



Research

The Costs of National Security Tariffs on Steel and Aluminum

JACQUELINE VARAS | MARCH 23, 2018

Executive Summary

- President Trump is imposing a 25 percent tariff on imported steel and a 10 percent tariff on imported aluminum in response to two Section 232 investigations into the national security threat of imports.
- This study estimates that these tariffs will increase the amount consumers are expected to spend by \$3.2 billion per year. This figure includes the exemption of Canada, Mexico, the European Union, and other allies from the tariffs.
- By excluding these countries, the United States exempted 66.6 percent of total steel imports and 55.0 percent of total aluminum imports from the new tariffs. This study estimates these exemptions will save consumers \$5.8 billion per year—yet the continued presence of tariffs, and the uncertainty around the administration's actions on trade, will weigh on the economy.
- The national security justification for these tariffs is poor; the administration likely intends to bolster domestic steel and aluminum producers. Existing anti-dumping and countervailing duties, however, already protect these producers from unfair trade practices, and the World Trade Organization will likely rule these tariffs illegal.

Introduction

President Trump recently announced new import taxes: a [25 percent tariff](#) on steel and a [10 percent tariff](#) on aluminum. This announcement follows two investigations ordered by President Trump last April (called [section 232 investigations](#)) into the national security implications of steel and aluminum imports. While both reports found that increasing imports threaten our national security, this conclusion is questionable.

Tariffs of this kind are costly to both consumers and the majority of producers in the United States. This study surveys the theory and evidence regarding the economic impacts of tariffs, examines their national security justification, and specifically estimates how President Trump's 232 tariffs on steel and aluminum will impact U.S. consumers.

The General Impact of Tariffs

Most economists [agree](#) that tariffs harm the economy. Tariffs restrict international trade, which increases the costs of consumer goods and inhibits economic growth. Empirical evidence supports this conclusion; a recent report from the [National Bureau of Economic Research](#) found that tariffs enacted to curb growing imports in Turkey, India, and Canada led to small improvements in the trade balance, but also to inflation, depressed aggregate demand, lower levels of investment, and lower productivity. Furthermore, every living chair of the Council of Economic Advisers signed a [letter](#) last year warning of the economic consequences of steel tariffs.

In contrast, open trade [benefits](#) U.S. consumers by increasing international competition and lowering prices, as

well as exposing them to a wider variety of goods and services that may not be produced in the United States. It also lowers costs for U.S. businesses that rely on international supply chains in their own production while giving exporters access to a larger number of consumers from around the world. Finally, open trade generates productivity gains spurred by specialization and international competition, which translates to increased economic activity and job creation.

The economic impact of tariffs is two-fold: they impact the economy directly by reducing U.S. imports (and exports, by extension), and indirectly by triggering retaliation from other nations. After President Trump announced his intention to impose tariffs on aluminum and steel, [Canada](#), [Mexico](#), [China](#), the [European Union \(EU\)](#), and the [United Kingdom](#) all threatened to raise their own trade barriers against the United States.

Retaliation is not new. In 2002, President Bush [imposed safeguard tariffs](#) of 8 to 30 percent on steel imports to protect domestic industry. These tariffs were met with immediate backlash from our trading partners as the EU threatened to impose retaliatory tariffs against \$2.2 billion of U.S. goods. President Bush's tariffs were also met with criticism [here at home](#). Almost one half of steel-consuming firms reported some difficulty in obtaining steel, 32 percent of manufacturers reported delays in production, and overall employment of steel-consuming industries generally fell or remained flat. Consequently, the White House started offering [exemptions](#) for certain steel products.

President Bush's steel tariffs were ultimately ruled to be illegal after the EU, Japan, and other nations [brought a lawsuit](#) against the United States at the World Trade Organization (WTO). He withdrew them less than two years after they were enacted.

Section 232 Tariffs on Steel and Aluminum

Most tariffs placed on imports to the United States are anti-dumping and countervailing duties. These are enacted after U.S. businesses petition the International Trade Commission for relief from imports that are priced below fair-market value. They can only be applied if government investigations find that low import prices are a result of foreign subsidies and that underpriced imports materially harm U.S. industry.

The recent tariffs on steel and aluminum are different. They are a result of a Section 232 investigation ordered by President Trump to gauge how U.S. reliance on imports would impact the country during a time of war and to evaluate our domestic production capacity to meet military needs. These two new tariffs mark only the [third and fourth times in history](#) that Section 232 investigations have led to import restrictions.

While both Section 232 investigations concluded that imports threaten U.S. national security, this is misguided. The United States imports more steel from [Canada](#), one of our closest allies, than anywhere else. Furthermore, U.S. steel producers currently supply [72.5 percent](#) of the domestic market, and steel imports made up only 27.5 percent of the domestic market in 2017.

The Department of Defense released a [memo](#) disagreeing with the results of the Section 232 investigations. The Secretary of Defense indicated that military needs for steel and aluminum each require only 3 percent of U.S. production, and that imports of these products do not impact the United States' ability to meet its national security requirements.

Following the Section 232 investigations, President Trump announced the United States will place a 10 percent tariff on certain aluminum imports and a 25 percent tariff on certain steel imports. These tariffs apply to imports

from all countries except for Canada, Mexico, the EU, and a handful of other allies.

Until recently, it was unclear whether Canada and Mexico would be excluded from the Section 232 tariffs. President Trump's top trade advisor originally [indicated](#) that there would be no country exclusions, and the president [suggested](#) that tariffs on Canada and Mexico would only be lifted if the countries negotiated a "new and fair" North American Free Trade Agreement (NAFTA). The United States Trade Representative (USTR) also [announced on Thursday](#) that no immediate tariffs would apply to Australia, Argentina, Brazil, South Korea, or the EU.

Estimating the Impact on Consumers

Based on the theory and empirical evidence, U.S. consumers will feel an impact even with some exemptions for U.S. allies. The following estimates the additional costs that steel and aluminum tariffs will impose on consumers in the United States. It applies the tariff rates of 10 and 25 percent to [current import levels](#) of both aluminum and steel (as defined by the product codes laid out in the president's [tariff proclamations](#)), assuming that import levels will remain unchanged. It also assumes that businesses will pass 100 percent of the cost of the tariffs on to consumers.

These assumptions produce an upper-bound estimate. In reality, imposing tariffs will likely reduce overall imports, somewhat reducing the tariff impact on consumers. However, it is costlier to produce these goods in the United States than overseas, which will also put upward pressure on prices. Furthermore, this study does not attempt to model the effect of retaliation. Tariffs and non-tariff barriers erected by other nations in response to U.S. tariffs will reduce overall trade levels, reduce revenue from U.S. exports, and reduce the number of goods and services that U.S. consumers can buy.

The results of this analysis are displayed in Table 1, below. Assuming that import levels remain constant, and that no new tariffs are applied to exempted nations, Section 232 tariffs are expected to increase economy-wide steel prices by \$2.4 billion and economy-wide aluminum prices by \$784.0 million. Together, this translates to a \$3.2 billion additional burden on both producers and consumers that use imported steel and aluminum.

Table 1: Additional Consumer Costs from Section 232 Tariffs

	Steel Imports	Aluminum Imports	Steel and Aluminum
2017 Import Levels	\$9.7 B	\$7.8 B	\$ 17.5 B
Additional Consumer Costs from Tariffs	\$2.4 B	\$784.0 M	\$3.2 B

The exemptions for Canada and Mexico are significant: Over 26 percent of U.S. steel imports come from the nations on our border, along with 42 percent of U.S. aluminum imports. Providing tariff exemptions to these countries prevented a serious deterioration in our trilateral relationship. It also prevented retaliation by Canada and Mexico and provided consumers significant cost savings. These savings are displayed in Table 2, below.

Table 2: Consumer Savings from Excluding Canada and Mexico

	Steel Imports from Canada and Mexico	Aluminum Imports from Canada and Mexico	Steel and Aluminum from Canada and Mexico
2017 Import Levels	\$7.7 B	\$7.3 B	\$15.0 B
Percent of Total Imports	26.5%	42.0%	32.3%
Savings from Excluding Canada and Mexico	\$1.9 B	\$730.5 M	\$2.7 B

If the tariffs also applied to Canada and Mexico, this analysis estimates that consumers would have faced an additional \$2.7 billion in price increases. These costs would have also applied to U.S. manufacturers that use imported steel and aluminum, and U.S. businesses that take advantage of supply chain integration throughout North America.

USTR Robert Lighthizer recently announced further tariff exemptions for additional allies of the United States. These include Australia, Argentina, Brazil, South Korea, and the European Union. Together, these nations account for 40.2 percent of total steel imports and 13.0 percent of total aluminum imports. Exempting these nations provided consumers with an additional \$2.9 billion in steel savings and \$225.9 million in aluminum savings. Together, this equates to \$3.1 billion in economy-wide savings (shown in Table 3).

Table 3: Consumer Savings from Excluding the EU, Brazil, Argentina, Australia, and South Korea

	Steel Imports from Other Allies	Aluminum Imports from Other Allies	Steel and Aluminum Other Allies
2017 Import Levels	\$11.7 B	\$2.3 B	\$13.9 B
Percent of Total Imports	40.2%	13.0%	30.0%
Savings from Excluding Other Allies	\$2.9 B	\$225.9 M	\$3.1 B

Canada, Brazil, South Korea, and Mexico are the [top four sources](#) of steel imports for the United States. By providing exemptions to these and other nations, the United States exempted 66.6 percent of total steel imports and 55.0 percent of total aluminum imports from the new tariffs. These exemptions will save consumers an estimated \$5.8 billion. Exempting the EU also prevented significant retaliation from the bloc, which had [announced plans](#) to impose retaliatory tariffs on \$7.9 billion worth of U.S. imports over three years.

These nations were the first countries excluded from the tariffs, but they may not be the last. USTR Lighthizer [indicated that](#) decisions about country exemptions will not be concluded until the end of April. The Department of Commerce also established a [rule](#) allowing importers to request exemptions for steel and aluminum products not produced in the United States. It expects to receive [6,000 requests](#).

The more country and product exemptions are added, the more consumer costs will decline. However, which exemptions are included will depend on the president's policy goal. If he wants to target Chinese foreign subsidies specifically and address the global overcapacity of steel and aluminum, tariffs should be targeted at China, not at a broad array of nations. There is already a process to accomplish this: anti-dumping and countervailing (AD/CV) duties. [More than 60 percent](#) of all steel imports are already subject to these duties, as are 94 percent of U.S. steel imports from China. As they stand, these tariffs will have a greater impact on U.S. allies that are not yet exempted and not already subject to AD/CV duties than on China.

Conclusion

The Section 232 tariffs on steel and aluminum will not strengthen U.S. national security. The true reason they were enacted is to protect domestic producers from foreign competition, which is traditionally the role of AD/CV duties. Regardless, these tariffs will continue to be weakened as U.S. importers and foreign nations seek exemptions. They will also be challenged at the WTO and likely be ruled illegal, inviting retaliation from our trading partners. In the meantime, consumers can be expected to spend an additional \$3.2 billion per year.