Impact of global economic decoupling on ASEAN: a geographical simulation analysis[1]

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Synopsis

- The war between Russia and Ukraine triggered renewed concerns about the decoupling of the global economy. This presentation discusses the possible economic impact on ASEAN based on the assumption of future decoupling of the global economy using the geographical simulation model (IDE-GSM).
- Global economic decoupling implies the changes in national policies and firms' responses to these changes. We examine how the firms in our model change their behaviour when we assume a change in the national policy.
- Decoupling should be avoided because it negatively affects the global economy. Therefore, making continued efforts towards maintaining an open economy is crucial.
- In terms of ASEAN countries, if decoupling does occur despite the efforts of economic actors, the ones that do not belong to any group would have a relative advantage.

The Ukrainian crisis triggered renewed concerns about the decoupling of the global economy. Using a geographical simulation model (IDE-GSM, Kumagai et al. 2013), this presentation describes the past analysis of (1) the US-China economic war and (2) sanctions against Russia. It also analyses the possible economic impact on ASEAN, assuming the global economy's future decoupling. This study does not endorse decoupling, nor does it argue that decoupling is inevitable. While the efforts of those involved in ensuring that decoupling does not occur are to be commended, it is not futile to discuss the global economy in the event of decoupling.

Concerns about such decoupling have been exacerbated by the Russia-Ukraine war. Singapore's Prime Minister, Lee Hsien Loong said, 'What happens in Ukraine is bound to have a big impact on US-China relations' (PMO Singapore 2022). At a meeting between the Secretary of State Antony Blinken and Chinese Foreign Minister Wang Yi in July 2022, the former said, 'Russia's war in Ukraine is complicating US-Chinese relations', while the latter blamed the US for the deterioration of relations (NPR 2022).

In response to the announcement of the Indo-Pacific Strategy by the US, Wang Yi pointed out that the US 'Indo-Pacific Strategy' claims to change China's surrounding environment, but its aim is to encircle China and try to make the Asia-Pacific countries act as 'pawns' for US hegemony (Ministry of Foreign Affairs, China, 2022). With regard to the US Indo-Pacific Economic Framework (IPEF), Yi said that China, like the other countries in the region, welcomes initiatives that help strengthen regional cooperation but is opposed to attempts to create division and confrontation (XinhuaNet 2022).

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[1] This is a preliminary version of a study by the IDE-GSM team for discussion purposes and does not represent the views of IDE-JETRO or ERIA. Based on this presentation and the comments received, Isono and Kumagai (2023) was published.

There have also been several media expressions of concern about decoupling and news stories about corporate actions. On 24 August 2022, the Sankei newspaper reported that Honda Motor was considering the building of a separate supply chain to reduce its dependence on China. Sankei said that Honda would continue to maintain a supply chain in China for the domestic market of the world's second largest economy while building another supply chain for markets outside China. Meanwhile, a Honda spokesperson told Reuters that although Honda has been working on reviewing its overall supply chain and hedging risks, this was not indicative of decoupling (Reuters 2022a). On 12 August 2022, Mazda announced that it would request parts suppliers to increase their inventories in Japan and manufacture parts outside of China. This was due to the COVID-19 lockdown in Shanghai, which caused supply instability and disrupted production. One of Mazda's senior managing executive officers stated, 'As we continue to do business globally, we must manage the current changes based on the recognition that we are no longer in the era of globalisation as we were in the past' (Reuters 2022b).

Some experts believe that this is a shift from an era of economic integration to one of economic security. In the era of economic integration, countries have promoted the conclusion of free trade agreements (FTAs); however, in the era of economic security, countries are increasingly placing restrictions on trade, investment, and the movement of people. Businesses have responded to this by pursuing the establishment and optimisation of supply chains in the era of economic integration. However, as economic security becomes the main objective of states, supply chains need to be restructured (Ishikawa 2022).

Based on an awareness of these issues, we define decoupling as (1) state policy and (2) firms' behaviour in response to it. We also examine how firms in the model react when the model assumes state policy changes.

The simulation used the IDE-GSM. Firms and consumers are included in the model. For example, manufacturing firms in each region decide where and how much raw material to source, how much to produce, and how much to sell to which regions, with the aim of maximising profit margins. Therefore, if the external environment changes, the firm behaviour will also change, resulting in economic conditions that differ from the baseline scenario.

In the US-China trade war scenario discussed by Kumagai et al. (2021), the US and China would experience negative economic effects, while East Asia, excluding China, would experience positive economic effects (Table 1). This is because East Asia, which can import and export without additional tariffs against the US and China, would be in a relatively advantageous position. In case of sanctions against Russia discussed by Kumagai and Hayakawa (2022), many parts of the world would suffer negative economic effects because it assumes that the whole world would impose sanctions on Russia.

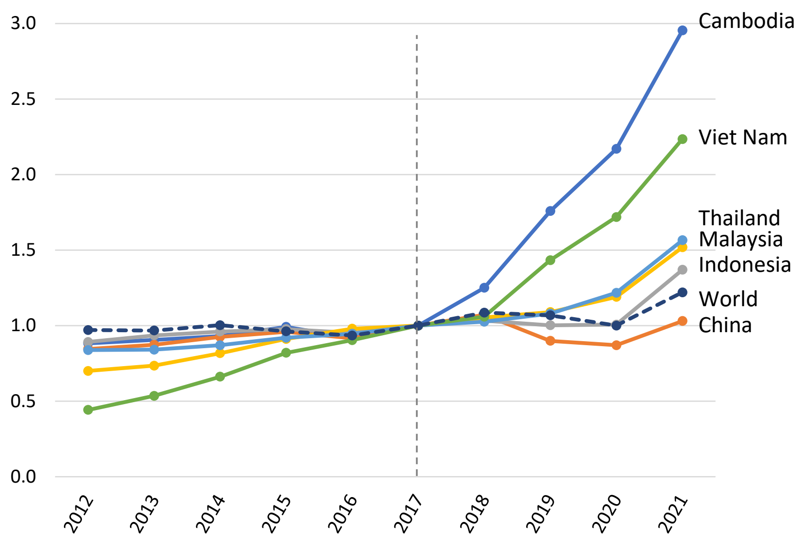
Table 1: Impact of the US-China trade war by industry (2021)

	USA	China	East Asia* (Excl. China)	World
Agriculture	-0.1%	-0.3%	0.0%	-0.1%
Automotive	-1.7%	-0.8%	0.0%	-0.3%
E&E	-12.4%	-7.5%	2.8%	-3.0%
Textile	-0.5%	0.0%	0.2%	0.0%
Food Proc.	-0.1%	0.0%	0.0%	0.0%
Oth. Mfg.	-0.4%	-0.1%	0.1%	0.0%
Services	0.0%	0.0%	0.0%	0.0%
Mining	0.0%	0.0%	0.0%	0.0%
GDP	**-0.4%**	**-0.5%**	**0.1%**	**-0.1%**

Source: Kumagai et al. (2021).
Note: E & E: Electronics and electric appliances. *East Asia: ASEAN10, Japan, South Korea, Taiwan, Australia, and New Zealand.

With regard to the US–China trade war, the validity of the simulation results can be partly verified by actual trade data. Since the US-China trade conflict, the value of exports from China to the US has decreased, whereas the value of exports from China to ASEAN and ASEAN to the US has increased. For products for which the US increased its tariff rates with China, there was a significant impact on the increase in exports from Cambodia, Indonesia, and Vietnam to the US (Hayakawa 2022). Indeed, using US import data, with 2017 normalised to 1.0, imports from China were lower than those from the rest of the world, while imports from ASEAN, particularly Cambodia and Vietnam, showed higher growth (Figure 1).

Figure 1: US import (2017=1.0)



Source: UN Comtrade.

The decoupling scenario in this preliminary simulation, in which the Western and Eastern groups of countries impose an additional 25% tariff on all goods, uses 2030 as the evaluation year and compares the economic impacts with the baseline scenario without decoupling. The results show that countries and economies participating in both decoupling groups face negative economic effects[2]. ASEAN, which does not participate in decoupling under the simulation assumptions, experiences positive economic effects. In Thailand, Vietnam, Malaysia, and Indonesia, high economic effects are observed in areas where the automotive, electrical, and electronic industry clusters are located. In one case, where the countries in the eastern grouping were changed, ASEAN also was seen to experience positive economic effects by not being in either group.

This result has different implications for the world as a whole, ASEAN countries, and individual firms. For the global economy, decoupling should be avoided because it has a negative impact. Therefore, it is important to continue making efforts towards maintaining an open economy. This may sound simplistic, but the most important message provided by the simulation results is this. For ASEAN countries, if decoupling occurs despite the efforts of economic actors, the countries that do not belong to any group would have a relative advantage. For each company, it is necessary to optimise and restructure supply chains, considering the constraints of both cases, where decoupling occurs and where it does not.

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[2] As this is a preliminary simulation, details of the result are omitted.

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