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

St.Gallen Endowment for Prosperity through Trade

# cBrief 5: "These Are Your People"

## *Canada and Mexico have retaliation options that shrink American take-home pay.*

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*Trade conflict is costly to all parties. Canadian and Mexican trade retaliation can deny tariff-related wins for American workers. Blunt retaliation could go so far as to eliminate all the take-home pay gains in 40 U.S. states and make whatever gains occur elsewhere barely noticeable. Tariff-induced higher prices are a further drag on American families. Canada and Mexico would take a strong hit from blunt retaliation, but they can use smarter approaches and demonstrate the limits of America First Trade Policy for U.S. workers.*

Soon after Donald J. Trump's first inauguration as President in 2017, he contemplated withdrawing from the North American Free Trade Agreement (NAFTA). In a decisive intervention, his Secretary of Agriculture Sonny Perdue reportedly persuaded the President otherwise (Baker and Glasser, 2022): Perdue showed evidence that scrapping NAFTA would harm voters especially in states that had supported the President during the 2016 election. Apparently, Perdue's line that clinched it was: "These are your people."

Now back for a second term, President Trump seems intent on imposing 25% tariff increases on Canadian and Mexican goods, except energy imports that are in for a more lenient treatment. President Trump suspended the tariff hike until March 4, 2025—a deadline that looms. During a press conference with French President Emmanuel Macron on February 24, President Trump affirmed his tariff plans for Canada and Mexico: "The tariffs are going forward, on schedule." He reconfirmed the plans in a post on Truth Social on Thursday, February 27. Canada and Mexico's governments have both declared that they will retaliate if the tariffs are imposed. Any of these parties' threatened tariff moves would effectively invalidate the United States-Mexico-Canada (USMCA) Agreement, the NAFTA replacement since 2020.

Several teams of economists at institutions with impeccable credentials predict the impact of higher U.S. tariffs and that of Canadian and Mexican retaliation measures (McKibbin and Noland, 2025; Meltzer, 2025; The Budget Lab, 2025; Ai et al., 2025). Without exception, they find that Canadian and Mexican retaliation will worsen the retaliators' living standards. As Cambridge economist Joan Robinson observed long ago about trade restrictions, when a trading partner throws rocks into their harbor it makes little economic sense to block one's own port with stones in retaliation. Could there be another element in the calculus of retaliation that has been overlooked, leaving aside evident national pride?

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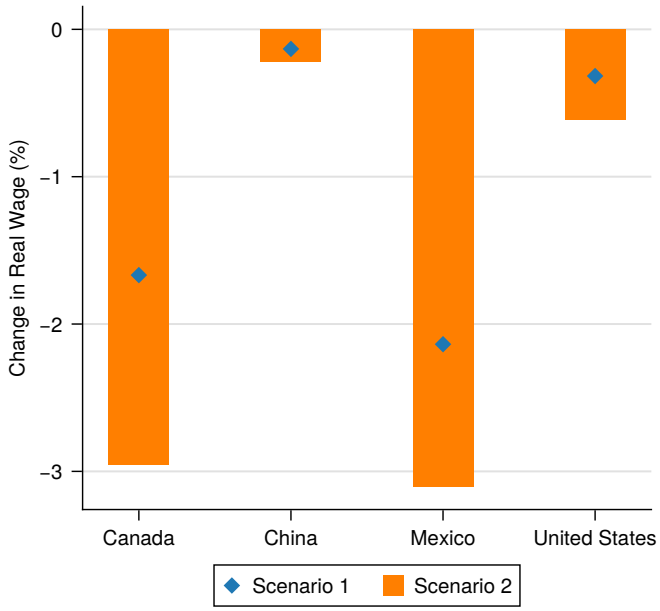
Figure 1: Real Wage Changes by Country.
*Canadian and Mexican workers pay a high price for retaliation with a 3-percent real income loss, while depressing U.S. real incomes by just around half a percent.*




*Notes*. Scenario 1: 25% increase in U.S. tariffs on imports from Canada and Mexico, except energy; 10% increase in U.S. tariffs on imports from China and energy from Canada and Mexico; Scenario 2: in addition to scenario 1, 25% increase in Canadian, Chinese and Mexican tariffs on U.S. imports and a 10% Canadian and Mexican tax on energy exports to the United States. Real-wage changes computed from the percentage-change predictions for the state-level nominal wages (change of the numerator of the real wage) and the percentage-change prediction for U.S. wide consumer price inflation (change of the denominator of the real wage) in the cModel. U.S. economy-wide average is the unweighted average for 50 U.S. states and Washington, DC.

In preparing this cBrief, we too simulated the consequences of Canadian and Mexican retaliation to higher U.S. tariffs, and we will confirm that retaliation reduces living standards North and South of the U.S. border as well as in the United States. Taking a leaf out of Secretary Perdue's book, we will gauge the impact of retaliation on the pay packets of Americans on a state-by-state basis.

The central question is whether retaliation by governments in Ottawa and Mexico City can eliminate wage gains arising from higher U.S. tariffs. If so, retaliation would deny the U.S. administration the pro-worker and Main Street payoff that some place at the heart of the motivation for the America First Trade Policy memorandum (The White House, 2025*a*), issued soon after President Trump was inaugurated.

The U.S. administration has contested findings that tariffs raise price levels, so we will show the extent to which Canadian and Mexican retaliation reduces both take-home (nominal) pay and inflation-adjusted (real) wage earnings. The prospect that retaliation reduces American employees' take-home pay may resonate politically.

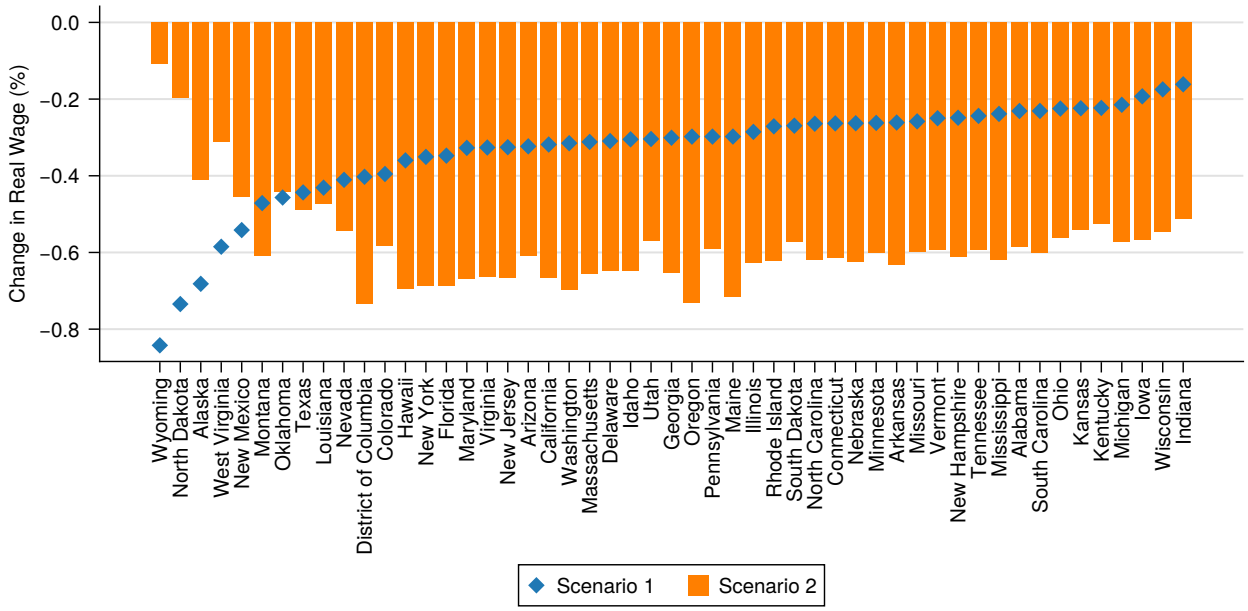
Recall, the original tariff threat arose because President Trump determined that illegal drugs crossing the borders from Canada and Mexico, including fentanyl, threatened the national security of the United States. China was implicated too in the supply of such drugs. We take no position on the merits of the national security rationale (The White House, 2025*b*); our focus is on the economic consequences.

To fix ideas, we consider the following two scenarios:

**Scenario 1.** The United States imposes an additional 25% ad-valorem import tariff on all goods from Canada and Mexico, except energy products that receive 10% higher import taxes. China is subject to a 10% increase in import tariffs across-the-board since February 4, so we include the change in the baseline scenario. No retaliation occurs.

**Scenario 2.** Scenario 1 plus: Canada and Mexico retaliate by imposing a 25% tariff increase on all imports

Figure 2: Real Wage Changes by U.S. State.
*Real income losses are exacerbated under tough retaliation. U.S. workers' real incomes suffer in every state.*




*Notes*. Scenario 1: 25% increase in U.S. tariffs on imports from Canada and Mexico, except energy; 10% increase in U.S. tariffs on imports from China and energy from Canada and Mexico; Scenario 2: in addition to scenario 1, 25% increase in Canadian, Chinese and Mexican tariffs on U.S. imports and a 10% Canadian and Mexican tax on energy exports to the United States. Real-wage changes computed from the percentage-change predictions for the state-level nominal wages (change of the numerator of the real wage) and the percentage-change prediction for U.S. wide consumer price inflation (change of the denominator of the real wage) in the cModel.

from the United States as well as an additional 10% export tax on energy products shipping to the United States. China confines itself to a 25% tariff increase for American imports.

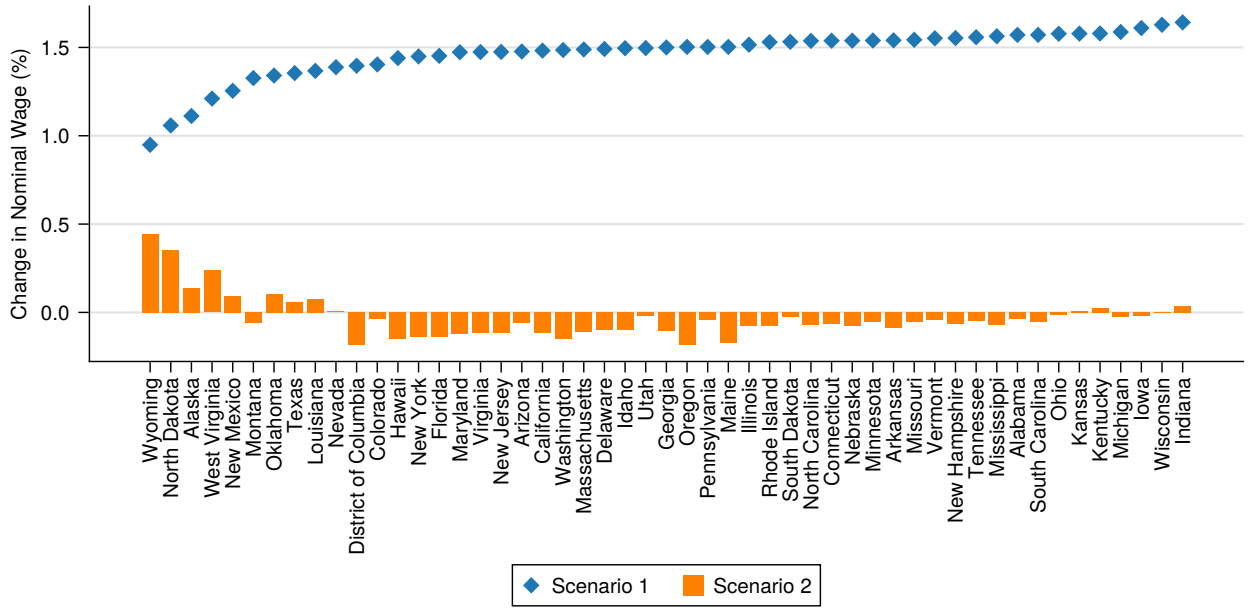
Our retaliation scenario arguably goes beyond what America's trading partners have threatened. Our rationale for doing so is twofold: a symmetric retaliation on non-energy goods demonstrates the scope of consequences for U.S. states that policy makers in Ottawa and Mexico City plausibly explore, and homing in on the partial U.S. dependence on energy from its neighbors shows what a muscular retaliatory response might involve. By exempting energy products from the full 25% tariff hike, only subjecting them to a 10% increase, the United States has shown some of its hand. Export taxes imposed by Canada and Mexico on their energy shipments out would hit the pocket book of American families, but also hurt these retaliating countries' own residents.

To simulate the impact of these scenarios, we deploy the cModel—a computational model of the world and U.S. economy that has cutting-edge microeconomic foundations and takes account of each industry's procurement of supplies from any other industry, including from abroad. The cModel builds in enough granularity to estimate the nominal and inflation-adjusted wage impacts (a description of the cModel can be found in the Box at the end of this cBrief). The imposition of import tariffs by a large economy like the United States can raise both nominal wages of employees and their cost of living. Both effects will be at work in the results below.

First, we confirm what other studies have found. As shown in Figure 1,

- in both scenarios real wages fall in all four economies (Canada, China, Mexico and the United States), so from a national perspective no country's workers win this trade conflict;
- real wages fall further in the smaller and closer economies (Canada and Mexico) that are more dependent on export sales to the United States;

Figure 3: Nominal Wage Changes by U.S. State.
*Tough retaliation by Canada, China and Mexico wipes out nominal wage gains in 40 out of 50 U.S. states.*




*Notes*. Scenario 1: 25% increase in U.S. tariffs on imports from Canada and Mexico, except energy; 10% increase in U.S. tariffs on imports from China and energy from Canada and Mexico; Scenario 2: in addition to scenario 1, 25% increase in Canadian, Chinese and Mexican tariffs on U.S. imports and a 10% Canadian and Mexican tax on energy exports to the United States. Nominal-wage changes computed from the percentage-change predictions for the state-level nominal wages.

- real wages are lower in all four economies under the retaliation scenario. Real-income losses in Canada and Mexico are near 3%, they are around 0.5% for the United States, and smallest for China.

Next, we examine the impact on inflation-adjusted earnings in each U.S. state, taking account of the fact that states differ in the degree to which they are dependent directly and indirectly (through supply chains) on the Canadian, Chinese, and Mexican markets. U.S. states that import a lot of energy from Canada and Mexico are also at greater risk. These considerations account for the variation in the impact of retaliation across U.S. states revealed in Figure 2.

In six states (Wyoming, North Dakota, Alaska,West Virginia, New Mexico and Oklahoma) retaliation by America's trading partners improves their inflation-adjusted wages over the no-retaliation case. A reason is that trade barriers prevent some U.S. made goods from crossing into the trade partners' economies and instead cause some U.S. goods to fall behind and stay local: their newly added supply to domestic U.S. markets reduces the pressure on U.S. consumer prices so that other countries' retaliation in fact mitigates the price driving effect of U.S. tariffs. Even so, workers in these six states are still worse off compared to the situation prevailing under the prior U.S. administration. In November 2022 there were less than 5 million registered voters in these six states—implying that there are 156 million registered voters in states where retaliation by Canada, China, and Mexico reduces inflation-adjusted real incomes. The latter voters, who cannot afford as much consumption as before, outweigh the number of former voters, who happen to gain from foreign retaliation compared to no retaliation, by a proportion of more than 31 to 1.

The impact of retaliation is starkest when we consider actual nominal take-home pay in U.S. dollars. The cModel allows nominal take-home wages to flexibly move up or down, taking the view of economic adjustment over the course of several quarters. In practice, labor contracts and employers' pay and promotion schedules may make it hard for take-home wages to fall immediately. Our results for take-home pay therefore have predictive power a few quarters out.

See Figure 3. Without retaliation, the actual dollar value of wages goes up in every U.S. state—we estimate the gain to typically lie between 1% and 1.5% across individual U.S. states. Should the U.S. tariff

hikes go unrequited, there is little doubt that the Trump team would declare a win for U.S. voters on Main Street.

However, Figure 3 also shows that, in all but ten U.S. states, tough retaliation by Canada, China, and Mexico eliminates the nominal wage gain entirely. In those states where take-home pay is higher under retaliation, the gains are tiny. Only residents in Wyoming and North Dakota see nominal wage gains approaching half of one percent. For the residents of all other U.S. states, blunt retaliation by U.S. trading partners either nullifies any of the nominal wage gains or causes nominal wage declines.

In short, blunt retaliation hits the pocket books of U.S. residents in every state with a significant number of voters, Congressional districts, and electoral votes. For Canada, China and Mexico, their residents are their people. No doubt there are smarter retaliation options available to Canada, China, and Mexico that come at a lower cost to their residents and also deny the Trump team a political win. Add on top the costs of disruption—delays in shipping life-saving medication, food, and the like—retaliation inflicts a political price on the Trump team.

These costs will arguably unfold through the mid-term elections in 2026, so Canadian and Mexican politicians may be prepared to take an economic hit for their own residents if they find that retaliation reduces the likelihood of the Republican Party retaining control of Congress.

In conclusion, seen through a narrow economic lens, retaliation by Canada, China, and Mexico makes no sense. There is no reason to dispute Joan Robinson's wisdom on the economic inefficacy of retaliation: clogging your own port with rocks in response to a trade partner's less navigable harbor only does economic harm. However, shift the metric to political gains and losses and the pros and costs of retaliation are cast in a different light.

Canadian and Mexican residents suffer greater economic losses from a trade conflict than their U.S. neighbors, so it is for elected leaders in Ottawa and Mexico City to decide whether inflicting economic losses on supporters of America First Trade Policy is worth it. For their part, since their acts likely trigger retaliation abroad, American politicians might want to reflect on the vulnerability of their own voters' take-home pay and living standards. These are your people.

## 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 labour 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 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. Each country's observed net exports or imports (a trade surplus or deficit) are exogenous.

Version 2.0 of the cModel, underlying the simulations of this cBrief 4, 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-S data Release 1 (December 2024) by Borchert et al. (2024), we obtain production and trade flows for 170 supply industries in the benchmark years 2017-2019, including services trade. 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 170 ITPD-S 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-S and OECD-ICIO data.

To account for state-specific outcomes within the United States, we use County Business Patterns 2022 data from the U.S. Census Bureau (2022). We obtain state-level labor supply and allow for varying industry productivity within and across U.S. states. We assume all U.S. residents to have identical consumption preferences. To recover trade flows between U.S. states, we suppose that trade is free and balanced between states within the United States. All U.S. states face the same trade cost with a source or destination country outside the United States.

In the cModel, Scenario 1 is implemented as an increase of import tariffs on all Canadian and Mexican goods, except energy, by 25 percent relative to the trade cost in 2019 and an increase of import tariffs on all Chinese goods as well as Canadian and Mexican energy by 10 percent relative to the trade cost in 2019. Scenario 2 considers, in addition to the U.S. tariff increases, an increase of Canadian, Chinese and Mexican import tariffs by 25% on all U.S goods in relative to 2019 as well as a government-revenue generating imposition of a 10% export tax on Canadian and Mexican energy shipments to the United States relative to the trade cost in 2019.

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