



PNTR
Revocation
is a Recipe
for Inflation

January 2024

Consumer Technology
Association®

Dear Colleagues:

Over the last year, members of Congress have submitted numerous bills that concern the People's Republic of China. Several bills propose to revoke what is called "Permanent Normal Trade Relations" (PNTR) for China. This means that the United States would not treat China like every other trading partner under the World Trade Organization. Instead, the United States would treat China in the same way it treats North Korea, Cuba, Russia, and Belarus - pariahs in the international trading system. The authors of these bills variably claim that PNTR revocation is necessary to defend the United States against China's predatory economic behavior, decouple the U.S. economy from China's economy, deter China from invading Taiwan, or promote supply chain resilience.

In response to the May 17 testimony of former U.S. Trade Representative Robert Lighthizer, the bipartisan Select Committee on Strategic Competition between the United States and the Chinese Communist Party weighed in. On December 12, it released its long-awaited proposal for a new U.S.-China economic strategy. Recommendation 1 called on the Congress to create a new column in the U.S. tariff schedule just for China with entirely new and much higher tariff rates. The recommendation intentionally does not mention PNTR revocation. In practice the Congress creating a new tariff column would revoke PNTR. This development is a prelude to further debate and perhaps more proposed legislation in 2024, as the former President included PNTR revocation for China as a part of his campaign platform for trade.

PNTR revocation for China would be a grave and economically disastrous action that far exceeds the ongoing Section 301 tariffs on \$370 billion in imports. It would cover all imports from China. Those products already facing Section 301 tariffs would face much higher tariffs. PNTR revocation would cause China to retaliate in unpredictable ways against U.S. exports, businesses, workers, and strategic interests. In essence, China would move from the Column 1 of the U.S. tariff schedule, where tariffs are at zero percent or close to zero for many

products, to Column 2, where tariffs are set at very high rates from the Smoot-Hawley Tariff Act of 1930. Consumer technology products such as smartphones, laptops and tablets, connected devices, televisions, monitors, and video game consoles would face tariffs of 35 percent under Column 2, previously facing zero percent under Column 1. A new tariff column just for China would be even more unpredictable as the Congress would have to negotiate all the tariff rates and would be under great pressures to set them as high as possible.

While the Congress was right to revoke PNTR status for Russia and Belarus after their illegal, unprovoked, and horrific invasion of Ukraine, the authors of these bills and the Select Committee are proposing to preemptively revoke PNTR for China. If China invades Taiwan, then a discussion on PNTR revocation would be warranted and consistent with the Russia/Belarus standard. However, in absence of that, PNTR revocation would push China to invade Taiwan and may even ignite regional conflict that could spin out of control, causing unprecedented suffering, economic damage, and environmental catastrophe in an otherwise peaceful region.

With these perspectives in mind and to inject data and facts into the ongoing conversation on PNTR revocation, CTA commissioned Trade Partnership Worldwide to draft a report on the impact on the consumer technology industry. This report reaches serious conclusions that merit serious consideration.

What does a new 35% tax on consumer tech mean for Americans and the U.S. economy?

- A 30% decline in smartphone, tablet and laptop purchases would be huge and would hurt our economy significantly.
- Schools, businesses, and individuals will hang on to their devices longer, put off a replacement for another year perhaps, foregoing faster and more efficient equipment and/or software, which could in turn have an impact on education and productivity.

- The tariff hike would be passed on to consumers, which could compound the inflationary pressures consumers are already facing.
- It would also be a reverse thruster fueling digital inequality just two years after Congress dedicated \$70 billion in spending and infrastructure investment to enhance broadband access to underserved Americans.
- With decreased purchasing power, consumers with a lower ability to afford technology products will be excluded from the market, creating a significant social welfare loss. It would dramatically reduce the ability of the poorest Americans and their schools to take advantage all these technologies offer.
- The biggest winners would be foreign producers outside of China. They would fill the gap in demand for American consumers due to little current U.S. production.
- PNTR revocation would likely not result in immediate increased or new U.S. production, which would take considerable time to develop.
- American producers are not the winners. As their production increase would be minimal, the producer surplus would not increase substantially.
- Chinese producers are not the losers. Their production decrease would be minimal. They will direct their supply to new markets or shift production to other markets to escape the tariffs.
- When China retaliates with their own tariffs or through other means, U.S. exporters will lose market share again to competitors in China and in other economies.
- Overall, PNTR revocation would result in a net loss for the U.S. economy, higher costs, lower productivity, and weaker competitiveness, because of the increased tariffs on consumer technology imports from China.
- In the end, higher tariffs through PNTR revocation are taxes on American consumers and businesses.

- And if upon PNTR revocation China moves against Taiwan, the United States, our allies in the region, our citizens, workers, and businesses will all be living in a much more costly and dangerous world.

We urge you to read this report and consider the harm that PNTR revocation would cause, not just to the consumer technology industry, but the United States, our workers, businesses, our trading partners, and indeed the world.

Sincerely,



Gary Shapiro
 President and CEO
 Consumer Technology
 Association (CTA)®

Executive Summary

Trade proposals that would have been unheard of just several years ago, including terminating China’s “permanent normal trade relations” (PNTR) trade status and subjecting imports from China to high tariff rates, are now part of regular congressional discussions. Such actions would apply to a broader range of products than Section 301 tariffs imposed in 2018 and 2019, and in many cases lead to much higher tariffs rates. Not only would the potential tariff cost increases be several times larger than Section 301 tariffs – they would be imposed on top of them.

This research aims to help policy makers understand the potential impacts on American families of pending proposals to terminate China’s PNTR status. The report focuses on six consumer electronics products categories: televisions, monitors, laptops and tablets, smartphones, connected devices and video game consoles. 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 in most cases be dramatic: for most of these widely-used consumer technology products, U.S. tariffs on imports from China would rise from 0% to 35%.

Even accounting for alternative sources of supply and potential new U.S. production, the proposed tariffs on these six products alone would reduce American consumers’ spending power by over \$30 billion. Smartphones, laptops, and tablets – spared from Section 301 tariffs due to the expected consumer harms – would see the biggest price increases.

Estimated Impacts on Consumers of Termination of PNTR for China

	Increase in Consumer Price	Value of Lost Consumer Spending Power Due to Higher Prices	Average Retail Cost Increase
Laptops and Tablets	+21.6%	-\$13.8 billion	Up to +\$162 (laptop); +\$39 (tablet)
Smartphones	+15.7%	-\$12.5 billion	+\$113
Monitors	+11.7%	-\$2.3 billion	Up to +\$35
Connected Devices	+3.9%	-\$1.4 billion	+\$2 to +\$14
Video Game Consoles	+2.5%	-\$447 million	+\$12
Televisions	+2.3%	-\$450 million	Up to +\$12

Introduction

Members of Congress have expressed growing interest in a number of trade policy and practice changes that would affect U.S. trade with China. Trade with China is also receiving attention from some candidates seeking party presidential nominations in the upcoming election.

Chief among them are proposals to revert to an annual review of China’s “permanent normal trade relations” (PNTR) trade status (which might result either in a continuation of that status or a termination of it), terminate PNTR status (subjecting imports from China to “Column 2” rates in the U.S. tariff schedule, which can be much higher than “normal trade relations” rates, referred to as “Column 1” rates in the tariff schedule), or terminate PNTR status and raise Column 2 tariff rates in some way.¹

Any of these three options would raise the costs of goods imported from China and thus have impacts (both positive and negative) on the overall U.S. economy and consumers specifically.

The purpose of this research is to assist policy makers in understanding the potential impacts of terminating China’s PNTR status and subjecting imports from China of selected widely-used consumer electronics to the higher tariff rates shown in Column 2 of the U.S. tariff schedule² The report focuses on six consumer electronics products categories: televisions, monitors, laptops

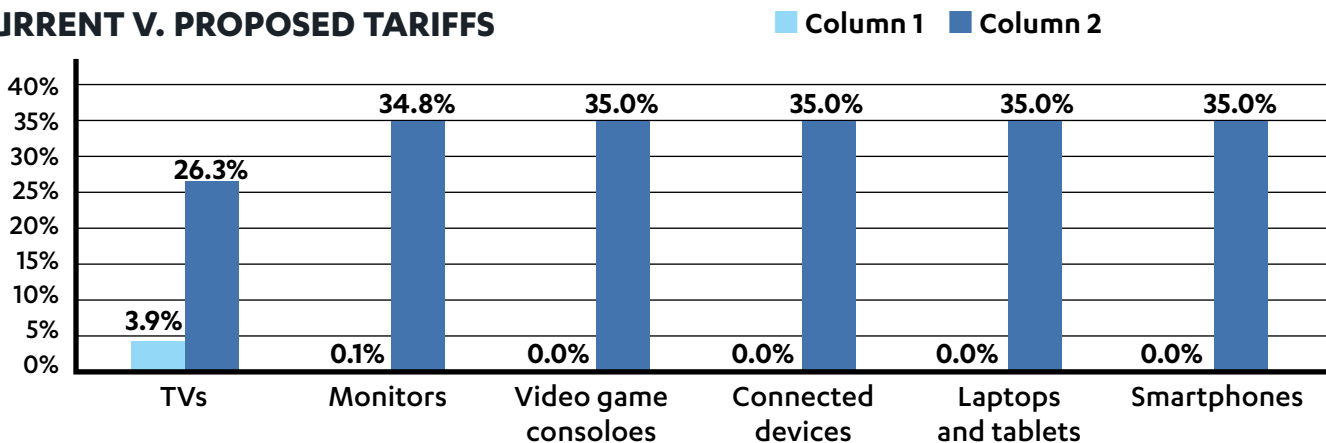
and tablets, smartphones, connected devices and video game consoles. Most of these products can be found in nearly every home across the United States, regardless of family income.

The increases in tariffs applied would in most cases be dramatic. For most of these consumer technology products, U.S. tariffs on imports from China would rise from duty-free to 35%. Again, this does not include any Section 301 tariffs that may be in place.³

China accounts for most if not nearly all of the supply from international manufacturers for four of the product categories.⁴ In 2022, China accounted for 92% of U.S. imports of laptops and tablets; 90% of imports of video game consoles; 79% of imports of smartphones; and 75% of imports of monitors.⁵ The model that Trade Partnership Worldwide LLC uses in the report (described in detail in the Appendix) reflects the shifts in sourcing that would occur as buyers of the products attempt to move away from Chinese suppliers and towards suppliers in other countries, including the United States, when faced with the higher Column 2 tariffs. Given that China is such a large source of current supply, moving that quantity of production to other countries would be problematic, especially in the short term..

The Trade Partnership Worldwide LLC results show that, even accounting for alternative sources of supply, the proposed tariffs would have a negative impact on American consumers. This is the case even for products for which the new tariff rates do not represent a large

CURRENT V. PROPOSED TARIFFS



increase over current rates. Its definition of “consumer” includes all U.S. purchasers of the products over the supply chain: importers, wholesalers, retailers and American families. ⁶

Laptops and Tablets

Like smartphones, the loss of PNTR would result in the application of a new tax (the tariff) to U.S. imports of laptops and tablets from China. Column 1 tariffs for laptops and tablets⁷ are duty free. Column 2 tariffs are 35%, an increase of 35 percentage points.

According to industry analysts, there is little to no U.S. production of these goods. Imposition of the proposed duties would largely benefit other foreign suppliers. China currently accounts for over 90% of total imports of these products into the United States; its value of supply is 21 times greater than the next largest supplier – Taiwan. Shifting that large a volume of supply to other countries is not possible, and what shifts do occur will take time and cost significant amounts of money.

Because shifts in sourcing will take time, U.S. prices of laptops and tablets would rise significantly, especially in the short term. The cost of laptops and tablets that are still imported from China will increase by 26%. Overall U.S. prices for laptops and tablets (from all sources combined: China, other countries, the United States) would rise by 22%, or by about as much as \$162 for the average retail price of a laptop today (estimated at \$600-750⁸), and \$39 for the average retail price of a tablet today (estimated at \$179⁹). **As a result, U.S. consumers reduce overall purchases by 30%.**

American consumers lose from the change in PNTR status. Higher costs from tariffs impose on consumers an additional cost of \$13.8 billion more for laptops and tablets. **The result, even after accounting for new tariff revenue, is a net \$6.0 billion loss for the U.S. economy, with the burden carried by U.S. consumers.**

Smartphones

The loss of PNTR would result in the application of a new tax (the tariff) to U.S. imports of smartphones from China. Column 1 tariffs for smartphones¹⁰ are

SUMMARY OF IMPACTS OF INCREASED LAPTOP AND TABLET TARIFFS

Change in price of Chinese imports	+26.4%
Change in imports from China	-52.8%
Change in Chinese production	-4.8%
Change in price of U.S.-made laptops and tablets	0
Change in U.S. production	0
Change in U.S. consumer prices (all sources)	+21.6%
Change in consumption	-33.7%
Reduction in consumer spending power (billion)	-\$13.8
Net impact on U.S. economy (billion)	-\$6.0

currently import-tax-free (duty free). But Column 2 tariffs are 35%, so the termination of PNTR status for China would result in a new 35% tariff on smartphone imports from China, much of which American consumers would pay.

According to industry analysts, there is no U.S. production of smartphones.¹¹ Imposition of the tariffs would therefore cause most if not all sourcing of products currently purchased from producers in China to shift to other countries. China currently accounts for about 79% of total imports of these products into the United States, so shifting that large a volume of supply to other countries will be difficult and take time. Therefore, U.S. prices of smartphones would rise significantly.

According to Trade Partnership Worldwide LLC analysis, prices for smartphones rise across the board. The cost of smartphones imported from China would rise by 30%. Overall U.S. prices for smartphones generally (from all sources combined) would rise by

16%, or by nearly \$113 for the average retail price of a smartphone today (estimated at \$720¹²). **As a result of this sticker-shock, U.S. consumers reduce overall purchases by 30%.**

The biggest winners from tariffs on Chinese smartphones are other foreign producers, not U.S. manufacturers. Manufacturers in the Republic of Korea and India would see annual revenues grow by about \$300 million and \$340 million, respectively.

American consumers, on the other hand, would pay \$12.5 billion more for smartphones. Adults in low-income households have so far been able to substantially increase their purchases of smartphones, thanks to lower prices made possible by imports. According to Pew Research Center, in 2011 22% of adults in households earning less than \$30,000 had a smartphone. Ten years later, in 2021, that share had risen to 76%.¹³ **The result, even after accounting for new tariff revenue, is a net \$8.2 billion loss for the U.S. economy, with the burden carried by U.S. consumers.**

SUMMARY OF IMPACTS OF INCREASED SMARTPHONE TARIFFS

Change in price of Chinese imports	+30.5%
Change in imports from China	-75.9%
Change in Chinese production	-6.6%
Change in price of U.S.-made smartphones	0
Change in U.S. production	0
Change in U.S. consumer prices (all sources)	+15.7%
Change in consumption	-30.5%
Reduction in consumer spending power (billion)	-\$12.5
Net impact on U.S. economy (billion)	-\$8.2

SUMMARY OF IMPACTS OF INCREASED MONITOR TARIFFS

Change in price of Chinese imports	+28.6%
Change in imports from China	-60.5%
Change in Chinese production	-10.8%
Change in price of U.S.-made monitors	+4.9%
Change in U.S. production	+6.2%
Change in U.S. consumer prices (all sources)	+11.7%
Change in consumption	-20.3%
Reduction in consumer spending power (billion)	-\$2.3
Net impact on U.S. economy (million)	-\$894.0

Monitors

The loss of PNTR would increase the tariff applied to U.S. imports of televisions from China. Column 1 tariffs for monitors¹⁴ average 0.1%. Column 2 tariffs average 34.8%, an increase of 34.7 percentage points, most of which would be paid by American consumers.

Imposition of the tariffs causes U.S. imports from China of monitors to drop precipitously. Production in other countries increases, primarily in Mexico (+5.6%), to compensate for some of the lost output in China. U.S. producers are able to increase higher-priced output (by 6%).

The tariffs have a negative impact on U.S. monitor consumers in the form of higher prices. U.S. prices for monitors imported from China increase by 28.6%. **Overall, monitor prices increase by 12%, and U.S. consumers cut back on purchases of monitors from all sources, combined, by 20%.** One monitor product reviewer reports that the

average price of a monitor is \$200-\$300, which equates to an increase in retail prices of up to \$35 per monitor.¹⁵ The tariff increase forces consumers to pay \$2.3 billion more than they otherwise would for the monitors they continue to buy.

The annual net impact on the economy (the value of U.S. producer gains plus tariff revenues to the U.S. government, minus the value of consumer losses) is a loss of \$894 million.

Connected Devices

The connected devices analyzed here include products spanning the ecosystem of the “Internet of things” (IoT)¹⁶ This tariff line captures products that consumers need to access the web and enjoy its content: portable cellular access points, portable and smart Bluetooth speakers, Bluetooth wireless headsets, fitness trackers, smartwatches and other Bluetooth enabled smart technologies such as whole-home controls. Current Column 1 tariffs for connected devices are zero. Column 2 tariffs are 35%, an increase of 35 percentage points.

POTENTIAL ESTIMATED RETAIL COST INCREASES FOR SELECTED CONNECTED DEVICES

	Estimated Retail Price ¹⁷	Estimated Price Increase
Smartwatches	\$333	+\$14
Wireless headphones (ex. earbuds)	\$105	+\$4
Wireless earbuds	\$128	+\$5
Fitness activity trackers	\$95	+\$4
Smart speakers	\$49	+\$2

Terminating PNTR and imposing Column 2 tariffs on U.S. imports from China causes the cost of those imports to increase by 33%, resulting in a shift in sourcing out of China (-88%) to a number of other countries. **There is no output growth for U.S. producers.**

Prices for these products rise across the board – by 4% overall. As a result, U.S. consumers reduce purchases of connected devices by 8%. Some sample estimates are provided in the table. Higher prices for what they do continue to purchase reduces household spending power by \$1.4 billion.

Overall, considering U.S. producer benefits, tariff revenue changes, and losses incurred by consumers, the impact of the tariffs is an annual net negative \$1.6 billion for the U.S. economy.

Perhaps ironically, increasing tariffs on imports from China causes U.S. tariff revenue to *decline*. This results from U.S. importers shifting from Chinese suppliers that face 7.5% Section 301 tariffs to suppliers in other countries that face no tariffs because both Column 1 rates and Section 301 duties are zero.

SUMMARY OF IMPACTS OF INCREASED CONNECTED DEVICES TARIFFS

Change in price of Chinese imports	+33.2%
Change in imports from China	-87.8%
Change in Chinese production	-3.3%
Change in price of U.S.-made devices	0
Change in U.S. production	0
Change in U.S. consumer prices (all sources)	+3.9%
Change in consumption	-7.6%
Reduction in consumer spending power (billion)	-\$1.4
Net impact on U.S. economy (million)	-\$1.6

Video Game Consoles

The loss of PNTR would impose a new import tax (the tariff) to U.S. imports of televisions from China. Column 1 tariffs for video game consoles¹⁸ are currently tax-free (duty free). Column 2 tariffs average 35%, so imports from China would be subject to a new 35% tax (duty).

The higher tariffs have limited positive impacts on other suppliers. According to industry analysts, there is very little U.S. production of video game consoles (U.S. production represents perhaps 1% of the mark. U.S. trade data reveals that China accounts for nearly all (90%) of total imports. Imposition of the tariffs suggests that shifting this much Chinese production to any other source would be very difficult given the volume currently sourced from China. American producers' output would grow by 3%, the same as Mexican producers' output. **Thus the result of the imposition of Column 2 rates would likely be supply chain disruptions that exacerbate product shortages and force prices up particularly in the short run.**

Because alternative sources are so limited, U.S. prices of video game consoles would rise. **According to Trade Partnership Worldwide LLC analysis, the cost of video game consoles from China would increase by 31%**, and by 1% for products from the very few U.S. suppliers that exist. Overall U.S. prices for video game consoles generally (from all sources combined) would rise by 2.5%, or by up to \$12 based in a retail price range of video game consoles today (ranging from \$274-\$500¹⁹). American consumers would pay \$467 million more for video game consoles. As a result, U.S. consumers reduce overall purchases by 6%.

Even after accounting for new tariff revenue, the result is a net annual \$788 million 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 INCREASED VIDEO GAME CONSOLE TARIFFS

Change in price of Chinese imports	+31.4%
Change in imports from China	-89.5%
Change in Chinese production	-7.7%
Change in price of U.S.-made consoles	+1.3%
Change in U.S. production	+2.5%
Change in U.S. consumer prices (all sources)	+2.5%
Change in consumption	-5.9%
Reduction in consumer spending power (million)	-\$466.7
Net impact on U.S. economy (million)	-\$326.9

Televisions

The loss of PNTR would increase the tax (the tariff) applied to U.S. imports of televisions from China. Column 1 tariffs for televisions²⁰ average 3.9% in 2022.²¹ Column 2 tariffs average 26.3%, an increase of 23.2 percentage points.

Imposition of the higher Column 2 tariffs on televisions imported from China causes U.S. imports from China of televisions to decline by 53%, and Chinese production to drop by 5%. **Producers in Mexico, which already the largest supplier of TVs to the United States, are the biggest winners.** U.S. production also increases, but only by 1.2%.

The tariffs have a negative impact on U.S. television consumers in the form of higher prices. **U.S. prices for TVs imported from China jump by 19.9%.** Overall, prices of TVs (from all sources, China, other countries and the United States) increase by 2.3%. **In response, U.S. consumers cut back on purchases of TVs.** According to one TV product reviewer, the

average price of a television is \$400-\$500.²² The loss of PNTR for imports from China would therefore raise television prices by as much as \$12 per TV. While this may not seem like a lot, when multiplied by the large number of televisions purchased by consumers, **the tariff increase results in the loss of millions of dollars of spending power as consumers are forced to pay \$450 million more than they otherwise would for the televisions they continue to buy.**

That loss in spending power continues as long as the higher tariffs are in effect.

The net annual impact on the economy (the value of U.S. producer gains plus tariff revenues to the U.S. government, minus the value of consumer losses) is a hit of \$296 million.

SUMMARY OF IMPACTS OF INCREASED TELEVISION TARIFFS

Change in price of Chinese imports	+19.9%
Change in imports from China	-42.6%
Change in Chinese production	-5.0%
Change in price of U.S.-made consoles	+1.2%
Change in U.S. production	+1.0%
Change in U.S. consumer prices (all sources)	+2.3%
Change in consumption	-4.6%
Reduction in consumer spending power (million)	-\$450.1
Net impact on U.S. economy (million)	-\$296.4

Conclusion

All U.S. policymakers should give careful consideration of both the costs and benefits of revoking PNTR for China and moving to much higher “Column 2” rates before adopting or advocating for any new proposals. As the Trade Partnership Worldwide LLC analysis shows, taking that step for these six consumer technology products alone would reduce Americans’ spending power by over \$30 billion,²³ with almost no benefit to U.S. production. Across the entire U.S. economy, there likely are many more products and sectors where imposing “Column 2” rates on China would be create much pain, but little to no gains.

The recent past should serve as a warning. Before Section 301 (and Section 232 tariffs before that) were imposed, proponents claimed trading partners would not retaliate. They did. Similarly, tariff proponents claimed that China would pay the tariffs. China did not.²⁴ And in the initial year or two following imposition of Section 232 and 301 tariffs, Administration officials pointed to the lack of inflation as evidence that tariffs did not hurt American consumers – only for inflation to hit 40-year highs and become the top U.S. economic issue in ensuing years.

If Congress and other policymakers choose to take the plunge, they should know how cold the water may be in advance. This analysis shows it may be much colder than they think – or have been told by proponents of significantly raising tariffs on imports from China.

Appendix A

Methodology

the Trade Partnership Worldwide LLC 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, the Trade Partnership Worldwide LLC 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/>).²⁵ 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. the Trade Partnership Worldwide LLC should stresses 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. Trade Partnership Worldwide LLC is then able to reduce the solution set of the model to those global prices that clear global markets. Once Trade Partnership Worldwide LLC has a global set of equilibrium prices, it can obtain national results (changes in prices and quantities). Based on price and quantity changes, Trade Partnership Worldwide LLC in turn obtains 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. urplus, and real national income that result from the imposition of tariffs on imports from China.

Within this context, Trade Partnership Worldwide LLC works with a non-linear representation of import demand, combined with generic export-supply equations (see Francois and Hall 2009).

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)	Malaysia (MYS)
China (CHN)	Singapore (SGP)
European Union (EUN)	Taiwan (TWN)

Hong Kong (HKG)	Thailand (THA)
India (IDN)	Rest of World (ROW)
Japan (JPN)	Vietnam (VNM)
Korea (KOR)	United States (USA)
Mexico (MEX)	

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>.

References

¹ Legislation introduced so far in this session of Congress includes: “China Trade Relations Act of 2023” (Cotton, S. 125); “Ending Normal Trade Relations with China Act of 2023” (Hawley, S. 906); “Raising Tariffs on Imports from China Act of 2023” (Hawley, S. 1537); “China Trade Relations Act of 2023” (Smith, H.R. 638); “To withdraw normal trade relations treatment from products of the People’s Republic of China, and for other purposes” (Banks et al, H.R. 4673).

Presidential candidates weighing in on the topic include Donald Trump and Ron Desantis. See for example: Brooke Singman, “Trump rolls out 2024 trade policy that would ‘tax China to build up America,’ reward US producers,” Fox News, February 27, 2023, <https://www.foxnews.com/politics/trump-rolls-out-2024-trade-policy-tax-china-build-up-america-reward-us-producers>; Eric Revell, “GOP presidential hopeful DeSantis calls for end to China’s preferential trade status,” Fox News, July 8, 2023, <https://www.foxbusiness.com/politics/gop-presidential-hopeful-desantis-calls-end-chinas-preferential-trade-status>.

² It is important to remember that 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 “normal” tariffs plus 25% for Section 301 tariffs). The rate would in the absence of PNTR would be 60% (35% for Column 2 rates plus 25% for Section 301 tariffs), also an increase of 30 percentage points. WTrade Partnership Worldwide LLC models the increase: the extra 30 percentage points..

³ According to U.S. Census Bureau data, effective tariff rates on imports from China in 2022 often were higher than the weighted Column 1 tariff rates reported above. For both TVs and connected devices, the assessed rate was about 7.5% higher due to Section 301 tariffs. As such, connected devices such as wireless speakers or voice-activated assistants would face combined Section 301 and Column 2 tariffs of over 42%.

⁴ While China may be the official country of origin for the consumer technology product because it is the place where the item was last transformed (assembled) before being exported to the United States, most of these products include inputs made in other countries, including the United States. The iPhone example continues to be relevant. A recent assessment found that even though its landed cost value is recorded as an import from China in U.S. import statistics, just 1% of the retail price of an iPhone 7 is attributable to China; more than 40% of the retail price is U.S.-based value (e.g., design). See Jason Dedrick and Kenneth L. Kraemer, “Intangible assets and value capture in global value chains: the smartphone industry,” Economic Research Working Paper No. 41, World Intellectual Property Organization, November 2017, pp. 16-17, https://www.wipo.int/edocs/pubdocs/en/wipo_pub_econstat_wp_41.pdf.

⁵ China accounted for 19% of U.S. imports of connected devices in 2022, and 12% of imports of televisions.

⁶ Trade Partnership Worldwide LLC reports here the composite estimated price increase for all of these consumers. It does not disaggregate between them, nor does it report the price increase that would be faced only by families. The price increase faced by families may be all of what Trade Partnership Worldwide LLC reports, or some smaller share of it if other buyers in the supply chain choose to absorb some of the cost increase.

⁷ HTS 8471.30.01.

⁸ League Feed, “How Much Should You Spend on a New Laptop in 2023?,” https://leaguefeed.net/how-much-should-you-spend-on-laptop/?utm_campaign=how-much-should-you-spend-on-laptop&utm_medium=rss&utm_source=rss

⁹ Federica Laricchia, “Consumer tablets average price in the U.S. 2013-2027,” statista, Feb. 28, 2023.

¹⁰ HTS 8517.13.00.

¹¹ Production data that may appear in the North American Industry Classification category for this product may be related products, like antennas/towers and other cellular network equipment, or even satellite production. There is a small industry related to refurbished/ repaired phones, which is likely what is included in the export category for this product, or represents re-exports of phones imported from another country.

¹² Federica Laricchia, “Smartphone (consumer/enterprise) average price in the United States, 2013-2027,” statista, <https://www.statista.com/statistics/619830/smartphone-average-price-in-the-us/>.

¹³ Pew Research Center Telephone survey, published April 2021, <https://www.statista.com/statistics/195006/percentage-of-us-smartphone-owners-by-household-income/>.

¹⁴ HTS 8528.49, 8528.52 and 8528.59.

¹⁵ Lawrence Bonk, “How Much Do Computer Monitors Cost?,” <https://www.gadgetreview.com/computer-monitor-cost>.

¹⁶ HTS 8517.62.0090

¹⁷ Derived from Consumer Technology Association’s *U.S. Consumer Technology One-Year Industry Forecasts. 2019-2024 (July 2023)*.

¹⁸ HTS 9504.50.00.

¹⁹ Charles Osborne and Josh Slate, "Game console showdown: PS5, Xbox, Nintendo Switch, and more," ZDNet, May 4, 2023, <https://www.zdnet.com/home-and-office/home-entertainment/best-game-console/>.

²⁰ HTS 8528.71, 8258.72, 8528.73.

²¹ The average tariff rates reported here and elsewhere in this report exclude any application of 301 Section tariffs. As noted previously, TVs generally face Section 301 tariffs of 7.5%, meaning the actual tariffs faced for TV imports from China would increase from about 11% to 34%.

²² Jed Smith, "How Much Should You Expect to Spend on a TV?," *Gadget Review*, January 22, 2023, <https://www.gadgetreview.com/how-much-expect-to-spend-on-a-tv>.

²³ The total value of the consumer spending impacts for these six products may be overstated by the nature of partial equilibrium analysis. The total does not take into account the broader impacts of higher tariffs applied to all U.S. imports from China. Those broader impacts would increase the total cost of the tariffs to American families, but may reduce it on a product by product basis.

²⁴ Many research economists have confirmed this fact; the most recent demonstration comes from the U.S. International Trade Commission. It's 2023 assessment of the effects of Section 232 and 301 tariffs found a "nearly one-to-one increase in prices of U.S. imports following the tariffs" that supported others studies showing that "U.S. importers have borne almost the full burden of section 301 tariffs." See 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>.

²⁵ 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.

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