Seven Charts Showing How Canada/Mexico Tariffs Would Harm the US Auto Industry (and American Car Buyers)

By Scott Lincicome and Alfredo Carrillo Obregon

President Donald Trump has repeatedly threatened to impose 25 percent tariffs on all goods imported into the United States from Canada and Mexico, with the levies coming as soon as this Saturday, February 1. As Cato scholars and others have repeatedly explained (and as recent history has shown), these new US import taxes, as well as retaliation against US businesses that the Canadian and Mexican governments have promised, would cause significant damage to the US, Canadian, and Mexican economies. And due to these economies' decades-long integration (thanks to good ol' specialization and comparative advantage), particular industries and individuals would disproportionately suffer from the tariffs.

This blog post, the first of a series that we'll publish over the next month, focuses on one such industry—US-based manufacturers of motor vehicles and parts—and provides seven charts showing

how Trump's tariffs will harm US automotive operations and workers, as well as American car consumers.

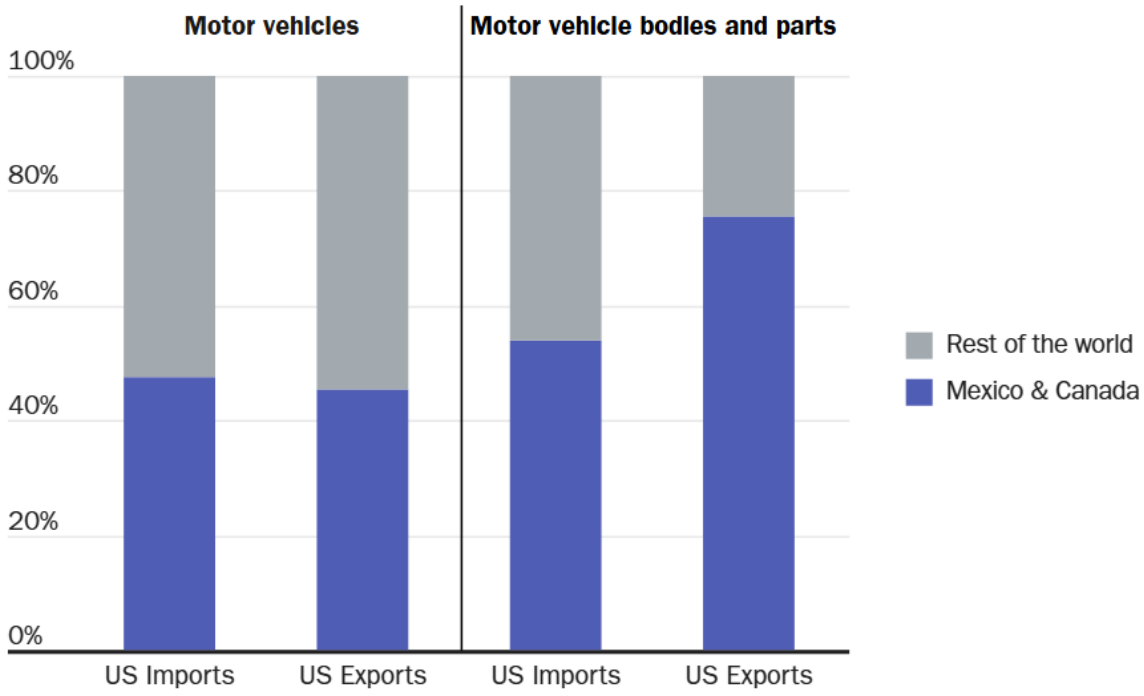
Mexico and Canada Are the United States' Top Trading Partners for Automotive Goods

Mexico and Canada are both the main sources of US imports of motor vehicles and motor vehicle parts *and* the major purchasers of US exports of these same products. As Figure 1 shows, both countries together account for nearly half of US imports and exports of motor vehicles and parts.

Figure 1

Mexico and Canada are the top US trading partners for motor vehicles and parts

Share of US imports and exports in 2023



Sources: "USITC DataWeb," US International Trade Commission.
Notes: The figure displays data for US general imports and domestic exports of products under HTS Codes 8702, 8703, 8704, 8707, and 8708.

A 25 percent tariff on these products would not just harm US consumers—both individuals buying vehicles and manufacturers using automotive inputs—but could also expose US companies to decreased sales in, and potential retaliation from, Canada and Mexico.

Cars Sold in the United States Have High Shares of Mexican and Canadian Value-Added

As noted above, decades of free trade have caused the US, Canadian, and Mexican automotive industries to be highly integrated, with producers in all three countries shipping finished goods and parts across the United States' northern and southern borders. Table 1 below shows this integration in practice, documenting car models marketed in the United States that have high shares of Mexican and Canadian value-added. (The American and Canadian automotive supply chains are so interlinked that

the National Highway Traffic Safety Administration's list does not distinguish between American-made and Canadian-made content embedded in these vehicles.)

Table 1

Vehicles sold in the US with substantial North American content would be affected by a 25 percent tariff

Brand	Model	Share of North American content	Share of foreign content	Final assembly countries	Sources of engine/motor	Sources of transmission
Acura	ADX	30% (US/CAN) 35% (MEX)		MEX	US	US
Audi	Q5 S Line 45	20% (US/CAN) 78% (MEX)	20% (GER)	MEX	MEX	GER
Cadillac	CT5	15% (US/CAN) 49% (MEX)		US	US	US
Chevy	Malibu	39% (US/CAN) 25% (MEX)		US	US	US
GMC	Acadia	35% (US/CAN) 22% (MEX)		US	MEX	US
Ford	Bronco Sport	23% (US/CAN) 64% (MEX)		MEX	US (2.0L) MEX (1.5L)	US
Ford	Maverick	27% (US/CAN) 60% (MEX)		MEX	MEX (2.5L) US (2.0L)	US
Ford	Mustang Mach-E	13% (US/CAN) 78% (MEX)		MEX	MEX	MEX
Honda	HR-V FWD	30% (US/CAN) 45% (MEX)		MEX	US	MEX
Mazda	CX-50	50–60% (US/CAN) 25% (MEX)		US	MEX & JPN	JPN
Nissan	Sentra	10% (US/CAN) 75% (MEX)		MEX	MEX	MEX
Nissan	Pathfinder	50% (US/CAN) 15% (MEX)		US	US	US
Tesla	Model 3	70–75% (US/CAN) 20% (MEX)		US	US	US
Tesla	Model Y Long Range	70% (US/CAN) 25% (MEX)	15% (JPN)	US	US	US
Volkswagen	Atlas Cross Sport	56% (US/CAN) 35% (MEX)		US	MEX	US
Volvo	EX90	20–25% (US/CAN) 30% (MEX)	30% (CHN)	US	SWE	SWE

Source: "American Automobile Labeling Act Report, 2025," National Highway Traffic Safety Administration.
Notes: US = United States; CAN = Canada; MEX = Mexico; GER = Germany; JPN = Japan; CHN = China; SWE = Sweden

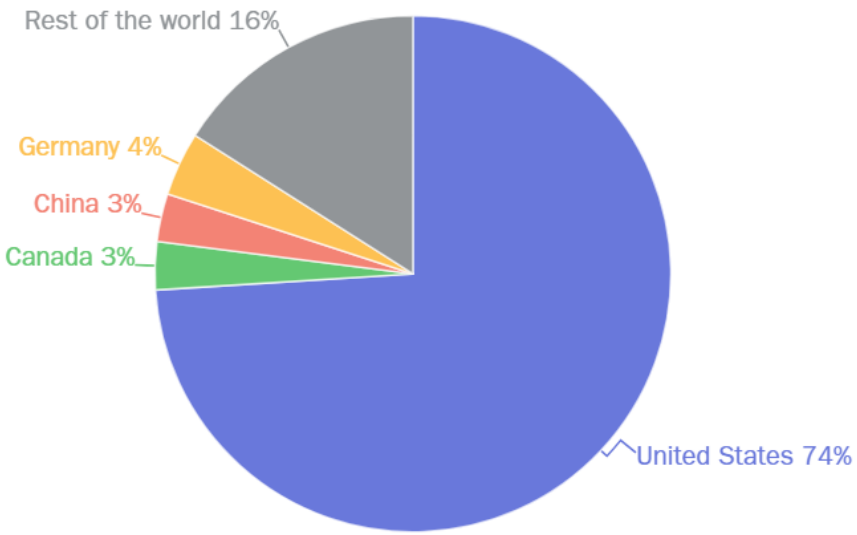
A Tariff on Cars "Made in Mexico" Would Harm American Workers and Companies

The table above also shows that many cars sold in the United States are made in Mexico with core parts from the United States and Canada, meaning that much (if not most) of the vehicles' value comes from work performed by *American* workers and companies during production. As Figures 2 and 3 below show, this economic reality applies more broadly to the North American auto industry. In particular, a **2019 paper** found that US-made content accounted for nearly *three-quarters* (74 percent) of the foreign value-added embedded in vehicles imported by the United States from Mexico. A **recent**

analysis from the Peterson Institute for International Economics further calculated that 38 percent of the *total* value-added of vehicles imported to the United States from Mexico was American-made.

Figure 2

Most of the foreign content embedded in Mexican motor vehicles exported to the US originates in the US

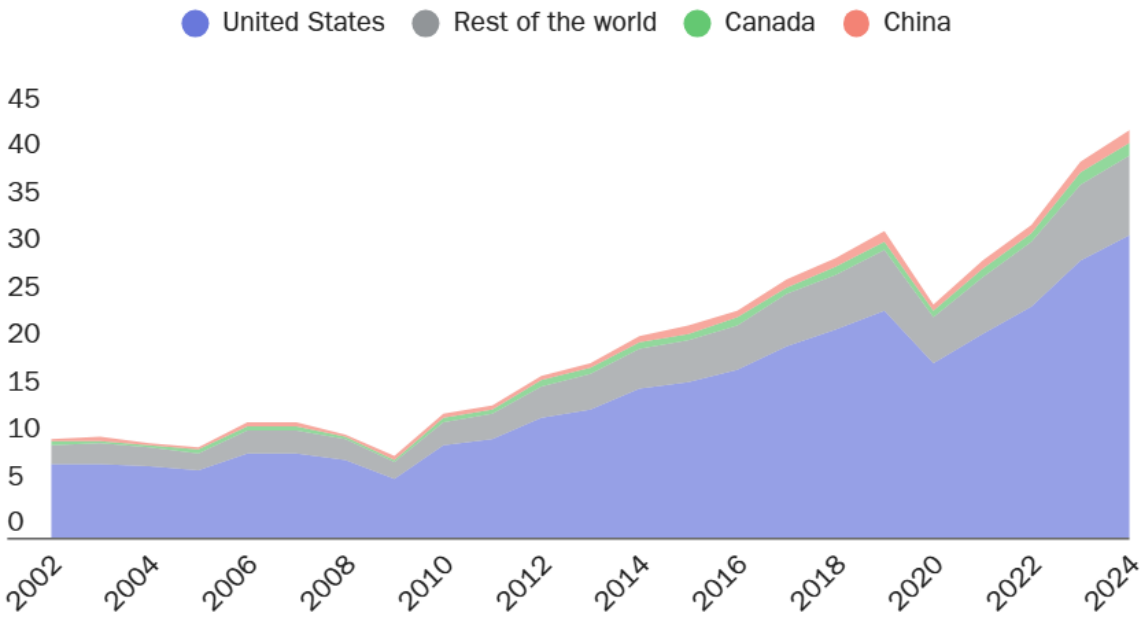


Source: Alonso de Gortari, "Disentangling Global Value Chains," National Bureau of Economic Research Working Paper no. 25868, May 2019, p. 13.

Figure 3

The value of US content embedded in Mexican motor vehicles exported to the US has grown over time

Implied value-added content by country of origin, billions of US dollars



Download data

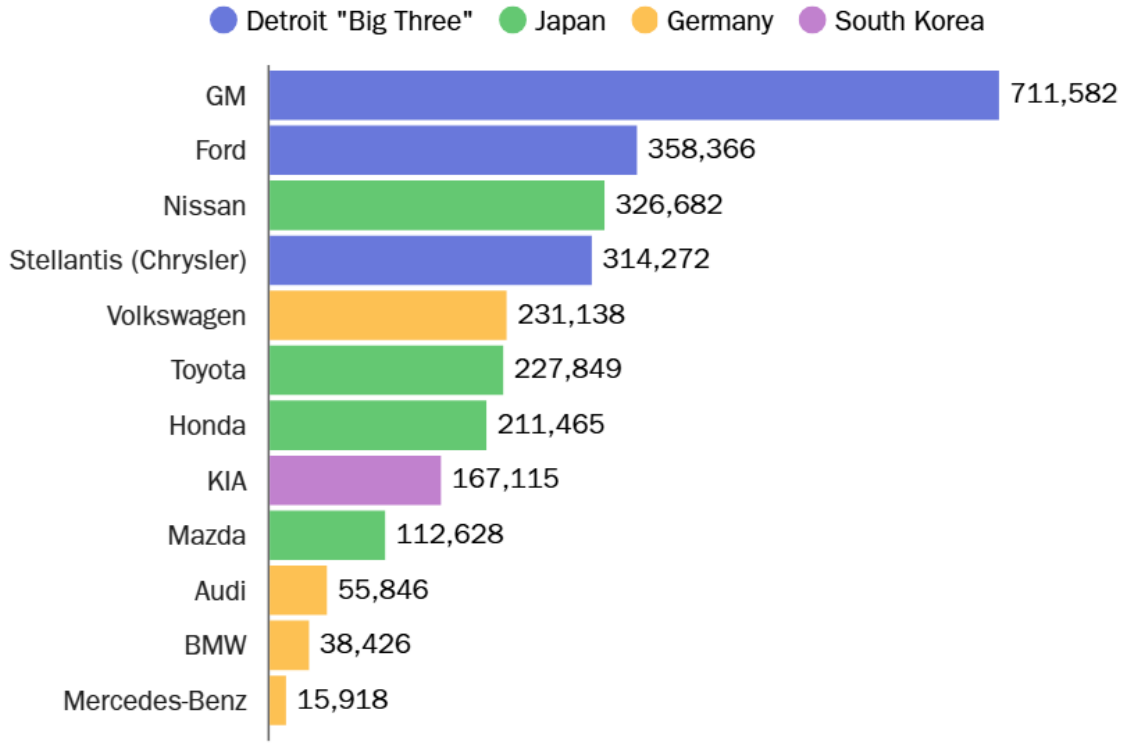
Source: Julieta Contreras, "Restricting Imports of Mexican Vehicles Will Harm US Manufacturers," *RealTime Economics* (blog), Peterson Institute for International Economics, December 4, 2024.
Notes: Imports for 2024 are estimated. See the source for more details on the author's calculations.

As Figure 4 shows, moreover, Mexican government data on the country's exports of passenger vehicles to the United States show that about half of these goods were made by *Detroit automakers*.

Figure 4

About half of automobiles and light trucks exported by Mexico to the United States in 2024 were made by Detroit automakers

Units exported in 2024



Sources: Author's calculations using data from "Exportación de Vehículos Ligeros por Marca, Modelo y País Destino," National Institute of Statistics and Geography (Mexico), updated January 9, 2025.
Note: Finished passenger vehicles and light trucks exported from Mexico to the United States only. Stellantis refers to vehicles produced by its North American subsidiary, Chrysler.

These figures again underscore that high tariffs on "Made in Mexico" vehicles would harm many *American* companies and workers.

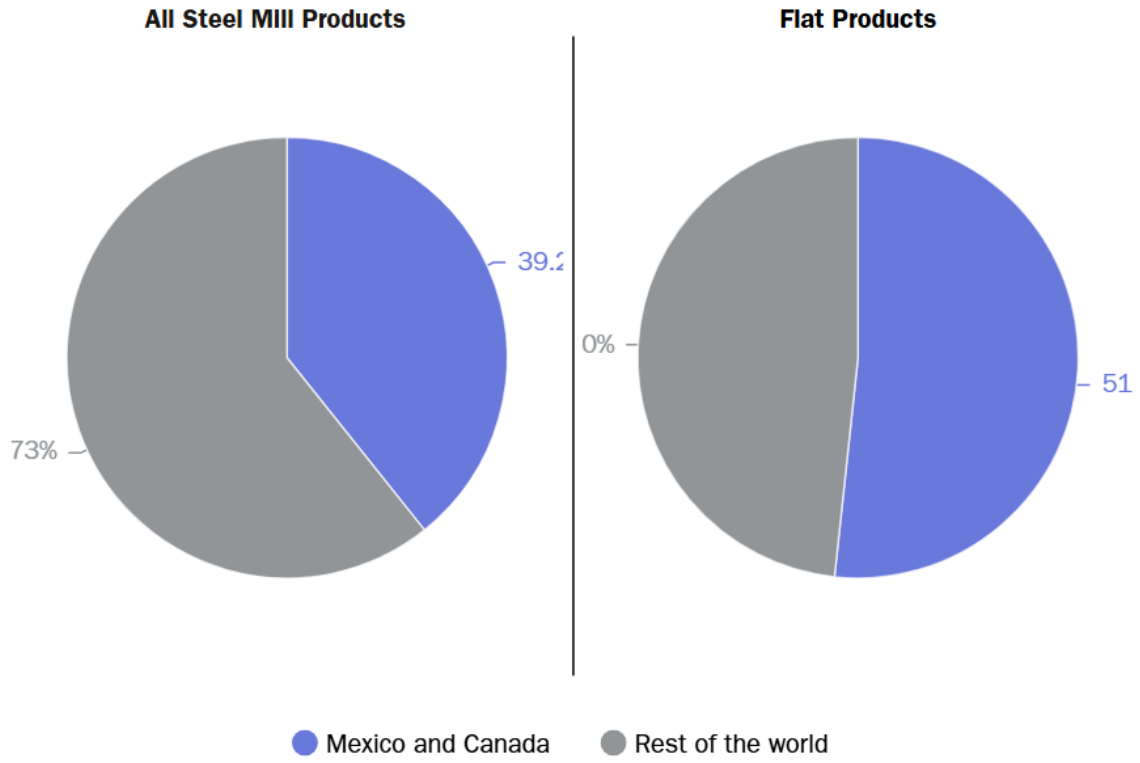
Mexico and Canada Are Also Major Sources of *Non-Automotive Inputs* for the Automotive Industry

The harms to American automotive producers from Trump's proposed tariffs would not just stem from increased duties on vehicles and auto parts, but also from duties on non-automotive inputs. Steel provides a useful example. In 2019, the US government agreed to remove "national security" (**Section 232**) tariffs on steel and aluminum imported from Canada and Mexico, and today these two countries account for nearly 40 percent of all **US imports of steel mill products**, as well as over half of US imports of flat steel, which is used extensively in the automotive industry (Figure 5).

Figure 5

Mexico and Canada were among the top 5 sources of US imports of steel mill products in 2023, and major sources of one type of product used extensively in the auto sector

Millions of metric tons



Sources: "United States Steel Import Report," US International Trade Administration.
Notes: Flat products include steel sheets, strips, and plates. Per the US International Trade Administration, these products are used most often in the automotive, tubing, appliance, and machinery manufacturing sectors. According to Kenwal, flat-rolled steel is used by automakers to make body panels, engine components, suspension components, and safety components (i.e., door beams and roof rails).

Given these quantities and the **known effects** of the Section 232 tariffs on US steel (and aluminum) prices, resuming them or otherwise applying new 25 percent tariffs on Canadian and Mexican steel would likely harm most American manufacturers of motor vehicles and parts by significantly raising their input costs. According to a 2023 report from the **US International Trade Commission**, the Section 232 steel and aluminum tariffs disproportionately harmed six US motor vehicle and parts manufacturing sub-industries, thus significantly reducing their production.**[1]** Several auto industry representatives also reported to the Commission that "section 232 tariffs on steel have led to decreased supplies of automotive steel products and increased input costs for automotive manufacturers," as well as longer lead times due to "limited availability of steel inputs." And the Center for Automotive Research **calculated** in 2019 that Section 232 tariffs on steel and aluminum from Canada and Mexico alone cost US light vehicle manufacturers almost $500 million per year (in 2019 dollars). **[2]** New tariffs on these metals would thus cost American automotive manufacturers dearly.

Multiple Tariffs on a Single Product?

The North American automotive supply chain is so interwoven across all three USMCA countries that an engine, transmission, or other automotive component might cross the US-Canada and US-Mexico borders as much as seven or eight times before it ends up in a finished vehicle. As a **2017 Bloomberg report** documented, this dynamic applies not just to complex parts but relatively simple ones too. In particular, the authors tracked the journey of a capacitor, a simple electrical component in a circuit board, incorporated into a car seat. As Figure 6 shows, by the time the capacitor was embedded in a finished seat, it had already crossed from one North American country to another four times.

Figure 6

A simple capacitor's journey through North America illustrates the complexity of the regional automotive supply chain

Source: Adapted from Thomas Black, Jeremy Scott Diamond and Dave Merrill, "One Tiny Widget's Dizzying Journey Through the US, Mexico and Canada," Bloomberg, updated May 31, 2019.

Given this dynamic, the effects of tariffs are highly uncertain, and industry experts **have no idea** whether Trump's proposed 25 percent tariffs would be levied on a single component every time it crosses US borders or just once. In the former case, the tariffs' costs would multiply greatly, further slowing (or even shutting down) the North American automotive supply chain.

Conclusion

As I wrote **late last year**, the US automotive industry is a great example of the complexities of 21st-century manufacturing and the benefits of globalization:

[I]t's **widely** **acknowledged** by automotive industry **experts** that freer trade and investment have generally fueled the growth and stability of North American automotive production since the 1990s.… By permanently reducing trade barriers, **trade agreements** have been **credited** with attracting more **foreign investment** and boosting overall industry competitiveness by lowering production costs (e.g., via imported inputs), utilizing national comparative advantages, and **opening** overseas markets.

It's also a stark example of how and why tariffs would harm the modern US economy, including the manufacturing sector and American consumers. Automotive industry experts have **warned** that the tariffs would quickly "add a minimum of thousands of dollars" to the price of a new car in all three countries.

Hopefully, cooler heads prevail.

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[1] The six motor vehicle and parts manufacturing sub-industries identified in the US International Trade Commission's report are: Truck Trailer Manufacturing (NAICS 336212), Travel Trailer and Camper (336214), Motor Vehicle Transmission and Power Train Parts Manufacturing (336350), Motor Vehicle Metal Stamping (336370), Other Motor Vehicle Parts Manufacturing (336390), and Motor Vehicle Steering, Suspension Component (except Spring), and Brake Systems Manufacturing (336300).

[2] Before Mexico and Canada were exempted from the steel and aluminum tariffs, the Center for Automotive Research calculated that the steel and aluminum tariffs represented an indirect tax of $1.4 billion on US light vehicle and vehicle parts manufacturing, which increased costs of US vehicle assembly by 0.43 percent (scenario 1). It also estimated that, were Mexico and Canada exempted from the steel and aluminum tariffs, the cost of US vehicle assembly would only increase by 0.28 percent (scenario 2). Thus, the $500 billion figure is the result of the percent change in the cost increase when moving from scenario 1 to scenario 2 (i.e., 15/43) times the value of the tax increase for scenario 1 (i.e., $1.4 billion).