## Policy Analysis Focus 24-15 Economic Impact of US Reciprocal Tariff<sup>1</sup>

### February 2025

# Kenichi Kawasaki Professor, GRIPS Alliance, National Graduate Institute for Policy Studies (GRIPS)

#### I. Introduction

On February 1 United States (US) President Trump issued executive orders to impose an additional 10% tariff on imports from China and an additional 25% tariff on imports from Canada and Mexico, and on February 11 signed a proclamation to hike import tariffs on steel and aluminum by 25%. Moreover, on February 13 President Trump signed a presidential memorandum and ordered development of a "fair and reciprocal [trade] plan."

This article quantitatively investigates the economic impact of changes in tariff rates (when those rates were balanced between the US and its trade partners) by means of simulation studies using a computable general equilibrium (CGE) model of global trade.<sup>2</sup>

#### II. Macroeconomic impact

Tariff rates<sup>3</sup> on US exports among US major trade partners<sup>4</sup> are far higher in China (7.1%), India (11.2%) and Russia (4.9%) than the average US import tariff rate (1.5%). Japan's tariff rate (3.4%) on US exports is also around twice that of the US on

<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).

<sup>&</sup>lt;sup>3</sup> Tariff data in this article is based on tariff rates some time in the future when those rates would be reduced according to trade agreements including the US-Mexico-Canada Agreement and the US-Japan Trade Agreement (USJTA) provided by Market Access Map, International Trade Centre. <sup>4</sup> Economies shown in Table 1 here. US trade deficit was the largest with China in 2024, followed

by Mexico, Canada, Japan, Korea, Chinese Taipei, Viet Nam, Germany and Ireland.

Japanese exports. By industry, the tariff rates of US trade partners are high in agriculture, forestry and fisheries (4.0%), processed foods (7.2%) and motor vehicles and parts (4.4%). On the other hand, the US tariff rate on textiles and apparel (10.3%) is higher than the tariff rates of US trade partners. The tariff rate on US motor vehicles and parts is zero in Japan, but the rates set by Chinese Taipei, the Association of Southeast Asia Nations (ASEAN), the European Union (EU) and the United Kingdom (UK) are higher than those of the US.

The US Reciprocal Trade Act bill includes negotiations for reduction of trade partners' tariffs alongside hikes of US tariffs on imports from economies in which tariff rates are higher than those of the US. Meanwhile, there are legal rulings in the US governing which trade policies are implemented, including Trade Expansion Act sections 232 and 337 and Trade Act section 301. The actual legal framework would also need to account for international legal system policy including countervailing duty, which is allowed by the World Trade Organization (WTO) under the principle of most favored nation (MFN) treatment, where uniform tariff rates must be applied among member economies.

There is a concern that tariff hikes would deteriorate free trade and adversely affect the economy. If the US hiked tariffs by sector on imports from trade partners equivalent to tariffs of trade partners but only if trade partner tariffs were higher than US tariff rates,<sup>5</sup> US real GDP is estimated to decrease alongside those of China, India and Russia, whose tariff rates are much higher than those of the US, as is shown in Table 1. Decreases in US imports from trade partners would be limited, as those partners are

					(%)
	US hikes	Partner's cut		US hikes	Partner's cut
Australia	0.00	-0.10	New Zealand	0.03	-0.13
China	-0.22	0.03	Japan	0.11	-0.12
Korea	0.09	-0.19	Chinese Taipei	0.03	-0.11
ASEAN	0.13	0.05	India	-0.26	0.20
US	-0.17	0.13	Canada	0.15	-0.11
Mexico	1.09	-0.45	Russia	-0.12	-0.13
EU	0.01	-0.18	UK	0.02	-0.08
World	-0.03	-0.05			
~					

Table 1 Changes in real GDP

Source: Author's simulations.

<sup>&</sup>lt;sup>5</sup> It is assumed here that the US would hike import tariffs to the levels that the US is imposed when US partner tariff rates were higher by 1% and more than US import tariff rates in the economies shown in Table 1 by sector including those shown in Table 2. Other sector classifications here are mining, processed foods, other light manufacturing, metals, chemical products, electronic products and other machinery and equipment.

internationally non-competitive and export little to the US. On the other hand, it is suggested that real GDP would increase due to trade diversion effects in economies whose tariff rates are lower than those of other economies,<sup>6</sup> alongside Korea, Canada and Mexico, whose tariffs have mostly been eliminated in line with free trade agreements (FTAs) with the US.

On the other hand, tariff reductions are expected to expand trade and generate economic benefits. If US trade partners reduced tariffs on imports from the US by sector to the level of US tariffs,<sup>7</sup> US real GDP is estimated to increase. US domestic production would increase as a result of the expansion of exports in industries where the US is internationally competitive. That said, it is suggested that real GDP would decrease in US trade partners due to trade diversion effects,<sup>8</sup> though real GDP would increase in China and India. Reciprocal reduction of the remaining tariffs would be required for both the US and its trade partners to enjoy benefits.

#### III. Impact by industry

The impact of trade policy including tariff hikes and reductions would be larger at the sector level than at the macro level. The impact of US tariff hikes and trade partner tariff reductions on the production of major industries is shown in Table 2.

- Agriculture, forestry and fisheries production is estimated to remain broadly unchanged if the US hiked tariffs. That said, if trade partners reduced tariffs, US production is estimated to increase (by 0.89%). On the other hand, the production of trade partners is generally estimated to decrease, with the largest fall in Japan (0.91%).
- *Textiles and apparel* production is estimated to decrease in the US under both US tariff hikes and trade partner tariff reductions. If the US hiked tariffs, it is suggested that the production of US trade partners would generally decrease except in China and India. That said, production would increase in ASEAN and other economies if trade partners reduced their tariffs.
- *Motor vehicles and parts* production is estimated to increase in the US, and to a large extent (5.03%) if trade partners reduced tariffs. Production is estimated to increase in Japan and Korea if the US hiked tariffs but decrease if US trade partners reduced tariffs. Production would appear to decrease in ASEAN, the EU and the UK under

 $<sup>^6\,</sup>$  If the US hiked tariffs on imports from Japan only, Japan's real GDP is estimated to decrease by  $0.01\%\,$ 

<sup>&</sup>lt;sup>7</sup> It is assumed that US trade partner tariffs would be reduced when they are 1% higher than those of the US, and more as is the case of tariff hikes.

<sup>&</sup>lt;sup>8</sup> Japan's real GDP is estimated to increase by 0.08% as a result of Japan's tariff reductions.

	Agri. forestry fisheries		Textiles and apparel		Motor vehicles	
	US hikes	Partner's cut	US hikes	Partner's cut	US hikes	Partner's cut
Australia	-0.03	-0.43	-0.75	-0.14	0.48	-0.23
New Zealand	0.03	-0.30	-1.21	0.05	0.04	-0.80
China	0.03	-0.07	0.88	0.31	-1.86	-1.81
Japan	-0.05	-0.91	-1.47	0.16	1.98	-1.19
Korea	0.02	-0.01	-0.79	-0.21	2.14	-0.53
Chinese Taipei	-0.03	-0.14	-1.14	0.24	-6.45	-0.46
ASEAN	-0.10	-0.25	-0.34	0.67	-0.58	-1.77
US	-0.05	0.89	-1.85	-2.02	1.11	5.03
Canada	-0.44	-0.12	-2.58	-0.56	6.03	0.45
Mexico	-0.04	0.27	-2.42	-1.07	4.64	-0.14
Russia	0.08	-0.19	-0.18	-0.27	0.18	-0.58
India	-0.14	-0.23	0.73	0.80	-0.31	0.06
EU	-0.04	-0.10	-0.79	-0.37	-1.18	-1.63
UK	-0.03	-0.07	-0.89	-0.44	-0.32	-2.19
World	-0.03	-0.05	0.10	0.05	0.01	-0.17

Table 2 Impact on production by sector

Source: Author's simulations.

both US tariff hikes and trade partner tariff reductions.

The above changes in production by industry would be generated by differences in relative levels of tariff rates among economies, reflecting the comparative advantage of industries in those economies. It would be essential to further investigate sector development in detail<sup>9</sup> for trade negotiations with the US on items including tariffs.

#### IV. Concluding remarks

The US president has ordered the development of a plan for reciprocal tariffs. Larger macroeconomic benefits could be expected from trade partner tariff reductions, and moreover, from tariff reductions by both the US and its trade partners, rather than US tariff hikes. That said, the results of quantitative studies using an economic model suggest that the positive and negative macroeconomic impact on economies resulting from individual tariff hikes and reductions with the US would reverse due to trade diversion effects. Meanwhile, by industry, there would be concern that the higher the protection offered by tariffs, the more production would decrease. Ex-ante investigation based on quantitative policy analysis will be useful for negotiations with the US.

(%)

<sup>&</sup>lt;sup>9</sup> It is estimated in Kawasaki (2024), "Economic Impact of USJTA Renegotiation," Policy Analysis Focus 24-10 that rice production would increase by 21.4% in the US and decrease by 30.8% in Japan. On the other hand, motor vehicles and parts production would increase by 2.6% in Japan and decrease by 0.1% in the US due to removal of remaining US and Japan tariffs.