	***	***	▲***	***	▲***
All import sources: Covered.....	***	***	***	▼***	▲***	▼***
Expansion washers: All import sources.....	***	***	***	▲***	▲***	▼***
All residential washers and parts.....	***	***	***	▼***	▲***	▼***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	Calendar year			Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) :						
All U.S. producers':						
Practical capacity quantity.....	13,354,698	13,876,214	14,317,054	▲7.2	▲3.9	▲3.2
Production quantity.....	8,280,902	8,991,110	7,817,669	▼(5.6)	▲8.6	▼(13.1)
Capacity utilization (fn1).....	62.0	64.8	54.6	▼(7.4)	▲2.8	▼(10.2)
U.S. shipments:						
Quantity.....	7,648,202	8,197,981	7,491,291	▼(2.1)	▲7.2	▼(8.6)
Value.....	3,313,529	3,778,632	3,642,062	▲9.9	▲14.0	▼(3.6)
Unit value.....	\$433	\$461	\$486	▲12.2	▲6.4	▲5.5
Export shipments:						
Quantity.....	***	***	***	▲***	▲***	▼***
Value.....	***	***	***	▲***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Ending inventory quantity.....	483,416	613,258	296,236	▼(38.7)	▲26.9	▼(51.7)
Inventories/total shipments (fn1).....	***	***	***	▼***	▲***	▼***
Production workers.....	5,427	5,862	5,593	▲3.1	▲8.0	▼(4.6)
Hours worked (1,000s).....	9,183	9,693	9,210	▲0.3	▲5.6	▼(5.0)
Wages paid (\$1,000).....	255,964	293,255	283,178	▲10.6	▲14.6	▼(3.4)
Hourly wages (dollars per hour).....	\$27.87	\$30.25	\$30.75	▲10.3	▲8.5	▲1.6
Productivity (units per 1,000 hours).....	901.8	927.6	848.8	▼(5.9)	▲2.9	▼(8.5)
Unit labor costs.....	\$30.91	\$32.62	\$36.22	▲17.2	▲5.5	▲11.1
Continuous U.S. producers':						
Practical capacity quantity.....	***	***	***	▲***	▲***	▲***
Production quantity.....	***	***	***	▼***	▲***	▼***
Capacity utilization (fn1).....	***	***	***	▼***	▲***	▼***
U.S. shipments:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Export shipments:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	▼***	▲***	▼***
Inventories/total shipments (fn1).....	***	***	***	▼***	▲***	▼***
Production workers.....	***	***	***	▼***	▲***	▼***
Hours worked (1,000s).....	***	***	***	▼***	▲***	▼***
Wages paid (\$1,000).....	***	***	***	▼***	▲***	▼***
Hourly wages (dollars per hour).....	***	***	***	▲***	▲***	▲***
Productivity (units per 1,000 hours).....	***	***	***	▼***	▲***	▼***
Unit labor costs.....	***	***	***	▲***	▲***	▲***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data Calendar year			Period changes Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) :						
New entrant U.S. producers':						
Practical capacity quantity.....	***	***	***	▲ ***	▲ ***	▲ ***
Production quantity.....	***	***	***	▲ ***	▲ ***	▲ ***
Capacity utilization (fn1).....	***	***	***	▼ ***	▲ ***	▼ ***
U.S. shipments:						
Quantity.....	***	***	***	▲ ***	▲ ***	▲ ***
Value.....	***	***	***	▲ ***	▲ ***	▲ ***
Unit value.....	***	***	***	▲ ***	▲ ***	▲ ***
Export shipments:						
Quantity.....	***	***	***	▲ ***	▲ ***	▲ ***
Value.....	***	***	***	▲ ***	▲ ***	▲ ***
Unit value.....	***	***	***	▼ ***	▼ ***	▲ ***
Ending inventory quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Inventories/total shipments (fn1).....	***	***	***	▼ ***	▲ ***	▼ ***
Production workers.....	***	***	***	▲ ***	▲ ***	▲ ***
Hours worked (1,000s).....	***	***	***	▲ ***	▲ ***	▲ ***
Wages paid (\$1,000).....	***	***	***	▲ ***	▲ ***	▲ ***
Hourly wages (dollars per hour).....	***	***	***	▲ ***	▲ ***	▼ ***
Productivity (units per 1,000 hours).....	***	***	***	▼ ***	▲ ***	▼ ***
Unit labor costs.....	***	***	***	▲ ***	▼ ***	▲ ***
Covered parts (i.e., less than full unit):						
All U.S. producers':						
Commercial U.S. shipments:						
Quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Unit value.....	***	***	***	▼ ***	▲ ***	▼ ***
Continuous U.S. producers':						
Commercial U.S. shipments:						
Quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Unit value.....	***	***	***	▲ ***	▲ ***	▲ ***
New entrant U.S. producers':						
Commercial U.S. shipments:						
Quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Unit value.....	***	***	***	▼ ***	▲ ***	▼ ***
Select residential washers (i.e., full units) and covered parts:						
All U.S. producers':						
U.S. shipments value:.....	***	***	***	▲ ***	▲ ***	▼ ***
Continuous U.S. producers':						
U.S. shipments value:.....	***	***	***	▼ ***	▲ ***	▼ ***
New entrant U.S. producers':						
U.S. shipments value:.....	***	***	***	▲ ***	▲ ***	▲ ***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) :						
All U.S. producers':						
Net sales:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▲***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Cost of goods sold (COGS).....	2,701,422	3,129,665	3,390,968	▲25.5	▲15.9	▲8.3
Gross profit or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
SG&A expenses.....	485,272	518,755	516,331	▲6.4	▲6.9	▼(0.5)
Operating income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
Net income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
Unit COGS.....	***	***	***	▲***	▲***	▲***
Unit SG&A expenses.....	***	***	***	▲***	▼***	▲***
Unit operating income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
Unit net income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
COGS/sales (fn1).....	***	***	***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1).....	***	***	***	▼***	▼***	▼***
Net income or (loss)/sales (fn1).....	***	***	***	▼***	▼***	▼***
Capital expenditures.....	115,738	90,080	77,719	▼(32.8)	▼(22.2)	▼(13.7)
Research and development expenses.....	***	***	***	▼***	▲***	▼***
Net assets.....	1,972,658	1,991,307	1,665,486	▼(15.6)	▲0.9	▼(16.4)
Continuous U.S. producers':						
Net sales:						
Quantity.....	***	***	***	▼***	▲***	▼***
Value.....	***	***	***	▼***	▲***	▼***
Unit value.....	***	***	***	▲***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	▲***	▲***	▼***
Gross profit or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
SG&A expenses.....	***	***	***	▲***	▲***	▼***
Operating income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
Net income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
Unit COGS.....	***	***	***	▲***	▲***	▲***
Unit SG&A expenses.....	***	***	***	▲***	▲***	▲***
Unit operating income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
Unit net income or (loss) (fn2).....	***	***	***	▼***	▲***	▼***
COGS/sales (fn1).....	***	***	***	▲***	▲***	▲***
Operating income or (loss)/sales (fn1).....	***	***	***	▼***	▲***	▼***
Net income or (loss)/sales (fn1).....	***	***	***	▼***	▲***	▼***
Capital expenditures.....	***	***	***	▼***	▲***	▼***
Research and development expenses.....	***	***	***	▼***	▲***	▼***
Net assets.....	***	***	***	▼***	▲***	▼***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	Calendar year			Comparison years		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) :						
New entrant U.S. producers':						
Net sales:						
Quantity.....	***	***	***	▲ ***	▲ ***	▲ ***
Value.....	***	***	***	▲ ***	▲ ***	▲ ***
Unit value.....	***	***	***	▲ ***	▲ ***	▲ ***
Cost of goods sold (COGS).....	***	***	***	▲ ***	▲ ***	▲ ***
Gross profit or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
SG&A expenses.....	***	***	***	▲ ***	▲ ***	▲ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Net income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Unit COGS.....	***	***	***	▲ ***	▲ ***	▲ ***
Unit SG&A expenses.....	***	***	***	▲ ***	▲ ***	▲ ***
Unit operating income or (loss) (fn2).....	***	***	***	▼ ***	▼ ***	▼ ***
Unit net income or (loss) (fn2).....	***	***	***	▼ ***	▼ ***	▼ ***
COGS/sales (fn1).....	***	***	***	▲ ***	▲ ***	▲ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▼ ***	▼ ***	▼ ***
Net income or (loss)/sales (fn1).....	***	***	***	▼ ***	▼ ***	▼ ***
Capital expenditures.....	***	***	***	▼ ***	▼ ***	▲ ***
Research and development expenses.....	***	***	***	▼ ***	▼ ***	▲ ***
Net assets.....	***	***	***	▼ ***	▼ ***	▼ ***
Covered parts (i.e., less than full unit):						
All U.S. producers':						
Commercial net sales:						
Quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Unit value.....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▼ ***	▼ ***	▼ ***
Continuous U.S. producers':						
Commercial net sales:						
Quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Unit value.....	***	***	***	▲ ***	▲ ***	▲ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▼ ***	▼ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▼ ***	▼ ***	▼ ***
New entrant U.S. producers':						
Commercial net sales:						
Quantity.....	***	***	***	▼ ***	▲ ***	▼ ***
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Unit value.....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▲ ***	▼ ***	▲ ***

Table continued.

Table C-1 Continued

Select residential washers and covered parts: Summary data concerning the U.S. market, by item and period

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

Item	Reported data			Period changes		
	2020	2021	2022	2020-22	2020-21	2021-22
Select residential washers (i.e., full units) and covered parts:						
All U.S. producers':						
Net sales:						
Value.....	***	***	***	▲ ***	▲ ***	▼ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▼ ***	▼ ***	▼ ***
Continuous U.S. producers':						
Net sales:						
Value.....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▼ ***	▲ ***	▼ ***
New entrant U.S. producers':						
Net sales:						
Value.....	***	***	***	▲ ***	▲ ***	▲ ***
Operating income or (loss) (fn2).....	***	***	***	▼ ***	▲ ***	▼ ***
Operating income or (loss)/sales (fn1).....	***	***	***	▼ ***	▼ ***	▼ ***

Source: Compiled from data submitted in response to Commission questionnaires. 508-compliant tables containing these data are contained in parts III, IV, V and Appendix E of this report.

Note.--Value data shown "0" represent values greater than zero, but less than 500 dollars. Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). True zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

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

fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

APPENDIX D

SELECT DATA FROM PRIOR PROCEEDINGS

Summary data from original safeguard proceeding	D-3
Summary data from safeguard monitoring proceeding	D-23
Summary data from safeguard extension proceeding	D-29
Select pricing data from original safeguard proceeding.....	D-35
Estimated economic effects from original safeguard proceeding	D-43

SUMMARY DATA FROM ORIGINAL SAFEGUARD PROCEEDING

Table C-1

LRWs and covered parts: Summary data concerning LRWs and covered parts, 2012-16, January to March 2016, and January to March 2017

* * * * *

Table C-2

Residential washers and covered parts: Summary data concerning LRWs, covered parts, and selected out-of-scope residential washers, 2012-16, January to March 2016, and January to March 2017

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Table C-3

Residential washers: Summary data concerning LRWs and selected out-of-scope residential washers, 2012-16, January to March 2016, and January to March 2017

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Table C-4

LRWs: Summary data concerning LRWs, 2012-16, January to March 2016, and January to March 2017

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Table C-5

Covered parts: Summary data concerning covered parts, 2012-16, January to March 2016, and January to March 2017

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SUMMARY DATA FROM SAFEGUARD MONITORING PROCEEDING

Table C-1

LRWs: Summary data concerning the U.S. market, 2016-18, January to March 2018, and January to March 2019

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SUMMARY DATA FROM SAFEGUARD EXTENSION PROCEEDING

Table C-1

LRWs: Summary data concerning the U.S. market, 2017-19, January to June 2019, and January to June 2020

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

	Reported data					Period changes			
	Calendar year		2019	January to June		Calendar year		2018-19	Jan-Jun 2019-20
2017	2018	2019		2020	2017-19	2017-18			
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	▼***	▼***	▲***	▼***
Producers' share (fn1).....									
Continuously operating producers.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Non-continuously operating producers.....	***	***	***	***	***	▲***	▲***	▲***	▲***
All U.S. producers.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Importers' share (fn1):									
China.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Korea.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Mexico (fn1).....	***	***	***	***	***	***	▲***	▼***	***
Thailand.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Vietnam.....	***	***	***	***	***	▼***	▼***	▼***	▼***
All other sources.....	***	***	***	***	***	▲***	***	▲***	▼***
All import sources: LRWs.....	***	***	***	***	***	▼***	▼***	▼***	▼***
PSC/belt/clutch.....	***	***	***	***	***	▼***	▼***	▼***	▼***
CIM/belt.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Non-covered residential washers...	***	***	***	***	***	▲***	▲***	▲***	▼***
All residential washers.....	***	***	***	***	***	▼***	▼***	▼***	▼***
U.S. consumption value:									
Amount.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Producers' share (fn1).....									
Continuously operating producers.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Non-continuously operating producers.....	***	***	***	***	***	▲***	▲***	▲***	▲***
All U.S. producers.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Importers' share (fn1):									
China.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Korea.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Mexico (fn1).....	***	***	***	***	***	***	▲***	▼***	***
Thailand.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Vietnam.....	***	***	***	***	***	▼***	▼***	▼***	▼***
All other sources.....	***	***	***	***	***	▲***	***	▲***	▼***
All import sources.....	***	***	***	***	***	▼***	▼***	▼***	▼***
PSC/belt/clutch.....	***	***	***	***	***	▼***	▼***	▼***	▼***
CIM/belt.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Non-covered residential washers...	***	***	***	***	***	▲***	▲***	▲***	▼***
All residential washers.....	***	***	***	***	***	▼***	▼***	▼***	▼***
U.S. importers' U.S. shipments:									
China:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▲***
Unit value.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Korea:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Mexico (fn1):									
Quantity.....	***	***	***	***	***	***	▲***	▼***	***
Value.....	***	***	***	***	***	***	▲***	▼***	***
Unit value.....	***	***	***	***	***	***	▲***	▼***	***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	***	***
Thailand:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Vietnam:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***

Table continued on next page.

Table C-1--Continued

LRWs: Summary data concerning the U.S. market, 2017-19, January to June 2019, and January to June 2020

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

	Reported data					Period changes			
	Calendar year		2019	January to June		Calendar year		2018-19	Jan-Jun 2019-20
	2017	2018		2019	2020	2017-19	2017-18		
All other sources:									
Quantity.....	***	***	***	***	***	▲***	***	▲***	▼***
Value.....	***	***	***	***	***	▲***	***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Top-load PSC/belt/clutch washers:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	***
Front-load CIM/belt washers:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Non-covered residential washers:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
All residential washers:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
U.S. producers:									
Average capacity quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Production quantity.....	***	***	***	***	***	▲***	▼***	▲***	▼***
Capacity utilization (fn1).....	***	***	***	***	***	▼***	▼***	▲***	▼***
U.S. shipments: full units									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
U.S. shipments: covered parts									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▼***
U.S. shipments: full units and covered parts									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Export shipments:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▲***	▼***
Inventories/total shipments (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Production workers.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Hours worked (1,000s).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Wages paid (\$1,000).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Hourly wages (dollars per hour).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Productivity (units per 1,000 hours).....	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit labor costs.....	***	***	***	***	***	▲***	▲***	▼***	▲***

Table continued on next page.

Table C-1--Continued

LRWs: Summary data concerning the U.S. market, 2017-19, January to June 2019, and January to June 2020

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

	Reported data					Period changes			
	Calendar year		2019	January to June		Calendar year		2018-19	Jan-Jun 2019-20
	2017	2018		2019	2020	2017-19	2017-18		
Net sales:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Gross profit or (loss) (fn3).....	***	***	***	***	***	▲***	▼***	▲***	▲***
SG&A expenses.....	***	***	***	***	***	▼***	▲***	▼***	▲***
Operating income or (loss) (fn3).....	***	***	***	***	***	▲***	▼***	▲***	▼***
Net income or (loss) (fn3).....	***	***	***	***	***	▲***	▼***	▲***	▼***
Capital expenditures.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Research and development expenses...	***	***	***	***	***	▼***	▼***	▼***	▼***
Net assets.....	***	***	***	***	***	▲***	▲***	▲***	***
Unit COGS.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit SG&A expenses.....	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit operating income or (loss) (fn3).....	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit net income or (loss) (fn3).....	***	***	***	***	***	▲***	▼***	▲***	▼***
COGS/sales (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▼***
Operating income or (loss)/sales (fn1)....	***	***	***	***	***	▲***	▼***	▲***	▼***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	▲***	▼***	▲***	▼***

Table continued on next page.

Table C-1--Continued

LRWs: Summary data concerning the U.S. market, 2017-19, January to June 2019, and January to June 2020

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

	Reported data					Period changes			
	Calendar year		2019	January to June		Calendar year		2018-19	Jan-Jun 2019-20
	2017	2018		2019	2020	2017-19	2017-18		
Continuously operating U.S. producers':									
Average capacity quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Production quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Capacity utilization (fn1).....	***	***	***	***	***	▼***	▼***	▲***	▼***
U.S. shipments: full units									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. shipments: covered parts									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▼***	▼***	▼***	▲***
U.S. shipments: full units and covered parts									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Export shipments:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▼***	▼***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Inventories/total shipments (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Production workers.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Hours worked (1,000s).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Wages paid (\$1,000).....	***	***	***	***	***	▼***	▼***	▼***	▼***
Hourly wages (dollars per hour).....	***	***	***	***	***	▲***	▼***	▲***	▲***
Productivity (units per 1,000 hours).....	***	***	***	***	***	▲***	▼***	▲***	▼***
Unit labor costs.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Net sales:									
Quantity.....	***	***	***	***	***	▼***	▼***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Cost of goods sold (COGS).....	***	***	***	***	***	▲***	▲***	▼***	▼***
Gross profit or (loss) (fn3).....	***	***	***	***	***	▲***	▲***	▲***	▼***
SG&A expenses.....	***	***	***	***	***	▼***	▲***	▼***	▲***
Operating income or (loss) (fn3).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Net income or (loss) (fn3).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Capital expenditures.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Research and development expenses...	***	***	***	***	***	▼***	▼***	▲***	▲***
Net assets.....	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit COGS.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit SG&A expenses.....	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit operating income or (loss) (fn3).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit net income or (loss) (fn3).....	***	***	***	***	***	▲***	▲***	▲***	▼***
COGS/sales (fn1).....	***	***	***	***	***	▼***	▼***	▼***	▲***
Operating income or (loss)/sales (fn1)....	***	***	***	***	***	▲***	▲***	▲***	▼***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	▲***	▲***	▲***	▼***

Table continued on next page.

Table C-1--Continued

LRWs: Summary data concerning the U.S. market, 2017-19, January to June 2019, and January to June 2020

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

	Reported data					Period changes			
	Calendar year		January to June			Calendar year		Jan-Jun	
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
Non-continuously operating U.S. producers ¹ :									
Average capacity quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Production quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Capacity utilization (fn1).....	***	***	***	***	***	▲***	▲***	▼***	▲***
U.S. shipments: full units									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
U.S. shipments: covered parts									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▼***	▲***
U.S. shipments: full units and covered parts									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Export shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Inventories/total shipments (fn1).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Production workers.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Hours worked (1,000s).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Wages paid (\$1,000).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Hourly wages (dollars per hour).....	***	***	***	***	***	▲***	▲***	▼***	▲***
Productivity (units per 1,000 hours).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit labor costs.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Net sales:									
Quantity.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	***	***	▲***	▲***	▲***	▲***
Gross profit or (loss) (fn3).....	***	***	***	***	***	▼***	▼***	▲***	▲***
SG&A expenses.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss) (fn3).....	***	***	***	***	***	▼***	▼***	▲***	▲***
Net income or (loss) (fn3).....	***	***	***	***	***	▼***	▼***	▲***	▲***
Capital expenditures.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Research and development expenses...	***	***	***	***	***	▲***	▲***	▼***	▼***
Net assets.....	***	***	***	***	***	▲***	▲***	▲***	***
Unit COGS.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit SG&A expenses.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit operating income or (loss) (fn3).....	***	***	***	***	***	▼***	▼***	▲***	▲***
Unit net income or (loss) (fn3).....	***	***	***	***	***	▼***	▼***	▲***	▲***
COGS/sales (fn1).....	***	***	***	***	***	▲***	▲***	▼***	▼***
Operating income or (loss)/sales (fn1)....	***	***	***	***	***	▼***	▼***	▲***	▲***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▼***	▲***	▲***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "--". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

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

fn2.--Imports of washers from Mexico are not within the product description of the safeguard and are reported as part of the import expansion to match the like product

fn3.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

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

SELECT PRICING DATA FROM ORIGINAL SAFEGUARD PROCEEDING

Table V-13

LRWs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by quarters, January 2012-March 2017

* * * * *

Table V-14

LRWs: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by quarters, January 2012-March 2017

* * * * *

Table V-15

LRWs: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by quarters, January 2012-March 2017

* * * * *

Table V-16

LRWs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, by quarters, January 2012-March 2017

* * * * *

Table V-17

LRWs: Weighted-average f.o.b. prices and quantities of domestic and imported product 5, by quarters, January 2012-March 2017

* * * * *

Table V-18

LRWs: Weighted-average f.o.b. prices and quantities of domestic and imported product 6, by quarters, January 2012-March 2017

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ESTIMATED ECONOMIC EFFECTS FROM ORIGINAL SAFEGUARD PROCEEDING

III. Estimated Economic Effects

Attachment Table 4 reports the estimated economics effects of the TRQ on large residential washers recommended by Chairman Schmidtlein and Commissioner Williamson. The estimates do not include the effects of the recommended TRQ on parts.

Attachment Table 4:
Tariff-Rate Quota on Washers at 1.2 Million Units with In-Quota Rate

Tariff Rates	Year 1: 50% out-of- quota, 20% in quota	Year 2: 45% out-of-quota, 18% in quota	Year 3: 40% out-of-quota, 15% in quota
Domestic Supply Elasticity	6	6	6
Covered Imports Supply Elasticity	6	6	6
Non-Covered Imports Supply Elasticity	3	3	3
Demand Elasticity	-0.3	-0.3	-0.3
Substitution Elasticity	4	4	4
% Change in Covered Imports Quantity	***	***	***
% Change in Non-Covered Import Quantity	***	***	***
% Change in U.S. Quantity	***	***	***
% Change in Covered Import Prices	***	***	***
% Change in Non-Covered Import Prices	***	***	***
% Change in U.S. Prices	***	***	***
% Change in Market Price Index	***	***	***
Change in Industry Revenue (million \$)	***	***	***
Change in Operating Income (million \$)	***	***	***
Tariff Revenue (million \$)	***	***	***

Attachment Table 5 reports the estimated economics effects of the TRQ recommended by Vice Chairman Johanson and Commissioner Broadbent. The estimates do not include the effects of the recommended TRQ on imports of parts.

Attachment Table 5:

Tariff-Rate Quota on Washers at 1.2 Million Units without In-Quota Rate

Tariff Rates	Year 1: 50% out-of- quota, 0% in quota	Year 2: 45% out-of-quota, 0% in quota	Year 3: 40% out-of-quota, 0% in quota
Domestic Supply Elasticity	6	6	6
Covered Imports Supply Elasticity	6	6	6
Non-Covered Imports Supply Elasticity	3	3	3
Demand Elasticity	-0.3	-0.3	-0.3
Substitution Elasticity	4	4	4
% Change in Covered Imports Quantity	***	***	***
% Change in Non-Covered Import Quantity	***	***	***
% Change in U.S. Quantity	***	***	***
% Change in Covered Import Prices	***	***	***
% Change in Non-Covered Import Prices	***	***	***
% Change in U.S. Prices	***	***	***
% Change in Industry Price Index	***	***	***
Change in Industry Revenue (million \$)	***	***	***
Change in Operating Income (million \$)	***	***	***
Tariff Revenue (million \$)	***	***	***

APPENDIX E

APPENDIX FOR PART IV (FINANCIAL SECTION)

Table E-1**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net sales quantity**

Quantity in units

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net sales value**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****COGS**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	2,701,422	3,129,665	3,390,968

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Gross profit or (loss)**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****SG&A expenses**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	485,272	518,755	516,331

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Operating income or (loss)**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net income or (loss)**

Value in 1,000 dollars

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****COGS to net sales ratio**

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Gross profit or (loss) to net sales ratio**

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****SG&A expenses to net sales ratio**

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Operating income or (loss) to net sales ratio**

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net income or (loss) to net sales ratio**

Ratio in percent

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit net sales value**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit material input costs**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit direct labor costs**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit other factory costs**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit conversion costs**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit COGS**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit gross profit or (loss)**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit SG&A expenses**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit operating income or (loss)**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

Table continued.

Table E-1 Continued**Select residential washers: U.S. producers' sales, costs/expenses, and profitability, by firm and period****Unit net income or (loss)**

Unit value in dollars per unit

Firm	2020	2021	2022
Alliance	***	***	***
GE Appliances	***	***	***
Whirlpool	***	***	***
Continuous producers	***	***	***
LG USA	***	***	***
Samsung	***	***	***
New entrants	***	***	***
All firms	***	***	***

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

Note: Unit conversion costs equals the sum of direct labor cost and unit other factory costs. Information presented in this table encompasses select residential washers, i.e., both LRWs as specified by the safeguard measure and (1) PSC/belt drive/clutch top load washers and (2) CIM/belt drive front load washers but does not include covered parts.

Table E-2**Commercially sold covered parts U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net sales quantity**

Quantity in units

Firm	2020	2021	2022
Samsung (New entrant)	***	***	***
Whirlpool (Continuous producer)	***	***	***
All firms	***	***	***

Table continued.

Table E-2 Continued**Commercially sold covered parts U.S. producers' sales, costs/expenses, and profitability, by firm and period****Net sales value**

Value in 1,000 dollars

Firm	2020	2021	2022
Samsung (New entrant)	***	***	***
Whirlpool (Continuous producer)	***	***	***
All firms	***	***	***

Table continued.

Table E-2 Continued

Commercially sold covered parts U.S. producers' sales, costs/expenses, and profitability, by firm and period

Operating income or (loss)

Value in 1,000 dollars

Firm	2020	2021	2022
Samsung (New entrant)	***	***	***
Whirlpool (Continuous producer)	***	***	***
All firms	***	***	***

Table continued.

Table E-2 Continued

Commercially sold covered parts U.S. producers' sales, costs/expenses, and profitability, by firm and period

Operating income or (loss) to net sales ratio

Ratio in percent

Firm	2020	2021	2022
Samsung (New entrant)	***	***	***
Whirlpool (Continuous producer)	***	***	***
All firms	***	***	***

Table continued.

Table E-2 Continued

Commercially sold covered parts U.S. producers' sales, costs/expenses, and profitability, by firm and period

Unit net sales value

Unit value in dollars per unit

Firm	2020	2021	2022
Samsung (New entrant)	***	***	***
Whirlpool (Continuous producer)	***	***	***
All firms	***	***	***

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

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