24-1 Why Trump's Tariff Proposals Would Harm Working Americans

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At the beginning of its history, the United States relied on tariffs—taxes on imported goods—as its major source of government revenue. That changed starting in the early 20th century, with the enactment of the federal income tax and the advent of a new consensus recognizing tariffs as regressive, burdening the working class while leaving untaxed much of the income accruing to the wealthy.[1] Today, less than 2 percent of government revenue in high-income countries comes from import taxes.

Is the United States on the cusp of reverting to an antiquated approach to funding its government? Presidential candidate Donald Trump is proposing to reduce US reliance on income taxes while increasing reliance on import tariffs, doubling down on an agenda he began during his first term as president. In a campaign devoid of specifics across many policy arenas, Trump has repeatedly advanced two key fiscal policy proposals. First, he would extend the tax cuts from the 2017 Tax Cuts and Jobs Act (TCJA), the signature legislative accomplishment of his administration. At times, candidate Trump and his advisors have also suggested new rounds of tax cuts, perhaps coupling the extension with a lower corporate rate (Stein 2024) or unspecified other tax cuts. Second, candidate Trump has pledged to increase tariffs far beyond their current levels, suggesting a

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1 In this Policy Brief, we use the term *regressive* in the way it is typically used in the public finance literature. A tax is regressive if tax payments relative to income fall as income increases; a tax is progressive if tax payments relative to income increase as income increases. For more on the history of tariffs and taxation, see Weisman (2002) and Irwin (2017).

10 percent "across-the-board" tariff (Curtis and Baschuk 2023) on imports from every US trading partner as well as a 60 percent or more tariff on imports from China (Diaz 2024).[2]

As fiscal policy, the Trump agenda amounts to regressive tax cuts, only partially paid for by regressive tax increases. A lower-bound estimate of costs to consumers indicates that the tariffs would reduce after-tax incomes by about 3.5 percent for those in the bottom half of the income distribution; tariffs would cost a typical household in the middle of the income distribution at least $1,700 in increased taxes each year.[3] If executed, Trump's latest tariff proposals would increase manifold the distortions and burdens created by the rounds of tariffs levied during the Trump administration (and sustained during the Biden administration), while inflicting significant collateral damage on the US economy. Domestic job creation claims for the 2018–19 return to protectionism have simply proved false, as discussed below.

This Policy Brief highlights the distributional implications of Trump's proposed fiscal switch. First, we discuss the incidence of tariffs, reviewing recent literature that concludes that US purchasers of imports bear the burden of tariff increases. Second, we leverage recent research to provide approximate calculations for the cost of the higher proposed tariffs to US consumers, considering the impact of higher prices. Lower-bound estimates of the costs are substantial, nearly 2 percent of GDP. Third, we estimate the likely revenue consequences of Trump's proposed tariffs, comparing them to the fiscal costs associated with extending the TCJA tax cuts. Upper-bound projections of tariff revenues would fall far short of what is needed to cover the tax cut extensions, even ignoring the negative effects of tariffs on economic activity that are likely to further dampen fiscal revenues. Fourth, we examine how the burden of tariffs is distributed across US households. Both the tariffs and candidate Trump's tax proposals entail sharply regressive tax policy changes, shifting tax burdens away from the well-off and toward lower-income members of society. Finally, we describe why tariffs fail to meet other policy objectives, instead causing harm to many US workers and industries, prompting retaliation from trading partners, worsening international relations, and, in the end, expanding trade deficits.

UNDERSTANDING WHO PAYS FOR TARIFFS

In contrast to Trump's frequent, and mistaken, claims that foreigners bear the impact of tariffs, economists have long understood that tariffs burden domestic purchasers of imported goods.[4] Because imports are the difference between domestic demand and domestic supply, a tariff affects both sides of the market.

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2   These actions would violate US commitments to both free trade agreement (FTA) partners and the World Trade Organization (WTO).

3   Table B1 of US Census data on US income indicates median household after-tax income of about $64,000 in 2022. Calculations in the text suggest the median taxpayer loses about 2.7 percent of after-tax income due to the Trump tariff proposals. These calculations are a lower bound since they do not include transfers from consumers to domestic producers, discussed below.

4   There have also been questions in the Trump administration about what tariffs really are. Treasury Secretary Steven Mnuchin claimed: "Tariffs are a tariff on imports. They're not a tax." However, the very definition of a tariff is a tax on imports. Thus, tariffs are a consumption tax, albeit a particularly distortionary type of consumption tax.

Tariffs harm consumers by increasing prices in affected markets

Classic tariff analysis
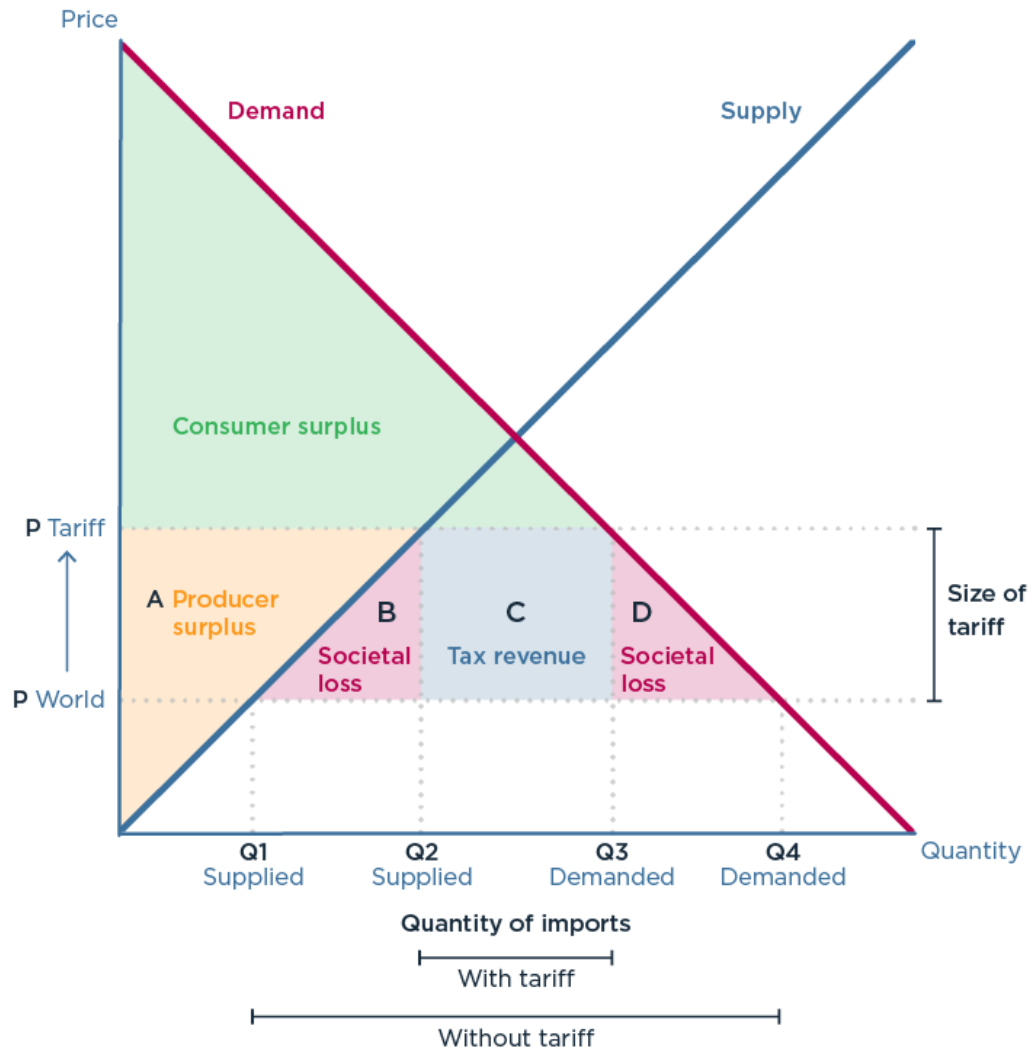
Source: Authors' illustration.

Analytically, we can think of a tariff as the combination of a tax on domestic consumption, since it raises the price buyers pay domestically, and a subsidy to producers, since it raises the price producers face when they sell to domestic buyers. Tariffs are considered an inefficient way to raise revenue because they generate losses to domestic buyers that exceed the sum of benefits to producers and tariff revenues.

The classic textbook diagram, shown in figure 1, is so familiar that it was even put on a t-shirt. The figure illustrates typical supply and demand in the market for a consumer good. If trade is unfettered by tariffs, consumers pay the world price, *P(world)*, and purchase a quantity *Q4*. Producers sell at the world price and they produce the amount *Q1*. The difference between domestic demand and domestic supply is the free trade level of imports (quantity *Q4 − Q1*).

A tariff raises the price of market transactions for both producers and consumers. If the world price is constant, the new domestic price is $P(t) = P(w) + t$, where t is the amount of the tariff. Domestic buyers of the good are obviously worse off, as some drop out of the market at the higher price, and those who continue to buy face a higher price. In figure 1, the total consumer loss can be measured by the areas a, b, c, and d. Area a represents a gain to producers, an amount that increases "producer surplus." Producers gain from a tariff because the domestic price rises to match the higher price of imports; that's the source of "protection" for producers. For example, if a $90 tariff raises the price of foreign washing machines by $90, domestic producers can also charge $90 more for their machines, allowing less efficient production to expand while increasing profit margins for existing sales. Area c represents tariff revenue and is transferred from consumers to the US Treasury in the form of import taxes.

Importantly, tariffs result in societal losses (areas b, d) that are not recouped by the government or domestic suppliers. These "deadweight losses" stem from two sources of inefficiency: reductions in (1) production efficiency as inefficient producers expand at the expense of other sectors in the economy (including nontraded goods and exports), and (2) consumption efficiency as some consumers are priced out of goods they would otherwise choose to purchase.

Tariffs cause a level shift in consumer prices in the year that they are implemented, similar to a one-time burst of inflation. In effect, the economic burden of a tariff is similar to a retail sales tax or a value-added tax: an increase in the price paid by consumers that is levied with each additional purchase.[5] However, tariffs are a more distortionary consumption tax, since they cause an inefficient reallocation of production, in addition to a consumer price increase.

In theory large countries may experience some terms-of-trade benefits from tariffs (since reduced demand from a sufficiently large buyer may reduce the price exporters are able to charge for their products).[6] In practice, no study of the Trump tariffs has found any evidence that US tariffs result in lower prices for US importers. On the contrary, study after study has shown that US tariffs levied since 2017 have instead been fully "passed through" to American buyers.[7]

Further, it is important to remember that tariffs also typically provoke retaliation, which can undo possible terms-of-trade benefits. The tit-for-tat nature of trade wars was dramatically illustrated during the 2018–19 US-China trade war. As calculated by Chad P. Bown (2021), China retaliated against US tariff imposition by eventually subjecting 58 percent of US bilateral exports to an average tariff of 21 percent. Particularly hard hit were US agricultural exports and, to a lesser extent, capital equipment exports. Counterfactual simulations

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5 For more on the relationship between tariffs and inflation, see Hufbauer, Hogan, and Wang (2022), Robinson and Thierfelder (2022), and Summers (2022). A recent Bloomberg analysis (Martin 2024) found that Trump's tariff proposals would increase consumer prices by 2.5 percent and reduce GDP by 0.5 percent.

6 In 2023 the United States accounted for 13 percent of world merchandise imports (UNCTAD 2024). This share is lower than the US share of world GDP, which is 25 percent (measured in current US dollars).

7 See, e.g., Fajgelbaum et al. (2020a, 2020b), Fajgelbaum and Khandelwal (2022), Amiti, Redding, and Weinstein (2019, 2020), Cavallo et al. (2021), Flaaen, Hortaçsu, and Tintelnot (2020), and Houde and Wang (2023). Some buyers of imports are, in fact, businesses, which may pass along their increased costs to consumers. We do not separate this mechanism, instead assuming that all costs are fully passed through to consumers eventually. There may be imperfect pass-through in the case of imperfectly competitive firms, but we expect that that consideration applies to only a minority of firms.

by Pablo Fajgelbaum and colleagues (2020a) suggest that Chinese retaliation during the trade war destroyed more than half of the producer surplus attributed to US tariffs on China.

ESTIMATES OF THE COST OF HIGHER TARIFFS TO US HOUSEHOLDS

Studies of the Trump tariffs have found substantial costs to the average US household. Xiangtao Meng, Katheryn Russ, and Sanjay Singh (2023, table 1) provide an overview, including a convenient tabular summary of costs to households estimated by these studies. The Congressional Budget Office (CBO 2020) expected tariffs to reduce individual household income by about $1,300 in 2020. Studies by Mary Amiti, Stephen Redding, and David Weinstein (2019, 2020) and Fajgelbaum and coauthors (2020a, 2020b; Fajgelbaum and Khandelwal 2022) suggest hundreds of dollars in costs per year. Russ (2019) notes an estimated increase in household costs through the first half of 2019 of about $800. Aaron Flaaen, Ali Hortaçsu, and Felix Tintelnot (2020) find that tariffs on washing machines raised their costs by $90, with matching cost increases for dryers (which were not subject to the tariff)!

Given the increase in trade volumes, prices, and incomes since these studies were performed, the cost of higher tariff rates would be even higher today. A recent Center for American Progress analysis found that a 10 percent tariff would act like an annual consumption tax increase of about $1,500 per household; a taxpayers' organization forecast even higher costs (Duke and Mulholland 2024).[8] Such burdens on households also raise prices, a particularly undesirable consequence given concerns about inflation in the post-COVID economy.

Studies that simulate the costs of variations from these policies also find large consumer impacts. For example, Gary Hufbauer, Megan Hogan, and Yilin Wang (2022) explore the benefits of an across-the board tariff cut of 2 percentage points and find that it would have effects on prices equivalent to a one-time reduction in consumer price index (CPI) inflation of around 1.3 percentage points. These effects result in part from increased market competition, saving the typical household hundreds of dollars.

The scale of trade barriers proposed by candidate Trump is unprecedented, but their costs to the US economy is informed by the empirical evidence from studies of the 2017 tariffs on solar panels, washing machines, aluminum, steel and iron, and Chinese imports. Importantly, these studies convincingly find no evidence of terms-of-trade benefits for the United States from these tariffs. Rather, the data show that higher tariffs are fully reflected in higher prices for US buyers.

Prior work also suggests a simple method for calculating the loss to US import buyers from the tariffs.[9] Dixit and Norman (1980) provide a formula

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8   The National Taxpayers Union estimated that household taxes would increase by $2,600 a year, labeling this the "largest tax increase since World War II" (Riley 2023).

9   This calculation assumes a first approximation that starts from tariffs of zero, which is appropriate for most US imports given currently low US tariff rates. The exception is tariffs on Chinese imports, which average almost 10 percent. Consequently, this formulation may somewhat overestimate areas *b* and *d* in figure 1 for those goods subject to trade-war tariffs since it will effectively calculate a rectangle rather than a trapezoid. However, many other sources of deadweight loss are excluded from this analysis, including effects on rent seeking, consequences of retaliation, and distortions associated with possible subsidies to those harmed by retaliation, all of which were observed during the trade war. Thus, it is unlikely that we are overestimating the efficiency losses from this policy experiment.

Table 1
Costs to buyers of imports from Trump tariff waves

Tariff wave	Targeted imports as a share of GDP	Average import price increase	Total cost as a share of GDP
US China trade war (2018–2019)	1.8%	20%	0.4%
10 percent across-the-board tariff	9.8%	10%	1.0%
60 percent China tariff on trade war goods	1.0%	44%	0.4%
60 percent China tariff on other Chinese goods	0.6%	60%	0.4%
New tariffs, total			**1.8%**

Sources: US-China average import price increase calculated by authors based on announced tariff increases and tariff coverage. Total US trade comes from US Bureau of the Census, and GDP comes from the Federal Reserve Economic Data (FRED).

for "equivalent variation," which is defined as the sum of money needed to leave US buyers indifferent to a tariff change, if properly distributed across the economy. Fajgelbaum et al. (2020a) apply this formula to estimate the economic cost of the 2018–19 trade war tariffs. The calculation is the product of three terms: the import share of value added, the fraction of US imports targeted by increased tariffs, and the average tariff-induced import price increase.[10] In table 1, we calculate this loss for the Trump tariff proposals following the same method and collapsing the first two ratios to show targeted imports relative to GDP. Our analysis focuses solely on the revenue and distortion effects of tariffs, ignoring the transfer to producers that corresponds to area *a* in figure 1. As such, it constitutes a lower bound of consumer losses from the tariffs, as it doesn't "count" the redistributive effects to domestic producers, which may also be large.[11] In these calculations, based on Trump's recent public statements, we assume his proposal would levy an additional 10 percent tariff on all countries aside from China and raise the tariff rate up to a 60 percent on all Chinese goods.[12]

Applying the finding that tariffs are fully passed on to US buyers, we estimate that the combination of new Trump tariff proposals will generate consumer costs of at least 1.8 percent of GDP, not considering further damage from foreign

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10 Updated analyses (Fajgelbaum et al. 2020b, Fajgelbaum and Khandelwal 2022) account for all US tariffs and foreign retaliation levied in 2018 and 2019, finding a loss to buyers of imports of about 0.6 percent of GDP. Our estimate of the economic loss of these Trump tariffs in table 1 is lower, as it captures the China trade-war tariffs only.

11 This method is appropriate if one views the transfer to producers as a key part of the policy goal. Still, one should note that this transfer from consumers to producers is a direct cost to taxpayers. Also, some of the producers who gained as a result of the Trump tariffs are foreign, not domestic. Freund et al. (2023) analyze highly disaggregated US trade flows and find that US imports from China were largely replaced by imports from other countries, with no evidence of reshoring of production back to the United States.

12 This assumption is consistent with subsequent clarifications from Robert Lighthizer (reported in Savage, Swan, and Haberman 2023). Trump has indicated that tariffs may be higher than these assumptions; see, e.g., a recent interview in TIME magazine..

retaliation and lost competitiveness. This calculation implies that the costs from Trump's proposed new tariffs will be nearly five times those caused by the Trump tariff shocks through late 2019, generating additional costs to consumers from this channel alone of about $500 billion per year.[13]

Tariff-related costs to consumers and buyers of imports are substantial, but they do not all accrue to the Treasury. Some accrue to domestic producers as surplus or profits (area *a* in figure 1). Such costs are not included in our table 1 calculations, but including the redistribution from domestic consumers to producer profits could conceivably double the cost. (We do not attempt to calculate area *a* here, since it entails numerous assumptions.)[14] And some fraction of additional corporate profits accrues to foreign shareholders; as of 2022, these shareholders accounted for 42 percent of outstanding US stock holdings (see Rosenthal 2024).

In contrast, extending Trump's tax cuts would have far smaller benefits to households. Fully extending TCJA provisions (including built-in business revenue-raisers and interest) would entail about 1 percent of GDP in tax cuts, accruing disproportionately to the top end of the income distribution.[15]

FISCAL IMPLICATIONS

In terms of government revenue, US Customs would expect to collect both the 10 percent tariff on all imported goods and (by our assumption regarding the Trump China tariff policy) an additional 50 percent tariff on Chinese goods (on a weighted average basis). To calculate the revenues from such tariffs, one must account for the associated import elasticity, which is dependent on the domestic production elasticity (how much more do producers make because of the increase in price?), the domestic consumption elasticity (how much less do consumers demand of the now more expensive goods?), and world market conditions. World markets can respond in different ways. With respect to the tariff on Chinese goods, some trade reshuffling may occur, with Chinese products rerouted to other markets while other foreign products enter US markets. Further, some transshipment may occur, if Chinese goods are shipped through other countries to mask their origin or if modifications are made in an intermediate destination in order to change the origin of the good.[16]

The costs from Trump's proposed new tariffs will be nearly five times those caused by the Trump tariff shocks through late 2019, generating additional costs to consumers from this channel alone of nearly 2 percent of GDP.

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13 Throughout this analysis, we focus solely on the costs of additional tariffs, not the costs of tariffs levied by the Trump administration and (in many cases) retained during the Biden administration. These costs are also substantial, as shown in table 2, and the consumer and deadweight losses from their maintenance continue to be borne. So far, President Biden has criticized the Trump across-the-board tariffs but has announced only modest changes in current trade policy.

14 Goods imports relative to GDP are about 11 percent. Data from Consumer Expenditure Surveys indicate that about 30 percent of income is spent on goods that are tradable (defined here as consumption excluding housing, education, personal insurance, medical services, health insurance, cash contributions, and restaurant dining). To figure out the size of area *a*, one would need to assess how much domestic goods production is in competition with imported goods and how many products are imported and not produced domestically.

15 This calculation includes the full costs of extensions but not interest costs. Data are from the Committee for a Responsible Federal Budget (for extension costs) and CBO (for GDP forecasts over the coming decade).

16 For a nuanced analysis of the evolution of US-China trade since the trade war, see Bown (2022).

All of these margins of behavioral response create substantial uncertainty regarding the revenue impact of tariffs, and the wide variation of trade elasticities in the literature does not help settle the matter. As one possible benchmark for analyzing the across-the-board 10 percent tariff proposal, assume the tariff semi-elasticity of import demand is −1. Semi-elasticity describes the relationship between a percentage point tariff change and the resulting percentage response of imports. In this case, a semi-elasticity of −1 implies that a 10 percentage point increase in tariffs reduces imports by 10 percent. This assumption would keep overall US import expenditures approximately constant. To analyze the Chinese tariff proposal, we assume a higher semi-elasticity, since substitution among different import sources is possible. Assume a semi-elasticity of −1.5, such that a 50 percentage point increase in tariffs reduces imports from China by 75 percent.[17] Given these behavioral assumptions about how imports respond to tariffs, we estimate the additional government revenues tariffs would generate, shown in table 2. The 10-year revenue gain also needs to account for the growth in trade; here we assume that trade would grow at the same pace over the coming years as it did over the prior 10 years (2014–23).

While such a dramatic increase in tariffs may generate substantial tariff revenues, such calculations do not account for several factors. First, trade elasticities may increase over time (Boehm, Levchenko, and Pandalai-Nayar 2023); that consideration would cause revenues to fall over time. Second, trade diversion would cause some loss of revenue from Chinese imports to show up as increased imports from the rest of the world (subject to a lower tariff). Third, there may be large costs from subsidizing those hurt by foreign retaliation, as occurred during prior rounds of tariffs (see next section).[18] Fourth, there will be additional economywide costs due to increased rent seeking, as companies use more economic resources seeking the benefits of protection or in filing for exemptions from tariffs due to certain hardships. These rent-seeking costs are not included in our analysis even though they may be substantial in practice.

Finally, these estimates also neglect important negative effects from reduced economic growth. For example, a Committee for a Responsible Federal Budget (CRFB 2023) analysis estimated that $2.5 trillion over the same budget window (2026-2035) would be raised from the 10 percent tariff policy, with this projection falling to $2.0 trillion if lower economic growth is factored into the estimates.[19] A subsequent analysis (CRFB 2024) of the proposed 60 percent

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17   Some elasticities in the literature are substantially higher than these estimates, but they also pertain to policy experiments that allow much more substitution than an across-the-board tariff. Substitution away from China to other exporters of the same goods was possible once the 2018–19 trade war started, for example. In the case of semi-elasticities at or above 2, Chinese imports would entirely disappear if the tariff were increased by 50 percentage points, implying larger deadweight losses and no revenue collection.

18   In this analysis, we do not make any assumptions about the use of tariff revenue, and thus we do not "distribute" resulting effects on government spending or deficits across the population in any particular manner.

19   The CRFB models the tariff increase as "topping up" existing tariffs that are below 10 percent to 10 percent, rather than (as assumed here) a 10 percent increase in all tariffs; our assumption is consistent with clarifications from Lighthizer (Savage, Swan, and Haberman 2023). The CRFB assumes an import elasticity of −1.7, supported by analysis from Gruebler, Ghodsi, and Stehrer (2022, table 1), and that roughly half the tariff revenue would be subject to income and payroll tax revenue offsets (which reduce revenue collections from these taxes due to a lower tax base).

Table 2
Possible revenues from Trump's proposed tariffs

	US goods imports in 2023	Additional tariff	Anticipated imports after adjustment	Additional revenue in 2023	Ten-year revenue (2026–35)
Rest of world	$2.69 trillion	10%	$2.42 trillion	$242 billion	$3.0 trillion
China	$427 billion	50%	$107 billion	$53 billion	$530 billion
Offset[a]				–68 billion	–820 billion
Total				$227 billion	$2.75 trillion

a. Offsets account for lower revenues elsewhere in the system due to consumption tax increases; revenue changes from excise taxes are often scaled to allow for a 21–25 percent offset; a 23 percent offset is used here. See CBO (2022). Offsets will generally increase the regressivity of this tax change, since the taxes that are shrinking in size are progressive taxes like the income tax.

Note: In this table, the new Chinese tariffs are collapsed into one row and the additional tariff rate is calculated based on weighted averages of the tariffs in table 1. World trade is assumed to grow at a nominal rate of 3 percent per year, based on the approximately 3 percent growth rate of the prior ten years; Chinese trade is assumed to have a flat trajectory, based on the approximately zero growth rate of the prior ten years. This simple analysis overstates revenues since it does not account for dynamic budgetary effects that operate through real GDP.

Source: Trade data are from the Bureau of Economic Analysis.

China tariff estimated a $2.4 trillion revenue effect on a static basis, dropping to a range of −$50 billion to $300 billion when considering the resulting drop in imports and depressed US growth.[20] Our analysis does not include dynamic effects on economic growth, but they are important.

Even ignoring growth effects, the consequences of increasing trade elasticities over time, the likely need to subsidize those hurt by retaliation, and the costs of rent seeking, tariff revenues would fall far short of the revenue needed to pay for a full extension of expiring provisions in the TCJA and to reverse built-in business revenue raisers that are a feature of the law.[21] Together, these TCJA extensions would cost $4 trillion over the coming budget window, or $5 trillion if the interest costs associated with the increased debt are included, assuming legislation in 2025 would extend these provisions over 2026–35. Figure 2 shows these fiscal costs.

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20 Tariff increases, especially in the context of retaliation by trade partners, reduce growth in part by raising uncertainty for firms facing sourcing and investment decisions. Handley and Limão (2022) document the role for trade policy in deterring trade, while Amiti, Kong, and Weinstein (2022) estimate that the tariff announcements caused the VIX, a market-based measure of volatility, to more than double.

21 For example, in 2026 GILTI (minimum tax) and FDII (export subsidy) rates are scheduled to increase. Since 2022 limitations on the deductibility of business interest have become more binding, and investment expensing provisions are becoming less taxpayer-favorable over 2023–26. In 2023 the tax treatment of research and development expenses became less favorable. Congress has shown enthusiasm for preventing these tax increases and even retroactively relieving those that have already occurred. For example, in early 2024 the House passed a tax bill that would extend business provisions that have become less advantageous under TCJA, and there is likely to be persistent lobbying pressure for these extensions.

Figure 2
Fully extending the Tax Cuts and Jobs Act could add almost $5 trillion to the deficit over 10 years

Cumulative deficit effects of extending the TCJA and reversing revenue raisers, billions USD, 2026–35
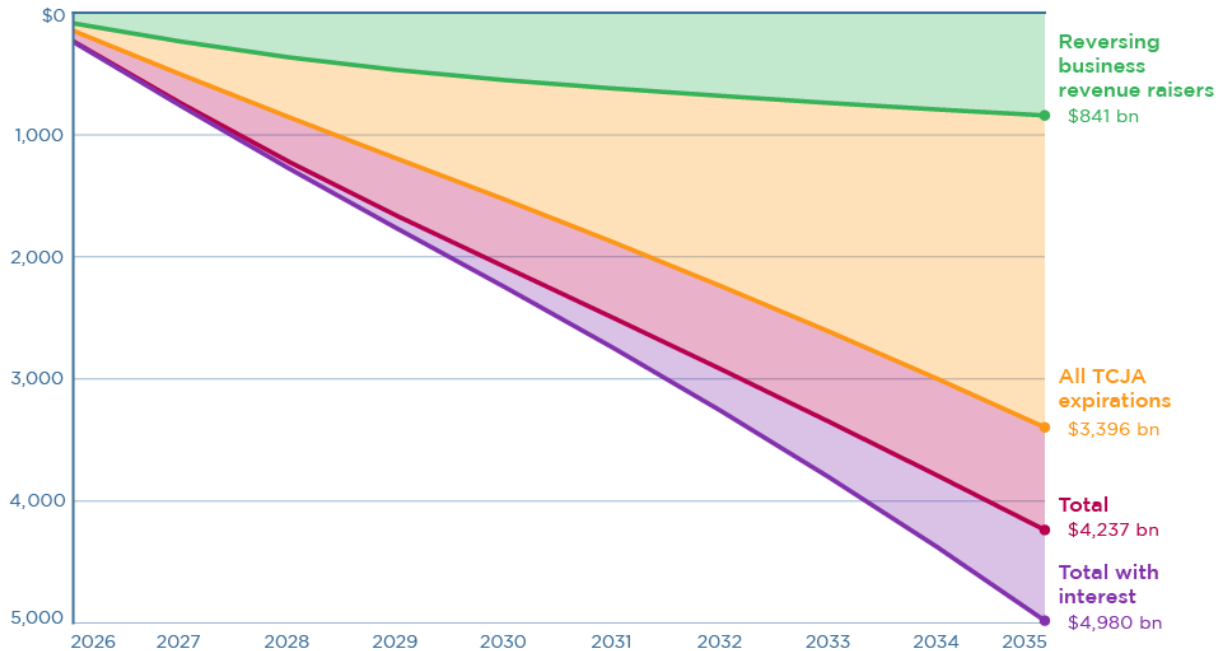
TCJA = Tax Cuts and Jobs Act
Sources: Estimates are from the Committee for a Responsible Federal Budget. These estimates are similar to those published by the Congressional Budget Office if adjusted to cover the same provisions over a similar budget window.

DISTRIBUTION OF IMPORT TAX INCREASES

Tariffs have a negative impact on both efficiency and economic growth, but the burden of tariffs is felt differently across the population. Economists typically consider regressive taxes to be those that have higher relative burdens (as a share of income) for lower-income people, whereas progressive taxes impose higher relative burdens (as a share of income) for higher-income people.

Assigning tariff burdens to different parts of the population, or "distributing" the effects of a tariff increase, is not entirely straightforward. Indeed, there is no comprehensive data source that indicates how much households at different points in the income distribution spend on imported goods in total, much less on imports from particular countries. Given this lack of data on import consumption, tariffs might be distributed in a manner akin to consumption or excise taxes. Such a procedure reflects the fact that tariffs either fall on final consumption directly or result in importing firms' pass-through of tariffs to the prices of the goods they sell domestically.
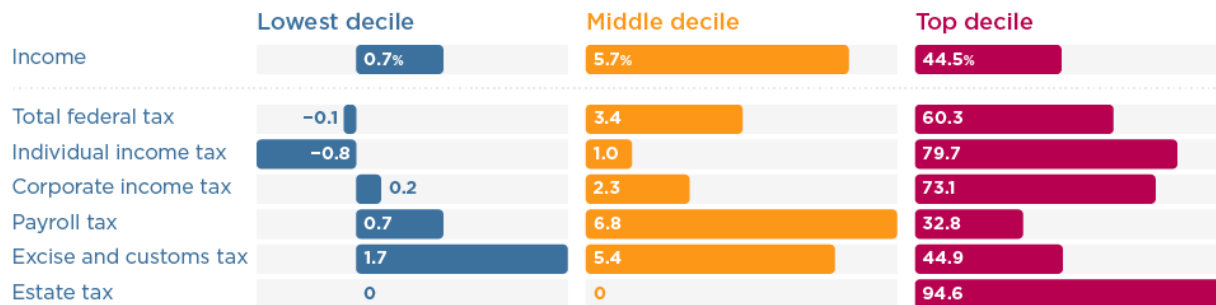
When the US Treasury considers the distribution of excise taxes and customs duties, technical considerations prevent it from allowing the price level to rise, since the price level is assumed to be determined by macroeconomic factors outside the tax distribution model.[22] This means that Treasury will typically "pass

22   For more detail on the Treasury distribution methodology, see Cronin (2022) and the appendix.

Figure 3
Consumption-based taxes are less progressive than other tax instruments, putting more burden on lower-income taxpayers

Share of income and total tax burden for the lowest, middle, and top deciles

	Lowest decile	Middle decile	Top decile
Income	0.7%	5.7%	44.5%
Total federal tax	−0.1	3.4	60.3
Individual income tax	−0.8	1.0	79.7
Corporate income tax	0.2	2.3	73.1
Payroll tax	0.7	6.8	32.8
Excise and customs tax	1.7	5.4	44.9
Estate tax	0	0	94.6

Notes: The middle decile averages 40–60 deciles. Estate tax shares are imperceptible for both the bottom decile and the middle deciles, since they are only paid by the most well-off estates.
Source: US Treasury analysis in Cronin (2022).

back" excise taxes and customs duties in their distributional analysis, assuming that they are borne by both labor income and rents, or above normal returns to capital.[23] This method, while sensible in some respects, is likely to understate the regressivity of tariffs in the short run, compared to a method that allows prices to change. These issues are discussed in more detail in the appendix.

Still, when Treasury models excise taxes and customs duties, it finds that they are less progressive than other tax instruments. For example, figure 3 shows tax burden shares (the decile's share of the relevant tax's total burden) relative to income shares (the decile's share of total income) for three groups: the top decile of the US income distribution, the middle decile (an average of the 5th and 6th deciles), and the bottom decile. The lowest decile (shown in panel A) of the population earns 0.7 percent of the income but pays less than 0.7 percent of most taxes (with negative income tax rates due to the earned income tax credit), 0.7 percent of the payroll tax, and 1.7 percent of excise or customs duties. The middle deciles earn 5.7 percent of income, paying relatively less income tax and relatively more payroll tax. For the richest decile, because most federal taxes are progressive, tax shares are much higher than income shares, with two exceptions: (1) the payroll share is much lower, since most payroll taxes do not apply above a cap, and (2) the excise and customs duty share is similar to the income share, not higher.
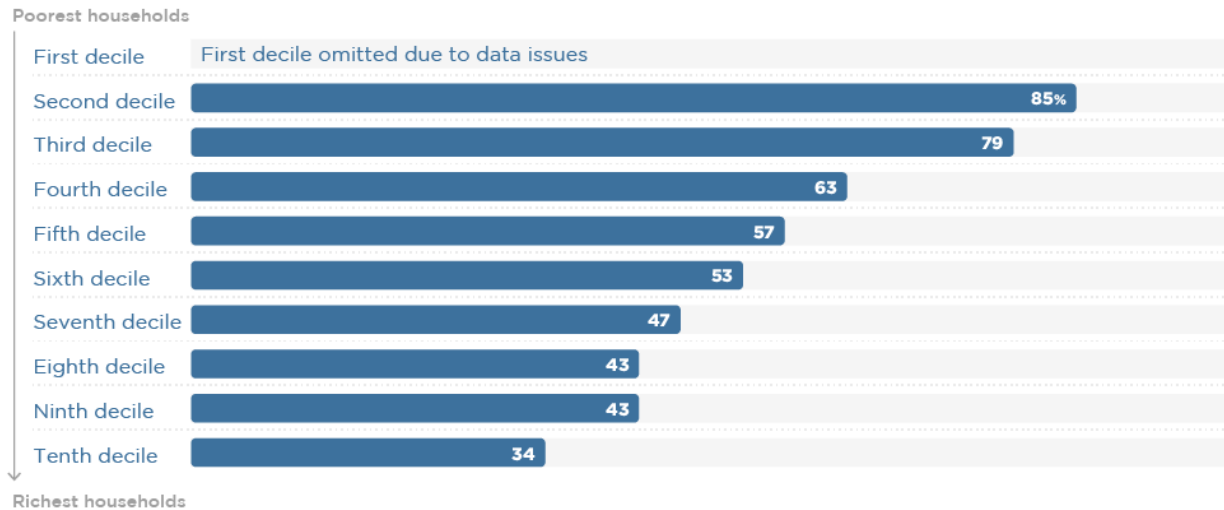
The Treasury method assumes that tariffs affect households by reducing their incomes. But another way to consider the effect of tariffs is to directly examine current consumption patterns. Of note, consumption is distributed very differently than income, which has implications for the distributional effects of consumption taxes. Consumer Expenditure Survey data on how consumption

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23   Treasury distributions are based on the current levels of excise and customs duties, which do not correspond to the tariffs proposed by the Trump campaign. For more on the Treasury method, see the appendix.

Figure 4
Lower-income households consume a much higher share of their income while richer households can afford to save more

Consumer expenditure excluding housing, personal insurance, and pensions, as a share of after-tax income by decile, 2022

Poorest households

First decile	First decile omitted due to data issues
Second decile	85%
Third decile	79
Fourth decile	63
Fifth decile	57
Sixth decile	53
Seventh decile	47
Eighth decile	43
Ninth decile	43
Tenth decile	34

Richest households

Notes: Mean expenditures and income were used in the calculations. In this figure (and in our analysis), we omit the first decile for reasons discussed in the text.
Source: US Bureau of Labor Statistics, Consumer Expenditure Surveys, 2022.

varies with income are shown in figure 4, which charts the consumption share of after-tax income, excluding housing, insurance, and pensions, as a possible guide to the impact of tariffs. Because richer households can afford to save more, they tend to have lower consumption shares.

The lowest decile often displays unusual consumption patterns in these data, so we exclude its data from our analysis to avoid exaggerating the underlying patterns.[24] Still, even beyond that decile, the pattern is clear. In the second decile, consumers spend 85 percent of their after-tax income, and this fraction declines steadily across the deciles, falling below 35 percent for the top decile. This pattern is at the root of why one might expect tariffs to be regressive taxes: lower-income households consume a much higher share of their income, and tariffs are a tax on consumption.

As reviewed in Meng, Russ, and Singh (2023), the literature has consistently found that tariffs are regressive taxes in the United States, with no notable exceptions. Russ, Jay Shambaugh, and Jason Furman (2017) and Arthur Gailes et al. (2018, an analysis from the International Trade Commission) both indicate that tariffs are a much higher burden for lower-income deciles. Fajgelbaum and Amit Khandelwal (2016) find that lower-income households are more

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24 The first decile consumes a particularly large amount, so including these data would make tariffs appear even more regressive. There are several reasons that could explain the pattern of low-income households consuming so much more of their income: They may borrow to finance consumption (especially if their low income is temporary), they may receive transfers from outside their household, or they may be reporting losses that drive down their reported income even as their consumption remains higher.

likely to spend higher shares of their income on traded goods. In contrast, Kirill Borusyak and Xavier Jaravel (2021) show a nearly flat share of traded goods in consumption, but since the share of income devoted to consumption falls with income, their finding still indicates that tariffs are regressive. Miguel Acosta and Lydia Cox (2024) present evidence of a current pattern of higher tariffs on lower-end goods than on higher-end products, giving the tariff code an additional regressive element.

While one might hope that these regressive effects on the consumer side of the market would be offset by gains to lower-income households in their roles as workers, that is not borne out in the literature (discussed below), which finds harm to many US workers from the imposition of tariffs.

Taken as a whole, the Trump fiscal agenda amounts to regressive tax cuts, only partially paid for by regressive tax increases. Figure 5 shows three distribution analyses, illustrating how elements of the Trump agenda affect after-tax income for selected income groups. The first two bars show analyses by the Tax Policy Center that indicate (a) how after-tax income changed because of the original TCJA legislation and (b) how it would change with the extension of provisions set to expire in 2025.[25] The third bar shows the burden of a nearly 2 percent of GDP consumer loss stemming from proposed tariffs, distributed according to the consumption shares shown in figure 4.[26,27]

Several factors could affect the estimates of the tariff distribution. First, the Fajgelbaum et al. calculations may need to be modified to account for longer-run behavioral responses that generate either incomplete pass-through or substitutions that would lower the consumer impact of tariffs. For example, if tariff pass-through were only 75 percent in the long run, the tariff bars would gradually shrink to three-quarters their current size, although the relative regressivity would remain. Second, the response of US import volumes to tariffs may increase in the longer run; if new sources are found for goods currently purchased from China, this could lower the negative effects of the Chinese tariffs. Third, trade policy may evolve to be either more or less punitive than the assumptions here.

Still, a remarkable pattern emerges from this analysis. As has long been understood, the TCJA tax provisions disproportionately favored those at the top of the distribution—not only the permanent corporate tax cut provisions but also the individual, estate, and pass-through provisions slated to expire in 2025 (unless they are extended). Perhaps less appreciated is the regressivity of
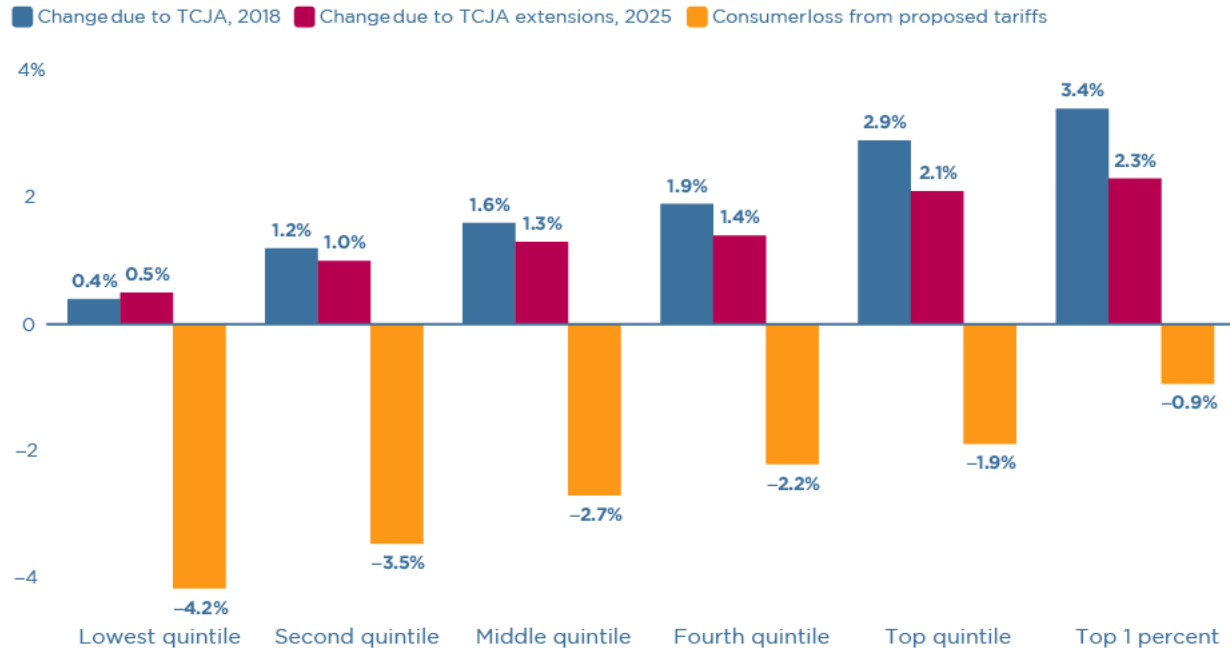
This pattern is at the root of why one might expect tariffs to be regressive taxes: lower-income households consume a much higher share of their income, and tariffs are a tax on consumption.

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25 Many other sources have also pointed to the regressive impact of the TCJA legislation. For a recent paper that uses detailed tax data to unpack these effects, see Kennedy et al. (2024).

26 In this analysis, we treat the entire bottom quintile as if it has the consumption pattern of the second decile (due to data features that distort the first decile discussed in footnote 24). To calculate the consumer cost distribution, consumers are assumed to pay tariffs according to their consumption shares, which are derived from income data and consumption-to-income ratios.

27 The top 1 percent is assumed to average half the typical tariff burden of the top quintile. This is a conservative assumption based on the work of Dynan, Skinner, and Zeldes (2004). Using Survey of Consumer Finance data, they find that the implied saving rate (or change in wealth) of the top 1 percent is 51 percent, more than twice the 24 percent implied saving rate of the top quintile; this implies that their burden from consumption taxes will be much lower under this method. While the data are from several decades ago (the mid-1980s), given rising inequality in the interim, this ratio has likely increased in the subsequent period. For example, Mian, Straub, and Sufi (2021) document a dramatic surge in savings among the top 1 percent in recent years, both in terms of levels and in terms of their share of total savings.

Figure 5
Trump's fiscal agenda includes both regressive tax cuts and regressive tax increases

Distribution of tax increases and reductions under Trump proposals and legislation, percent change in after-tax income

■ Change due to TCJA, 2018   ■ Change due to TCJA extensions, 2025   ■ Consumer loss from proposed tariffs

TCJA = Tax Cuts and Jobs Act
Notes: The baseline TCJA distribution is for 2018 and TCJA extension is for 2026. Tariff calculations are done according to Consumer Expenditure Survey data on consumption patterns (yellow bars) for the consumer losses implied in the text. In the tariff distribution, the top 1 percent is assumed to average half the typical tariff burden of the top quintile for reasons described in footnote 27 in the text. The tariff baseline scenario considers the second decile as solely representative of the lowest quintile, due to data issues with the first decile, as noted in footnotes 24 and 26 in the text.
Sources: Tax Policy Center (2017, 2022) provides the TCJA distribution data. Consumer Expenditure Survey data are from the US Bureau of Labor Statistics and data on incomes are from the US Treasury.

the tariff increases, which disproportionately affect lower- and middle-income taxpayers. Figure 6 shows the net effect of the new proposals under a possible second Trump administration, the TCJA extenders (minus the business provisions, which would exacerbate their regressive impact) and the tariffs.

Of note, this analysis excludes other regressive elements of the Trump economic plan. For example, the Trump campaign is still promising to repeal the Affordable Care Act (ACA). This agenda would reduce healthcare insurance subsidies for those at the bottom of the income distribution while eliminating ACA taxes that disproportionately fall on the top of the income distribution, including the 3.8 percent net investment income tax. As noted by Brendan Duke (2024), this would exacerbate the regressivity documented above.

During the Biden years, there have been opportunities to rethink the Trump tax cuts and tariff increases, and undoing those policies would undoubtedly be progressive. But the China tariffs have been in a long process of review and no significant reversals have occurred, perhaps partly because of tensions with China. (Of course, one might question the tariffs' effectiveness in addressing their root policy goals.) Regressive tax changes have also not been reversed.

Figure 6
Trump's fiscal agenda places a greater burden on lower- and middle-income taxpayers

Net distributional effect of TCJA extensions and tariff increases, percent change in after-tax income
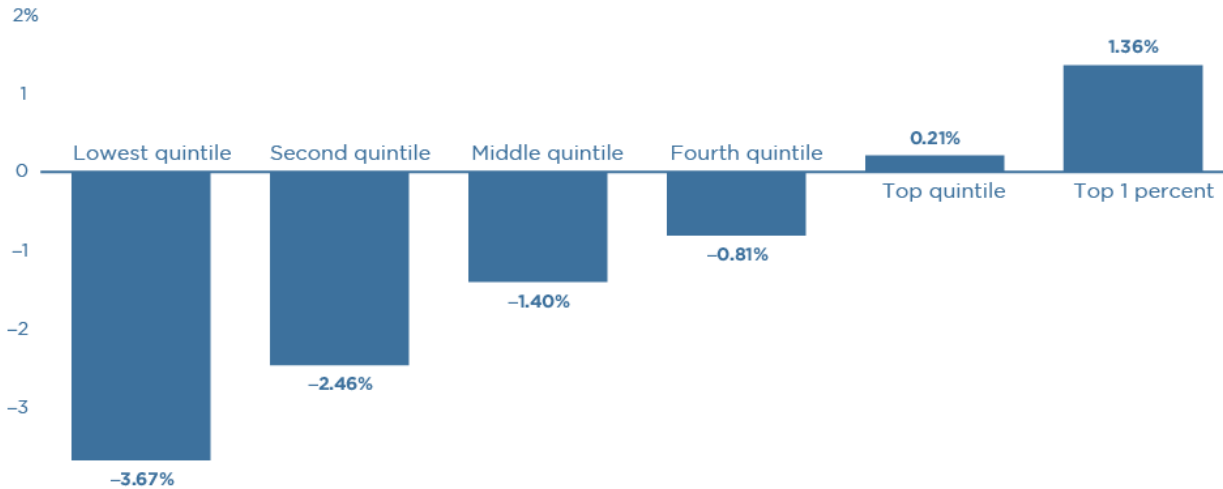
Sources: Tax Policy Center (2022) provides the TCJA extension distribution data. Tariff distributions utilize data from Consumer Expenditure Surveys from the US Bureau of Labor Statistics and data on incomes are from the US Treasury.

In part, this is due to politics; tax cuts (even regressive ones) are often popular, and tariffs have also found supporters (Autor et al. 2024). The tight balance of power in Congress also made it difficult to enact a tax agenda that significantly shifts tax burdens upward in the income distribution, despite volumes of Biden administration tax policy proposals, some of which would reverse regressive elements of the Trump tax agenda.[28]

Just as this Policy Brief went to press, the Biden administration announced new tariffs on imports from China, affecting electric vehicles, semiconductors, steel and aluminum, batteries and battery inputs, solar cells, cranes, and some medical products. New tariff rates range from 25 to 100 percent, and together these products comprise 4 percent of US imports from China. These measures were explained in part by concerns regarding unfair trade practices in China; tariffs were levied under Section 301 of the Trade Act of 1974. Previously, the administration has indicated opposition to the across-the-board tariffs proposed by the Trump campaign.

TARIFFS AND JOBS

It has become fashionable to argue that tariffs, though clearly second best and distortionary, are nonetheless necessary in a country without a strong social safety net or adequate place-based policies to cushion communities from the adverse effects of trade shocks. Indeed, a very prominent literature points to the

28   The Inflation Reduction Act did undertake some progressive tax reforms, including a new stock buyback tax and a new corporate alternative minimum tax. For a Tax Policy Center analysis of the distributional effects of the act, see Buhl (2022).

"China shock" as a key source of job loss that fueled economic discontent and swelled the ranks of voters supporting populist and protectionist policies.[29]

While surging imports from China no doubt caused places of concentrated job loss, it is also important to put these arguments in context. The US economy regularly experiences degrees of job churn that vastly dwarf the job loss attributed to Chinese imports. Moreover, trade with China caused job creation in other sectors that may have neutralized the net employment effect.[30]

Furthermore, new tariffs are unlikely to help workers that have experienced harms due to import competition or other sources of concentrated job loss (such as technological change). Steel provides a cautionary tale: tariffs on steel have not increased employment in the sector, which remains meager (see FRED data), and they have created negative rates of protection for industries that use steel, harming competitiveness and job growth in those sectors. For example, if steel in the United States costs 40 percent more than it does in countries such as Japan, Germany, or China, then competitors in those countries making products that use steel (such as cars, cutlery, or machinery) have advantages relative to their American counterparts.

Import tariffs also spur retaliation, which leads to its own shocks. As an example, the Chinese government retaliated against Trump's tariffs with tariffs that harmed various US industries, including agriculture. Consequently, the Trump administration expanded subsidies to farmers, spending much of the tariff revenue on handouts to exporters that were harmed by retaliation. One analysis found that newly authorized spending on farmer subsidies in 2018–20 nearly equaled the size of tariff revenues on Chinese imports over that period (Steil and Della Rocca 2020). There were also important long-term effects, as Chinese importers set up contracts with other sources. China now imports more corn from Brazil than it does from the United States (Gu 2023).

Even the authors of the China shock literature found that the tariffs did nothing to help those in affected communities, even though they may have generated political support nonetheless. David Autor and colleagues (2024) note that:

> The trade-war has not to date provided economic help to the US heartland: import tariffs on foreign goods neither raised nor lowered US employment in newly-protected sectors; retaliatory tariffs had clear negative employment impacts, primarily in agriculture; and these harms were only partly mitigated by compensatory US agricultural subsidies. Consistent with expressive views of politics, the tariff war appears nevertheless to have been a political success for the governing Republican party. Residents of regions more exposed to import tariffs became less likely to identify as Democrats, more likely to vote to reelect Donald Trump in 2020, and more likely to elect Republicans to Congress. Foreign retaliatory tariffs only modestly weakened that support.

This finding echoes other research that has failed to find beneficial effects for workers from these waves of protection—and has more often found serious

Even the authors of the China shock literature found that the tariffs did nothing to help those in affected communities, even though they may have generated political support nonetheless.

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29   The China shock authors have a handy website with many of their papers (http://chinashock. info/); the site includes interactive graphics. Important papers in this group include Autor, Dorn, and Hanson (2013) and Autor et al. (2020).

30   For a broader overview of these arguments, see chapter 4 of Clausing (2019). See also *The Economist* (2017), Feenstra, Ma, and Xu (2019), and Dix-Carneiro et al. (2023).

harms. For example, Flaaen and Justin Pierce (2024) find that the 2018 tariffs were associated with reduced manufacturing employment, in part due to the complexities of supply chains, competitiveness, and retaliation.

US export competitiveness is harmed by tariffs on intermediate inputs, which increase firms' costs and harm their competitiveness. Russ and Cox (2020a, 2020b) demonstrate job loss from the tariffs due to harmful effects on producer input prices. Kyle Handley, Fariha Kamal, and Ryan Monarch (forthcoming) directly link firm performance to their exposure to the 2018–19 tariff increases. The products most exposed to US tariff increases had lower exports; the resulting decline in exports is equivalent to what would be caused by a foreign tariff of about 3 percent. In terms of US export competitiveness, tariffs on inputs used by US manufacturers and other businesses are clearly an own goal.

These analyses, which are consistent with the view that trade can create negative shocks, demonstrate what many economists have long suspected: that such shocks are difficult to undo or reverse, and that tariffs generate serious collateral damage.[31] But tariffs allow policymakers to express blame. Much like snake oil, they may sell well, even if they are ultimately harmful.[32]

But tariffs allow policymakers to express blame. Much like snake oil, they may sell well, even if they are ultimately harmful.

EFFECTS ON THE TRADE DEFICIT, INTERNATIONAL COLLECTIVE ACTION, AND WIDER AIMS

Former President Trump often claims that foreigners bear the burden of tariffs, despite the analysis above, and he plans to use tariffs to punish other countries for what he views as undesirable trade practices. For example, he points to trade deficits as indicators that the United States is being taken advantage of, suggesting that tariffs might right such wrongs.

These claims ignore the simple macroeconomic reality behind trade deficits. Countries that have low savings rates (both public and private) relative to their investment rates run trade deficits, and countries that have the opposite pattern run surpluses. Strong macroeconomies are also frequently associated with increased trade deficits due to greater investment and lower savings.[33]

Since Trump's proposed fiscal policies would likely increase the fiscal deficit (see above) and may appreciate the exchange rate (see footnote 31), his policy suggestions are more likely to increase than reduce the trade deficit. Further, as we've discussed, these policies are more likely to hurt than help the lower- and middle-income Americans they purport to benefit.

Beyond these effects, such broad increases in tariffs will certainly create waves of retaliation and distrust among US trading partners, lessening the collaborative spirit that is required to solve global collective action problems such as climate change, public health emergencies, security, nuclear nonproliferation, and tax competition. At a time when international conflicts are manifold and international collective action problems are substantial, the United

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31   A more technical point that is appreciated in the economist community but less in the world at large is that tariffs can influence the equilibrium exchange rate, causing dollar appreciation that ultimately both undoes some or all of the benefits of protection in the tariffed sectors and acts as an implicit tax on exports by making US goods more expensive abroad. This effect would, however, reduce the impact of tariffs on prices.

32   See also Goulder (2024).

33   For a more detailed exposition of these ideas, see chapter 6 of Clausing (2019).

States cannot afford to alienate its partners and allies. In short, the proposed policies come with serious national security risks.

As noted, President Biden, despite having ample opportunity, has failed to remove the tariffs on China levied during the Trump presidency. Tensions with China have no doubt made it politically difficult to reverse many of these tariffs, but the tariffs continue to harm American households, although to a far smaller degree than Trump's proposed tariffs would do, since they have about one-fifth the impact (see table 1). As the *2024 Economic Report of the President* notes, there are myriad benefits from international trade, including lower consumer prices, which disproportionately benefit low- and middle-income households (pp. 202–03).

The retention of the Trump tariffs speaks to the political economy point noted by Autor et al. (2024). Although tariffs are clearly not effective and are even harmful, they are nonetheless perceived favorably by many. The politics therefore make tariffs, an unfortunate policy choice, difficult to undo. And that political economy consideration is yet another reason why the United States should not "double-down" on such a wrong-headed policy in the time ahead.

In sum, tariffs should be rejected on both fiscal policy grounds and on traditional trade policy grounds. Tariffs are a regressive and distortionary source of public finance, and they do not help the groups they are intended to help. They instead introduce new economic inefficiencies and collateral damage, and they make it more difficult to work cooperatively with allies and partners to solve our most vexing international problems.

> **At a time when international conflicts are manifold and international collective action problems are substantial, the United States cannot afford to alienate its partners and allies.**

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APPENDIX: ALTERNATE DISTRIBUTION METHODS

The US Treasury has not done a distributional analysis of the proposed tariffs, nor has the Joint Committee on Taxation, but they do find that excise and customs duties are regressive taxes in comparison to most other taxes in the tax system, as discussed in the text.

Treasury uses a pass-back method, since the price level is assumed to be determined by macroeconomic factors outside the tax distribution model.[34] This means that Treasury will model such taxes as ultimately reducing the real incomes of both labor and those earning rents, or above-normal returns to capital.

Treasury's method also allows relative price changes to affect taxpayers. For example, tobacco excise taxes fall more heavily on lower-income households, and airline excise taxes fall more heavily on higher-income households. Overall, however, the distributional effects on factor incomes are quite similar to the overall distributional effects for excise taxes and customs duties.[35] While relative price effects may be large for particular goods (such as cigarettes and air travel), they are not dominant for the category as a whole, in part because they are not included for customs duties or for intermediate goods (in the case of excise taxes).

Treasury's pass-back method will understate the regressivity of a consumption tax increase in the short run because it assumes that the tax burdens all factors of income except the normal return to capital (since savings are not taxed). However, while all rents might be consumed over an infinite horizon, in the short run many rents are merely held rather than consumed. For example, the earnings held by shareholders of the world's most profitable companies typically are not immediately consumed but rather held and passed on, perhaps for a lengthy period. An entrepreneur may hold substantial rents and may not have the chance to consume rents prior to death, instead passing the rents on to heirs or to charities, either of which may take some time to consume the funds; such recipients also are likely to have atypical consumption patterns.

Thus, the Treasury method might be thought of as more of a "long-run" analysis, since all above-normal, or rent, income is assumed to be burdened by the tax. In contrast, current consumers (those facing the price increases) are burdened more heavily under a "pass-forward" method, such as the one considered in the text. Figure A.1 shows how the tariff burden would vary based on the Treasury method, contrasting it with the one used in the main text.

One can also use different definitions of consumption to distribute tariff incidence. We use consumer expenditure data that excludes housing, personal insurance, and pension contributions. We also consider a more narrowly targeted definition of traded goods consumption, by also excluding restaurant meals, education, medical services (but not drugs or equipment), medical insurance, and cash contributions. (Missing data on a few deciles' observations were interpolated.) That generates a pattern similar to the baseline Consumer Expenditure Survey distribution in the text. One could also use Treasury's consumption distribution (from table 7 in Cronin 2022); however, that does not allow disaggregation of consumption into traded goods. For comparison, all four series are included here.

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34   For more detail on the Treasury distribution methodology, see Cronin (2022).
35   Compare, e.g., tables 5 and 6 in Cronin (2022).

Figure A.1
Consumption taxes appear more regressive in methods that account for short-run consumption patterns

Tariff distributions using different methods and data series, percent change in after-tax income

■ Treasury passback method   ■ Tariff baseline   ■ Alternate CEX series   ■ Treasury consumption distribution
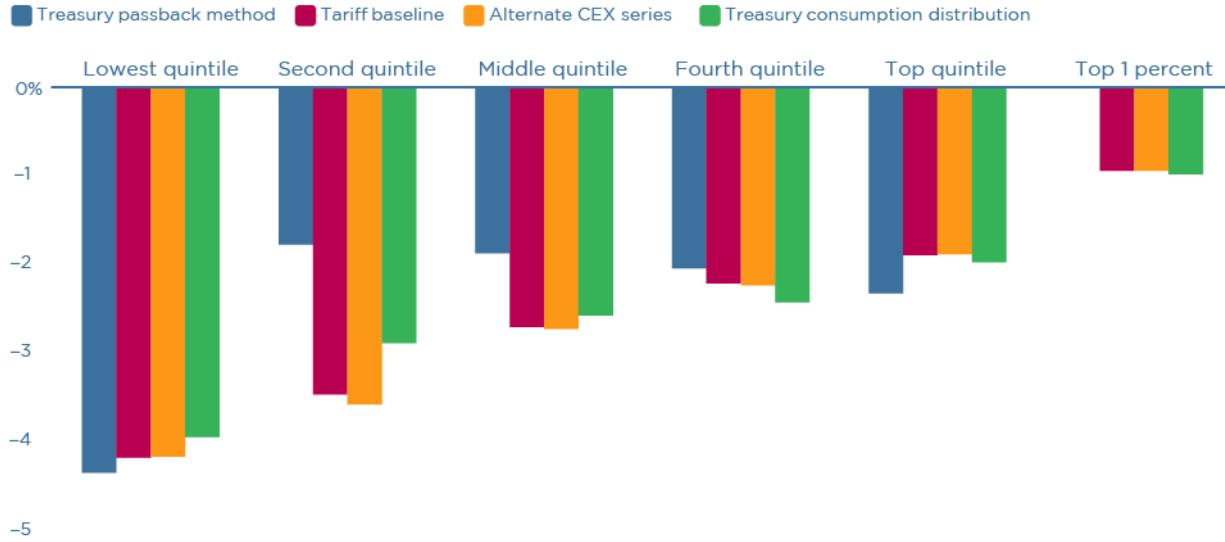
Notes: Tariff distribution calculations are done according to the method described in the text, using Consumer Expenditure Survey data on consumption patterns (red and yellow bars), according to the Treasury method for consumption and excise tax distribution (blue bars), and according to the Treasury consumption distribution (but a pass-forward method) in green bars. For the distributions that rely on consumption data, the top 1 percent is assumed to average half the typical tariff burden of the top quintile, for reasons described in footnote 27 in the text. The tariff baseline scenario and the tariff CEX alternative scenario consider only the second decile, as noted in footnotes 24 and 26 in the text.

Sources: Data sources are those described in figure 5 and Cronin (2022).