

Section 6

THE IMPORTANCE OF THE ASEAN ECONOMY IN TERMS OF JAPAN'S TRADE STRUCTURE: A GVC PERSPECTIVE

GOTO, Kenta; INADA, Yoshihisa; NOMURA, Ryosuke; YOSHIDA, Shigekazu; LUONG Anh Dung; NITTA, Yosuke; MIYAMOTO Ei

1. Japan's Economy and the ASEAN

The growth potential of the Japanese economy is highly dependent on its relationship with the rest of the world and, in particular, on the competitiveness of its inter-connected international production networks, or the so-called global value chains (GVCs). Asia is the region where these GVCs have developed in the most complex way (Goto, 2019).

Until now, Japanese companies have played a leading role as the key coordinator in organizing GVCs in Asia. The most important partner in this has been China. In the 2020s, the COVID-19 pandemic and other conflicts in various regions have greatly shaken the political and economic order, affecting the economies of each country. Under these circumstances, ASEAN has continued to show robust growth despite the slowdown in the global economy (Hamada, 2024a.).

ASEAN is of particular importance to Japan. While it is not realistic to organize a GVC coordinated by Japanese firms without China, it is the most important region for Japan as it reassesses its trade and investment dependence and builds a more robust value chain. ASEAN, on the other hand, includes 10 diverse Southeast Asian countries, each at a different stage of development and with different international comparative advantages. Therefore, the characteristics of the relationship with Japan also differ greatly from country to country.

In Section 6, we focus on ASEAN as a diverse region, overview its trade structure, and examine the characteristics of its economic linkages with Japan based on various statistical data. Subsection 6.2 provides an overview of the characteristics of ASEAN based on the business activities of overseas subsidiaries of Japanese firms, and Subsection 6.3 examines the trade structure of major ASEAN countries based on UN Trade Statistics to see how major ASEAN countries with different characteristics are connected to the world and Japan. Finally, Subsection 6.4 examines the relationship of the Kansai economy with ASEAN in comparison with China.

2. Trends in the Activities of Japanese Firms Based on the Quarterly Survey of Overseas Subsidiaries

In Subsection 6.2, we use the “Quarterly Survey of Overseas Subsidiaries” of the Ministry of Economy, Trade and Industry (METI) to examine the trends of Japanese firms in the ASEAN region. The characteristics of the business activities of Japanese firms operating overseas are clarified by comparing data on the sales, number of employees, and capital investment in North America, China, and Europe, with those in ASEAN.

(1) Trends by Major Regions (North America, Europe, China, and the ASEAN): Sales, Number of Employees, and Capital Investment¹⁾

Figure 1-6-1 shows the change in the share of sales by region. As the figure shows, the share of North America has been on an upward trend since Q2 2014, reaching a peak of 32.3% in Q3 2016. After that, the share showed a downward trend, but returned to an upward trend from Q1 2022, reaching 31.1% in Q4 2023.

For Europe, the share has shown a gradual downward trend from 13.7% in

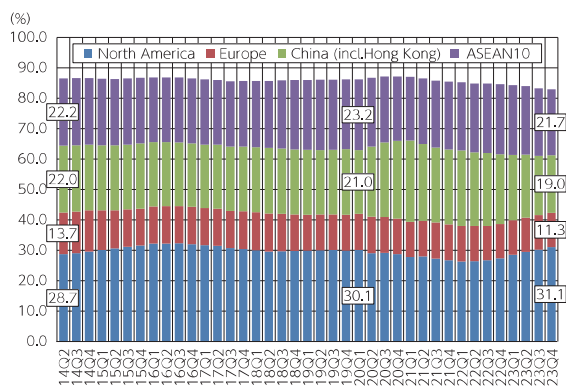


Figure 1-6-1 Changes in sales share by region

Source: Prepared by the author from “Quarterly Survey of Overseas Subsidiaries,” Ministry of Economy, Trade and Industry

1) The regions defined in the overseas subsidiaries are as follows: North America: United States of America and Canada. ASEAN: Indonesia, Thailand, the Philippines, Malaysia, Cambodia, Singapore, Brunei, Vietnam, Myanmar, and Laos. China: People’s Republic of China (including Hong Kong SAR). Europe: Ireland, United Kingdom, Italy, Ukraine, Austria, Netherlands, Greece, Switzerland, Sweden, Spain, Slovakia, Slovenia, Czech Republic, Denmark, Germany, Turkey, Hungary, Finland, France, Bulgaria, Belgium, Poland, Portugal, Montenegro, Luxembourg, Romania, and Russia

Q2 2014 to 11.3% in Q4 2023.

On the other hand, China's share peaked at 26.8% in Q1 2021 and has been on a downward trend since then, reaching 19.0% in Q4 2023.

In this context, ASEAN's share was 22.2% in Q2 2014 period and showed a gradual downward trend in the Q2 2017 period; it turned upward in Q3 2017 but declined again in Q2 2020 and thereafter due to the COVID-19 pandemic. The share began to rise again from Q2 2021, but was 21.7% in Q4 2023.

In summary, North America is increasing its share, while Europe's share has declined somewhat since 2014. China's share has been declining since the COVID-19 pandemic, while ASEAN's share has remained stable at around the 20% level and will exceed China's in 2023.

Figure 1-6-2 shows the change in the share of capital investment (the amount of tangible fixed assets acquired in the current quarter, excluding land) by region. As the figure shows, the share of North America is increasing in 2023, and the share of Europe is also increasing slightly. In contrast, China's share is declining (14.9%), and ASEAN's share is still in the high 20% range, although it has decreased somewhat since 2014.

Figure 1-6-3 shows the changes in the share of the number of employees. As the figure shows, ASEAN's share is overwhelmingly higher than that of other regions from 2014 to 2023. When considered together with the share of capital investment mentioned earlier, the relatively high share of the number of employees in ASEAN may suggest that Japanese firms in the region are mainly responsible for labor-intensive processes and functions in GVCs.

The share is also increasing in Europe and North America. In China, on the

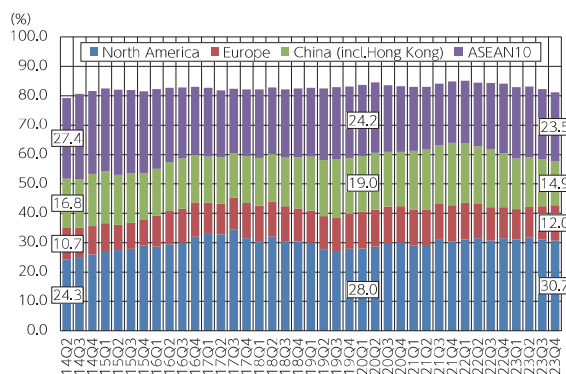


Figure 1-6-2

Changes in the share of capital investment by region

Source: Prepared by the author from "Quarterly Survey of Overseas Subsidiaries," Ministry of Economy, Trade and Industry

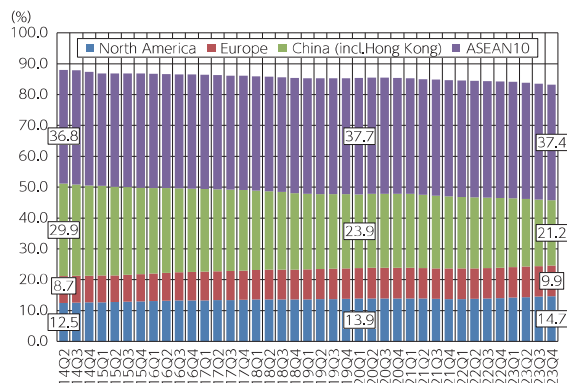


Figure 1-6-3 Changes in the share of employees by region

Source: Prepared by the author from "Quarterly Survey of Overseas Subsidiaries," Ministry of Economy, Trade and Industry

other hand, the share is decreasing from 2014 to 2023. Since the figure does not show the type of work performed by employees in each region, it is not possible to examine the specifics of the background to these trends. However, it is also possible that the production bases are shifting from China to ASEAN, as both regions have been integrated into GVCs mainly from labor-intensive production processes.

(2) Trends in Japanese Firms' Shipments by Destination (to Local, to Japan, and to Other Countries) in Major Regions

Next, let us look at the destinations of Japanese firms in each region.

North America is characterized by an overwhelmingly high local market share of 90% and low shares for Japan and other countries (Figure 1-6-4). This is a typical characteristic of foreign direct investment (FDI) in developed countries motivated by market access.

In Europe, the share of the local market is in the 50% range. The share for other countries is in the 40% range, which is high compared to the other regions. On the other hand, the share of exports to Japan is low (Figure 1-6-5). This is most likely due to the fact that exports to other countries include exports within Europe, and the extremely small share of exports to Japan may play a role similar to that of North America.

As for China, while the share of local markets is increasing, the share of Japan and other countries is decreasing (Figure 1-6-6). This may reflect the expansion of China's local market and the concomitant increase in local business

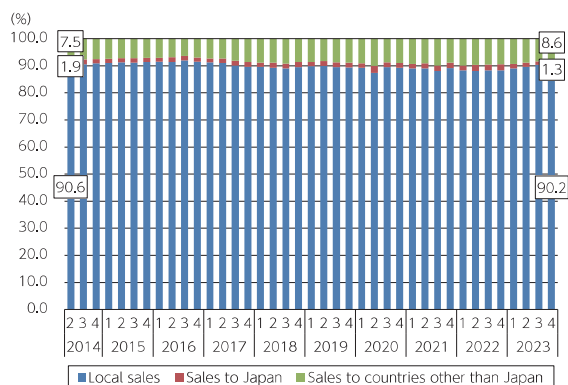


Figure 1-6-4

Changes in sales share by destination: North America

Source: Prepared by the author from "Quarterly Survey of Overseas Subsidiaries," Ministry of Economy, Trade and Industry

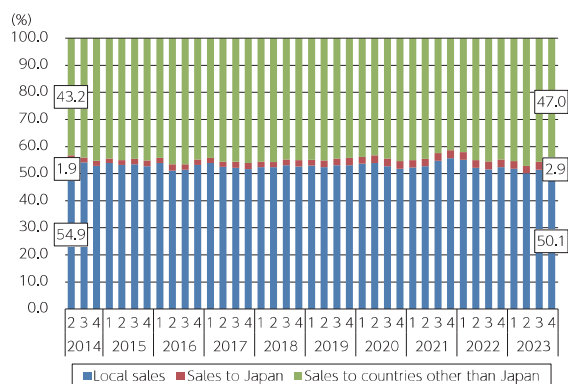


Figure 1-6-5

Changes in sales share by destination: Europe

Source: Prepared by the author from "Quarterly Survey of Overseas Subsidiaries," Ministry of Economy, Trade and Industry

opportunities, suggesting a gradual shift from being a production base to focusing on business development aimed at Western-style market access for domestic demand in China.

In the ASEAN region, the share of local markets has been fluctuating at the 50% level, reaching 56.5% in Q4 2023. The share of exports to Japan rose somewhat from 16.8% in Q2 2014 to 19.8% in Q4 2023. On the other hand, the share of exports to other countries declined from 27.9% in Q2 2014 to 23.7% in Q4

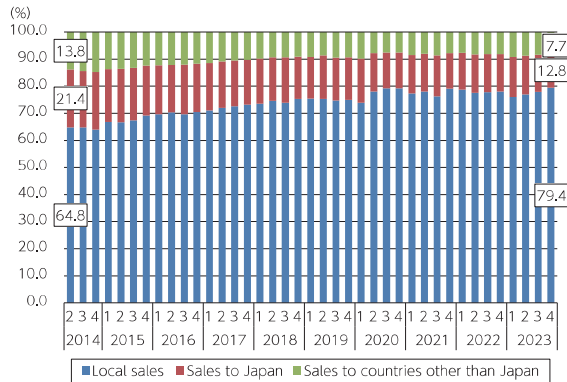


Figure 1-6-6 Changes in sales share by destination: China

Source: Prepared by the author from "Quarterly Survey of Overseas Subsidiaries," Ministry of Economy, Trade and Industry

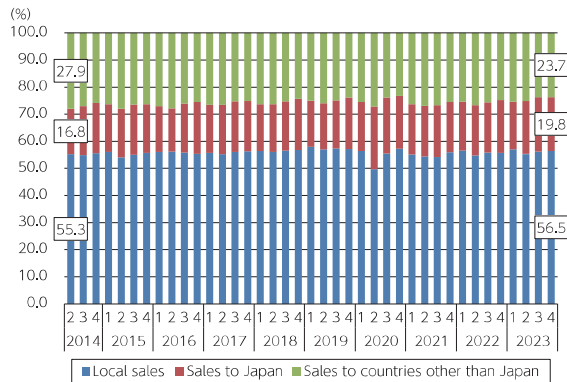


Figure 1-6-7 Changes in sales share by destination: ASEAN

Source: Prepared by the author from "Quarterly Survey of Overseas Subsidiaries," Ministry of Economy, Trade and Industry

2023 (Figure 1-6-7). In general, however, exports to Japan and other countries account for more than 40% of total exports, indicating that the region is characterized as a production base for outside markets.

3. Changes in the ASEAN's Import/Export Structure Based on UN Trade Statistics (2012-2022)

(1) Major Trading Partners of the ASEAN

As we have seen, the ties between Japan and ASEAN are strong for Japanese companies. We will now review the trade structure of ASEAN, which is expected to become even more important for Japan in the future, using the Commodity Trade Statistics Database (UN Comtrade) published by the United Nations.

Figure 1-6-8 shows the change in ASEAN exports by country/region. The U.S. and China have been major export destinations, but the value of exports to the U.S. slightly exceeded that to China in 2022. In any case, it can be seen that the U.S. and China occupy an important position for ASEAN as export destinations compared to other countries.

Similarly, in terms of import value (Figure 1-6-9), it can be understood

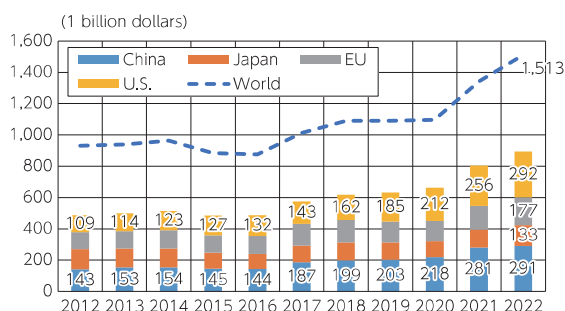


Figure 1-6-8

Changes in ASEAN export values by country and region

Source: Prepared by the author from UN Comtrade

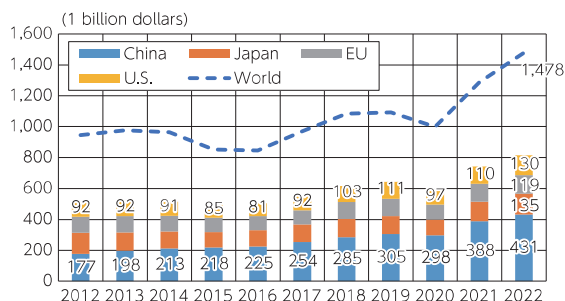


Figure 1-6-9

Changes in ASEAN import values by country and region

Source: Prepared by the author from UN Comtrade

that the volume of imports from China is extremely large. China’s presence as an import source has grown significantly, especially during the COVID-19 pandemic (2020-22).

Next, we calculated the export share, export growth rate, and revealed comparative advantage index (RCA) for the major export items of ASEAN (the top five export items by value in 2022) to conduct a comparison. The RCA is calculated by taking the ratio of a specific good’s exports in total exports and dividing it by the world average (the share of that good’s exports in total world exports). It indicates the degree of comparative advantage of each good within ASEAN exports. If the index is above 1, the country has a comparative advantage in exporting the good, and the higher the value, the higher the degree of advantage (Balassa, 1965).

Figure 1-6-10 shows the share of ASEAN’s total exports in 2022, the average annual growth rate from 2015, and the RCA for the top five goods in terms of export value in 2022, with the RCA on the horizontal axis and the average annual growth rate from 2015 to 2022 on the vertical axis. The size of the circle indicates the share of each good in total exports in 2022.

The electronic parts category (HS code Class 85), which had the highest average annual growth rate, is a group that includes integrated circuits, smartphones, and semiconductor devices. The RCA for this category was 1.9, indicating that this category has an international comparative advantage.

The next highest growth rate and the highest RCA is for prepared edible fats and oils (HS code Class 15), which has a small share of total exports but a

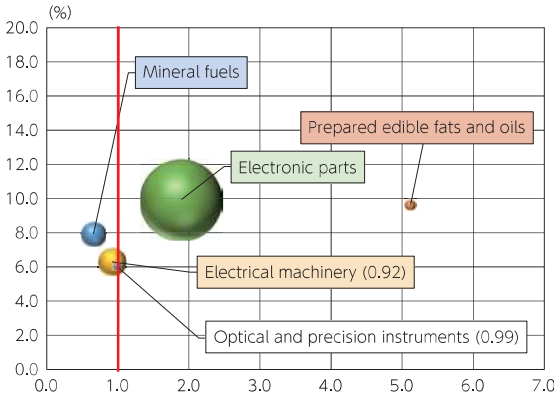


Figure 1-6-10 Comparison of RCA, export value share, and average growth rate: ASEAN

Source: Prepared by the author from UN Comtrade

high average annual growth rate. This is likely to be a strong reflection of the characteristics of Indonesia and Malaysia, the major palm oil-producing countries. On the other hand, mineral fuels, electrical machinery, and optical and precision instruments have high export growth rates, but ASEAN as a whole does not show an international comparative advantage. This suggests that the comparative advantage of each country in the ASEAN region for these goods is highly uneven.

In any case, the high international comparative advantage and export growth rate of electronic parts imply a high level of intra-industry trade as a typical feature of GVCs and indicate that ASEAN as a whole is deeply involved in those GVCs.

(2) Trade Structure of the Five Major ASEAN Countries

As mentioned at the beginning of this section, ASEAN is a regional framework encompassing a wide variety of countries. In this section, we focus on the major exporting countries of ASEAN (Indonesia, Malaysia, the Philippines, Thailand, and Vietnam) and examine their trade structures. Figures 1-6-11 and 1-6-12 show the trends in the value of imports and exports for the five major ASEAN countries.

Figure 1-6-11 shows that the export value of the five countries has generally been rising steadily, with some differences in performance among them. Vietnam stands out in particular for its high growth rate and high level of exports, while the Philippines has been at a relatively low level during these years. After the COVID-19 pandemic (2020), the growth of exports from Indonesia and Malaysia is significant. The rapid growth of Vietnam's presence

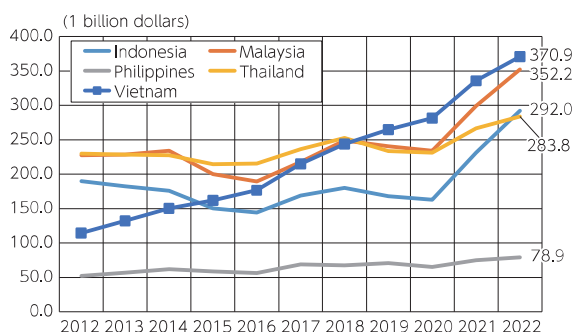


Figure 1-6-11

Changes in export values for the five major ASEAN countries:
Annual

Source: Prepared by the author from UN Comtrade

in imports (Figure 1-6-12) can also be confirmed.

Next, we will also look at the top five exports in 2022 for each of these countries in terms of export growth rate, share of export value, and RCA.

Indonesia's export structure is basically highly dependent on natural resources. This is supported by the fact that the highest RCA value is for prepared edible fats and oils, mainly palm oil (Figure 1-6-13). In terms of export value share, mineral fuels (HS code Class 27) have the largest share. In recent years, Indonesia's coal exports have increased rapidly, largely due to China's rapidly growing demand for the resource (Hamada, 2024b.). Iron and Steel (HS code Class 72) stands out in terms of export growth rate and has a high

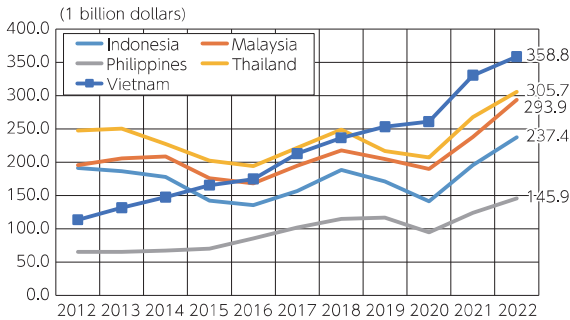


Figure 1-6-12

Changes in import values for the five major ASEAN countries:
Annual

Source: Prepared by the author from UN Comtrade

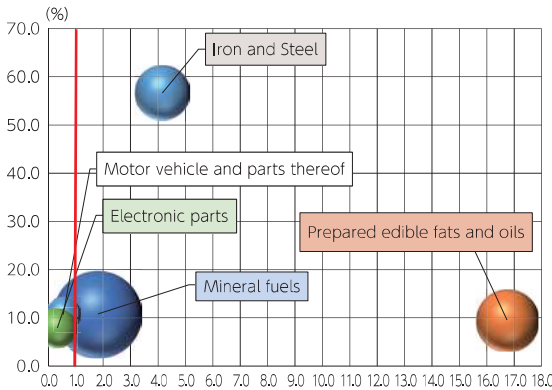


Figure 1-6-13

Comparison of RCA, export value share, and average growth rate:
Indonesia

Source: Prepared by the author from UN Comtrade

international comparative advantage. On the other hand, while the automotive sector (HS code Class 87) has a relatively large share, its RCA is below 1, indicating that this industry sector may still be in its infancy. Indonesia is one of the most resource-rich countries in ASEAN, and its participation in GVC, especially in the manufacturing sector, is relatively low. In order to overcome its high dependence on natural resources, the government has been aiming to strengthen the manufacturing sector by enacting the “Mineral and Coal Mining Law,” thereby prohibiting the export of raw mineral resources and thus forcing the development of related downstream sectors to add value domestically (Hamada, 2024b.).

As in Indonesia, Malaysia's exports have the highest RCA in prepared edible fats and oils, with palm oil accounting for the majority of exports. In terms of export share and growth rate, electronic parts (HS code Class 85) has the largest export value, which is largely attributable to Japanese companies that have been operating in Malaysia since the 1980s as a production base for electrical and electronic equipment, including white goods. On the other hand, the RCA for electrical machinery is below 1, suggesting that Malaysia does not currently have an international comparative advantage in this sector. This indicates that Malaysia has an advantage in the production of intermediate goods such as electronic parts, which are often located in the upstream process, rather than in the assembly process of final products (Figure 1-6-14).

The largest share of the Philippine export sector is electronic parts (HS code Class 85). The Philippines' traditional export structure has been dominated by agricultural products and services, but in recent years, foreign firms have

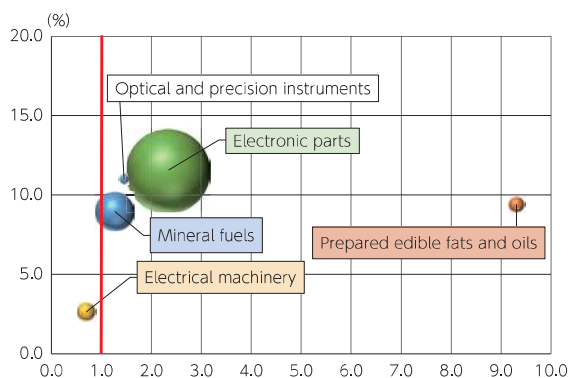


Figure 1-6-14

Comparison of RCA, export value share, and average growth rate: Malaysia

Source: Prepared by the author from UN Comtrade

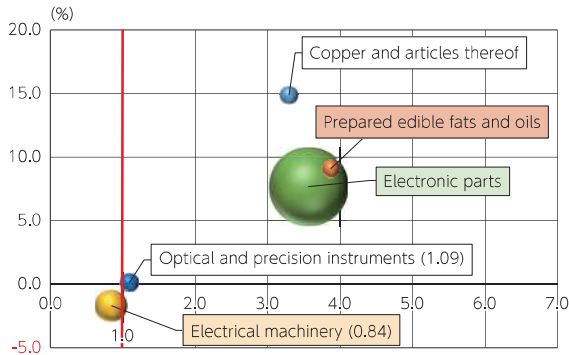


Figure 1-6-15

Comparison of RCA, export value share, and average growth rate: Philippines

Source: Prepared by the author from UN Comtrade

played a major role in connecting the Philippine’s economy to GVCs, especially in the manufacturing sector in East Asia, and Japanese firms play a significant role in this structure (Figure 1-6-15).

Thailand has been a major production base in ASEAN, which is particularly evident in its relationship with Japanese firms. In terms of export value share, the typical GVC-type industries of electrical/electronics and automobiles account for a large share, with the RCA exceeding 1. Its automotive industry has particularly been referred to as the “Detroit of Asia,” whose development has been driven by Japanese automobile manufacturers. However, the export structure of the automobile industry is likely to change depending on future industrial trends as the shift to electric vehicles (EVs) is underway (Figure 1-6-16).

At the beginning of the 21st century, Vietnam’s exports were mainly derived from natural resources such as crude oil and agricultural, forestry, and marine products, which were gradually replaced by manufacturing industries such as for clothing and shoes. In the 2010s, the electronics and electrical machinery industries grew rapidly and now account for about half of Vietnam’s exports. Figure 1-6-17 shows that the share of electronic parts (HS code Class 85) is very high and the growth rate is remarkable. The details of the 85th category are shown in Table 1-6-1, which shows the four-digit HS code classification.

This four-digit classification shows that Vietnam’s electronics industry is part of a typical horizontal division of labor, in which the country imports intermediate goods for manufacturing electronic and electrical machinery, such as integrated circuits, and then assembles them domestically and exports the finished product, which is an archetypal form of a processing trade (Figure

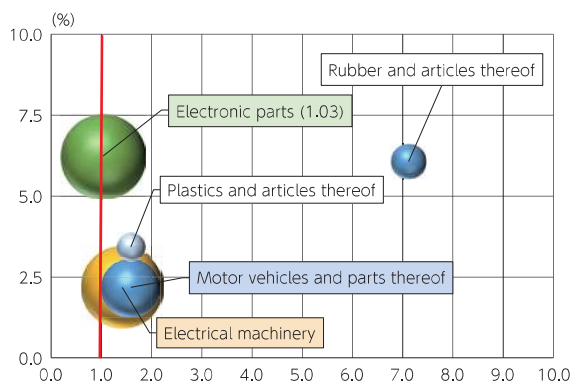


Figure 1-6-16

Comparison of RCA, export value share, and average growth rate: Thailand

Source: Prepared by the author from UN Comtrade

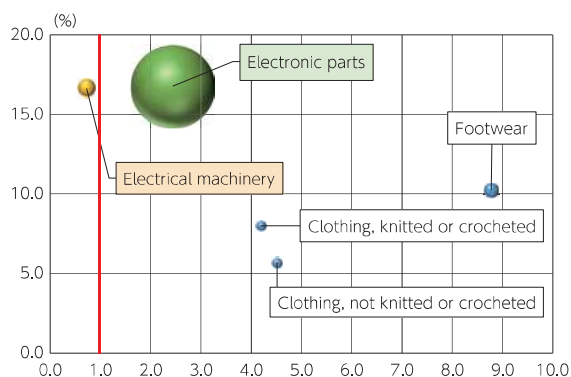


Figure 1-6-17

Comparison of RCA, export value share, and average growth rate: Vietnam

Source: Prepared by the author from UN Comtrade

1-6-18). The RCA of this sector exceeds 1, and its growth rate is also high.

The above is an overview of the export structure of the five major ASEAN countries, along with their comparative advantage and growth rates. While a high level of participation in GVCs can be inferred for the region as a whole, there are clear differences among the countries, and the sectors of comparative advantage are also different. Keeping this diversity in mind, it is important to appreciate the differences of each country to better understand the region as a whole.

Table 1-6-1

Detailed classification table for electronic parts (HS code Class 85) in Vietnamese imports and exports

HS code	Export items	2022 Export Value (100 million dollars)
8517	Smartphones	785.0
8542	Electronic integrated circuits	132.6
8541	Semiconductor devices	75.3
8544	Insulated wire, cable and optical fibre cables	62.6
8528	Monitors and projectors	56.5
8525	Transmission apparatus for radio-broadcasting or television	53.9
8504	Rectifiers and rectifying apparatus	40.2
8529	Parts for monitors and projectors	38.0
8518	Headphones and earphones	25.5
8507	Electric accumulators	21.6

HS code	Import items	2022 Import Value (100 million dollars)
8542	Electronic integrated circuits	543.4
8517	Smartphones	248.4
8534	Printed circuits	57.6
8529	Parts for monitors and projectors	54.3
8541	Semiconductor devices	51.2
8507	Electric accumulators	40.7
8536	Switches, fuses, lightning arresters, etc.	38.1
8544	Insulated wire, cable and optical fibre cables	25.4
8504	Rectifiers and rectifying apparatus	25.2
8528	Monitors and projectors	16.3

Source: Prepared by the author from UN Comtrade

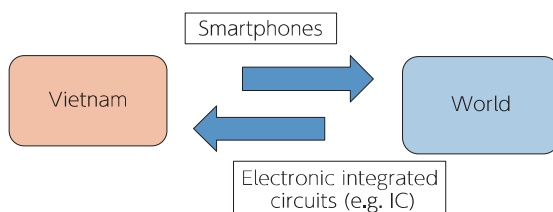


Figure 1-6-18

Image of Vietnam's main export and import goods

Source: Prepared by the author

4. Changes in the Structure of Kansai's Exports and Imports Based on Japan's Trade Statistics

Finally, let's take a look at how ASEAN and Kansai are connected. In Subsection 6.4, we compare the trade structures of Kansai and Japan with respect to China and ASEAN in order to identify their characteristics. We compare the trade of Kansai and Japan by item to see how it has changed. The trade statistics of Japan are based on the data from the Ministry of Finance's "Trade Statistics" by principal commodity²⁾.

[Trends in the shares of China and the ASEAN within Japan's and Kansai's total trade]

Figures 1-6-19 and 1-6-20 show the changes in the shares of exports and imports to China and ASEAN in relation to the total exports and imports from Japan and Kansai since 2000.

In 2023, Japan's exports to China (JPY 17 trillion, 764.1 billion) accounted for a 17.6% share of its exports to the world (JPY 100 trillion, 873.8 billion), while

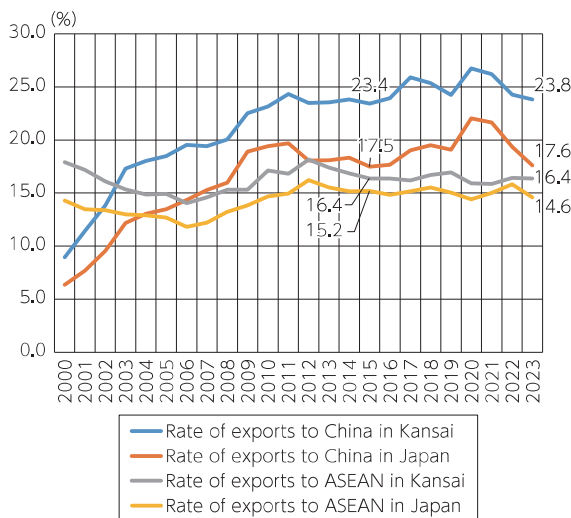


Figure 1-6-19

The rate of exports to China and ASEAN in total exports in Japan and Kansai

Source: Prepared by the author from "Trade Statistics," Ministry of Finance.

2) A principal commodity is a grouping of several statistical commodities (HS codes) with a common name.

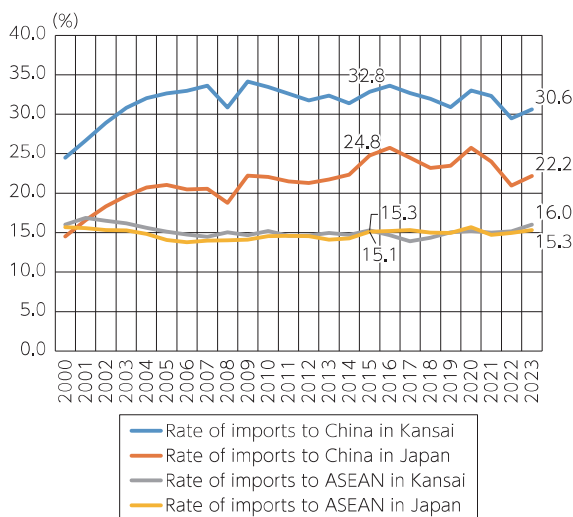


Figure 1-6-20

The rate of imports to China and ASEAN in total imports in Japan and Kansai

Source: Prepared by the author from "Trade Statistics," Ministry of Finance.

those to ASEAN (JPY 14 trillion, 717.5 billion) accounted for a 14.6% share.

Imports from China (JPY 24 trillion, 419.6 billion) accounted for 22.2% of Japan's global imports (JPY 110 trillion, 195.6 billion), while those from ASEAN (JPY 16 trillion, 904.8 billion) accounted for 15.3%.

The change in the share of Kansai's trade with China during this period shows that Kansai's exports and imports to China are about 6 and 8 percentage points higher, respectively, than the Japanese average. In other words, Kansai's trade dependence on China is considerably higher than the Japanese average. On the other hand, with regard to ASEAN, Kansai's share of exports is about 2 percentage points higher than that of the Japanese average, while the share of imports is at almost the same level.

The share of exports to China has increased rapidly since China's accession to the WTO, and has been stable at a high level since mid-2010 for both Japan and the Kansai region. However, from 2022 to 2023, the share somewhat declined due to the slowdown of the Chinese economy. On the other hand, the share of ASEAN declined relatively as China's share increased rapidly both in Japan and in Kansai. Thereafter, as China's share stabilizes at a high level, ASEAN's share also recovers.

As with exports, China's share of imports showed an upward trend until 2010, but has remained relatively stable since then in both Kansai and Japan.

[Trade structure: Characteristics of trade with China and ASEAN by product]

Next, let's look at the characteristics of each trade structure using data by product.

In this subsection, we first sorted the goods data by articles using 3-digit codes, and then selected the top three products in 2023. The characteristics of the selected products are further clarified by looking at the five-digit codes.

As shown in Table 1-6-2, looking at the share of Japan's exports to China

Table 1-6-2

Export value and share by product category to China in Japan and Kansai

[Japan]						
Ranking in 2023	Principal Commodity Code	Articles	Export value and share in 2015 (JPY 1 billion, %)		Export value and share in 2023 (JPY 1 billion, %)	
1	'701'	Machinery	2,539.8	19.2	4,132.9	23.3
Top 3 products	'70131'	Semicon Machinery, etc.	423.9	3.2	1,531.0	8.6
	'70101'	Power Generating Machine	306.4	2.3	331.7	1.9
	'70125'	Pump and Centrifuges	208.0	1.6	309.9	1.7
2	'703'	Electrical Machinery	3,128.7	23.7	3,791.1	21.3
Top 3 products	'70323'	Semiconductors, etc.	993.9	7.5	1,279.8	7.2
	'70303'	Electrical Apparatus	487.3	3.7	581.7	3.3
	'70327'	Electrical Measuring	253.9	1.9	426.0	2.4
3	'705'	Transport Equipment	1,179.1	8.9	1,446.1	8.1
Top 3 products	'70503'	Motor Vehicles	500.3	3.8	943.3	5.3
	'70505'	Parts of Motor Vehicles	641.3	4.8	456.3	2.6
	'70509'	Bicycles and Parts Thereof	8.3	0.1	21.2	0.1
		Total exports to China	13,223.4	100.0	17,764.1	100.0
[Kansai]						
Ranking in 2023	Principal Commodity Code	Articles	Export value and share in 2015 (JPY 1 billion, %)		Export value and share in 2023 (JPY 1 billion, %)	
1	'703'	Electrical Machinery	1,364.0	36.2	1,557.3	31.2
Top 3 products	'70323'	Semiconductors, etc.	610.9	16.2	740.9	14.8
	'70303'	Electrical Apparatus	115.6	3.1	204.0	4.1
	'70329'	Condenser	80.5	2.1	136.4	2.7
2	'701'	Machinery	525.6	14.0	1,057.8	21.2
Top 3 products	'70131'	Semicon Machinery, etc.	73.6	2.0	341.8	6.9
	'70101'	Power Generating Machine	31.0	0.8	68.3	1.4
	'70125'	Pump and Centrifuges	35.4	0.9	66.7	1.3
3	'515'	Plastic Materials	205.5	5.5	380.0	7.6
Top 3 products	'51505'	Polyethylene	5.3	0.1	11.4	0.2
	'51503'	Polyvinyl Preparation	11.8	0.3	7.0	0.1
	'51507'	Polystyrene	2.6	0.1	6.1	0.1
		Total exports to China	3,764.9	100.0	4,989.8	100.0

Source: Prepared by the author from "Trade Statistics," Ministry of Finance.

in 2023, “Machinery” (23.3%), represented by “Semicon Machinery, etc.,” had the highest share, followed by “Electrical Machinery” (21.3%) and “Transport Equipment” (8.1%). In Kansai, on the other hand, “Electrical Machinery” (31.2%) was the highest, followed by “Machinery” (21.2%) and “Plastic Materials” (7.6%).

Looking at the five-digit code, both in Kansai and Japan, “Semicon Machinery, etc.” in the “Machinery” category is growing rapidly in both value and share. Looking at “Electrical Machinery,” the value of “Semiconductors, etc.” is increasing and its share is also stable. In addition, in the category of “Transport Equipment,” the share of “Motor Vehicles” is increasing in Japan, while the share of “Plastic Materials” is increasing in Kansai.

On the other hand, let’s take a look at imports (Table 1-6-3). If we look at Japan’s and Kansai’s imports from China, the top three products in the three-digit code in 2023 are the same, namely “Electrical Machinery,” “Machinery,” and “Clothing and Accessories”. If we look at the five-digit code, the main imports are finished products, such as “Telephony, Telegraphy” (smartphones) in “Electrical Machinery,” “Office Machines” (PCs) in “Machinery,” and “Clothing,” which differs from exports.

Next, let’s take a look at the characteristics of ASEAN’s trade structure (Table 1-6-4). If we look at Japan’s share of ASEAN exports in 2023 by 3-digit code, “Electrical Machinery” (21.2%) is the highest, followed by “Machinery” (15.5%) and “Transport Equipment” (11.8%). In the Kansai region, the top three categories are “Electrical Machinery” (25.5%), “Machinery” (18.6%), and “Re-export goods” (8.5%).

Looking at the five-digit code, the feature of both the Kansai and Japan figures is that the share of “Semiconductors, etc.” is high among “Electrical Machinery.” In particular, the Kansai share of 12.7% is high compared to Japan’s share of 9.4%.

Looking at imports from ASEAN (Table 1-6-5), “Electrical Machinery” was in first place for both Kansai and Japan in the three-digit code. Looking at second place, natural resources such as “Petroleum Gas” were in the first place for Japan, but for Kansai it was “Clothing and Accessories.” Third place was “Machinery” for both Kansai and Japan.

Looking at the 5-digit code, it can be seen that the Kansai region imports processed and finished products such as “Insulated Wire and Cable,” “Semiconductors, etc.,” “Telephony, Telegraphy” (smartphones), and “Office Machines” (PCs).

Table 1-6-3

Import value and share by product category from China in Japan and Kansai

[Japan]							
Ranking in 2023	Principal Commodity Code	Articles	Import value and share in 2015 (JPY 1 billion, %)		Import value and share in 2023 (JPY 1 billion, %)		
1	'703'	Electrical Machinery	5,654.9	29.1	7,564.0	31.0	
Top 3 products	'70307'	Telephony, Telegraphy	2,272.1	11.7	2,867.4	11.7	
	'70305'	Audio and Visual Apparatus	675.3	3.5	989.1	4.1	
	'70301'	Electrical Power Machinery	344.8	1.8	604.0	2.5	
2	'701'	Machinery	3,190.8	16.4	4,139.8	17.0	
Top 3 products	'70105'	Office Machines	1,893.2	9.7	2,211.0	9.1	
	'70119'	Heating or Cooling Machine	283.2	1.5	387.6	1.6	
	'70121'	Pump and Centrifuges	176.0	0.9	298.0	1.2	
3	'807'	Clothing and Accessories	2,286.6	11.8	1,797.8	7.4	
Top 3 products	'80705'	Clothing, knitted or crocheted	1,171.3	6.0	928.6	3.8	
		Clothing	926.4	4.8	674.5	2.8	
	'80703'	Clothing Accessories	127.9	0.7	118.6	0.5	
Total Imports to China			19,428.8	100.0	24,419.6	100.0	
[Kansai]							
Ranking in 2023	Principal Commodity Code	Articles	Import value and share in 2015 (JPY 1 billion, %)		Import value and share in 2023 (JPY 1 billion, %)		
1	'703'	Electrical Machinery	1,464.5	29.4	1,529.4	26.6	
Top 3 products	'70307'	Telephony, Telegraphy	602.3	12.1	505.8	8.8	
	'70305'	Audio and Visual Apparatus	179.8	3.6	239.9	4.2	
	'70309'	Domestic Electrical Equip.	179.8	3.6	182.8	3.2	
2	'701'	Machinery	593.8	11.9	796.5	13.8	
Top 3 products	'70105'	Office Machines	215.0	4.3	241.2	4.2	
	'70119'	Heating or Cooling Machine	107.4	2.2	126.2	2.2	
	'70117'	Constraction Machines	36.5	0.7	81.3	1.4	
3	'807'	Clothing and Accessories	891.9	17.9	651.7	11.3	
Top 3 products	'80705'	Clothing, knitted or crocheted	459.6	9.2	329.7	5.7	
	'80701'	Clothing	346.7	7.0	239.7	4.2	
	'80703'	Clothing Accessories	62.2	1.2	55.2	1.0	
Total Imports to China			4,984.0	100.0	5,756.3	100.0	

Source: Prepared by the author from "Trade Statistics," Ministry of Finance.

Table 1-6-4

Export value and share by product category to ASEAN in Japan and Kansai

[Japan]

Ranking in 2023	Principal Commodity Code	Articles	Export value and share in 2015 (JPY 1 billion, %)		Export value and share in 2023 (JPY 1 billion, %)	
1	'703'	Electrical Machinery	2,235.5	19.4	3,127.5	21.2
Top 3 products	'70323'	Semiconductors, etc.	828.3	7.2	1,385.7	9.4
	'70303'	Electrical Apparatus	386.5	3.4	459.9	3.1
	'70327'	Electrical Measuring	222.3	1.9	303.6	2.1
2	'701'	Machinery	2,355.4	20.5	2,277.1	15.5
Top 3 products	'70101'	Power Generating Machine	431.8	3.8	446.8	3.0
	'70125'	Pump and Centrifuges	209.9	1.8	233.9	1.6
	'70105'	Office Machines	260.4	2.3	220.7	1.5
3	'705'	Transport Equipment	1,516.3	13.2	1,738.2	11.8
Top 3 products	'70505'	Parts of Motor Vehicles	559.7	4.9	771.3	5.2
	'70503'	Motor Vehicles	655.0	5.7	738.9	5.0
	'70513'	Ships and Boats	232.9	2.0	165.0	1.1
Total exports to ASEAN			11,494.9	100.0	14,717.5	100.0

[Kansai]

Ranking in 2023	Principal Commodity Code	Articles	Export value and share in 2015 (JPY 1 billion, %)		Export value and share in 2023 (JPY 1 billion, %)	
1	'703'	Electrical Machinery	668.7	25.4	872.9	25.5
Top 3 products	'70323'	Semiconductors, etc.	281.0	10.7	436.4	12.7
	'70303'	Electrical Apparatus	92.5	3.5	116.6	3.4
	'70327'	Electrical Measuring	38.1	1.4	58.9	1.7
2	'701'	Machinery	639.6	24.3	637.2	18.6
Top 3 products	'70101'	Power Generating Machine	121.8	4.6	138.7	4.1
	'70119'	Constraction Machines	52.8	2.0	60.7	1.8
	'70125'	Pump and Centrifuges	45.3	1.7	47.3	1.4
3	'901'	Re-export goods	120.4	4.6	290.5	8.5
Total exports to ASEAN			2,632.2	100.0	3,425.3	100.0

Source: Prepared by the author from "Trade Statistics," Ministry of Finance.

Table 1-6-5

Import value and share by product category to ASEAN in Japan and Kansai

[Japan]						
Ranking in 2023	Principal Commodity Code	Articles	Import value and share in 2015 (JPY 1 billion, %)		Import value and share in 2023 (JPY 1 billion, %)	
1	'703'	Electrical Machinery	2,113.3	17.8	3,782.3	22.4
Top 3 products	'70304'	Insulated Wire and Cable	401.0	3.4	827.4	4.9
	'70311'	Semiconductors, etc.	498.0	4.2	742.7	4.4
	'70307'	Telephony, Telegraphy	206.3	1.7	652.7	3.9
2	'305'	Gas, Natural & Manufactured	1,724.8	14.6	1,521.7	9.0
	'30501'	Petroleum Gas	1,724.8	14.6	1,521.7	9.0
3	'701'	Machinery	923.9	7.8	1,203.8	7.1
Top 3 products	'70105'	Office Machines	394.2	3.3	444.8	2.6
	'70131'	Semicon Machinery, etc.	86.9	0.7	175.4	1.0
	'70121'	Pump and Centrifuges	101.9	0.9	135.7	0.8
		Total Imports to ASEAN	11,843.3	100.0	16,904.8	100.0
[Kansai]						
Ranking in 2023	Principal Commodity Code	Articles	Import value and share in 2015 (JPY 1 billion, %)		Import value and share in 2023 (JPY 1 billion, %)	
1	'703'	Electrical Machinery	414.9	17.9	575.7	19.1
Top 3 products	'70311'	Semiconductors, etc.	98.4	4.2	121.1	4.0
	'70304'	Insulated Wire and Cable	41.2	1.8	76.4	2.5
	'70307'	Telephony, Telegraphy	34.6	1.5	63.1	2.1
2	'807'	Clothing and Accessories	249.6	10.7	390.9	13.0
Top 3 products	'80701'	Clothing	115.2	5.0	182.9	6.1
	'80705'	Clothing, knitted or crocheted	108.8	4.7	170.2	5.6
	'80703'	Clothing Accessories	12.5	0.5	18.0	0.6
3	'701'	Machinery	178.1	7.7	231.7	7.7
Top 3 products	'70131'	Semicon Machinery, etc.	33.7	1.5	73.7	2.4
	'70105'	Office Machines	62.4	2.7	55.8	1.9
	'70121'	Pump and Centrifuges	25.3	1.1	26.0	0.9
		Total Imports to ASEAN	2,324.1	100.0	3,016.1	100.0

Source: Prepared by the author from "Trade Statistics," Ministry of Finance.

5. Conclusion

The main points of Section 6 can be summarized as follows.

1. In terms of sales by overseas Japanese subsidiaries, China's share has been declining since the COVID-19 pandemic, while ASEAN's share has exceeded that of China. In addition, sales to Japan and other countries account for more than 40% of total sales by destination in ASEAN. These results suggest that ASEAN may be becoming increasingly important as a production base for Japanese firms.
2. In terms of trading partners, the United States and China are ASEAN's main export destinations, while China has a larger presence as an import source than in other regions. This suggests that ASEAN is not only a production base for China, but also an important export destination. This point indicates that ASEAN is a major production base for the world's two largest markets, the U.S. and China, and also suggests that ASEAN is connected to China as a supply base, which illustrates the importance of the international production linkage between ASEAN and China in GVCs.

In addition, looking at ASEAN's export goods, electronic parts have a high international comparative advantage and export growth rate, suggesting that ASEAN as a whole is becoming increasingly involved in electronics-related GVCs.

3. The trade structure of the five major ASEAN countries shows the diversity of the region, with Indonesia relying heavily on natural resources, Malaysia, the Philippines, and Vietnam being major production bases for electronic parts, and Thailand for automobile-related products.
4. A comparison of the shares of trade with China and ASEAN in Japan and Kansai shows that Kansai is more dependent on China for both imports and exports than Japan, while its dependence on ASEAN is at almost the same level as that of Japan as a whole.
5. Looking at the five-digit code for goods exported to China by Kansai and Japan, among "Machinery," "Semicon Machinery, etc." is growing rapidly in terms of both value and market share. Among "Electrical Machinery," the value of "Semiconductors, etc." is growing and its share is stable. In "Transportation Equipment," the share of "Motor Vehicles" is increasing in Japan, while that of "Plastic Materials" is rising in Kansai.

Imported goods differ from exports in that finished products, such as "Telephony, Telegraphy," "Office Equipment," and "Clothing," are the main imports.

6. The five-digit code for goods exported to ASEAN by Kansai and Japan

shows that “Semiconductors, etc.” accounts for a large share of “Electrical Machinery.” Imports include processed and finished products such as “Insulated Wire and Cable,” “Semiconductors, etc.,” “Telephony, Telegraphy” and “Office Equipment.”

Kansai is particularly dependent on trade with China and is vulnerable to the economic impact of a Chinese economic slowdown. Although China will continue to be an important trading partner, the economic risks may require consideration of a trade structure that is overly dependent on China. In this case, as shown in Section 6, the dependence on ASEAN is not as high as that on China, but its importance is likely to increase in the future.

References

- Balassa, B. (1965). “Trade Liberalization and Revealed Comparative Advantage.” *The Manchester School of Economic and Social Studies*, 33, 99-123.
- Goto, K. (2019). *What is the Asian Economy? Its Growth Dynamism and Japan's Future* (Japanese title: *Ajia Keizai toha Nanika? Yakushin no Dainamizumu to Nihon no Katsuro*). Chuko Shinsho.
- Hamada, M. (2024a). “What it means to grow with ASEAN” (Japanese title: *ASEAN to Tomoni Seichosuru toha Nanika*). In Hamada, M. (Ed.), *ASEAN and Japan: Changing Economic Relations* (Japanese title: *ASEAN to Nihon Kawariyuku Keizai Kankei*), Institute of Developing Economies, pp. 1-21.
- Hamada, M. (2024b). “Economic Relations between Indonesia and Japan” (Japanese title: *Indoneshia to Nihon no Keizai Kankei*). In Hamada, M. (Ed.), *ASEAN and Japan: Changing Economic Relations* (Japanese title: *ASEAN to Nihon Kawariyuku Keizai Kankei*), Institute of Developing Economies, pp. 23-53.