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Economic Consequences of Recent US Tariff Changes

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The second Trump administration is actively engaged in imposing tariffs in favor of the United States (see Congressional Research Service (2025), Bown (2025), and WTO-IMF (2025) for a comprehensive review of these tariff policies). Because the United States is the major trading partner for the rest of the world, placing tariffs on neighboring countries (Canada and Mexico) and on the world's biggest supplier of manufactures (China) will have significant economic consequences. Among other reasons, an influx of fentanyl and undocumented migrants was used to justify the tariff policy. The tariff increases alone make imports into the United States more costly for American consumers of final products and producers who use imported inputs. American production could replace formerly imported inputs, but this reallocation would have a cost associated with it.

In response to President Trump's tariff policy, Canada and China declared retaliations of their own. Mexico agreed to a one-month hold on the tariff by sending more troops to protect the US-Mexican border (Janetsky, 2025). While Canada first announced two rounds of tariff increases, it then agreed to also increase border protection and obtained a one-month hold on prospective US tariffs (Stevis-Gridneff, 2025). China's announcement of retaliation includes tariff increases and export controls (Reuters, 2025). It is important to note that under the USMCA agreement, compliant imports are not affected by additional tariffs. American exports facing increased tariffs in the destination countries will have to find alternative markets; otherwise, production would need to adjust downwards, with the possibility of its resources getting reallocated to an industry facing no tariffs.

Later announcements targeted US trading partners and focused on imposing tariffs with the goal of reducing trade deficits. The ripple effects of large increases in tariffs need to be studied using an applied global general equilibrium model with multiple countries and sectors that link international trade with domestic transactions, including effects on capital and labor. We use the GTAP (Global Trade Analysis Project) model to estimate and decompose the effects of the Trump administration's tariffs on the US economy and the rest of the world (ROW) economy. The GTAP model is a multicountry, multisector, computable general equilibrium model of the world. The model explicitly tracks bilateral trade between countries. Import demand adopts the Armington approach, which differentiates goods by origin (Corong et al., 2017).

The model calibrates to an aggregation of the GTAP Database. We use the latest GTAP Database, version 11, which includes 141 countries,19 aggregated regions, and 65 sectors for each country/region (Aguiar et al., 2022). Aggregate regions include countries for which there is no input-output table (IOT).

Simulation Design

The standard GTAP model readily accommodates the analysis of bilateral tariff changes. Given the uncertainty surrounding the changes to tariffs imposed by the United States, including retaliations, we consider the following illustrative scenarios: The United States imposes tariffs on China (10%), Canada (35%), Mexico (25%), and the ROW (10%), and these four countries retaliate against the United States (see Table 1).

Results

The simulated change in tariffs causes world trade to decrease from US$42.5 trillion to US$41 trillion. Figure 1 shows that the US share of world imports decreases from 13.69% in the baseline to 11.08% under the tariff scenario; by contrast, China's share of world imports increases from 10.58% in the baseline to 11.11% under the tariff scenario. The rest of the world (ROW) captures the remaining share of world imports and is depicted using the secondary axis. ROW's share of imports increases from 75.73% to 77.8%. The US share of world exports also decreases from 10.57% to 8.53%, while China increases its share from 11.35% to 11.59%, and the ROW increases its share of world exports from 78.09% to 79.89%. These results are consistent with

Table 1. Targeted Tariffs by the United States and Retaliatory Tariffs by Other Countries

From/To	United States	China	Canada	Mexico	Rest of the World
United States		10%	35%	25%	10%
China	10%				
Canada	35%				
Mexico	25%				
Rest of the World	10%				

Bouët, Sall, and Zhang (2025), who also find a reduction of world trade and a widening of the trade deficits of many countries with China, which would be expanding its role on the world market. Countries facing higher tariffs will try to sell domestically or to other foreign markets where they do not face tariffs. Overall, we see world trade diminish due to increased tariffs, but we also see that countries trade more with China since it is an important buyer of world products and has not increased its tariffs as the United States has.

Table 2 presents the effects of tariffs on US exports and imports for three aggregate sectors: agriculture, mining and manufacturing, and services. In the agricultural and manufacturing sectors, both US exports and imports decrease. The trade balance for agriculture and services grows, but this is driven by imports falling more than exports. In the case of services, exports increase due to tariffs, while imports decrease, which causes services to gain relevance as their share of total exports increases from 33% in the baseline to 47% under tariff scenarios, and the share of total imports rises from 19% to 24%. For the mining and manufacturing sector, we observe the largest decline of exports (39.74%) because of high US tariffs, and imports falling by 26.74% due to the retaliation by other countries. Overall, the United States lowers the trade deficit by 21% at the expense of the economy contracting, as discussed below. Yet the trade deficit remains large at $520.169 billion, even with the tariffs.

Table 3 reports the effects of tariffs on sectoral output. As with changes in trade, the mining and manufacturing sector endures the largest decline (1.17%), and agricultural output falls by 0.14%. The service sector's output increases because this sector is not directly affected by tariff policies and benefits from the use of factors released by manufacturing sectors. The overall output of all sectors experiences only a modest decrease of 0.13%. In contrast to output changes, domestic sales increase both in the manufacturing and agricultural sectors as the United States is reallocating its lost sales from importing countries to the domestic market. Domestic sales in the manufacturing sectors expand significantly (8.27%) to offset the decline in imports. This result is consistent with the findings of Rodriguez-Claire et al. (2025), who explain that the effect of "Liberation Day" tariffs causes home production to become comparatively more appealing as domestic manufacturing replaces previously imported products.

Within agriculture, output increases only in the wheat, vegetables, fruits and nuts, and fishing sectors (Table 4). Wheat production experiences the largest increase at

Figure 1. Share of Exports and Imports in the Baseline and After the Trade War for the US, China, and the Rest of the World Simulation

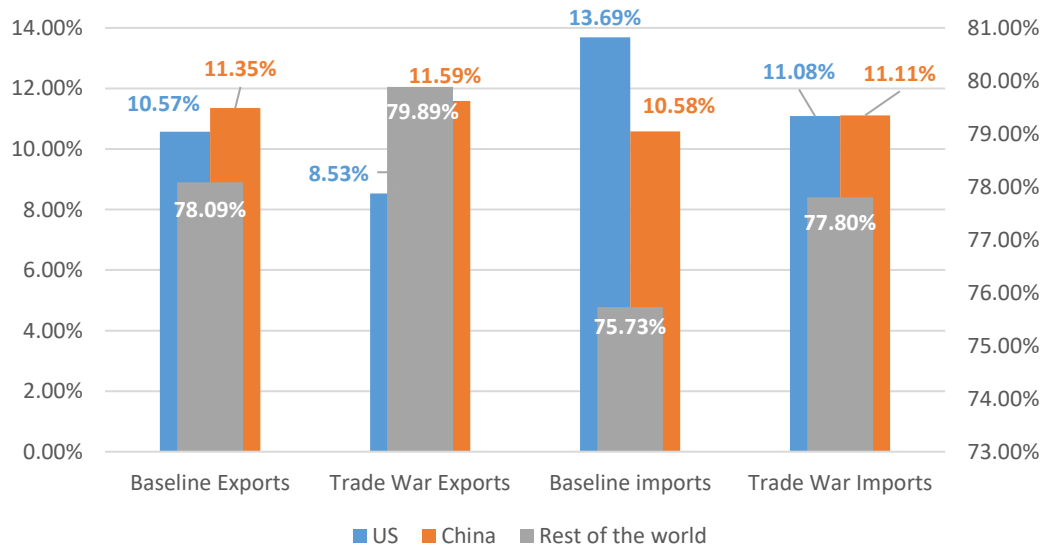


Table 2. Effect of Targeted Tariffs on US Aggregate Sectoral Trade (millions of 2017 USD)

	Exports		Imports		Trade Balance	
	Base	**Trade War**	**Base**	**Trade War**	**Base**	**Trade War**
Agriculture	77,990	-5.76%	51,233	-14.78%	26,757	29,835
Mining and Manufacturing	1,413,738	-39.74%	2,282,214	-26.47%	-868,476	-826,242
Services	736,052	9.89%	552,034	-3.51%	184,018	276,238
Total	2,227,780	-22.15%	2,885,481	-21.87%	-657,701	-520,169
Shares						
Agriculture	3.50%	4.24%	1.78%	1.94%		
Mining and Manufacturing	63.46%	49.12%	79.09%	74.44%		
Services	33.04%	46.64%	19.13%	23.63%		

20.49%, and vegetable and fruit and nut production rise by 3.21%. The sectors that endure a significant decline in production are oil seeds, plant-based fibers (e.g., cotton), paddy rice, other crops, and other cereal grains. Sectors that experience output increases are also expanding domestic sales. The vegetable and fruit and nut sector expands the domestic sales by 8.42%, followed by other crops at 5.29%, and wheat at 4.66%. Outside of agriculture, domestic sales for mining, manufacturing, and services increase as expected, though only the output of the mining sector expands. Increase in wheat production translates into more wheat exports (42.27%);[1] however, all other sectors have large declines in exports because of the retaliatory tariffs by other countries. In particular, exports in mining, sugar cane and sugar beet, manufacturing, forestry, service, other crops, and fishing fall significantly. All US sectors endure large decreases in imports because of the US tariff increases. Given these large import decreases, domestic sales can increase only if exports fall, particularly with production decreasing in many sectors.

Figure 2 decomposes the effect of the policy scenario and shows that at the macro level, US GDP declines minimally by 0.37%, caused mainly by the United States imposing tariffs on Canadian goods and the rest of the world retaliating against the United States. Bouët, Sall, and Zhang (2025) and McKibbin and Noland (2025) also find that increasing tariffs is detrimental to the United States and that retaliations only aggravate the GDP losses. China's GDP is negatively affected by the increasing US tariffs on Chinese products and by Chinese retaliatory tariffs against the United States. US tariffs on other countries and these countries' retaliations improve the Chinese GDP marginally. For Canada and Mexico, an increase in US tariffs and their retaliations causes negative effects on GDP, but their retaliations cause larger negative effects than the increased US tariffs.

Figure 2 also shows that the higher US tariffs will cause GDP reductions in other countries that endure these high tariffs, though GDP declines in the United States will be modest. This is because the United States is less reliant on exports than most other countries facing US tariffs. From Figure 2, we can also decipher some interactions between the tariff retaliations and other countries' GDP. For instance, the retaliation by the ROW towards the United States causes US GDP to decline, as American exports would be more expensive abroad, but Canadian and Mexican GDPs to rise as their exports increase to fill the void left by American exports.

Table 3. Effect of Targeted Tariffs on US Aggregate Sectoral Output and Domestic Sales (millions of 2017 USD)

	Output		Domestic Sales	
	Base	**Trade War**	**Base**	**Trade War**
Agriculture	465,471	-0.14%	387,814	0.98%
Mining and Manufacturing	7,045,418	-1.17%	5,670,788	8.27%
Services	25,774,295	0.16%	25,038,243	-0.13%
Total	33,285,185	-0.13%	31,096,845	1.42%

[1] Canada also expanded its production and exports of wheat, while the former Soviet Union and the ROW decrease their wheat production and exports.

Table 4. Effect of Targeted Tariffs on US Sectoral Output, Domestic Sales, Exports, and Imports (percentage)

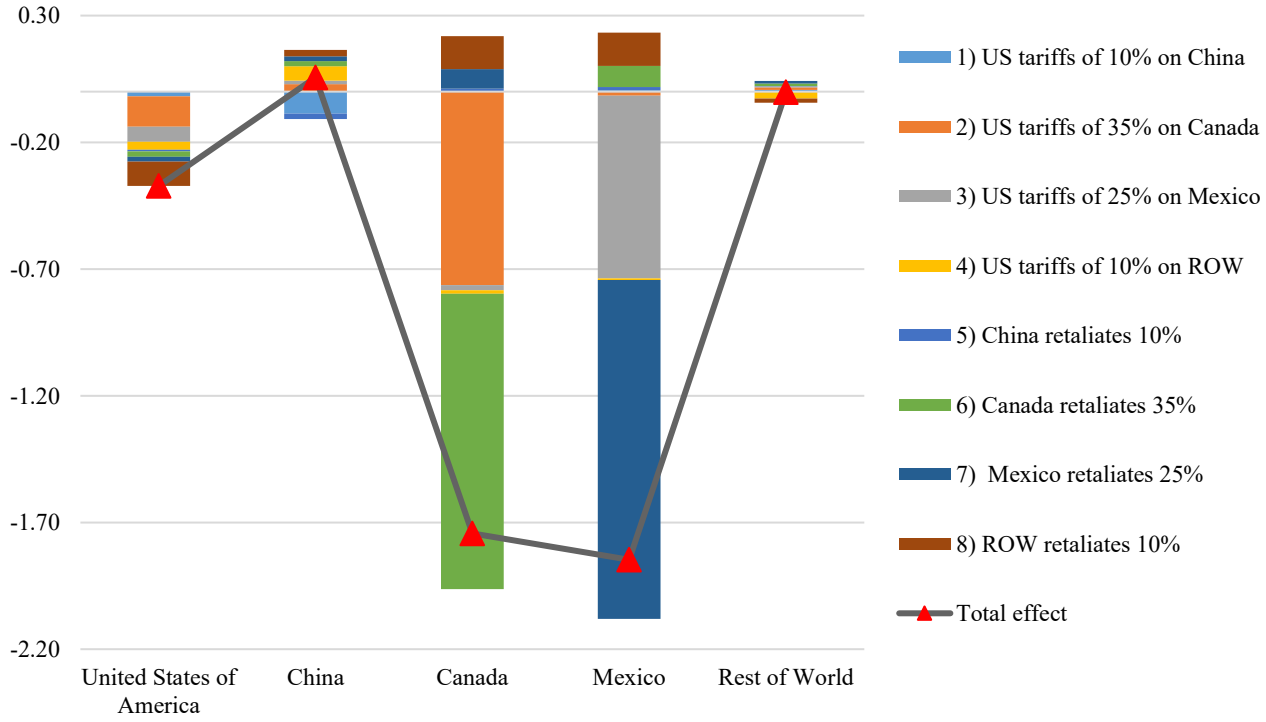
	Output	Domestic Sales	Exports	Imports
Paddy rice	-2.37	-1.06	-8.89	-46.58
Wheat	20.49	4.66	42.27	-55.43
Cereal grains nec	-1.74	-0.80	-5.72	-21.51
Vegetables, fruits, nuts	3.21	8.42	-10.25	-15.20
Oil seeds	-5.00	-0.11	-10.66	-35.32
Sugar cane, sugar beet	-1.01	-0.88	-41.54	-31.41
Plant-based fibers	-3.36	-0.23	-8.30	-24.76
Crops nec	-2.11	5.29	-25.11	-5.74
Livestock	-0.69	-0.65	-2.20	-23.50
Forestry	-0.80	0.01	-27.29	-30.63
Fishing	0.71	3.21	-16.89	-13.75
Mining	2.32	11.55	-71.22	-37.36
Manufacturing	-1.45	7.98	-38.32	-25.64
Services	0.16	9.89	-3.51	-0.13

In addition, Mexico's retaliation against the United States would cause larger decreases in Mexico's GDP as it would raise the cost of imported products, but as Mexico substitutes American exports with Canadian exports, Canadian GDP rises. McKibbin and Noland (2025) emphasize that Mexico and Canada are much more dependent on trade with the United States than vice versa. Mexico's exports account for 40% of its GDP, and about 80% of its exports go to the United States (McKibbin and Noland, 2025). This confirms why Mexico is not engaging in tariff retaliation to avoid any losses, given its close trade relations with the United States.

Conclusions

This study utilizes styled scenarios to represent recent tariff changes that have been announced by the Trump administration, particularly targeting China, Canada, Mexico, and other major trade partners, with the potential for retaliation. Our simulations illustrate that while the trade deficit can be diminished, it comes at a cost: World trade contracts, and the US share in world trade diminishes. While the US trade deficit decreases, it is still the largest in the world. Because of these trade policies, China joins the United States as the top

Figure 2. Effects of Targeted Tariffs on GDP (percentage change)



importer in the world. The GDP effects on the United States are not as pronounced as in other countries because the United States is less reliant on export markets, but as the United States isolates itself, other countries expand their trading relationships with each other.

For More Information

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