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# Global Value Chains (GVCs) in East Asia:
## Can They Contribute to Further Sophistication of Regional Industries under the Head Wind of Intensifying Trade Frictions?

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### What is a Global Value Chain?

Against the backdrop of development of the information and communication technology, globalization of corporate activities have much advanced with flourishing division of labor between manufacturing processes aiming at the optimal production at the optimal location. We call such division of labor between the processes across borders by multinational companies a global value chain (GVC). In the case of manufacturing industry, it used to be a general pattern that the upstream process of production including product design and marketing or production of sophisticated parts is conducted in advanced countries and assembly process is performed in emerging countries with low labor cost while high valued-added services like after-sales services are provided in advanced countries of destination for final consumption. In recent years, however, in an increasing number of cases parts are mutually traded among developing countries or the developing countries have become by themselves the destination of final consumption as many of them have achieved economic development to gain stronger supply capacity and purchasing power.

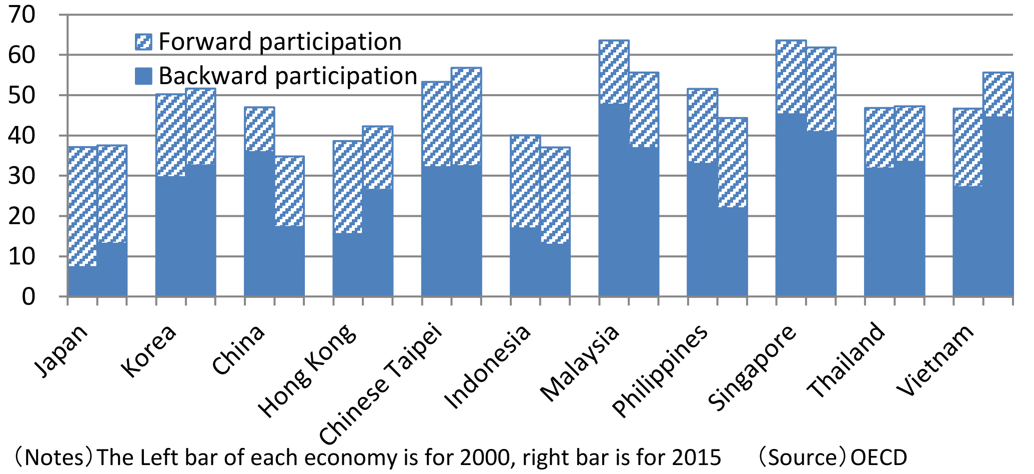
When companies make decisions on a construction of GVC networks, in addition to such factors as physical distance or transportation and communication technology, institutional arrangements like customs procedures play an important role in their decision making. Reflecting the consideration on these aspects, East Asia has joined North America and Europe as one of the regions with elaborated GVC networks.

The development of GVCs in East Asia was accelerated by the transfer of production bases by the Japanese companies which increased after the rapid appreciation of the yen since the latter half of the 1980s. The Japanese companies started their overseas business expansion into the NIEs like Korea and Taiwan (Chinese Taipei), expanding it to China and the ASEAN countries. The advancement of the Japanese companies contributed to boost the growth of the whole East Asia together with a progress of industrialization. More recently, Chinese companies have increased their high-profile in the Asian investment while Chinese outstanding amount of direct investment in Asia ranked the top at the end of 2017, exceeding Japan and the U.S. Looking ahead, connectivity within the region will be further enhanced helped by the infrastructure investment by China associated with its "Road and Belt" initiative and the construction of the GVCs is expected to continue centered around Chinese companies as a hub.

**East Asia's Participation in GVCs**

The OECD classifies the involvement in GVCs into forward participation and backward participation. The backward participation represents the involvement by assembling imported parts to export, while the forward participation represents the involvement in GVCs as a supplier of part and capital goods.

Figure 1: GVC Participation Index[1] of East Asian Countries（2000 and 2015）




（Notes）The Left bar of each economy is for 2000, right bar is for 2015 （Source）OECD

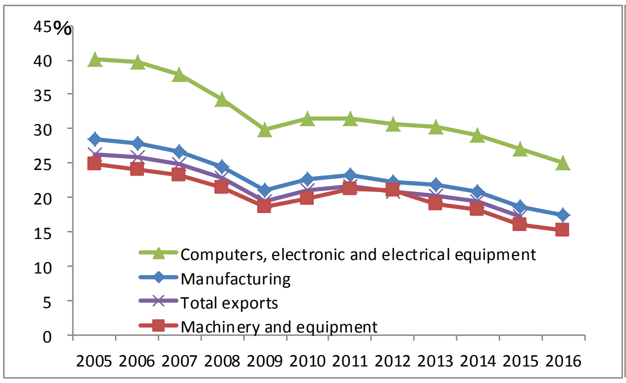
[1] The forward participation ratio in this figure implies a percentage share of value added exported to third countries in gross exports. The backward participation ratio is expressed by the percentage share of foreign value added in gross exports. For more details, please refer to Global Value Chains in ASEAN, Institute for International Monetary Affairs, *Newsletter*, January 4, 2018; http://www.iima.or.jp/Docs/newsletter/2018/NL2018No_1_e.pdf

Japan has a high ratio of forward participation as a supplier of parts and capital goods. China used to import parts to process and assembly them for exports (backward participation), but in the last 15 years, it rapidly developed advanced domestic industries to produce parts domestically, thus strengthening its position as a supplier of parts and capital goods to other countries. Among the ASEAN countries, Singapore, Malaysia and the Philippines have been increasing the ratio of domestic value added, lowering the ratio of backward participation as a result, while Thailand and Vietnam have been raising its degree of backward participation reflecting a rapid progress of globalization in recent years. In particular Vietnam stands out in its rapid rise in the backward participation ratio.

**Advancement of Chinese exports and deepening integration of the East Asian economies**

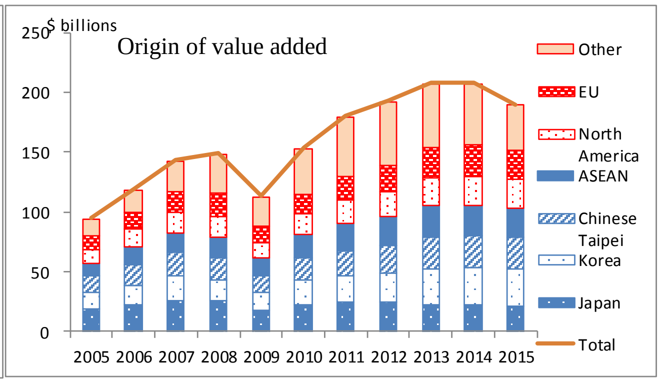
Computers, electronics and electrical equipment are the typical industries that have developed extensive GVC networks. The exports of these products account for about half of the Chinese export earnings but 40 percent of its exports consisted of the foreign value added (Figure 2) in 2005. In the past 10 years, the share of the domestic value added increased and the share of the foreign value added declined to 25% in 2016. In that process of declining share of the foreign value added, imports of the value added from East Asia (countries of original production) including Japan, Korea, Taiwan and ASEAN have remained mostly steady (Figure 3). Mainly reflecting the development in such leading industries noted above, the share of the foreign value added in the total exports declined from 28% in 2005 to 17.5% in 2016 for manufacturing products,

Figure 2 : Foreign Value Added in China's Exports




(Source) OECD

Figure 3 : Foreign Value Added in China's Exports of Computers and Electronics and its origin




(Source) OECD

On the other hand, as noted above, China has also been increasing the ratio of GVC participation as a supplier of parts and capital goods. In the exports of Japan, Korea and ASEAN, the share of the value added imported from China has been steadily rising.

For many Asian countries, the United States and Japan once used to be the main destination of their exports, but in more recently the share of China exceeded Japan among their counterparts both in exports and imports in most of these countries, with their relationship with the Chinese economy becoming stronger[2].

The Chinese government published in May 2015 "Made in China 2025", its industrial policy that focused on fostering priority industries, aiming at making China a world manufacturing power by 2025 by trying to advance industries in ten priority areas including next-generation information technology, robotics, aerospace equipment, biotechnology and so on.

The United States criticizes such policy of fostering industries as an action to strengthen unfair export competitiveness helped by the government subsidies. And this has led, in addition to the US large trade deficit with China, to the implementation of additional tariff hikes on the imports from China and other protectionist measures on China.

**Growing importance of regional economic partnership**

Free trade with less customs tariffs and non-tariff barriers is a necessary pre-requisite in developing GVCs. In this regard, the worldwide trend of growing protectionism since the start of the Trump administration in the U.S. is a major cause for concern[3].

Under such circumstances, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP, commonly known as TPP11) took effect on December 30 2018. TPP11 was realized through strenuous negotiations by the eleven countries led by the leadership of Japan and New Zealand after the withdrawal of the United States from the negotiation. Although its scale became smaller by the withdrawal of the US, TPP11 still covers 13% of the world GDP, 15% of trades, and has a population of 500 million. It represents a comprehensive agreement with a high level of trade liberalization and rules in wide-ranging areas including trade in services, investment, intellectual properties, labor and environment, and the agreement

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2 For details, please refer to "Global Value Chains in East Asia", IIMA Newsletter No. 4, 2018 (in Japanese ) http://www.iima.or.jp/Docs/newsletter/2018/NL2018No_4_j.pdf

3 There is also a view that the intensification of the US-China trade frictions (additional impose of the US tariffs on China) does not necessarily put negative impacts on the Asian countries other than China through the shift of source of US imports to other countries than China.

is expected to serve as a good model for the future economic partnership agreement in the world. Already Thailand, Indonesia, the Philippines, Korea, Taiwan, Columbia and the UK have expressed their intention of or interest in participation, suggesting a further enlargement of the membership.

On the other hand, the Regional Comprehensive Economic Partnership (RCEP) failed to reach an agreement in 2018 when it was first expected and the negotiations were postponed to 2019. RCEP is a partnership of 16 countries consisting of ASEAN 10 countries joined by Japan, China, Korea, India, Australia and New Zealand. Its scope of covered areas is narrower than TPP11 with lower degree of liberalization, but the participation of two big countries of China and India has a significant meaning. India is reported to be sticking to its policy stance, making the negotiation rough going, but it is hoped that taking effect of TPP11 would encourage the progress of the RCEP negotiations.

Also the ASEAN Economic Community (AEC) was launched in 2015 by the ASEAN countries with the intraregional tariffs abolished in the early 2018. Further integration of the AEC including digitalization of customs procedures has been promoted for completion by 2025.

East Asia has been a growth center of the world economy and achieved a development to reach the level of middle income countries together with the ASEAN late comers (Cambodia, Lao PDR, Myanmar and Vietnam). However, countries other than the NIEs are experiencing rough going in transforming themselves from middle income countries to high income countries, with substantial difficulty in getting out of a “middle income trap”. Western advanced economies now face a slow growth due to aging of population. Therefore, the Asian growth model that tried to “achieve an economic growth led by exports of labor intensive products targeting the markets in advanced economies” has become obsolete. Asia needs to shift to a “growth strategy based on the increased productivity accompanied by technological innovation”. To this end, it is hoped that the Asian countries actively participate in GVCs and sophisticate their industries, through which they achieve an economic growth based on the increased productivity. In the meanwhile, Asia has an enormous potential big consumer market in China and India. The neighboring Asian countries can expand their growth potentiality by participating GVCs that target these big markets. The deepening of regional economic partnership will make an important step toward this end.

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