# Policy Analysis Focus 25-3 Economic Impact of US and China Tariff Hikes<sup>1</sup>

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# I. Introduction

On April 9 United States (US) President Trump suspended the reciprocal tariff that he had introduced on April 2, and uniformly imposed an additional 10% tariff on some economies. On the other hand, China has responded to US tariff hikes by hiking tariffs on imports from the US, in line with retaliation by Canada and the European Union (EU), and further US hikes of tariffs on imports from China. There is concern that tariff hikes would adversely affect the world economy, and stock markets have been seriously volatile worldwide.

The US has imposed additional tariffs on imports of steel and aluminum as well as autos, and on imports from China, Canada and Mexico. This article quantitatively investigates the economic impact of substantial additional tariffs between the US and China by means of simulation studies using a computable general equilibrium (CGE) model of global trade.<sup>2</sup>

#### II. Macroeconomic impact

If the US imposed an additional 25% tariff on imports of metals, motor vehicles and parts, an additional 20% tariff on China, and an additional 25% tariff on Canada and

<sup>&</sup>lt;sup>1</sup> This is a supplementary report to Kawasaki (2024), "Economic Impact of Further US Tariff Hikes," GRIPS Discussion Paper 24-12, GRIPS, December 2024. The views expressed in this article are the author's own and do not represent those of GRIPS Alliance or other organizations to which the author belongs.

<sup>&</sup>lt;sup>2</sup> The framework of model simulations remains unchanged from that in Kawasaki (2024). The Global Trade Analysis Project (GTAP) 7 model (based on GTAP 11c Data Base) is solved using GEMPACK software referred to in Horridge, Jerie, Mustakinov & Schiffmann (2018), GEMPACK Manual, ISBN 978-1-921654-34-3, incorporating dynamic effects of capital and labor. The baseline data for GDP and population are updated to those for 2025 based on the World Economic Outlook (WEO) Database, October 2024, International Monetary Fund (IMF).

					(%, Trade balance: billion USD)			
	Exports to US		Exports		Trade Balance		Real GDP	
	Temp	US-China	Temp	US-China	Temp	US-China	Temp	US-China
Australia	2.3	6.8	0.5	0.6	-1.4	-1.6	-0.1	-0.0
New Zealand	-0.3	2.5	-0.1	0.1	-0.1	-0.0	0.2	0.4
China	-36.5	-96.5	-2.2	-7.1	-18.5	-21.6	-0.2	-2.0
Japan	-5.3	8.4	-0.6	0.4	-0.6	-1.0	0.3	0.8
Korea	-1.7	21.9	-0.1	1.0	-0.2	1.5	0.4	1.1
Chinese Taipei	5.4	34.3	0.1	1.7	-0.2	0.4	0.3	1.3
ASEAN	11.8	47.3	1.0	3.3	-1.8	-2.3	0.8	2.0
India	-0.5	12.1	-0.5	0.4	-2.5	-4.7	0.5	0.9
US	-	-	-25.6	-30.1	45.6	51.6	-2.8	-4.7
Canada	-31.6	-29.2	-8.9	-7.6	6.2	4.8	-3.2	-2.8
Mexico	-35.2	-26.6	-20.2	-15.1	-6.9	-5.8	-12.7	-10.2
EU	-1.4	10.7	-0.0	0.4	-3.7	-0.9	0.3	0.6
UK	-0.6	4.7	-0.3	-0.0	-0.2	-2.6	0.1	0.3
Russia	-11.7	-5.3	0.5	0.9	-3.6	-3.0	0.3	0.5
World	-15.5	-19.1	-3.6	-4.0	0.0	0.0	-0.9	-1.4

Table 1 Impact on trade and economy

Source: Author's simulations.

Mexico<sup>3</sup> (Temp), the US trade deficit is estimated to improve by 45.6 billion US dollars (USD), though that accounts for less than 0.2% of US GDP as is shown in Table 1. It is estimated that US imports would decrease by 15.5% but US exports would also decrease, by 25.6%, resulting in a 2.8% decrease in real GDP. There is a concern that the US economy would record negative growth. US employment would decrease by 0.8% but consumption price would rise by 4.4%, which suggests a risk of stagflation.

Exports by China, Canada and Mexico to the US are estimated to decrease by more than 30%. Real GDP decreases would be larger in Canada (by 3.2%) and Mexico (by 12.7%) (whose trade dependency ratio on the US is high) than in the US. But real GDP decrease in China would be small (0.2%). On the other hand, real GDP would increase in Japan and the EU, whose additional tariff rates are lower than those of China, Canada and Mexico.

If China imposed an additional 125% tariff on the US and the US imposed an additional 145% tariff on China alongside the above tariff hikes (US-China), trade in goods between the US and China would almost disappear.<sup>4</sup> Real GDP is estimated to

<sup>&</sup>lt;sup>3</sup> Imports of energy and energy resources from Canada are subject to an additional 10% tariff. Commodities covered by the US-Canada-Mexico Agreement (USMCA) are exempt from additional tariffs.

<sup>&</sup>lt;sup>4</sup> China's service exports to the US would increase by around 15%. The decrease in exports of goods and services, shown in Table 1, would be less than 100%.

decrease substantially, by 4.7% in the US and by 2.0% in China. That said, US real GDP decrease would remain larger than that of China.

It is indicated that trade divergent effects replacing trade between the US and China<sup>5</sup> would be much larger in other economies. In particular, Association of Southeast Asian Nations (ASEAN) exports to the US would increase by a much larger margin than those of other economies, and real GDP would also increase more in ASEAN than in other economies. It is estimated that total world real GDP would decrease by 1.4%, but increase by 0.3% in economies other than the US and China.

### III. Impact on industry

There is a concern that if tariffs were hiked, adverse economic impact would be larger at the industry level than the macro level, and resource allocation among sectors would be less efficient.

If the US hiked tariffs, it is estimated that textiles and apparel (TXL) production would increase but agriculture, forestry and fisheries (AFF) production (in which the US has international competitiveness) would decrease, as is shown in Table 2. Meanwhile, if additional tariffs were imposed on other goods alongside metals and motor vehicles and parts, production of metals (MTL) and motor vehicles and parts (MVH) would not necessarily increase,<sup>6</sup> given cost increases resulting from tariff hikes. If tariffs between the US and China were higher, textiles and apparel production would increase further but agriculture, forestry and fisheries and motor vehicles and parts production would decrease further.

It is estimated that production of internationally competitive textiles and apparel would decrease in China, and production would further decrease if tariffs between the US and China were higher. On the other hand, metals production including steel would not increase in China, though China produces more than half of world steel. It is estimated that motor vehicles and parts production would substantially decrease in Canada and Mexico. That said, textiles and apparel production would not necessarily decrease if tariffs between the US and China were higher.

<sup>&</sup>lt;sup>5</sup> US trade deficits with China decreased, but overall trade deficits increased in line with the expansion of US trade deficits with Viet Nam, Chinese Taipei, Canada, Mexico and others, resulting from tariff hikes between the US and China under the first Trump administration.

<sup>&</sup>lt;sup>6</sup> It is estimated that US production would increase by 8.5% in metals and by 11.7% in motor vehicles and parts as a result of an additional US 25% tariff by sector, according to Kawasaki (20-25), "Economic Impact of US Tariff Hikes by Sector," Policy Analysis Focus 24-14.

	(%, Trade balance: billion U							
	AFF		TXL		MTL		MVH	
	Temp	US-China	Temp	US-China	Temp	US-China	Temp	US-China
Australia	0.2	1.0	-0.4	-2.1	3.8	4.2	1.7	2.6
New Zealand	-0.4	0.6	-1.4	-2.6	-1.4	-1.9	1.3	1.8
China	-0.0	0.5	-1.6	-5.7	0.9	0.7	0.6	-0.4
Japan	0.1	0.0	-1.4	-2.5	-0.8	-0.7	-4.9	-3.3
Korea	0.1	0.0	-0.6	1.1	-1.6	-1.9	-4.5	-3.2
Chinese Taipei	0.0	-0.1	-1.0	-0.2	-4.5	-5.4	-3.1	-2.1
ASEAN	0.0	0.1	2.8	15.4	-0.4	-1.2	1.4	2.7
India	0.1	0.3	-0.4	1.9	0.3	0.1	0.6	1.1
US	-1.9	-4.3	2.1	17.7	-1.7	-2.1	-0.1	-2.8
Canada	0.6	0.6	-13.2	0.8	3.0	5.9	-20.9	-18.3
Mexico	-1.4	-2.7	-12.0	0.0	-8.3	-5.7	-15.0	-13.7
EU	-0.1	0.0	-1.5	-1.4	-1.2	-1.1	-1.0	0.0
UK	-0.1	-0.1	-2.0	-1.7	-2.3	-2.7	-4.0	-2.6
Russia	0.3	0.8	0.2	-1.9	0.1	1.4	1.6	2.2
World	-0.2	-0.2	-0.9	-0.6	-0.5	-0.5	-1.8	-1.8

Table 2 Impact on production by industry

Source: Author's simulations.

Among other economies, metals production is estimated to increase in Australia and Russia, both of whom are rich in those resources. Textiles and apparel production would increase in ASEAN, and would increase significantly if tariffs between the US and China were higher. On the other hand, motor vehicles and parts production is estimated to decrease in Japan, Korea, Chinese Taipei and the United Kingdom (UK) regardless of high tariffs between the US and China.

### IV. Concluding remarks

The announcement of substantial US tariff hikes would raise anxiety regarding economic agents worldwide and would make future economic development uncertain. That said, economic benefits from trade divergent effects including the impact of high tariffs between the US and China could be expected for third parties. It must be noted that the economic impact of tariff hikes varies by economy and by industry, depending on the relative size of additional tariffs among economies and sectors. It will be useful to consider the potential impact of various tariff hike scenarios by means of quantitative study using economic models.