Research

The Total Cost of U.S. Tariffs

TOM LEE, JACQUELINE VARAS | MAY 10, 2022

Executive Summary

- Former President Trump unilaterally imposed numerous tariffs on a variety of goods including, but not limited to, imports from China and steel and aluminum imports from across the world, creating upward pressure on prices in the United States.
- To date, President Biden has replaced only the tariffs on European steel and aluminum and Japanese steel with a tariff-rate quota system, but has kept in place the tariffs for most other countries, including China, and in March of 2023 raised tariffs on Russian aluminum and various other goods in response to the country's invasion of Ukraine.
- Based on 2022 import levels, these tariffs currently impact over $350 billion of imports and exports and increase consumer costs by roughly $51 billion annually.

Introduction

One of former President Trump's most prominent policy actions was to raise tariffs, which significantly harm the U.S. economy. Trade barriers such as tariffs increase the cost of consumer and producer goods and depress the economic benefits of competition, inhibiting economic growth. Research suggests that President Trump's tariffs have been directly responsible for reducing both imports and exports, raising prices, and reducing national welfare. Research also suggests that the entire cost of the tariffs has been borne by U.S. importers.[1] To date, President Biden has replaced the tariffs on steel and aluminum from the European Union (EU), the tariffs on steel from Japan, and the tariffs on steel and aluminum from the United Kingdom (UK) with tariff-rate quotas (TRQ). He has removed the tariffs on steel from Ukraine in a largely symbolic move to provide economic relief to the country during its ongoing war with Russia. In March 2023, he raised tariffs on aluminum and various other goods from Russia. Notably, President Biden has elected to keep in place most of the other tariffs enacted by President Trump, including those on imports from

China.

The tariffs, when combined with corresponding retaliation, threaten over $350 billion of traded goods annually. The following analysis calculates the overall impact these tariffs could have on the prices of goods in the United States.

The Economic Cost of Current Tariffs

This analysis focuses exclusively on the impact of Section 301 and Section 232 tariffs unilaterally imposed by former President Trump and still in effect under President Biden. Section 301 enables the president to impose tariffs or quotas when the United States Trade Representative (USTR) finds that other nations are engaging in unfair trade practices. President Trump used Section 301 to enact four tranches of tariffs on imports specifically from China. Section 232 allows the president to impose trade barriers if the Department of Commerce finds that imports threaten U.S. national security. President Trump used Section 232 to enact tariffs on steel and aluminum products from nearly every country, including strategic allies of the United States.

Table 1 lists the approximate value of imports that are currently subject to the tariffs initially imposed under former President Trump and now continued under President Biden. It additionally displays estimates of how the tariffs could increase nationwide consumer costs, assuming that 100 percent of the costs from the tariffs will be passed on to consumers and that current import levels will not change. While this estimate is an upper-bound, it represents the upward pressure that is placed on all prices in the economy. List 4B was constructed and proposed, but never finalized. It is included in the table but not counted in the final figure.

Table 1: The Total Cost of Tariffs[2], [3]

Tariff	Value of Affected U.S. Imports (2022)	Tariff Rate	Additional Cost Burden
Section 232, Steel	$9.4 B	25%	$2.3 B
Section 232, Aluminum	$9.8 B	10%	$2.1 B
Section 232, Derivative Steel Articles[4]	$558.4 M	25%	$139.6 M
Section 232, Derivative Aluminum Articles[5]	$303.4 M	10%	$30.3 M
Section 301, List 1	$26.1 B	25%	$6.5 B

Section 301, List 2	$10.7 B	25%	$2.7 B
Section 301, List 3	$118.5 B	25%	$29.6 B
Section 301, List 4A	$102.1 B	7.5%	$7.7 B
Section 301, List 4B	$147.1 B	Suspended	$0
Total[6]	**$277.5 B**	**7.5 – 25%**	**$51.1 B**

Without accounting for tariff exclusions granted at the request of U.S. businesses, the president's tariffs apply to approximately $277.5 billion of imports, increasing annual consumer costs by $51 billion.

An Excel file detailing the tariffs and the products they affect can be found here.

Tariffs That Have Been Removed by the Biden Administration

Since entering office, President Biden has replaced the Section 232 tariffs on both steel and aluminum imports from the EU with a tariff rate quota system (TRQ). He has also replaced the Section 232 tariffs on steel imports from Japan (the Section 232 aluminum imports from Japan are still in effect) and the Section 232 tariffs on both steel and aluminum imports from the UK with TRQs. Then, on May 9, 2022, the Biden Administration removed the Section 232 tariffs on steel imports from Ukraine for one year in a largely symbolic move to provide economic relief to the country during its occupation by Russia. Table 2 lists the approximate value of imports that are no longer subject to tariffs under President Biden. This figure is a slight overcount since the tariffs were not fully removed but rather changed to a TRQ, meaning if imports pass a certain amount, any subsequent imports after will be subject to the tariffs.

Table 2: Tariffs Removed

Action/Date of Removal	Import Value (2022)	Savings
Oct 29, 2021 Section 232 EU Steel/Aluminum	$9.2 B	$2.2 B
February 7, 2022 Section 232 Japan Steel	$1.8 B	$469.9 M
March 22, 2022 Section 232 UK Steel/Aluminum	$670.0 M	$338.7 M
May 9, 2022 Section 232 Ukraine Steel	$262.7 M	$65.7 M
Total	**$11.9 B**	**$3.1 B**

These actions combined removed tariffs on $11.9 billion – or nearly half – of the Section 232 steel and aluminum imports. President Biden has kept in place all of the Section 301 tariffs on Chinese imports, however. When taking into account the China tariffs, the four tranches of removals only account for 4 percent of the total imports subject to the tariffs.

Tariffs' Impact on Trade

The tariffs have significantly affected U.S. trade levels. Research has found that the tariffs caused importers to shift away from China and reorganize supply chains. What's more, the president's tariffs have decreased trade altogether – both imports and exports – which raises prices and reduces options for both U.S. consumers and businesses. The following table examines how import levels have changed since the president first began imposing tariffs in 2018.

Table 3: Import Levels of Goods Impacted by President Trump's Tariffs, 2018-2022[7], [8]

Tariff (Date Imposed)	Value of Affected Imports				
	2018	**2019**	**2020**	**2021**	**2022**
Section 232, Steel (Imposed March 2018; Canada and Mexico Exempted May 2019, EU TRQ January 2022, Japan TRQ April 2022, UK TRQ March 2022, Ukraine May 2022)	$7.1 B	$4.5 B	$2.5 B	$7.0 B	$9.4 B
Section 232, Aluminum (Imposed March 2018; Canada and Mexico Exempted May 2019, EU TRQ January 2022, and UK TRQ March 2022)	$8.1 B	$6.7 B	$4.0 B	$6.1 B	$9.8 B
Section 232, Derivative Steel Articles (Imposed February 2020, EU TRQ January 2022, Japan TRQ April 2022, UK TRQ March 2022, and Ukraine May 2022)	$424.1 M	$425.6 M	$351.7 M	$418.9 M	$558.4 M
Section 232, Derivative Aluminum Articles (Imposed February 2020, EU TRQ January 2022, and UK TRQ March 2022)	$244.7 M	$224.0 M	$195.5 M	$239.7 M	$303.4 M
Section 301, List 1 (Imposed July 2018)	$30.5 B	$22.9 B	$20.9 B	$24.7 B	$26.1 B
Section 301, List 2 (Imposed August 2018)	$14.7 B	$8.5 B	$9.8 B	$10.4 B	$10.7 B
Section 301, List 3 (Imposed September 2018; Raised May 2019)	$206.9 B	$128.0 B	$112.8 B	$126.4 B	$118.5 B
Section 301, List 4A (Imposed September 2019; Lowered January 2020)	$112.1 B	$114.6 B	$103.1 B	$105.1 B	$102.1 B
Section 301, List 4B (Not Imposed)	$160.2 B	$159.3 B	$164.4 B	$206.3 B	$147.1 B

Total[9]	**$380.1 B**	**$285.9 B**	**$253.6 B**	**$280.4 B**	**$277.5 B**

An Excel file detailing 2017 to 2022 import levels of every product impacted by the tariffs can be found here.

Table 3 confirms that the tariffs have had a clear impact on trade. From 2018 to 2019, the value of imports subject to tariffs decreased by $94 billion, or 25 percent. The bulk of this change can be attributed to a decrease in trade with China. Imports from China subject to tariffs fell by 25 percent, from $364.3 billion in 2018 to $274.1 billion in 2019. The largest decrease is seen in Section 301, List 3 decreasing from $206.9 billion in 2018 to $128.0 billion in 2019, a 38 percent decrease. Alternatively, imports of steel and aluminum goods subject to tariffs fell by 25 percent, from $15.8 billion in 2018 to $11.9 billion in 2019.

The COVID-19 pandemic further reduced U.S imports and exports while largely preserving the above dynamics. From 2019 to 2020, the value of overall imports in the United States fell by 6.5 percent, from $2.5 trillion to $2.3 trillion. The value of imports subject to the tariffs decreased 11.4 percent from 2019 to 2020. Then in 2021, as the economy recovered from the pandemic, imports returned to near their 2019 levels. There was also a slight decrease in 2022 in imports subject to tariffs compared to 2021, but the figures are still close to their 2019 levels.

Tariff Exclusions

When a president imposes tariffs unilaterally, U.S. firms can petition for certain products to be excluded if the tariffs negatively impact their business. For an exclusion to be granted, the product must not be available in the United States or any third countries that are not subject to U.S. tariffs. Alternatively, the business requesting the exclusion must show that the tariffs caused it severe economic harm. This analysis only considers Section 301 exclusions. Section 301 exclusions are vastly more far-reaching and easier to track than the Section 232 exclusions, which are smaller in nature and evaluated on a rolling basis.

The Trump Administration initially granted exclusions for over 2,200 products. Most of these exclusions expired in 2019, with 549 receiving extensions until the end of 2020. Those 549 extensions were then allowed to expire, so that throughout 2021 and 2022, tariffs were reinstated on all the imports that had received that extension. In October 2021, USTR under the Biden Administration started a review of the 549 exclusions extensions to determine which should be reinstated. On March 24, 2022, after much criticism of the administration's slow pace and lack of guidance throughout the review, USTR released a list of 352 products for which it would reinstate exclusions. These exclusions retroactively applied to October

2021.

Table 4: Section 301 Tariff Exclusions

Tariff Exclusion	Value of Affected U.S. Imports	Tariff Rate	Cost Savings
Section 301, List 1	$5.7 B	25%	$1.4 B
Section 301, List 2	$3.3 B	25%	$836.8 M
Section 301, List 3	$32.0 B	25%	$8.0 B
Section 301, List 4a	$18.8 B	7.5%	$1.4 B
Total	**$59.8 B**	**7.5 - 25%**	**$11.6 B**

Table 4 shows the dollar value of goods subject to the 352 renewed exclusions from the Section 301 tariffs on Chinese goods, valued at roughly $59.8 billion. Data on the tariff exclusions are limited, however, as the categories for exclusions are broader than the exclusions themselves. As such, this study overestimates the dollar value of products subject to tariff exclusions.[10]

Retaliatory Tariffs

In addition to raising costs for U.S. consumers, tariffs have also resulted in significant retaliation by other countries against U.S. exports. Table 4 below details every retaliatory action taken against the United States thus far and the value of U.S. exports that are adversely affected.[11]

To date, five nations have levied retaliatory tariffs of up to 70 percent on approximately $73.2 billion of U.S. exports. These tariffs do not include retaliation by Canada and Mexico; following the reversal of U.S. steel and aluminum tariffs, both Canada and Mexico withdrew their retaliatory tariffs of 7 percent to 25 percent, respectively, on approximately $20 billion of U.S. exports. These tariffs also no longer include those enacted in retaliation by the EU, as it canceled its retaliatory tariffs in exchange for the United States' replacement of the aluminum and steel tariffs with a TRQ for EU imports.

As a part of its "phase one" trade deal with the United States, China announced that it will be indefinitely suspending a portion of its retaliation against U.S. exports. The suspension applies to the retaliatory tariffs scheduled to go into effect on December 15, 2019, as well as

previous tariffs imposed on U.S. automobiles and auto parts. China's auto tariffs were originally suspended in December 2018 but later reimposed following a tariff escalation from President Trump.

Table 5: Total Retaliation to President Trump's Imposed Tariffs

Country	**Retaliation Rate**	**Value of Affected U.S. Exports**
Retaliation to Section 232 Tariffs		
China	15-25%	$2.3 B
Turkey	4-70%	$1.0 B
Russia	25-40%	$0.2 B
India	10-50%	$1.3 B
Retaliation to Section 301 Tariffs		
China Parts 1 – 4	5-25%	$68.4 B
Total Retaliation		
Total	**4-70%**	**$73.2 B**
* The bulk of these goods are already facing retaliation and now subject to tariff increases		

[1] For instance, see these three studies: https://www.nber.org/papers/w25672, https://www.nber.org/papers/w25638, and https://www.nber.org/papers/w26610.

[2] Data for this analysis were taken from the U.S. Census Bureau and the International Trade Commission. All import data is from 2021.

[3] Slight differences in totals may be present due to rounding errors.

[4] The categories of derivative steel and aluminum articles impacted by the tariffs are smaller than the HS codes provided, meaning this study overestimates the dollar value of these goods.

[5] The categories of derivative steel and aluminum articles impacted by the tariffs are smaller than the HS codes provided, meaning this study overestimates the dollar value of

these goods.

[6] Total does not include the value of goods in list 4B, which are not currently subject to tariffs.

[7] Data for this analysis were taken from the U.S. Census Bureau and the International Trade Commission.

[8] Slight differences in totals may be present due to rounding error.

[9] Total does not include the value of goods in list 4B, which are not currently subject to tariffs.

[10] The dollar value of tariff exemptions was determined using HS10 codes, the narrowest classification available, but one that includes more goods than were specifically exempted. HS10 codes that appear multiple times on the tariff exemption announcement are only counted once.

[11] The value of U.S. exports subject to retaliation is based on 2018 trade levels.