TRADE PARTNERSHIP WORLDWIDE, LLC

# Estimated Impacts of Changes to China's Tariff Status: Toys, Furniture, Apparel, Household Appliances And Footwear

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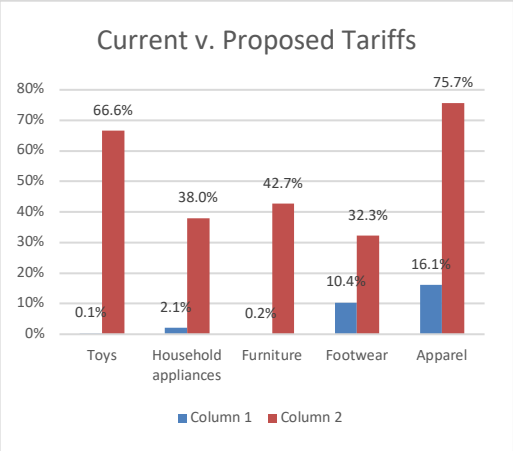
## Executive Summary

Many elected officials and others have expressed a growing interest in a number of trade policy and practice changes that would affect U.S. trade with China. Chief among them is a proposal to terminate China's "permanent normal trade relations" (PNTR) trade status, subjecting imports from China to "Column 2" tariff rates, which can be much higher than "normal trade relations" rates. Some have even suggested raising the rates higher than "Column 2" rates.




The purpose of this research is to assist policymakers in understanding the negative impacts of that proposal on American families. We focus on five consumer product categories: toys, furniture, apparel, household appliances and footwear. Most of these products can be found in nearly every home across the United States.

The increases in tariffs applied to imports from China would be dramatic – in the case of apparel, up to 75.6%. These tariffs would be applied in addition to Section 301 tariffs on many of the products analyzed.

Our results show that, even accounting for alternative sources of supply, the proposed tariffs on these five products alone would reduce consumers' spending power by nearly $31 billion, or $240 per household. This extra cost would hit low-income households especially hard.

Estimated Impacts on Consumers of Termination of PNTR for China

| | Increase in Consumer Price | Total Annual Value of Lost Consumer Spending Power Due to Higher Prices | "Hit" per Household |
|---|---|---|---|
| Toys | +21.4% | -$12.2 billion | $93 |
| Furniture | +4.0% | -$6.4 billion | $49 |
| Apparel | +1.8% | -$5.2 billion | $40 |
| Household Appliances | +6.8% | -$5.2 billion | $40 |
| Footwear | +4.6% | -$1.9 billion | $15 |

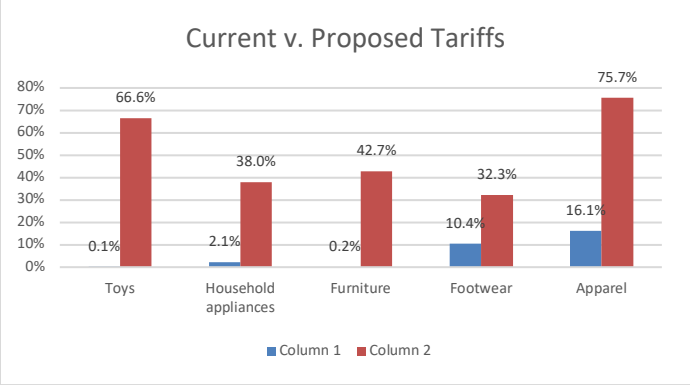
# Estimated Impacts of Changes to China's Tariff Status: Toys, Furniture, Apparel, Household Appliances and Footwear

## Introduction

The calls to reduce U.S. sourcing of goods from China seem to grow louder by the day. Whether it is dubbed "decoupling," "delinking" or "disengaging," the objective is the same: to reduce the role China plays in U.S. supply chains. One suggested idea is to end China's "permanent normal trade relations" (PNTR) status, which would enable the United States to increase tariffs on all imports from China. The idea is to increase the costs of goods and inputs imported from China, thereby motivating U.S. buyers to shift purchases of Chinese-made goods to those made in other countries, including the United States.

The purpose of this research is to assist policymakers in understanding the impacts of terminating China's PNTR status and subjecting imports from China of selected consumer products to the much higher tariff rates applied to countries that do not benefit from PNTR (referred to as "most favored nation" (MFN) or "Column 2" tariff rates) instead of those extended to countries benefiting from PNTR (referred to as "Column 1" tariff rates). We focus on five categories of products found in every American home, regardless of income: apparel, footwear, furniture, household appliances and toys.

The increases in tariffs applied to these products would be dramatic: For most of these widely used consumer products, current tariffs would rise from 0% to as high as 76%.[1]




[1] Many of the products considered here are also subject to Section 301 tariffs when imported from China. At least optically, the addition of Section 301 tariffs can be alarming. For example, for non-Chinese suppliers, if the Column 1 rate is 5% and the Column 2 rate is 35%, the tariff in the absence of PNTR would be 35%, an increase of 30 percentage points. For a Chinese supplier subject also to Section 301 tariffs of 25%, the starting tariff rate would be 30% (5% for Column 1 tariffs plus 25% for Section 301 tariffs). In the absence of PNTR, the rate would be 60% (35% for Column 2 rates plus 25% for Section 301 tariffs), also an increase of 30 percentage points.

The model we use (described in the Appendix) reflects the shifts in sourcing that might occur as buyers of the products attempt to move away from Chinese suppliers and toward suppliers in other countries, including the United States, when faced with the higher Column 2 tariffs. However, for all of the products reviewed in this research, very little of the production currently sourced from China can be moved to other countries. Sourcing of products subject to Section 301 tariffs (apparel, footwear, furniture) has already moved to the extent possible. For other products not yet subject to those tariffs (household appliances, toys), China accounts for most if not nearly all of the supply from international manufacturers partly because efforts to move production are more challenging. In 2022, China accounted for 81% of U.S. imports of toys, and nearly half of U.S. imports of household appliances.

Our results show that, even accounting for (limited) alternative sources of supply, the proposed tariffs would have a negative impact on American consumers totaling billions of dollars. Our definition of "consumer" includes all U.S. purchasers of the products over the supply chain: importers, wholesalers, retailers and American families.[2]

**Toys**

Raising U.S. tariffs on toys imported from China would have a very significant negative impact on American families. There are almost no current tariffs on toys[3], with current (Column 1) tariffs averaging just 0.1%. But Column 2 tariffs average 66.6%, a massive increase of over 66 percentage points.

The impact of higher tariffs would have little positive impact on U.S. producers – and even other foreign producers. Although attempts to diversify sourcing to countries other than China are under way, China still currently accounts for 81% of total imports of toys. Shifting to other sources of supply is challenging because of the need to find suppliers capable of conducting complex specialized manufacturing at scale. Supply-chain related shortages are almost certain. Therefore, U.S. prices of toys would rise by nearly all of the value of the tariffs as supply would continue to need to be met by China.

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[2] We report here the composite estimated price increase for all of these consumers. We do not disaggregate between them, nor do we report the price increase that would be faced solely by families. The price increase faced by families may be all of what we report, or some smaller share of it if other buyers in the supply chain choose to absorb some of the cost increase.

[3] Radio remote control devices (HTS 8526.92), tricycles, scooters, pedal cars and similar wheeled toys, dolls' carriages, dolls, other toys, reduced-scale ("scale") models and similar recreational models, puzzles (HTS 9503.00), games (HTS 9504.90), festive (except Christmas) entertainment toys (HTS 9505.90). We exclude video games from this analysis because it is covered in a companion study to be issued by the Consumer Technology Association.

According to our analysis, toy prices would rise significantly. The cost of toys from China would increase by 50%, though it would remain a key supplier due to a lack of viable alternatives. Combined with increased volumes of purchases from higher cost countries, including the United States, overall U.S. prices for toys would rise by a whopping 21%. In response, U.S. consumers would reduce overall purchases by 38%. Low-income households (those in the lowest 20% of household income) spend four times as much of their income on toys as high-income households (those in the upper 20%).[4]

Consumer losses from tariffs on Chinese toys overwhelm any gains to U.S. producers. While American producers' higher-priced output would grow by 16%, worth $3.7 billion to them, that gain is far exceeded by the loss faced by consumers, which would total $12.3 billion in higher prices paid for toys they continue to buy. This amounts to $93 per household in lost spending power.

Even after accounting for increased U.S. product and new tariff revenue, the result is a net annual $7.7 billion loss for the U.S. economy for each year the tariffs remain in effect, with the burden carried by U.S. consumers.

**Summary of Impacts of Change in Toy Tariffs**

| | |
|---|---|
| Change in price of Chinese imports | +49.5% |
| Change in imports from China | -80.5% |
| Change in Chinese production | -19.3% |
| Change in price of U.S.-made toys | +7.6% |
| Change in U.S. production | +15.7% |
| Change in U.S. consumer prices (all sources) | +21.4% |
| Change in consumption | -38.4% |
| Reduction in consumer spending power (billion) | -$12.2 |
| Net impact on U.S. economy (billion) | -$7.7 |

[4] Derived from Bureau of Labor Statistics, "Quintiles of income before taxes: Share of annual aggregate expenditures and sources of income," Consumer Expenditure Surveys, 2021, https://www.bls.gov/cex/tables/calendar-year/aggregate-group-share/cu-income-quintiles-before-taxes-2021.pdf.

**Furniture**

Nearly all furniture[5] is currently duty-free when imported from any country, including China. Imposition of non-PNTR (Column 2) tariffs on imports from China would represent an astounding tax increase of 42.4% imposed on U.S. furniture purchases.

The imposition of the higher tariffs on Chinese furniture would shift some manufacturing to other countries, but much of the "low hanging fruit" for finding new suppliers is already picked. Due to the imposition of Section 301 tariffs, China's share of U.S. furniture imports fell from 56% in 2017 to 33% in 2022. Output in the United States and Mexico is estimated to increase by 2% each.

According to our analysis, prices for furniture would rise across the board if China's tariff status changed. The cost of furniture imported from China would rise by 36%. Overall U.S. prices for furniture from all sources would rise by 4%. As a result, U.S. consumers would reduce overall purchases by nearly 8%. American consumers would pay over $6.4 billion more for furniture. This amounts to $49 per household in lost spending power.

The net annual impact on the economy (the value of U.S. producer gains plus tariff revenues to the U.S. government (in this case, a loss[6]), minus the value of consumer losses) is a net $5.4 billion loss.

**Summary of Impacts of Change in Furniture Tariffs**

| | |
|---|---|
| Change in price of Chinese imports | +35.9% |
| Change in imports from China | -72.2% |
| Change in Chinese production | -11.5% |
| Change in price of U.S.-made furniture | +1.9% |
| Change in U.S. production | +2.4% |
| Change in U.S. consumer prices (all sources) | +4.0% |
| Change in consumption | -7.7% |
| Reduction in consumer spending power (billion) | -$6.4 |
| Net impact on U.S. economy (billion) | -$5.4 |

[5] We evaluate the impact of higher tariffs on imports of 42 furniture products at the six-digit HTS level. Six represent about two-thirds of total U.S. furniture imports from China: metal furniture (bed frames, shelves, etc., HTS 9403.20); upholstered wooden seats (HTS 9401.61); non-upholstered metal seats (HTS 9401.79); wooden tables, shelves, etc. (HTS 9403.60); rubber or plastic seats (HTS 9401.80); and upholstered metal seats (HTS9401.71).

[6] Because our base case includes the collection of Section 301 tariffs on imports of certain furniture from China, the move to Column 2 tariffs has the perverse effect of lowering total U.S. tariffs collected. This happens because imports from China decline to such a degree that tariff collections from Section 301 duties drop, and by enough to result in a negative impact on U.S. tariff revenue.

**Apparel**

The loss of PNTR would result in the application of a new tax (the tariff) to U.S. imports of apparel from China. Current MFN (Column 1) tariffs for apparel[7] average 16.1%. But Column 2 tariffs average 75.7%, an increase of nearly 60 percentage points, much of which American consumers would pay if applied to imports from China.

The enormous increase in U.S. apparel tariffs that would result from the termination of PNTR for China causes U.S. imports from China of apparel to decline almost completely. Higher cost production in other countries rises where possible to compensate. Higher cost U.S. production increases, but by just 3.6%.

The increased tariffs would have a negative impact on U.S. apparel consumers in the form of significantly higher prices. U.S. prices for apparel imported from China would jump by 56%. Prices of apparel from all sources (all foreign sources, including China, plus U.S. manufacturers) would increase by 4%. In response, U.S. consumers would cut back on purchases of apparel by nearly 10%. The higher tariffs result in millions of dollars of lost spending power as consumers are forced to pay $5.2 billion more than they otherwise would for the apparel they continue to buy. This "hit" to consumers is nearly eight times greater than the value of the gains in new business for U.S. apparel producers. It amounts to $40 per household in lost spending power.

The loss of consumer spending power hits lower-income households, minorities and those without a college education harder than their high-income, white or college-educated counterparts. In research prepared earlier this year for NRF and other trade associations,[8] we found that households in the lowest 20% of income quintiles spent over three times more of their after-tax income on apparel than high-income households (those in the top 20% of income quintiles). Similarly, apparel spending as a share of income was higher for households headed by minorities relative to those headed by whites, and those without college educations relative to those with college degrees.

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7 HTS Chapters 61 and 62.

8 Trade Partnership Worldwide LLC, "Impacts of Tariffs on Imports from China: Case Studies of Apparel, Footwear, Travel Goods and Furniture," prepared for American Apparel and Footwear Association, Footwear Distributors & Retailers of America, National Retail Federation, Retail Industry Leaders Association, and United States Fashion Industry Association, January 2023, p. 20, https://tradepartnership.com/wp-content/uploads/2023/01/China-301-Tariff-Costs-Joint-Association-Study-FINAL.pdf.

The net annual impact on the economy (the value of U.S. producer gains plus tariff revenues to the U.S. government (in this case, a loss[9]), minus the value of consumer losses) is a hit of $8.5 billion.

**Summary of Impacts of Change in Apparel Tariffs**

| | |
|---|---|
| Change in price of Chinese imports | +55.9% |
| Change in imports from China | -92.3% |
| Change in Chinese production | -4.5% |
| Change in price of U.S.-made apparel | +1.8% |
| Change in U.S. production | +3.6% |
| Change in U.S. consumer prices (all sources) | +4.2% |
| Change in consumption | -9.8% |
| Reduction in consumer spending power (billion) | -$5.2 |
| Net impact on U.S. economy (billion) | -$8.5 |

**Household Appliances**

The loss of PNTR for China would negatively impact a host of household appliances. Column 1 tariffs for household appliances[10] average 2.1%. Application of Column 2 tariffs, which average 38.0%, would increase the tax (tariffs) 18-fold.

China currently accounts for nearly half of total imports of these products into the United States. Shifting that large of a volume of supply to other countries would be a challenge, and what shifts do occur will take time and cost significant amounts of money. Therefore, U.S. prices of household appliances would rise. Higher-cost U.S. and Mexican production would each increase by 7%.

According to our analysis, prices for household appliances would rise significantly. Imports from China will increase in cost by 30%. Overall U.S. prices for household appliances generally (from suppliers in China, other countries and the United States) would rise by 7% and U.S. consumers would reduce overall purchases by nearly 13% in

[9] Like furniture, because our base case includes the collection of Section 301 tariffs on imports of certain apparel from China, the move to Column 2 tariffs has the perverse effect of lowering total U.S. tariffs collected. This happens because imports from China decline to such a degree that tariff collections from Section 301 duties drop, and by enough to result in a negative impact on U.S. tariff revenue.

[10] We evaluate the impact of higher tariffs on imports of 49 household appliance products at the six-digit HTS level. Eight represent about 60% of total U.S. appliance imports from China: fans (HTS 8414.51); misc. electrothermic appliances (HTS 8516.79); miscellaneous electromechanical appliances (HTS 8509.80); vacuum cleaners (HTS 8508.11); microwaves (HTS 8516.50); therapy appliances (e.g., massagers) (HTS 9019.90); gas stoves, ranges, ovens and grills (HTS 7321.11); and electric stoves, ranges and ovens (HTS 8516.60).

response to the higher prices. Higher costs from tariffs impose on consumers an additional cost of $5.2 billion more for household appliances. This amounts to $40 per household in lost spending power. The impact hurts low-income households especially hard: They spend five times as much of their income on household appliances as wealthier households.[11]

Considering all the gains and losses,[12] the net result is an annual $4.0 billion loss for the U.S. economy, with the burden carried by U.S. consumers.

**Summary of Impacts of Change in Household Appliances Tariffs**

| | |
|---|---|
| Change in price of Chinese imports | +30.2% |
| Change in imports from China | -79.1% |
| Change in Chinese production | -7.5% |
| Change in price of U.S.-made appliances | +3.6% |
| Change in U.S. production | +7.2% |
| Change in U.S. consumer prices (all sources) | +6.8% |
| Change in consumption | -12.6% |
| Reduction in consumer spending power (billion) | -$5.2 |
| Net impact on U.S. economy (billion) | -$4.0 |

**Footwear**

The loss of PNTR would result in the application of significantly higher taxes (Column 2 tariff rates) to U.S. imports of footwear from China. Current (Column 1) tariffs for footwear[13] average 10.4%. Loss of PNTR for imports from China would more than triple that import tax: Column 2 tariffs average 32.3%.

The tripling of U.S. footwear tariffs from the termination of PNTR for China causes U.S. imports from China of footwear to decline by 61%. Higher cost production in other countries rises where possible to compensate. Higher cost U.S. production increases by just 3.9%.

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11 Bureau of Labor Statistics, *op. cit*.

12 Yet again, like furniture and apparel, because our base case includes the collection of Section 301 tariffs on imports of certain household appliances from China, the move to Column 2 tariffs has the perverse effect of lowering total U.S. tariffs collected. This happens because imports from China decline to such a degree that tariff collections from Section 301 duties drop, and by enough to result in a negative impact on U.S. tariff revenue.

13 HTS Chapter 64.

The increased tariffs would have a negative impact on U.S. footwear consumers in the form of higher prices. U.S. prices for footwear imported from China would increase by 19%. Prices of footwear from all sources (all foreign sources, including China, plus U.S. manufacturers) would increase by 4.6%. In response, U.S. consumers would cut back on purchases of footwear by nearly 9%. The higher tariffs would result in millions of dollars of lost spending power as consumers are forced to pay $1.9 billion more than they otherwise would for the footwear they continue to buy. This "hit" to consumers is 14 times greater than the value of the gains in new business for U.S. footwear producers. It amounts to $15 per household in lost spending power.

Like several of the products analyzed here, the loss of consumer spending power because of much higher footwear tariffs hits lower-income households harder than their high-income counterparts. Households in the lowest 20% of income quintiles spend more than three times more of their after-tax income on footwear than high-income households (those in the top 20% of income quintiles). Similarly, footwear spending as a share of income was higher for households headed by minorities relative to those headed by whites, and those without college educations relative to those with college degrees.[14]

The net annual impact on the economy (the value of U.S. producer gains plus tariff revenues to the U.S. government (in this case, a loss[15]), minus the value of consumer losses) is a hit of $1.9 billion.

**Summary of Impacts of Change in Footwear Tariffs**

| | |
|---|---|
| Change in price of Chinese imports | +18.6% |
| Change in imports from China | -60.8% |
| Change in Chinese production | -5.1% |
| Change in price of U.S.-made footwear | +1.9% |
| Change in U.S. production | +3.9% |
| Change in U.S. consumer prices (all sources) | +4.6% |
| Change in consumption | -8.7% |
| Reduction in consumer spending power (billion) | -$1.92 |
| Net impact on U.S. economy (billion) | -$1.89 |

[14] Trade Partnership Worldwide, LLC, *op. cit.*

[15] Like apparel, because our base case includes the collection of Section 301 tariffs on imports of certain footwear from China, the move to Column 2 tariffs has the perverse effect of lowering total U.S. tariffs collected. This happens because imports from China decline to such a degree that tariff collections from Section 301 duties drop, and by enough to result in a negative impact on U.S. tariff revenue.

**Conclusion**

Congress and the administration should proceed deliberately on discussions related to further tariff increases on imports from China, such as revoking PNTR for China and moving to "Column 2" rates, which would impose regressive taxes on American families for consumer staples and harm the U.S. economy. There is simply no way for American families to escape the inevitable pain from tariff increases of up to 75% on necessities like apparel, footwear, furniture, appliances and toys.

Worse still, new price hikes would come on top of the abnormally high inflation of the last few years. And options to shift sourcing quickly may be limited by past efforts to identify suppliers outside of China in response to Section 301 tariffs, increasing the risk of supply chain disruptions and shortages.

The PNTR proposal as a means to reduce U.S. reliance on China as a source of supply for national- or economic-security related products would have the (presumably unintended) consequence of imposing huge cost increases on imports of products like t-shirts, sneakers, toys, blenders and bassinets. As such, the proposal feeds inflation at a time policymakers are seeking to reduce it, and puts most of the burden on low-income households.

In short: If Congress revokes PNTR for China and moves to "Column 2" rates, Americans will pay more to buy a lot less, with low-income American facing the greatest burdens.

## Appendix A

## Methodology

We employed a modeling strategy for industry-focused globally linked partial equilibrium analysis of tariff policy. It enables us to estimate the cross-country impacts of changes in trade policy (moving from Column 1 to Column 2 tariff rates) for detailed product categories.

Grouping products by Harmonized Tariff System (HTS) code into defined consumer technology product categories, we built a set of product-specific models based on the "global simulation model" framework (GSIM). Francois and Hall (2009) developed GSIM to allow detailed analysis of tariff scenarios across individual products and potentially all major trading countries and blocks. The World Bank and the United Nations adopted the GSIM framework, integrating it into the joint World Bank-UNCTAD trade data portal known as the "World Integrated Trade Solution," or WITS (see http://wits.worldbank.org/wits/).[16] The U.S. International Trade Commission used a similar approach in its assessment of the economic effects of the Section 232 and 301 tariffs applied to imports from China (USITC 2023).

The basic framework employed here can be implemented with a spreadsheet-based interface. We should stress that, in implementation, this set of models is structurally consistent with the recent class of Eaton-Kortum based structural trade models (see Bekkers *et al*, 2018 (technical annex); Costinot and Rodriguez-Clare, 2014 for example).

The basic approach involves specifying global supply and demand for each set of goods produced by a particular country as the sum of individual (national) sources of supply and demand. This is done for goods produced in all regions in the model. We are then able to reduce the solution set of the model to those global prices that clear global markets. Once we have a global set of equilibrium prices, we can obtain national results (changes in prices and quantities). Based on price and quantity changes, we in turn obtain estimates of changes in production, trade, consumer and producer surplus, and real national income that result from the imposition of tariffs on imports from China.

Within this context, we work with a non-linear representation of import demand, combined with generic export-supply equations (see Francois and Hall 2009).

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[16] Another application, the MRPE model, is a specialized, scalable extension of the GSIM framework for strategic trade policy assessments at the detailed sector level, developed for the European Commission.

*Data Sources*

Trade data and tariffs are from "World Integrated Trade Solution," or WITS (see http://wits.worldbank.org/wits/) and the U.S. Census Bureau.

U.S. production data (domestic shipments) are from the Census Bureau's Annual Survey of Manufacturers and the Manufacturers' Shipments, Inventories and Orders (M3) survey. The latest data from ASM resource is 2021; the M3 runs through recent months in 2023. Shipments data for 2022 were taken from the M3 whenever possible for televisions the most recent shipments data are only available from the ASM and therefore are for 2021.

Trade elasticities are from the Global Trade Analysis Project (GTAP).

*Country Disaggregation*

Canada (CAN)
China (CHN)
European Union (EUN)
Hong Kong (HKG)
India (IDN)
Japan (JPN)
Korea (KOR)
Mexico (MEX)
Malaysia (MYS)
Singapore (SGP)
Taiwan (TWN)
Thailand (THA)
Rest of World (ROW)
Vietnam (VNM)
United States (USA)

References

Bekkers, E., Francois, J. F., & Rojas-Romagosa, H. (2018). Melting ice caps and the economic impact of opening the Northern Sea Route. *The Economic Journal*, 128(610), 1095-1127.

Costinot, A. and Rodríguez-Clare, A. (2014). "Trade theory with numbers: Quantifying the consequences of globalization," *Handbook of International Economics* 4, 197–261.

Francois, J., & Hall, K. (2009). Global Simulation Analysis of Industry-Level Trade Policy: The GSIM model, An Extended Global Simulation Model: Analysis of Tariffs & Anti-Dumping Policy Impacts on Prices, Output, Incomes, and Employment, IIDE Discussion Papers 20090803. Institute for International and Development Economics, Rotterdam, available at: http://www.i4ide.org/content/wpaper/dp20090803.zip .

U.S. International Trade Commission, *The Economic Impact of Section 232 and 301 Tariffs on U.S. Industries*, USITC Pub No 5404 Inv. No. 332-591, Corrected May 2023, https://www.usitc.gov/publications/332/pub5405.pdf.