

Economic Security Through Global Value Chains



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Economic Security Dilemma

During his campaign for the presidential primaries, Donald Trump has suggested the imposition of a 60% tariff on goods coming from China. While the current geopolitical concern centers around the situations in Ukraine and Gaza, his remark is a fresh reminder of the ongoing battle between the world's economic superpowers.

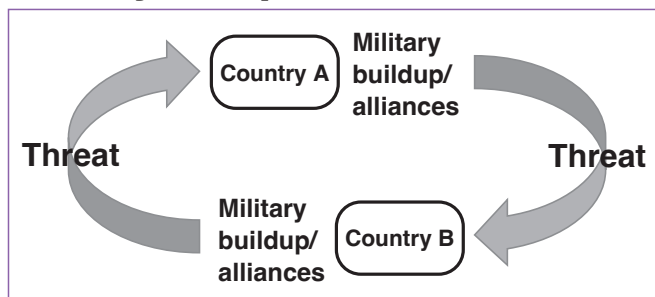
Theories of international relations often refer to the concept of “security dilemma”. It depicts a mechanism in which one country's attempt to enhance its own national security conversely imperils that security. For example, military buildups or alliances, even for a purely defense purpose, may be perceived by opponents as a threat to their security, and thereby drive these countries to mirror-image reactions (i.e., military buildups/alliances). As a result, both camps are trapped in a vicious cycle of escalating global risks and tension (Chart 1).

There is a great deal of studies on the security dilemma in military and diplomatic contexts, but the application of the model to the issue of economic security is still limited. Today, with rapid permeation of advanced technologies into economic activities, it has become increasingly difficult to distinguish between products for civilian uses and those for military uses. Accordingly, the state of play about decoupling measures of global value chains (GVC) have an important implication for current and future inter-state power relations.

Chart 2 illustrates which part of US-China bilateral channels is targeted by each country's decoupling devices with respect to flows of goods, money and people. It is clear from the diagram that any of the GVC channels is blocked one way or another.

The observed tit-for-tat economic statecraft between the United

CHART 1
Security risk spiral



Source: Inomata, Satoshi. *Geopolitics of Global Value Chains*, Nikkei Publishing, 2023

States and China suggests that the two superpowers may have fallen into the state of “economic security dilemma”. What is worse, it is totally unclear whether or not their political leaders have any concrete prospect of resolving this structural dilemma. Where does the exchange of decoupling measures lead to? What is the exit strategy and subsequent reconstruction plan? If things remain as they are, the negative spiral will continue and may take us to a point of global economic catastrophe. With increasing uncertainty over the 2024 US presidential election, it is no longer easy to deny such a dark scenario.

“Dual-Use” GVCs

The security dilemma is analogous to the “prisoner's dilemma” in game theory. Each side of the game knows in advance that it will benefit both parties if one cooperates with the other, but in the end they always fall into the choice of non-cooperation for a one-shot game. Note that this happens *not* because of their incompetency in calculating gains and losses; on the contrary, it is a product of a rational choice by each side in a given environment.

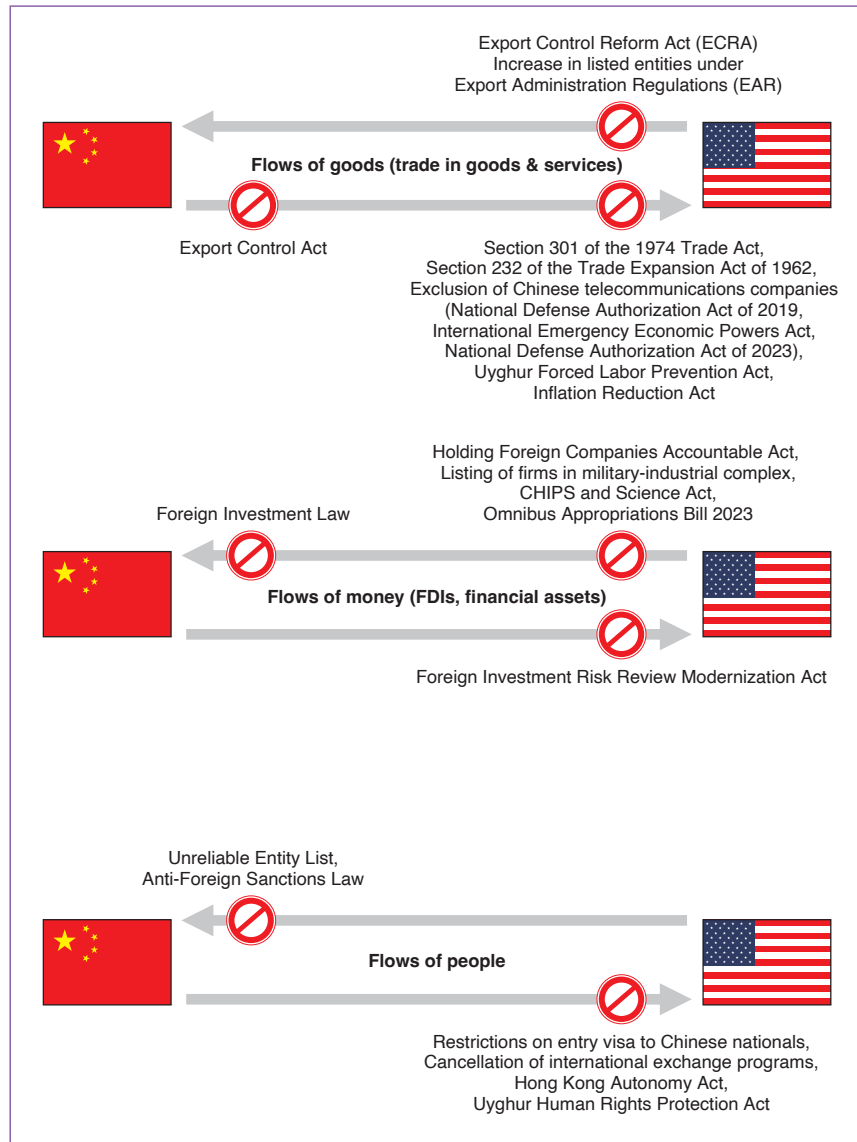
The fundamental cause of the dilemma lies in the structure of the game, where, like prisoners in cells, the parties lack an effective communication channel to engage in complicity for joint survival. This is why the security dilemma is often alluded to in military domains for which informational asymmetry is a rule rather than an exception, as seen in the harsh intelligence operations during the Cold War.

Today, discussions on economic security are often framed within the logic of military security, but this is not necessarily appropriate. It is true that GVCs have the potential to be weaponized by means of economic statecraft. It is also true that weaponized GVCs have significantly increased their destructive power and speed because of rapid technological progress. Nevertheless, there is one crucial difference: unlike military tanks, fighter jets, or battleships, supply chains that compose GVCs can serve as extensive communication channels across national borders.

GVCs are continuously woven over the fields where firms' profit-making motives cross over, and each of these transactions enmeshed in GVCs contains multi-faceted information about the contractual parties (suppliers and clients), such as product specification, service quality, supplier networks, business competitors, management profiles, and the scope of technologies and intellectual property rights. They are carefully evaluated from

CHART 2

Bilateral exchange of decoupling measures



Source: Inomata, Satoshi. *Geopolitics of Global Value Chains*, Nikkei Publishing, 2023

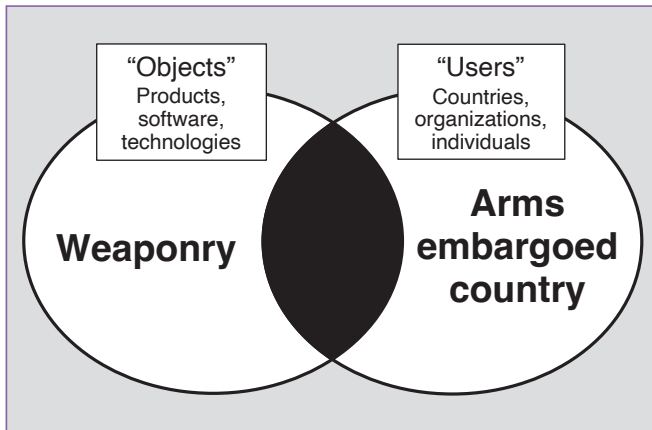
various perspectives, during which trust between the parties can be fostered and eventually materialized in the form of a legally-endorsed business contract. In this way, firms' uncompromising motives for risk management and profit maximization are the fundamental basis for trust-building between the parties.

In the light of macro-level risk management, GVCs can be an important public asset as trust-building networks by facilitating

communication across national borders. Furthermore, GVCs' communication channels have multiple paths along dispersed supply chains, and hence are quite amenable to the idea of risk diversification. Namely, GVCs are deemed "dual-use" apparatus, one as a platform for global relocation of resources, and the other as a trust-building mechanism for national security.

CHART 3

CHART 3 Image of export controls: “objects” x “users”



Note: Strictly speaking, the “use” of an object is also considered in export controls. However, its scope of restriction roughly overlaps with that of “users”.
 Source: Inomata, Satoshi. *Geopolitics of Global Value Chains*, Nikkei Publishing, 2023

GVCs as Trust-Building Mechanism

In the face of mounting geopolitical tensions between the US and China, the primary role of GVCs as a trust-building mechanism is to manage the escalation risk of economic decoupling. But how?

In general, the implementation of export controls is considered in accordance with the combination of “objects” (products, software, technologies) and “users” (countries, organizations, individuals). In the case of arms exports, for example, transactions are restricted if the product of concern falls under the category of “weaponry” and the export destination is identified as an “arms embargoed country” (Chart 3).

As for the export controls in view of objects, the current practice tends to follow the principle of “small yard, high fence”; namely, the controlled objects are limited to only military-sensitive products/technologies but the given restrictions should be fully implemented without faults. There are several national/supra-national lists of references such as the Wassenaar Arrangement, the US Export Administration Regulations (EAR), or Japan’s Foreign Exchange and Foreign Trade Act, with which the examination of individual products is carried out from a scientific viewpoint on physical and technological attributes. Of course, there is an issue of dual-use products/technologies which lie in a gray zone between civilian and military uses. Even so, in-depth examination and discussion involving regulatory bodies, company managers and engineers may help to overcome such a specification problem.

In contrast, as for the export controls in view of users, it is difficult to find equivalent operational references for pursuing the “small yard, high fence” principle. For example, a list of entities for which export controls apply is to be considered in accordance with vague criteria such as “foreign individuals, companies, and organizations deemed a national security concern” in the case of the US, and “parties that endanger China’s sovereignty, safety, and development interests” in the case of China. There is ample room in the wordings for broader interpretation, which may induce excessive designation of targeted entities.

Currently, it is known that regulators’ decisions about the designation of denied entities largely rely on information from economic intelligence, such as the possibility of the entities (individuals or organizations) having any engagement in military affairs. Here, the information embedded in transactional relations between firms can serve as complementary referential points for the correct identification of entities concerned. There is a rich lode of information to mine in GVCs in order to avoid overkill by regulators.

Surely, we should also keep our eyes on the risks that the dual-use criteria are overstretched beyond the scope of advanced military technologies lest even generic products of daily use be restricted as well. However, the greatest threat at the moment lies in the possibility that the US-China decoupling may geographically spill over to other countries, in the Indo-Pacific region in particular. The buzz-phrase “new Cold War” suggests that US-China confrontation can lead to a world with two opposing blocs as we once saw in the US-Soviet rivalry, and the Indo-Pacific region is most exposed to such a risk. How do we prevent the geographic spread of decoupling and preserve the stable trading systems in the region? This is the imperative mission of economic security through GVCs.

ASEAN & the “Gray World”

The key is the regional security system with the Association of Southeast Asian Nations (ASEAN) at its core. As US-China confrontation unfolds, many people tend to see that Southeast Asia is a vulnerable target of geopolitical competition between the great powers. Nevertheless, Mie Oba (Oba 2023) argues that ASEAN is in fact a proactive main player for regional security rather than a passive bi-player and challenges our naïve recognition of international relations as “democracy versus authoritarianism”. Indeed, the world we live in is not delineated as black and white but continuously “gray”, as she puts it.

The basic tenet of ASEAN’s collective foreign policy rests on the idea of risk diversification by avoiding skewed political and economic dependence on a particular country, especially big powers such as

the US and China. For example, ASEAN proposed in June 2019 the ASEAN Outlook on the Indo-Pacific (AOIP) in parallel to the Free and Open Indo-Pacific (FOIP) vision led by Japan and the US. Unlike the FOIP, it is a scheme that embraces the possibility of cooperating with China and Russia, too. In November 2021, the Strategic Partnership with China was upgraded to the Comprehensive Strategic Partnership (CSP) to strengthen the bilateral relations, while at the US-ASEAN Summit in November 2022 both sides agreed to establish the CSP, showing ASEAN's strong interest in managing delicate diplomatic distances *vis-à-vis* the US and China.

Even for Russia after the outbreak of war with Ukraine, ASEAN kept its door open for multilateral dialogues. Cambodia, the ASEAN chair in 2022, did not opt for excluding Russia from the East Asian Summit of that year in spite of diplomatic pressure from the US and European countries. Likewise in the same year, Indonesia, the G20 president, and Thailand, the host of APEC (Asia-Pacific Economic Cooperation) conferences, endeavored to enable Russia's participation in respective meetings (Oba 2023).

ASEAN is particularly relevant for economic security through GVCs because of its highly inter-dependent production systems stretching over the region and beyond. The ASEAN Economic Community (AEC) was founded in 2015, which realized a high degree of trade liberalization such as the elimination of tariffs for more than 90% of traded items. The presence of complex and sophisticated production systems enhanced regional stability, which in turn helped to develop the regional production networks in the manner of a virtuous cycle.

Political & Economic Positions of Indo-Pacific Countries

How, then, does the “gray world” as envisaged by Oba manifest itself in the Indo-Pacific region? *Chart 4* shows, in the horizontal axis, the relative positions of countries in terms of the similarity of foreign policies *vis-à-vis* those of the US and China, and, in the vertical axis, each country's degree of economic dependency on the two economic poles. The degree of foreign policy similarity is based on countries' voting patterns at the UN General Assembly, i.e., whether a vote is cast in line with the US or China. On the other hand, the degree of economic dependency is measured by the relative importance of the two countries as a source of value added for each country's supply chains, where the vertical sequences of markers correspond to 45 industries specified in the analytical data: the Intercountry Input-Output Tables of the Organisation for Economic Co-operation and Development. (Note that some markers overlap in the diagram and hence all 45 industries may not be fully presented.)

Looking at the foreign policy similarity (the horizontal axis), ASEAN countries and India are positioned in the left half, showing that their foreign policies are generally akin to that of China despite some observable variations. Further to this, if we cross-refer the results with the corresponding positions for the relative economic dependency (the vertical axis), there is a notable correlation between these two indicators (i.e. the more economically dependent, the more similar in foreign policies), perhaps with the exception of Singapore.

In the right-half segment, the countries similar to the US in policy stances line up, but they do not necessarily present a skewed dependence on the US economy as has been the case for ASEAN/India on China. There is thus a notable asymmetry between the country cluster in the China-side and that in the US-side. We talk about the Indo-Pacific as a specific region, but the data reveals that each country's political and economic positions in relation to the US and China differ significantly, showing the geoeconomic “grayscale” of the region.

Economic Security Through GVCs

Economic security through GVCs involves the process of trust building through firms' business networks. Considering the current political climates in the US and China, it is difficult to expect such a mechanism to work directly for bilateral relations between these two poles. But what about the case of “grayscale” GVCs in the Indo-Pacific region? Its production networks spread over countries with different political and institutional bases, where successive chain reactions of trust-building along the production sequence may eventually reach out to both the US and China so that these opposing rivals are indirectly connected through multiple communication channels. Or at least, it should have an immediate effect of mitigating the decoupling risks in the Indo-Pacific region.

Of course, the primary motives of firms are to maximize their own profits and corporate value; they do not do business for the sake of national security. Rather, it should be the interest of governments to recognize the trust-building mechanism of GVCs and establish the relevant institutional architecture for its active use. It is time to reconsider what GVCs mean for economic security in the age of political division and fragmentation.

CHART 4

Foreign policy similarity & economic dependency vis-à-vis China & the US: 2018



Note 1: Degree of foreign policy similarity is calculated by the method in Häge (2011) using data from Harvard Dataverse "Chance-Corrected Measures of Foreign Policy Similarity (FPSIM Version 2)".

Note 2: When value-added sources of an industry are "China > the US", the corresponding marker of the industry is located in the top-half by the ratio "value added from China divided by that from the US". Conversely, when value-added sources of an industry are "the US > China", the corresponding marker of the industry is located in the bottom-half by the ratio "value added from the US divided by that from China".

Note 3: The degrees of foreign policy similarity for India and Cambodia are almost the same, and thus the figure for India is adjusted slightly so that their markers do not overlap. The actual figures are -0.6388 for Cambodia and -0.6383 for India. Also, the data for Chinese Taipei is not available, and hence it is placed above the midpoint.

Source: Inomata, Satoshi. *Geopolitics of Global Value Chains*, Nikkei Publishing, 2023

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