Globalization and Prosperity Lab | UC San Diego SCHOOL OF SOCIAL SCIENCES Department of Economics

St.Gallen Endowment for Prosperity through Trade

cBrief 6: Tariffs Cannot Fund the Government

Evidence from Tariff Laffer Curves

Simon J. Evenett* *IMD Business School and SGEPT*

Marc-Andreas Muendler** *UC San Diego, CESifo and NBER*

April 4, 2025

Until the late 19th century, states raised most of their government revenues from import tariffs. Could the practice work today? A side effect of taxes is that they discourage the economic activity that they are assessed on. Tariffs are taxes on imports and no different: they shrink trade. We allow tariff revenues to change an economy's savings and therefore the trade balance, as the U.S. administration intends. Then the displacement effect of import tariffs is so strong that tariff revenues cannot plausibly fund more than a few weeks of annual U.S. government spending.

The U.S. Department of the Treasury reports that in 2024 US$ 2.43 trillion was collected in federal individual income taxes (FiscalData, 2025), representing just under half the $4.92 trillion total tax take. Senior members of the new U.S. administration, including President Donald J. Trump himself, have claimed that import tariffs can be raised to levels that can finance significant tax cuts. Just recently, the President's senior trade advisor Peter Navarro claimed that $600 billion more could be collected each year in import taxes. Given the strained public finances of the United States, is this number in the ballpark?

Ever since Arthur Laffer produced his famous curve on a napkin, economists have known that—if raising revenue is the sole objective—the tax rate that maximises revenue is finite. A zero tax collects, by definition, no revenue for the government. Too high a tax and the taxed subjects give up entirely on the economic activity being taxed, and tax revenue is back to zero. So, Laffer contended, there must be a turning point somewhere between the extremes where tax revenues max out.

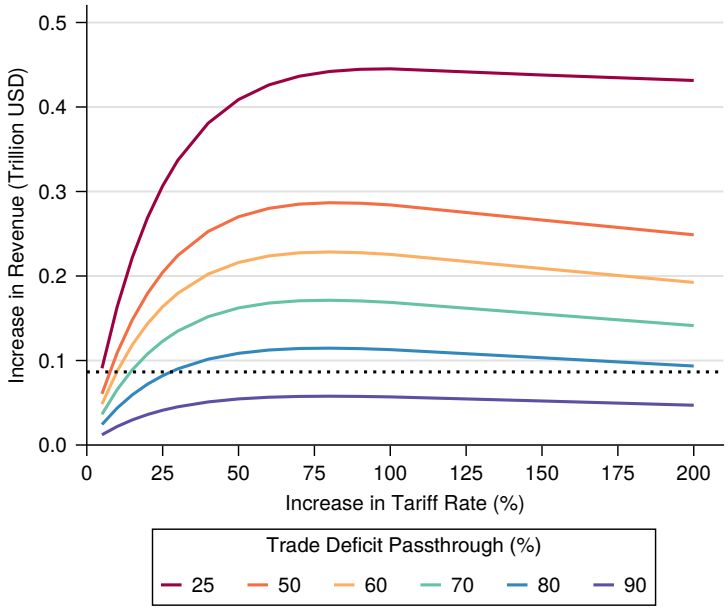
The resulting Laffer Curve has a key implication. For some range it is possible to raise the tax rate, and the revenue collected keeps going up as well, but the going gets tougher as the tax rate keeps increasing. While the benefit of more tax revenues sounds like a good outcome, the costs of dampening economic activity and misallocating resources towards the less taxed activities creates economic losses so that less and less additional tax revenue comes in. In principle, these arguments apply to import taxes, otherwise known as tariffs, as well. When tariffs increase, they discourage the taxed activity, trade. The relevant empirical question is: at what import tax rate do tariff revenues max out?

We deployed the cModel, a computational model of the world economy that captures domestic and cross-border supply chains and is built on cutting-edge microeconomic foundations, to answer this question. We consider across-the-board uniform tariff increases which, after all, the President campaigned on implementing. No doubt fancier configurations are possible—with some trading partners being hit more

*Professor of Geopolitics & Strategy, IMD Business School, Switzerland; Founder, The St. Gallen Endowment for Prosperity Through Trade, St. Gallen, Switzerland; Co-Chair, Global Futures Council on the Future of Trade and Investment, World Economic Forum; *simon.evenett@sgept.org*.

**Professor, Department of Economics, and Founding Director, Globalization and Prosperity Lab (gplab.ucsd.edu), University of California–San Diego, La Jolla, California; *muendler@ucsd.edu*. Further affiliations: CESifo and ifo; NBER; U St.Gallen; IGC.

Figure 1: Tariff Laffer Curves.
Peak tariff revenues are closer than you may think.



Notes. With an increase in the ad-valorem tariff rate on U.S. imports, tariff revenues can go to U.S. government consumption, or household consumption if rebated through tax cuts, and will then be partly applied to savings or repayment of existing debt. If 25 cents of a dollar of tariff revenues go to savings, or repayment of debt, then the U.S. trade deficit shrinks by 25 cents on the dollar and the top (dark red) curve depicts the evolution of tariff revenues as the tariff rate increases. If 90 cents of a dollar of tariff revenues go to savings, or repayment of debt, then the U.S. trade deficit shrinks by 90 cents on the dollar and the bottom (dark blue) curve depicts the evolution of tariff revenues as the tariff rate increases. Similarly for the remaining curves between the two extremes. The dotted horizontal line marks total tariff revenues of $86 billion as collected by the U.S. government in 2024.

than others as under the Executive Order of April 2—but results from a constant additional tax rate on all imports provide a useful benchmark for policy deliberation. Who knows at what levels tariffs will ultimately settle in the weeks and months to come, so we consider a uniform metric that is quick to understand and not subject to political whim.

Unlike most analyses of this nature, we do not fix the trade balance—the gap between total exports and total imports. The Trump administration wants higher import tariffs to cut the U.S. trade deficit and to raise revenues for the federal government. As you might surmise, there is a tension between these two objectives: the more successful tariffs are at cutting total imports the fewer foreign goods there are to tax. This trade-off comes through clearly in the results that follow.

We considered a wide range of cases, where each dollar of import taxes collected reduces the trade deficit by 25 to 90 cents. For each case we simulated the resulting trade flows and import tariff revenues collected, and then allowed the extra tax revenues to be used to build up savings, or to repay existing debt, and shrink the U.S. trade deficit alongside. As the trade balance and import activity change, we plotted Tariff Laffer Curves in the figure on the top of this page. Even in the extreme case when U.S. savings only go up by 25 cents on the dollar of tariffs collected, the maximum gain in government revenue is less than $500 billion (dark red curve in the figure).

When every dollar of tariff revenue collected results in the trade deficit falling 50 cents or more (the dark orange curve in the figure), the total additional revenues never exceed $300 billion. The more import tariffs reduce the trade deficit, the smaller the additional revenues collected by the federal government. For comparison purposes, the dotted horizontal line shows the total amount of tariff revenue collected by the U.S. government in 2024, around $86 billion. If the tariff revenues were fully passed on to U.S. families as a tax rebate, then as much as 94 percent of the tax rebate could go to build up savings or to repay debt, and only 6 percent to consumption, as was the case in recent episodes of tax rebates (Orchard, Ramey and

Wieland, 2025). As a result, the trade deficit would shrink by 94 cents on the dollar of tariff revenues and we would find government revenues to follow a trajectory of little increase (below the dark blue curve).

That the Tariff Laffer Curves have a gentle downward slope after they peak has another salient policy implication: if the Trump administration overshoots and sets too high an import tariff, then the total revenue gain barely falls. So, while tariff escalation and retaliation would lead to mounting cost increases on U.S. firms that import parts and components and on U.S. families who buy foreign food, toys, and clothes, the contribution to the U.S. public finances would not fall much.

To put the $300 billion and $500 billion tax revenue gains at the high end in perspective:[1]

- $300 billion extra government revenue would finance just over two weeks of U.S. federal government spending.
- $500 billion extra government revenue would finance less than four weeks of U.S. federal government spending.
- Current tariff revenues of $86 billion fund just over 4 days of U.S. federal government spending.

There is no case in the figure where import tariff hikes could raise an extra $600 billion in government revenues. To reach Mr. Navarro's $600 billion revenue gain, the U.S. trade deficit would have to shrink very little under the additional tariffs. In short, the Laffer rationale applied to U.S. trade explains why a return to the McKinley era, when import tariffs used to finance half of U.S. federal spending in the absence of income taxes, is unrealistic. Hiking import tariffs is not a viable solution to fund today's public finances.

[1] U.S. federal government spending in 2024 is $6.8 trillion. Current tariff revenues fund $86 billion and therefore just over 4 days of annual U.S. federal government spending. *Correction*: An earlier version of this cBrief reported wrong proportions for the simulated revenue gains.

Box: Updated cModel

Junyuan Chen, Fabian Eckert, Marc-Andreas Muendler and Fabian Trottner, UC San Diego (2025)

The cModel, a computational model of the global economy, is based on the Ricardian trade framework by Eaton and Kortum (2002), with competitive global markets for goods and services and with competitive local factor markets for labor and capital. Goods and services enter production as intermediate goods in addition to their final uses by households and government. In each industry and country, producers combine local labor and capital with globally procured intermediate inputs and offer a set of varieties. An active government in each country collects revenues from sales taxes and tariffs, while government expenditure is spent on subsidies as well as goods and services procurement. Producers, households and governments globally procure varieties within industries from the least costly producer. The simulation algorithm, implemented in Julia, calls equilibrium convergence for mutually consistent producer, household, and government decisions and budgets.

Version 2.0 of the cModel, underlying the simulations of this cBrief 6, is based on updated data for model calibration and accommodates state-specific simulation outcomes for all 50 U.S. states and Washington, DC. For details on Chen et al. (2023) version 1.0 see the online documentation.

From the ITPD-E data Release 2 (July 2022) by Borchert et al. (2022), we obtain production and trade flows for 170 supply industries in the benchmark years 2017-2019, including services trade. We aggregate activities in the mining sector and model a total of 165 supply industries. To account for the input-output relationships across countries and activities, we employ the Extended OECD Inter-Country Input-Output (ICIO) tables from the OECD (2023) for the years 2018-2020, extracting shares of supply industries by source country in use industries by destination (under Cobb-Douglas production) as well as expenditure shares of supply industries in (Cobb-Douglas) household and government consumption. Using shares of supply industries within use industries preserves positive value added by use industry but can result in negative inventory changes for data consistency. We apply the Wolsky (1984) disaggregation to infer a consistent input-output structure for the slightly aggregated 165 ITPD-E Revision 2 industries that map into 41 matching aggregates of the 45 industries in the OECD-ICIO data. The baseline cModel has 76 individual countries (78 economies after splitting China and Mexico into export processing and main economies) plus an aggregate of the rest of the world for mutual consistency between the ITPD-E and OECD-ICIO data.

We make three additional changes to version 2.0 of the cModel. First, we remove the newly generated tariff revenues Δ from the government budget constraint in a destination country d:

$$P_d^G C_d^G \leq T_d - S_d - \Delta,$$

where $T_d - S_d$ is net government revenue (sales tax and tariff revenues less subsidy expenditures), P_d^G is the aggregate price index of government consumption, and C_d^G is government consumption. Second, we rebate the additional tariff revenues Δ to domestic households through a matching tax cut, so that the household budget constraint becomes:

$$P_d^F C_d^F \leq w_d L_d + r_d K_d + (1-\zeta)\Delta - [NX_d + \zeta\Delta],$$

where $NX_d + \zeta\Delta$ are country d's net exports (the trade surplus), $w_d L_d$ is labor income and $r_d K_d$ capital income, P_d^F is the aggregate price index, and C_d^F is the households' final consumption. In the absence of a savings choice, a trade surplus would be similar to an exogenously mandated cross-country income transfer. Third, we acknowledge that households use tax rebates only partly for consumption (Orchard, Ramey and Wieland, 2025), at a marginal propensity to consume of $(1-\zeta)$, and use the remainder ζ to repay debt or save—raising the country's trade balance by a share $\zeta = .25, .50, .60, .70, .80, .90$ of Δ. We reduce the trade balances in all other countries $s \neq d$ by a fraction of $\zeta\Delta$ proportional to those countries' trade flows to destination d. Equivalently, instead of the households, we could have the government save or repay foreign debt with a fraction ζ of the additional tariff revenues Δ.

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