The Heritage Foundation

BACKGROUNDER
No. 3413 | MAY 30, 2019
CENTER FOR DATA ANALYSIS

Do No Harm: Tariffs and Quotas Hurt the Homeland

Gabriella Beaumont-Smith

KEY TAKEAWAYS

Tariffs are taxes on Americans, and quotas cut businesses off from valuable goods that provide Americans with more choice.

Imports are integral to the competitiveness of domestic producers—and increasing their prices or limiting imports hurts Americans.

Both tariffs and quotas decrease freedom, disrupt supply chains, and artificially change prices.

Introduction

In the past two years, the Trump Administration has imposed tariffs on goods imported from several U.S. trading partners, including Canada, Mexico, the European Union, and China. While it appears that the Administration believes tariffs are a good negotiating tactic,[1] Americans are literally paying the price—because *tariffs are taxes*. In the *Economic Report of the President*, the White House and Council of Economic Advisers stated, "$14.4 billion in revenue was collected from goods subject to new tariffs."[2]

This added cost has led to strong opposition from the business community, farmers, and policymakers. In response, the Administration has suggested replacing tariffs with quotas.[3] The problem with this policy response is that quotas tend to have even more harmful consequences than tariffs. This *Backgrounder*

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

lays out the differences between tariffs and quotas and focuses on the unintended consequences each creates.

How Do Tariffs Work?

A tariff is a government-imposed tax on goods imported into a country. Imposing a tax on imports makes them more expensive. The government's goal is to increase revenue—but another aim is to reduce the amount of goods people import.

Many people believe that when tariffs are imposed on a country, that country bears the costs. However, this is not the case. Tariffs are paid by an individual or business importing the subjected good. When a government collects revenue from tariffs, it is collecting it from its own citizens—not from the citizens of the country upon whose goods tariffs were imposed.

For example, when Mid Continent Steel and Wire in Missouri imports steel, it purchases from another business in a different country, such as Canada. Mid Continent Steel and Wire has to pay the tariff because tariffs are the subject of domestic law. It is easier for buyers to navigate and comply with domestic law, so it has become an industry practice for buyers (importers) rather than sellers (exporters) to pay the required tariffs.[4]

Typically, companies faced with tariffs will not be able to simply absorb all of the additional costs, so they will pass on a portion of the tariff to their customers and find other ways to cut costs. In this case, Mid Continent Steel and Wire's business costs were increased by 25 percent. As a result, they increased prices to their customers by 19 percent "who were already paying 5 [percent]–7 [percent] more for American-made nails."[5] This led to a *60 percent* loss in Mid Continent's sales.[6] However, since they did not pass along all of the cost, Mid Continent was forced to do other things to keep their doors open, including laying off 80 non-contract employees and cutting back on capital spending.[7] Additionally, 120 employees left out of fear that the business would close down.[8] Thus, the Administration's 25 percent tariff imposed on steel hurt Mid Continent Steel and Wire, its employees, and its customers.

As illustrated by Mid Continent Steel and Wire, tariffs increase business costs, which eventually get passed down to Americans—affecting their ability to buy necessary goods. Tariffs also have longer-term effects, such as disrupting the supply chain and impairing the relationships businesses spend years cultivating. The same goes for employees who leave businesses due to the imposition of uncertainty. Even if the tariffs are removed, businesses have to spend time making new relationships and finding new employees as they work to regrow to pre-tariff levels and beyond.

How Do Quotas Work?

Quotas are government-imposed limits on the quantity of goods imported into a country. As with tariffs, one goal is to reduce the consumption of imports. Because quotas do not produce revenue for the government, the desired effect is to increase domestic production to make up for lost imports.

For example, if a strict quota is imposed on the amount of coffee imported into the U.S., domestic coffee farmers would need to produce more to meet U.S. demand for coffee. As America does not have a comparative advantage in producing coffee (i.e., it is more costly to grow in the U.S.),[9] it is difficult for domestic farmers to produce more. This increased cost is likely to be passed on to Americans in the store.

Quotas vary in degrees of strictness. The strictest quotas that can be imposed allow importation of very small quantities and do not allow importers to move goods across time periods or across categories. This reduces the flexibility given to importers and exporters. For example, under a strict quota an exporter cannot choose to export more today in exchange for a tighter quota tomorrow.[10]

These types of quotas have tremendous implications for the entire supply chain. For example, if a strict quota is imposed on steel—which is needed to make nails, as nails are needed to make a desk—unexpectedly filling the quota would be felt by the entire supply chain. If the business importing the steel cannot access it, the nail maker must find a new supplier, who may charge more for the steel and may or may not be a domestic supplier. The nail maker may also not be able to produce as many nails if it incurs higher costs by having to find a new supplier. This affects the business buying nails for the desk because if the nail maker has a new supplier charging a higher price for the steel, the nails will become more expensive, which could make the desk more expensive.

While the strictness of quotas vary, a quota can leave a business with nowhere to turn for materials necessary to make their product. This occurs when a quota is imposed on a good that cannot be produced domestically. For example, U.S. manufacturers cannot easily produce certain types of steel pipe,[11] which is a major input for the oil and gas industry. During pipeline production, there are surges in demand for "oil country tubular goods…and the line pipe and drill pipe that goes with that."[12] An absolutely strict quota blocks suppliers' ability to respond to these surges of needs for products.

Strict quotas also prevent businesses from accessing materials they need, particularly if there are discrepancies in calculations. For example, if goods

arrive in the U.S. and Customs and Border Patrol finds that the quota is filled, importers and exporters have to wait until the quota reopens to take delivery of material. In the meantime, importers face three options:

1. Turn the shipment around,
2. Store the materials under bond in the U.S., or
3. Destroy the materials.[13]

Quotas also impede the ability of businesses to plan ahead, which is key for their capacity to expand. In order to continue to grow, businesses aim to minimize costs so that they can produce more and capture a bigger portion of the market by offering lower prices. Limiting imports that are needed to make products prevents businesses from being able to grow in this manner, resulting in fewer available goods and higher prices.

What Policymakers Should Consider Before Imposing Tariffs or Quotas

Both tariffs and quotas prevent the efficient allocation of resources in the market. While the government may have the good intention of protecting domestic industries, tariffs and quotas have unintended consequences that affect the very people they are aimed at helping. In order to evaluate these consequences, import elasticity of demand and the availability of substitutes must be considered.

Import Elasticity. Import elasticity of demand—a measure of how sensitive businesses' demands are to the change in price caused by the tariff—is a useful tool for estimating how effective a tariff will be at reducing the amount of inputs a business imports. For example, Mid Continent Steel and Wire's demand for steel is not very sensitive to the change in price because they continue to import the steel impacted and pay the tariffs. This is not to say that the tariffs are not having damaging effects. The tariffs are having decidedly harmful effects on Mid Continent—and its customers. It is likely that Mid Continent decided to pay the tariff because there were no good substitutes available for the steel used in their production process. As Mid Continent cannot afford the increased cost imposed on them by the tariffs, they are forced to pass it along to their customers. However, passing on most of the cost of the tariff reduced their sales by *60 percent*. While their import elasticity of demand is not sensitive to the change in prices caused by the tariffs, their customers' elasticity of demand is *very* sensitive to the changes in prices—as illustrated by Mid Continent's loss in sales. Therefore,

the tariffs made Mid Continent less competitive and forced their customers to seek out different suppliers.

Availability of Substitutes. The availability of substitutes is an important factor for estimating the damages that can be caused by both tariffs and quotas. If a tariff is imposed on a good and there is no suitable substitute available (as experienced by Mid Continent Steel and Wire), in order to continue production, a business is forced to pay the tariff to get the necessary materials for production. High tariffs are crippling for businesses if substitutes are not easily accessible because they will not be able to afford their production inputs. This would likely force some firms to exit the market.

Although the most competitive firms would be able to survive the tariff, the increased costs incurred could force them to produce less, increase prices, lay off employees, or reduce capital expenditure. However, even the most competitive could not survive with a strict quota in place. If substitutes for a good are not easily available domestically or from other countries, strict quotas are the most harmful to businesses—because they literally cut companies off from production inputs. Thus, even the most competitive businesses would be harmed. They would need to reduce their output since they could not import the amount of materials needed for production. This would result in laying off employees and increasing prices to customers as goods become scarcer.

Quotas Can Be More Harmful Than Tariffs

Both tariffs and quotas create distortions in the market by artificially increasing prices and limiting quantities that constrain the production process. The market is a dynamic process of people continually adjusting to demand, and tariffs and quotas hamper this dynamism. Because tariffs are taxes, their effects can be eased by currency depreciation and export subsidies. However, strict quotas are the most harmful as they cut off access to production inputs.

If the government is more interested in restricting imports than earning revenue, quotas tend to be more effective, especially if demand for the subjected good is not sensitive to a price increase. If demand for a good is not sensitive to price changes, then a tariff would be ineffective at reaching the government's desired goal of reducing imports because businesses will simply pay the tariff and continue to import.

Tariff-Rate Quotas. The U.S. does not impose as many quotas as tariffs on imports. It also very rarely imposes absolute quotas.[14] Instead, a combination of tariffs and quotas are often used, called tariff-rate quotas. Once the quota has been filled, in order to import over the threshold, businesses

must pay a tariff. Although, a tariff-rate quota may not be as harmful as a very strict quota, it still imposes restrictions on American businesses that have negative consequences.

For example, the U.S. has a sugar program that includes tariff-rate quotas, which limits the amount of sugar American businesses can import and then imposes hefty tariffs if they go over the threshold. The goal is to protect the domestic sugar production industry, but the result is to artificially raise the price of U.S. sugar. Since it is so costly to import sugar due to the tariff-rate quotas, many businesses have moved production outside the U.S. One business stated that if the price of sugar in the U.S. was equal to the world price, they could relocate 250 jobs from Mexico to Ohio.[15] For candy makers, there are no suitable substitutes for sugar, therefore, the tariff-rate quotas leave them with nowhere to turn.

Tariffs and Quotas Under Section 232

In March 2018, President Trump restricted imports of steel and aluminum products under Section 232.[16] If the Department of Commerce determines that a product being investigated "'is being imported into the United States in such quantities or under such circumstances as to threaten to impair the national security,'" the President can impose restrictions on certain imports. This authority is provided under Section 232 of the Trade Expansion Act of 1962.[17]

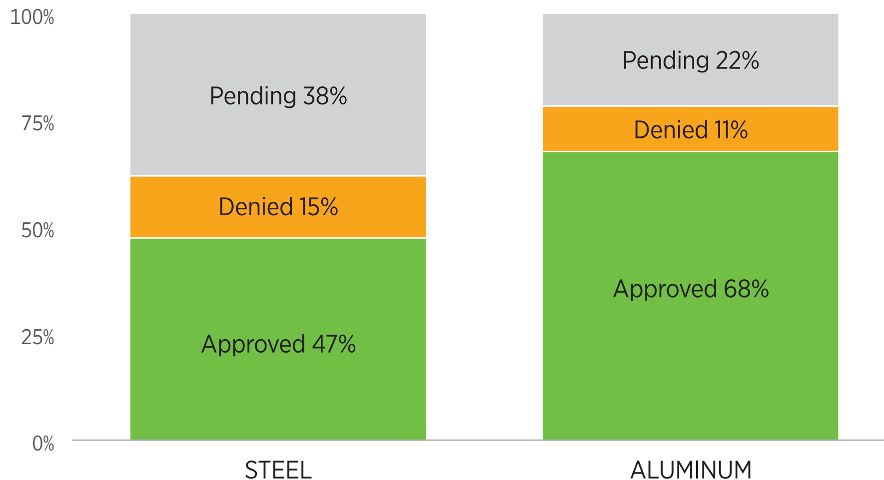
A 25 percent tariff was applied to steel products, while aluminum products were imposed with a 10 percent tariff. Additionally, a 50 percent tariff (instead of the 25 percent tariff) was placed on steel imports from Turkey.[18] In response to the steel and aluminum tariffs, many U.S. producers who import these metals as production inputs filed tariff-exclusion requests.[19] The Department of Commerce can grant businesses tariff-exclusion requests if "the article is not produced in the United States: (1) in sufficient and reasonably available amount; (2) satisfactory quality; or (3) there is a specific national security consideration warranting an exclusion."[20] By March 18, 2019, 45,328 and 6,017 tariff-exclusion requests had been filed for steel and aluminum, respectively.[21] The stark difference in tariff rates (25 percent for steel and 10 percent for aluminum) is likely one main reason for the extreme difference in filings for tariff-exclusion requests.

As shown in Chart 1, 47 percent of the filed requests for steel have been approved, while 15 percent were denied, and 38 percent are pending. For aluminum, 68 percent have been approved, 11 percent were denied, and 22 percent are pending.

CHART 1

Tariff Exclusion Requests for Steel and Aluminum

As of March 18, 2019



NOTE: Figures may not sum to totals due to rounding.
SOURCE: Christine McDaniel and Danielle Parks, "Special Report: Steel and Aluminum Tariff Exclusion Requests by Congressional District," Tradevistas, https://tradevistas.org/special-report-steel-and-aluminum-tariff-exclusion-requests-by-congressional-district/ (accessed April 9, 2019).

BG3413 heritage.org

These requests are a reminder that tariffs are ultimately paid by American businesses and are affecting their ability to produce their products.

South Korea was exempted under Section 232 and instead of tariffs, quotas were imposed on steel mill articles imported from South Korea.[22] The announcement of the quotas on South Korea stated that the limit would be set at 70 percent of the average volume of trade over the past three years, which was calculated to be around 2.68 million tons.[23] However, the Administration chose to make matters more complicated by dividing the 2.68 million tons into 54 separate units with an individual quota for each unit.[24] There were also quarterly restrictions. These were limits on the amounts for each of the 54 units that could be imported for any given calendar quarter of the year.[25] In the end, the 2.68 million tons of steel mill articles were divided up into 216 quotas.[26]

However, complications began with the lack of notice. The quotas were announced on April 30, 2018, and went into effect at 12:01 am on May 1, 2018. Most traders did not know that the steel mill articles on ships already

en route to the U.S. were going to be hit with quotas until a few hours before the announcement.[27] This was extremely problematic because these were strict quotas with no flexibility, therefore traders could not send less material in the next time period or swing the materials into another category in exchange for the non-compliant amounts already headed to the U.S.[28]

Many South Korean steelmakers specialize in particular steel products that cannot be easily substituted by U.S. manufacturers.[29] In September 2018, the U.S. oil industry had an output boom that was often supplied by South Korean steelmakers.[30] Japanese businesses were able to make up for some of South Korea's lost exports to the U.S. since they also offer high-tech pipes, but Japan could not meet the demand South Korean firms were able to supply.[31] In 2018, imports of pipes and tube products from Japan increased by almost 50 percent between January and July—while imports from South Korea fell by 18 percent.[32]

Conclusion

The Trump Administration should refrain from imposing any more tariffs and should not replace current tariffs with quotas. Both are harmful to American businesses and families. If one of these trade restrictions must be put in place, policymakers should seriously consider the availability of substitutes for U.S. businesses. The U.S. does not have a comparative advantage in everything—and imposing a trade restriction that makes imports dearer will not change that. Tariffs and quotas impose great costs that hurt everyone, but they are felt most significantly by the poor, who are the most sensitive to price increases.

Market forces are the most effective at leading the production process. If substitutes are available (domestically or from other countries), there are reasons why they are not currently being used by American businesses. As seen with the case of South Korea, substitutes of specialty pipes were offered by Japanese businesses, but they were unable to meet the demand of American businesses. South Korean businesses could meet this demand but were cut off by quotas, leaving Americans with fewer steel pipes.

While it might be the case that a government has good intentions, such as wanting to increase market share for domestic producers, tariffs and quotas have unintended consequences. Imposing any trade restriction reduces the autonomy of a business, harming its ability to minimize business costs or appropriately respond to demand. Raising barriers also increases uncertainty in the market. Businesses rely on certainty to make long-term

decisions in order to innovate and produce more goods and services. Both tariffs and quotas make these processes more difficult to achieve.

The problems tariffs and quotas cause for businesses stem from the importance of imported products to the production process. Both tariffs and quotas decrease freedom, disrupt supply chains, and artificially change prices. These trade barriers may also restrict the amount that a business can produce, limiting the amount its clients can produce, which could lead to fewer options available to Americans in store.

In order to increase domestic production, the Trump Administration should reduce trade barriers and commit to free trade. Tariffs and quotas are tools that aim to increase domestic production—but more often than not restrict domestic economic activity and increase government control over the economy. Free trade gives Americans access to more options as businesses have access to goods of differing qualities at different prices.

Gabriella Beaumont-Smith is Policy Analyst in Macroeconomics in the Center for Data Analysis, of the Institute for Economic Freedom, at The Heritage Foundation.

Endnotes

1. "Transcript of President Trump's Interview with *The Wall Street Journal*," *The Wall Street Journal*, October 24, 2018, https://www.wsj.com/articles/transcript-of-president-trumps-interview-with-the-wall-street-journal-1540388205?mod=article_inline (accessed April 9, 2019).
2. White House and Council of Economic Advisers, *Economic Report of the President: Together with the Annual Report of the Council of Economic Advisors*, March 2019, p. 496, https://www.whitehouse.gov/wp-content/uploads/2019/03/ERP-2019.pdf (accessed April 9, 2019).
3. Robert Schroeder, "Trump Today: President Suggests Quotas Could Replace Steel Tariffs, Claims to Have 'Compromising' Material on Senator," *MarketWatch*, October 1, 2018, https://www.marketwatch.com/story/trump-today-president-suggests-quotas-could-replace-steel-tariffs-as-he-claims-to-have-compromising-material-on-senator-2018-10-01 (accessed April 9, 2019).
4. It has also become standard practice for buyers (importers) to pay the tariff, while the sellers (exporters) pay the transportation costs.
5. Chris Pratt, "Our Nail Manufacturing Company Is at Risk Because of Steel and Aluminum Tariffs," U.S. Chamber of Commerce, November 15, 2018, https://www.uschamber.com/series/above-the-fold/our-nail-manufacturing-company-risk-because-of-steel-and-aluminum-tariffs (accessed April 9, 2019).
6. Melody Walker, "Missouri Nail Manufacturer Struggles Under Steel Tariff," *St. Louis Public Radio*, January 2, 2019, https://news.stlpublicradio.org/post/missouri-nail-manufacturer-struggles-under-steel-tariff#stream/0 (accessed April 9, 2019).
7. Ibid.
8. Ibid.
9. Attila Jambor, Tamas Mizik, and Aron Torok, "Comparative Advantages in the Global Coffee Trade," June 2017, https://www.researchgate.net/publication/321094949_Comparative_advantages_in_the_global_coffee_trade (accessed April 9, 2019).
10. Chad P. Bown and Soumaya Keynes, "Trade Talks Episode 49: Are Trump's Steel Quotas Worse Than His Steel Tariffs?" Peterson Institute For International Economics, August 1, 2018, https://piie.com/experts/peterson-perspectives/trade-talks-episode-49-are-trumps-steel-quotas-worse-his-steel-tariffs (accessed April 9, 2019).
11. Jane Chung and Yuka Obayashi, "Trumped: How Seoul's U.S. Trade 'Coup' Left Korea Steel in Limbo as Japan Marches On," Reuters, September 13, 2018, https://www.reuters.com/article/us-usa-trade-asia-steel-analysis/trumped-how-seouls-u-s-trade-coup-left-korea-steel-in-limbo-as-japan-marches-on-idUSKCN1LT13G (accessed April 30, 2019).
12. Bown and Keynes, "Trade Talks Episode 49: Are Trump's Steel Quotas Worse Than His Steel Tariffs?"
13. Ibid.
14. Absolute quotas are those that strictly limit quantity. U.S. Customs and Border Protection, "Commodities Subject to Import Quotas," February 7, 2018, https://www.cbp.gov/trade/quota/guide-import-goods/commodities (accessed April 30, 2019).
15. Sabrina Eaton, "Ohio Candy Makers Sour on Federal Sugar Support Program," October 11, 2017, https://www.cleveland.com/metro/2017/10/sugar_support_story.html (accessed April 30, 2019).
16. U.S. Customs and Border Protection, "Section 232 Tariffs on Aluminum and Steel: Duty on Imports of Steel and Aluminum Articles Under Section 232 of the Trade Expansion Act of 1962," https://www.cbp.gov/trade/programs-administration/entry-summary/232-tariffs-aluminum-and-steel (accessed April 9, 2019).
17. "Section 232 Investigations: Overview and Issues for Congress," Congressional Research Service *Report for Congress*, April 2, 2019, https://fas.org/sgp/crs/misc/R45249.pdf (accessed April 9, 2019).
18. U.S. Customs and Border Protection, "Section 232 Tariffs on Aluminum and Steel Duty on Imports of Steel and Aluminum Articles."
19. Christine McDaniel and Danielle Parks, "Special Report: Steel and Aluminum Tariff Exclusion Requests by Congressional District," https://tradevistas.org/special-report-steel-and-aluminum-tariff-exclusion-requests-by-congressional-district/#graphic (accessed April 9, 2019).
20. U.S. Department of Commerce, Bureau of Industry and Security, "Frequently Asked Questions Section 232 Steel and Aluminum Exclusions," December 21, 2018, https://www.bis.doc.gov/index.php/all-articles/224-232-investigations/1449-232-faq (accessed April 9, 2019).
21. McDaniel and Parks, "Special Report: Steel and Aluminum Tariff Exclusion Requests by Congressional District."
22. U.S. Customs and Border Protection, "QB 18–123 Announcement for Steel Mill Articles: South Korea," June 4, 2018, https://www.cbp.gov/trade/quota/bulletins/qb-18-123-announcement-steel-mill-articles-south-korea (accessed April, 9, 2019).
23. Bown and Keynes, "Trade Talks Episode 49: Are Trump's Steel Quotas Worse Than His Steel Tariffs?"
24. Ibid.
25. Ibid.
26. Ibid.
27. Ibid.

28. Ibid.
29. Chung and Obayashi, "Trumped: How Seoul's U.S. Trade 'Coup' Left Korea Steel in Limbo as Japan Marches On."
30. Ibid.
31. Ibid.
32. Ibid.