



The Perryman Group

The Potential Economic Impact of Sustained 25% Tariffs on Steel and Aluminum

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Aluminum and steel are key to many manufacturing, agricultural, and mining sectors ranging from automotive and aviation to energy. Infrastructure projects also heavily rely on these metals. They are integral to the entire US manufacturing supply chain, and a 25% tariff is likely to cause significant price increases for US manufacturers and, therefore, consumers (some are already being observed). In addition, other countries have retaliated. If lasting solutions are not reached and additional retaliatory tariffs are enacted, it could further escalate the economic harms and accelerate a global trade war.

The free flow of trade is beneficial, encouraging economic growth for all nations and benefiting consumers through allowing production to occur where costs are most favorable (an idea that was first mathematically articulated around 1811). When tariffs are imposed, they have the effect of raising prices as importers pass a portion of the costs along to US consumers and firms. Dynamic effects would also be initiated through the economy. The Perryman Group estimated the overall net economic cost of these tariffs, accounting for changes in purchasing patterns and other responses.

The Perryman Group estimates that the cost to the US economy of a sustained 25% tariff on imports of steel and aluminum would include **\$7.6 billion** in annual gross product and almost **80,000 jobs** when multiplier effects are considered. (See the accompanying tables for results by industry.)

Tariffs would likely lead to inflation as additional costs are passed on to consumers. The Perryman Group’s analysis indicates that if tariffs on steel and aluminum and sustained, the impact on overall inflation would be significant, particularly affecting housing, automobiles, and appliances. Although prices have been stabilizing for some items, inflation remains a concern. In addition to the negative effects on individuals, families, and businesses, increased inflationary pressures could lead to tightening by the Federal Reserve.

Clearly, imposing substantial tariffs on key inputs to the manufacturing process is costly for all nations involved. It is crucial that agreements on key issues are reached as soon as possible to reduce the effects of sustaining these destructive measures for an extended period.

The Potential Economic Cost of 25% Metal Tariffs on the US Economy

	Total Expenditures	Gross Product	Personal Income	Jobs
25% Steel	-\$12.453 b	-\$6.103 b	-\$4.177 b	-59,821
25% Aluminum	-\$1.128 b	-\$1.530 b	-\$1.007 b	-20,144
Total	-\$13.581 b	-\$7.633 b	-\$5.184 b	-79,965

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: Based on current import levels and potential dynamic effects of the proposed tariffs. Monetary values in millions of 2024 dollars. Components may not sum due to rounding. For more information, see the methodology section.

The Potential Economic Cost of 25% Metal Tariffs on the US Economy

Results by industry

	Total Expenditures	Gross Product	Personal Income	Jobs
25% TARIFF ON STEEL				
Agriculture	-\$0.185 b	-\$0.010 b	-\$0.025 b	-375
Mining	-\$0.432 b	-\$0.114 b	-\$0.079 b	-430
Utilities	-\$1.252 b	-\$0.277 b	-\$0.121 b	-417
Construction	-\$0.432 b	-\$0.238 b	-\$0.196 b	-2,179
Manufacturing	-\$2.102 b	-\$0.951 b	-\$0.941 b	-11,403
Wholesale Trade	-\$0.857 b	-\$0.580 b	-\$0.334 b	-3,009
Retail Trade*	-\$2.137 b	-\$1.605 b	-\$0.934 b	-22,634
Transportation & Warehousing	-\$0.726 b	-\$0.477 b	-\$0.316 b	-3,409
Information	-\$0.305 b	-\$0.189 b	-\$0.081 b	-571
Financial Activities*	-\$2.061 b	-\$0.513 b	-\$0.208 b	-1,735
Business Services	-\$0.558 b	-\$0.336 b	-\$0.274 b	-2,640
Health Services	-\$0.492 b	-\$0.344 b	-\$0.291 b	-3,810
Other Services	-\$0.911 b	-\$0.469 b	-\$0.377 b	-7,209
Total, All Industries	-\$12.453 b	-\$6.103 b	-\$4.177 b	-59,821
25% TARIFF ON ALUMINUM				
Agriculture	-\$0.050 b	+\$0.026 b	-\$0.001 b	-68
Mining	-\$0.128 b	-\$0.031 b	-\$0.019 b	-97
Utilities	-\$0.475 b	-\$0.107 b	-\$0.047 b	-161
Construction	-\$0.188 b	-\$0.102 b	-\$0.084 b	-936
Manufacturing	+\$3.854 b	+\$1.003 b	+\$0.584 b	+4,123
Wholesale Trade	-\$0.465 b	-\$0.315 b	-\$0.182 b	-1,634
Retail Trade*	-\$1.092 b	-\$0.817 b	-\$0.475 b	-11,565
Transportation & Warehousing	-\$0.310 b	-\$0.207 b	-\$0.137 b	-1,478
Information	-\$0.169 b	-\$0.104 b	-\$0.044 b	-316
Financial Activities*	-\$1.076 b	-\$0.274 b	-\$0.110 b	-909
Business Services	-\$0.302 b	-\$0.182 b	-\$0.148 b	-1,430
Health Services	-\$0.249 b	-\$0.174 b	-\$0.147 b	-1,926
Other Services	-\$0.477 b	-\$0.245 b	-\$0.196 b	-3,749
Total, All Industries	-\$1.128 b	-\$1.530 b	-\$1.007 b	-20,144
25% TARIFF ON STEEL & ALUMINUM				
Agriculture	-\$0.236 b	+\$0.016 b	-\$0.026 b	-443
Mining	-\$0.560 b	-\$0.145 b	-\$0.098 b	-527
Utilities	-\$1.728 b	-\$0.385 b	-\$0.168 b	-578
Construction	-\$0.621 b	-\$0.340 b	-\$0.280 b	-3,114
Manufacturing	+\$1.751 b	+\$0.051 b	-\$0.357 b	-7,279
Wholesale Trade	-\$1.322 b	-\$0.895 b	-\$0.516 b	-4,642
Retail Trade*	-\$3.229 b	-\$2.423 b	-\$1.409 b	-34,199
Transportation & Warehousing	-\$1.036 b	-\$0.684 b	-\$0.453 b	-4,887
Information	-\$0.474 b	-\$0.293 b	-\$0.125 b	-887
Financial Activities*	-\$3.137 b	-\$0.787 b	-\$0.318 b	-2,644
Business Services	-\$0.861 b	-\$0.518 b	-\$0.422 b	-4,070
Health Services	-\$0.741 b	-\$0.518 b	-\$0.438 b	-5,736
Other Services	-\$1.388 b	-\$0.714 b	-\$0.574 b	-10,958
Total, All Industries	-\$13.581 b	-\$7.633 b	-\$5.184 b	-79,965

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: Based on current import levels and potential dynamic effects of the proposed tariffs. Monetary values in millions of 2024 dollars. Components may not sum due to rounding. For more information, see the methodology section.

METHODS AND ASSUMPTIONS

This analysis compares the performance of the US economy with and without the proposed tariffs. The price differential across all industry categories was determined for more than 500 sectors. The elasticity of demand for products imported was then used to estimate the direct effects in each sector reflecting current trade patterns and market conditions. Responses such as reductions in purchases due to higher prices were fully accounted for, as was the potential for increased manufacturing in the United States as a result of the tariffs. These net results were then used as

inputs in a dynamic interactive simulation of the US Multi-Regional Impact Assessment System and the US Multi-Regional Econometric model to estimate the total effects.

Total economic effects are quantified for several measures of business activity; these measures are different ways of looking at the same effects and are not additive. Total expenditures (or total spending) reflects the change in the dollars changing hands as a result of the negative economic stimulus of the tariffs. Gross product (or output) is production of goods and services foregone as a result of

the tariffs. This measure is parallel to the gross domestic product numbers commonly reported by various media outlets and is a subset of total expenditures. Personal income is dollars that end up in the hands of people in the areas; the vast majority of this aggregate derives from the earnings of employees, but payments such as interest and rents are also included. Job losses would persist as long as the tariffs are in place. Monetary values are given in billions of 2024 US dollars per year. Industry components may not sum to total values due to independent rounding.

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Dr. Perryman is the President and CEO of the Perryman Group and Distinguished Professor of Economic Theory and Method at the International Institute for Advanced Studies. Over the past 40 years, Dr. Perryman has helped recruit corporations providing tens of thousands of jobs through economic development work, resolved billion-dollar legal issues, and revamped public policy through impact assessments and other studies. His firm has measured economic impacts for corporate locations and expansions involving billions in investments, and his economic forecasts are used by corporations and government agencies alike.



He has provided economic analysis and expert testimony for civil litigation across a wide range of practice areas including antitrust and competition, intellectual property disputes, securities, and commercial and complex litigation. His work combines strong expertise in economic damages calculation, asset valuation, market analysis, and statistical methods and econometrics.

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