

Section 3 Asia

1. ASEAN

We will provide an overview of economic trends in the Association of Southeast Asian Nations (ASEAN),¹²¹ which marked the 50th anniversary of its establishment in 2017 and which is further deepening the regional economic integration and external economic relationships.

(1) ASEAN aiming for deepening of economic integration

In December 2015, ASEAN established the ASEAN Economic Community (AEC), marking a major milestone in the implementation of a set of initiatives to achieve economic union among the 10 ASEAN countries, which it has been promoting since the 1990s. Until now, various initiatives to liberalize the movement of goods, services, capital and people have been conducted based on the AEC Blueprint 2015. In consideration of the achieved results, ASEAN is now promoting the development of systems and policies to realize an economy integrated at a higher level based on the AEC Blueprint 2025, which is a roadmap for the integration of ASEAN in the period leading to 2025 (Table I-2-3-1-1).

Table I-2-3-1-1 Roadmap for ASEAN integration toward 2025 (AEC Blueprint 2025)

A. Highly integrated and cohesive economy
A1 Trade in goods
A2 Trade in services
A3 Investment environment
A4 Financial integration, financial inclusion, and financial stability
A5 Facilitating movement of skilled labor and business visitors
A6 Enhancing participation in global value chains
B. A competitive, innovative and dynamic ASEAN
B1 Effective competition policy
B2 Consumer protection
B3 Strengthening intellectual property rights cooperation
B4 Productivity-driven growth, innovation, research and development, and technology commercialization
B5 Taxation cooperation
B6 Good governance
B7 Effective, efficient, coherent and responsive regulations, and good regulatory practice
B8 Sustainable economic development
B9 Global megatrends and emerging trade-related issues
C. Enhanced connectivity and sectoral cooperation
C1 Transport

121 Established in 1967. ASEAN expanded from the original five member countries, Indonesia, Malaysia, the Philippines, Singapore and Thailand, to 10 countries due to the addition of Brunei Darussalam in 1984, Viet Nam in 1995, Lao PDR and Myanmar in 1997 and Cambodia in 1999.

C2 Information and communications technology (ICT)
C3 E-commerce
C4 Energy
C5 Food, agriculture and forestry
C6 Tourism
C7 Healthcare
C8 Minerals
C9 Science and technology
D. A resilient, inclusive, people-oriented and people-centered ASEAN
D1 Strengthening the role of micro, small, and medium enterprises
D2 Strengthening the role of the private sector
D3 Public-private partnership (PPP)
D4 Narrowing the development gap
D5 Contribution of stakeholders in regional integration efforts
E. A global ASEAN
(Improvement and enhancement of economic partnership agreements with other economies; achievement of mutual benefits for ASEAN through sharing recognition and holding a consistent stance, etc.)

Notes: For the original text, visit the following website:

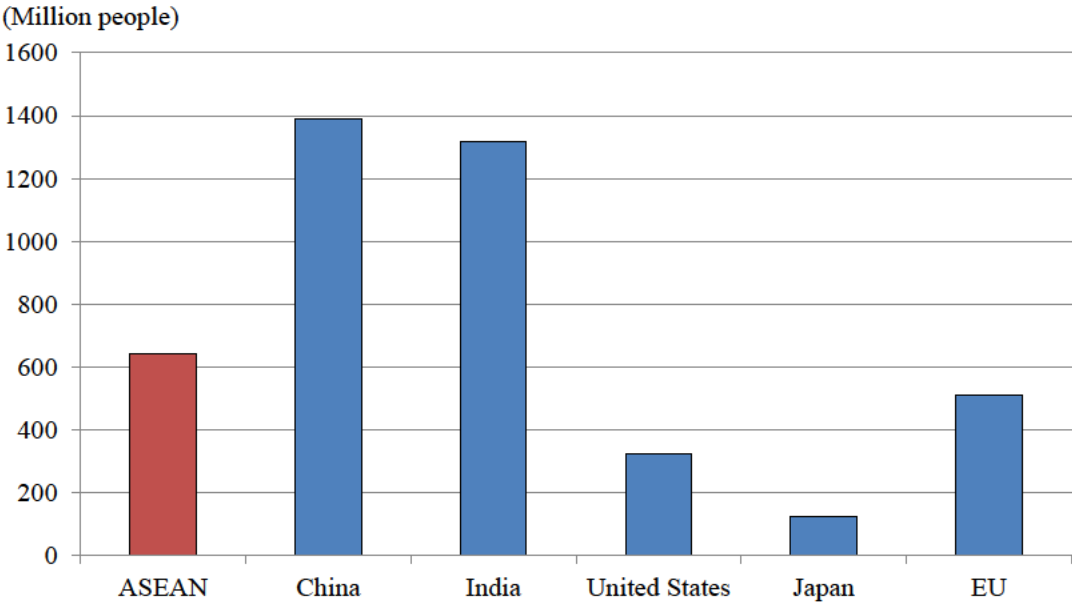
<http://www.asean.org/wp-content/uploads/images/2015/November/aec-page/AEC-Blueprint-2025-FINAL.pdf>

Source: ASEAN Secretariat.

The population of the ASEAN area is greater than 600 million people and is around double the U.S. population (Figure I-2-3-1-2). ASEAN's nominal GDP is larger than half of Japan's (Figure I-2-3-1-3). Although per-capita GDP is still low, it is expected to rise in the future, mainly in less developed ASEAN member countries (Figure I-2-3-1-4).¹²² From the scale of trade in goods and services and inward foreign direct investments, it is also clear that ASEAN is an important pillar of global growth (Figures I-2-3-1-5, I-2-3-1-6 and I-2-3-1-7).

¹²² Regarding per-capital nominal GDP in ASEAN, per-capita GDP of Singapore, ranked in the top position, is around 46 times as large as that of Myanmar, ranked at the bottom (World Economic Outlook, (IMF, April 2018)). According to data published by the ASEAN Secretariat, per-capita nominal GDP in ASEAN rose 70%, from 2,373 dollars to 4,034 dollars, over the 10 years from 2007 to 2016.

Figure I-2-3-1-2 Population of ASEAN (comparison with major economies and regions)

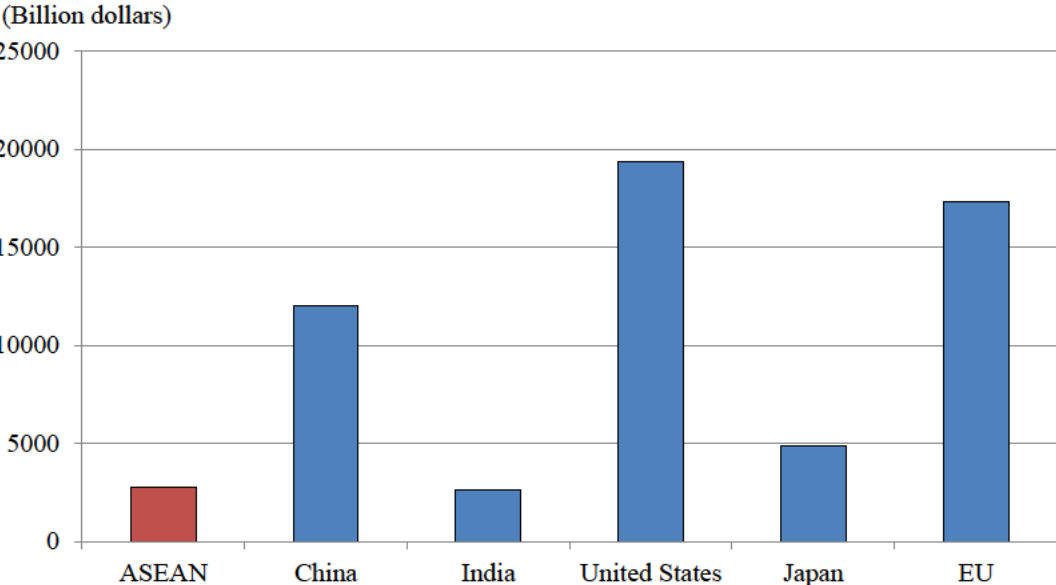


Notes: This figure shows values in 2017.

The term “ASEAN” refers to the 10 ASEAN member economies, while the term “EU” refers to the 28 EU member economies. The category “China” does not include Hong Kong, Macau or Taiwan.

Source: World Economic Outlook Database (WEO) (IMF, April 2018), Eurostat.

Figure I-2-3-1-3 Nominal GDP in ASEAN (comparison with major economies and regions)

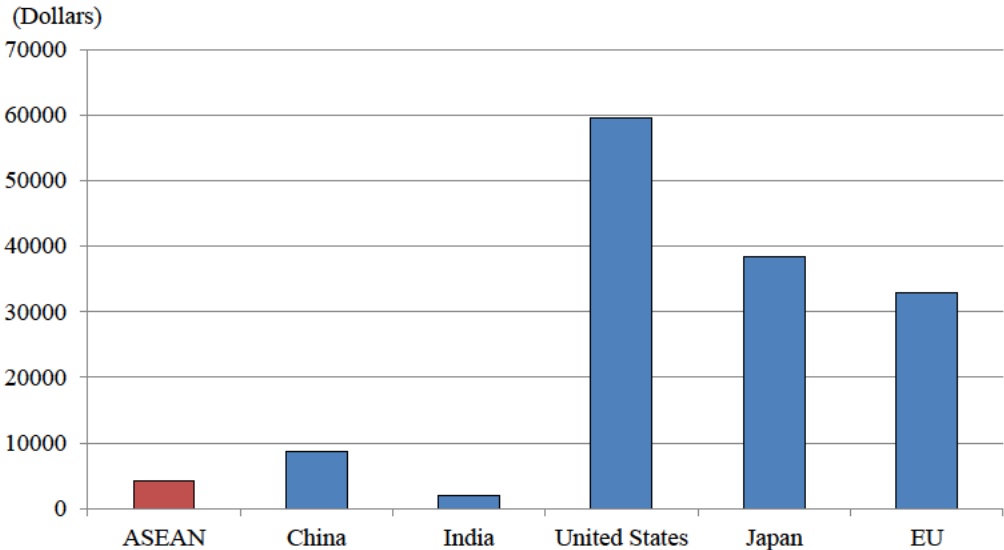


Notes: This figure shows values in 2017.

The term “ASEAN” refers to the 10 ASEAN member economies, while the term “EU” refers to the 28 EU member economies. The category “China” does not include Hong Kong, Macau or Taiwan.

Source: WEO Database (IMF, April 2018).

Figure I-2-3-1-4 Per-capita nominal real GDP in ASEAN (comparison with major economies and regions)

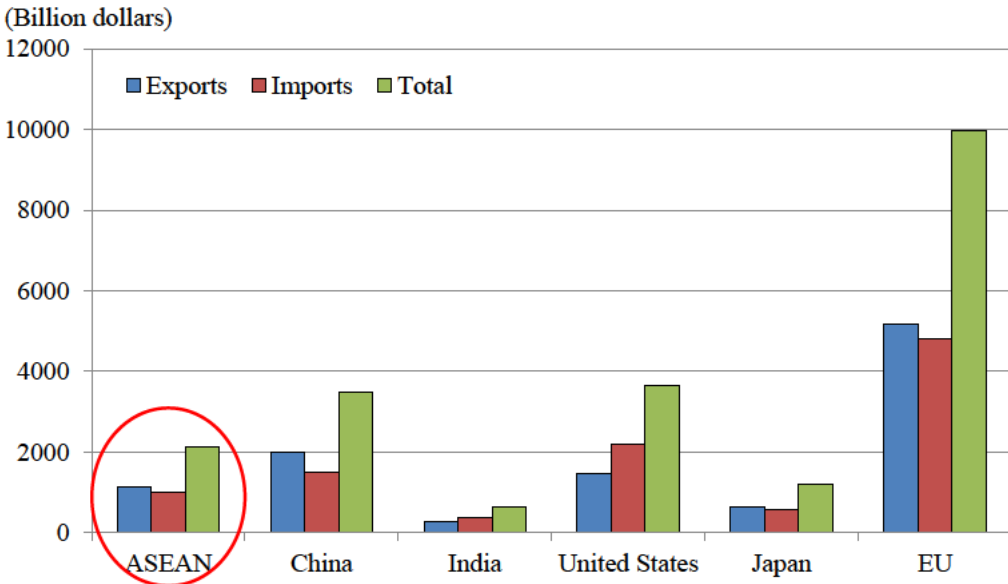


Notes: This figure shows values in 2017.

The term “ASEAN” refers to the 10 ASEAN member economies, while the term “EU” refers to the 28 EU member economies. The category “China” does not include Hong Kong, Macau or Taiwan.

Source: WEO Database (IMF, April 2018), Eurostat.

Figure I-2-3-1-5 Total values of trade in goods (imports and exports) in ASEAN (comparison with major economies and regions)

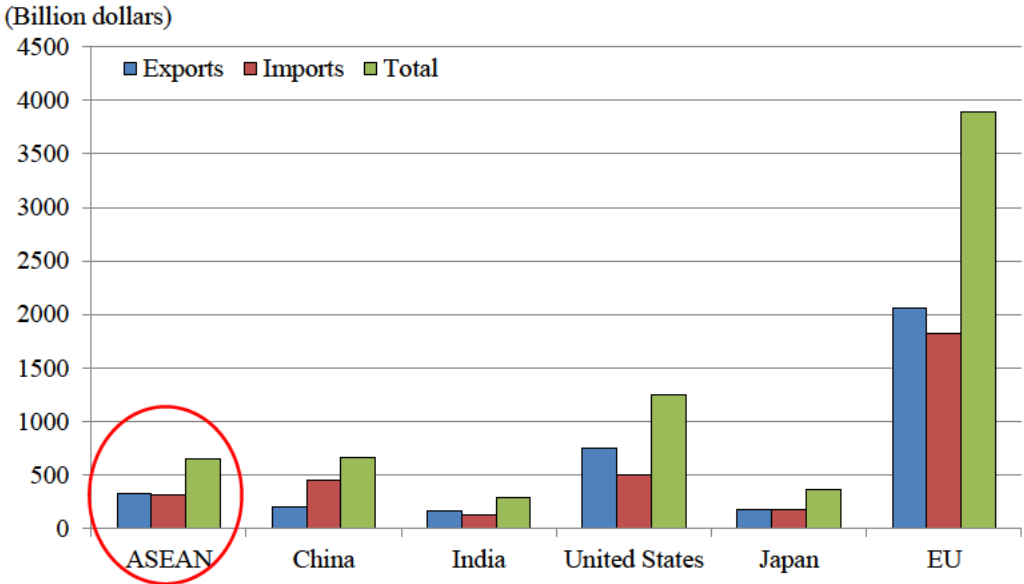


Notes: This figure shows values in 2016.

The term “ASEAN” refers to the 10 ASEAN member economies, while the term “EU” refers to the 28 EU member economies. The category “China” does not include Hong Kong, Macau or Taiwan.

Source: UNCTAD.

Figure I-2-3-1-6 Values of trade in services (imports and exports) in ASEAN (comparison with major economies and regions)

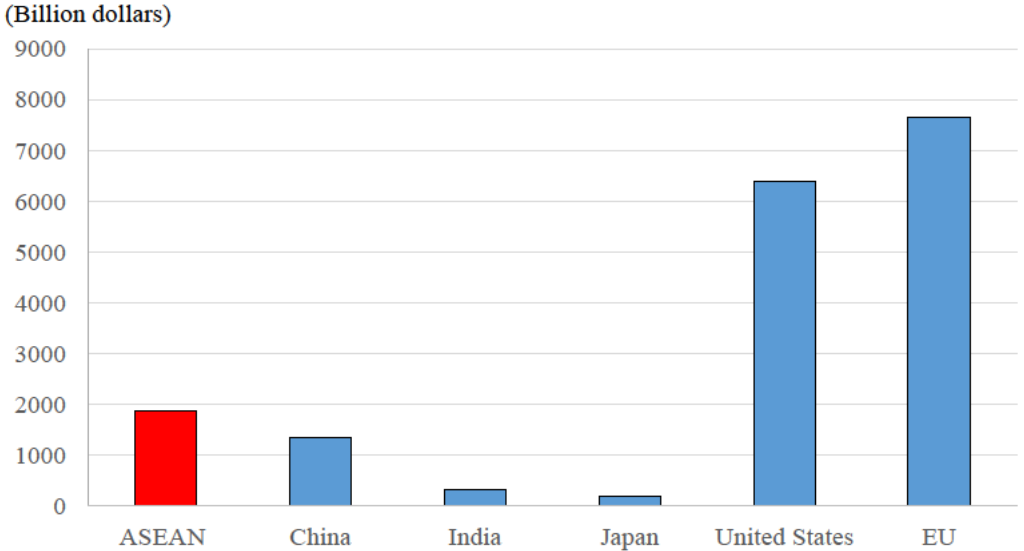


Notes: This figure shows values in 2016.

The term “ASEAN” refers to the 10 ASEAN member economies, while the term “EU” refers to the 28 EU member economies. The category “China” does not include Hong Kong, Macau or Taiwan.

Source: UNCTAD.

Figure I-2-3-1-7 Values of inward foreign direct investments by ASEAN (on a stock basis) (comparison with major economies and regions)



Notes: This figure shows values in 2016.

The term “ASEAN” refers to the 10 ASEAN member economies, while the term “EU” refers to the 28 EU member economies. The category “China” does not include Hong Kong, Taiwan or Macau.

Source: UNCTAD.

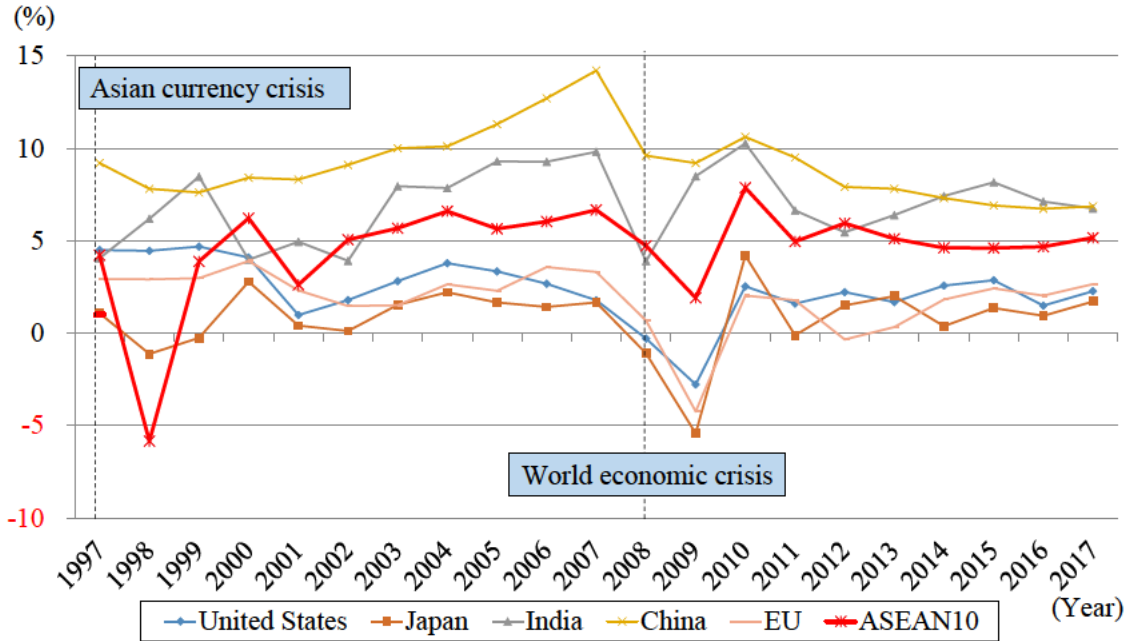
ASEAN, which is located between East Asia and South Asia, both of which are growing remarkably, is likely to maintain and expand its presence as a more competitive regional economy by achieving efficiency through the formation of a large integrated market, because the markets of individual member countries are small.

(2) Macroeconomic trends

According to the IMF, ASEAN’s economic growth rate¹²³ in 2017 was 5.2%, much higher than the previous year’s growth rate of 4.7% (Figure I-2-3-1-8). The growth rates of individual ASEAN member countries are as shown below (Figure I-2-3-1-9).

The main drivers of ASEAN’s economic growth (by expenditure) are robust private consumption due to an income rise, an increase in investments due to infrastructure development (gross fixed asset formation), and exports taking advantage of individual countries’ strengths. On the whole, private consumption is making steady contributions to ASEAN’s growth compared with investments and exports, which are prone to wide fluctuations, although its strength varies from country to country (Figure I-2-3-1-10). By industry, the service industry is making the greatest contributions, followed by the manufacturing industry (Figure I-2-3-1-11).

Figure I-2-3-1-8 Changes in real GDP growth rates in ASEAN (comparison with major economies and regions)



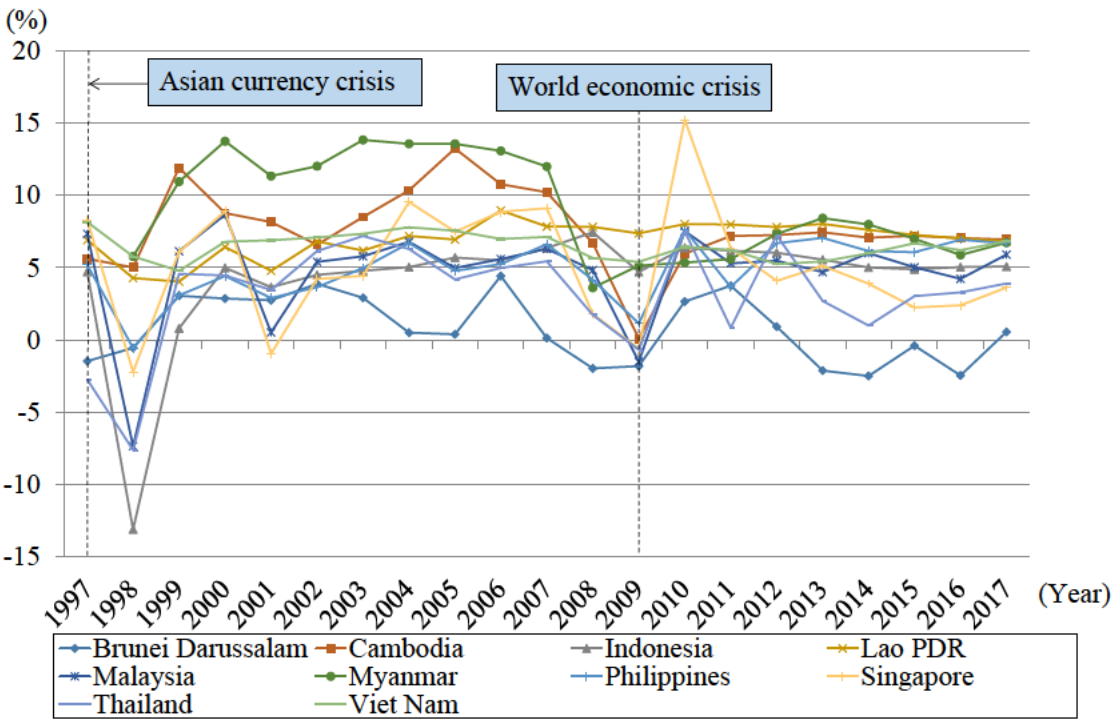
Notes: The category “ASEAN 10” shows the weighted average of the changes based on the nominal GDP in the respective economies.

The data on the ASEAN 10 in 1997 do not include the values in Lao PDR.

Source: WEO Database (IMF, April 2018).

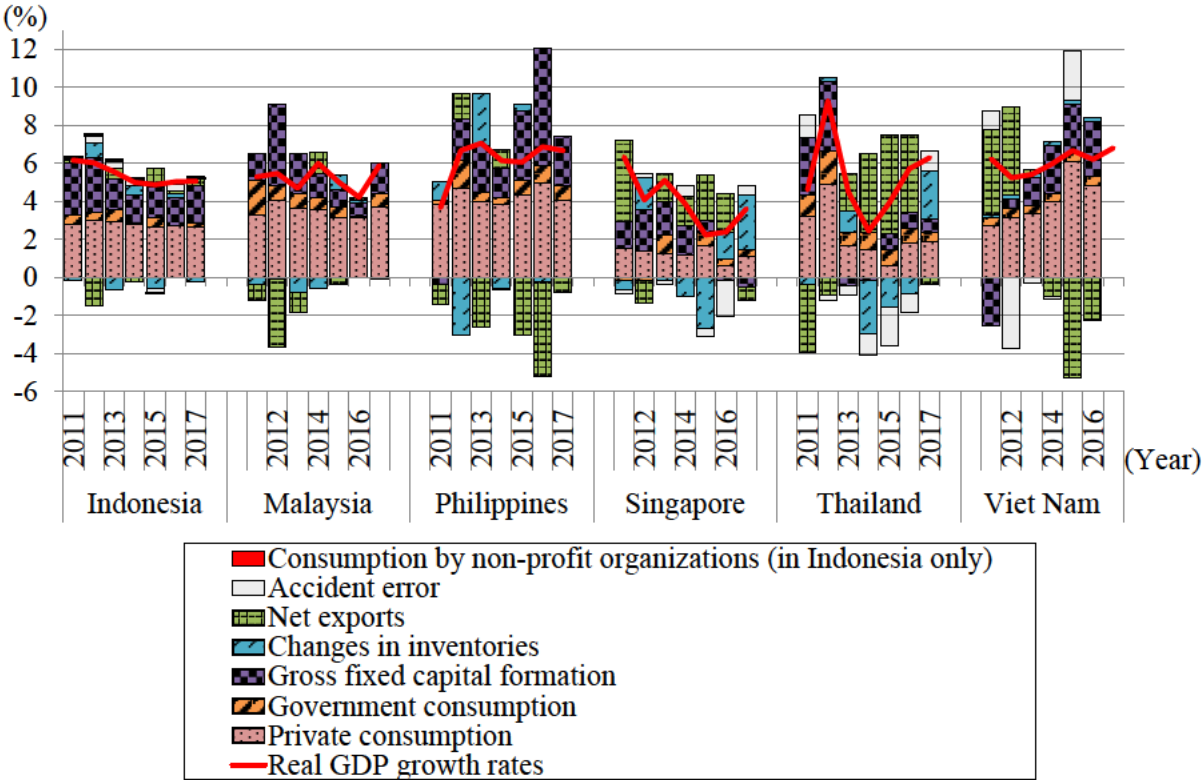
123 This is a figure obtained by weight-averaging the 10 ASEAN member countries’ respective annual real GDP growth rates published by the IMF in each year by the values of those countries’ respective annual nominal GDP.

Figure I-2-3-1-9 Changes in real GDP growth rates in ASEAN member economies



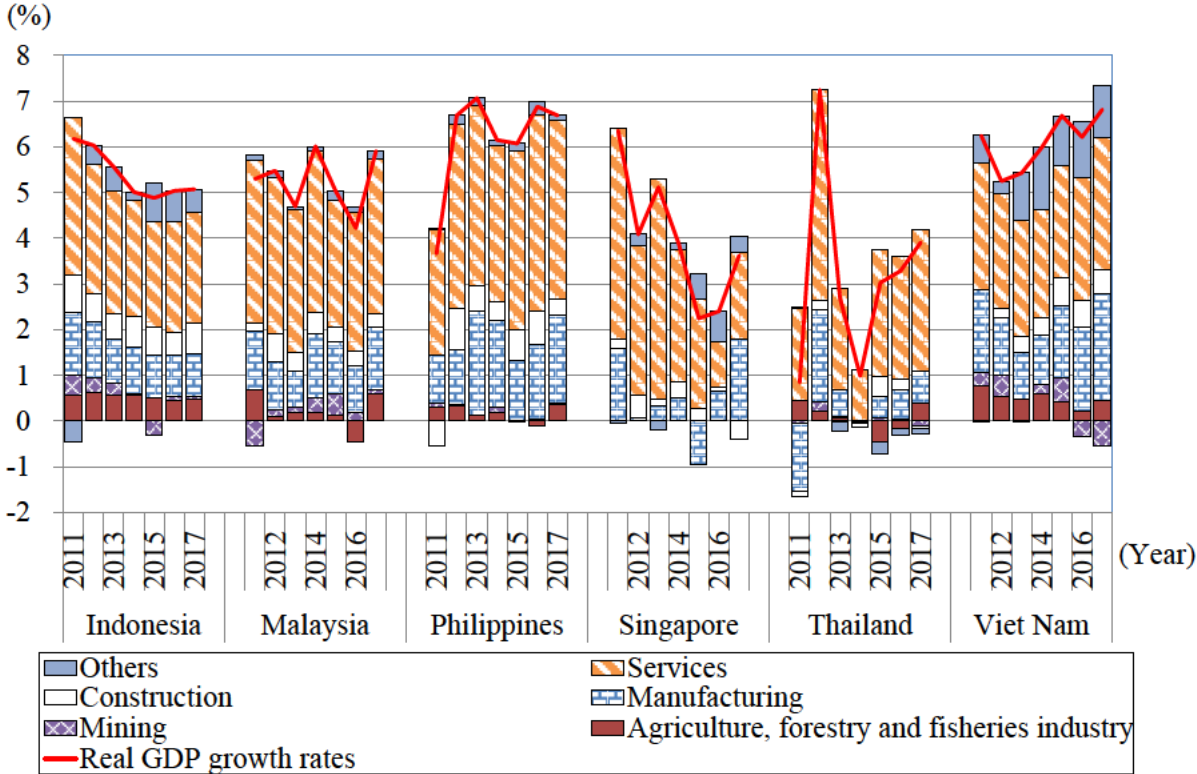
Source: WEO Database (IMF, April 2018).

Figure I-2-3-1-10 Changes in real GDP growth rates and contributions by expenditure in major ASEAN member economies



Notes: This figure does not include the 2017 breakdowns in Viet Nam.
 Source: Governmental statistics of target economies, CEIC Database.

Figure I-2-3-1-11 Changes in real GDP growth rates and contributions by industry in major ASEAN member economies



Source: Governmental statistics of target economies, CEIC Database.

(3) Changes in ASEAN’s trade

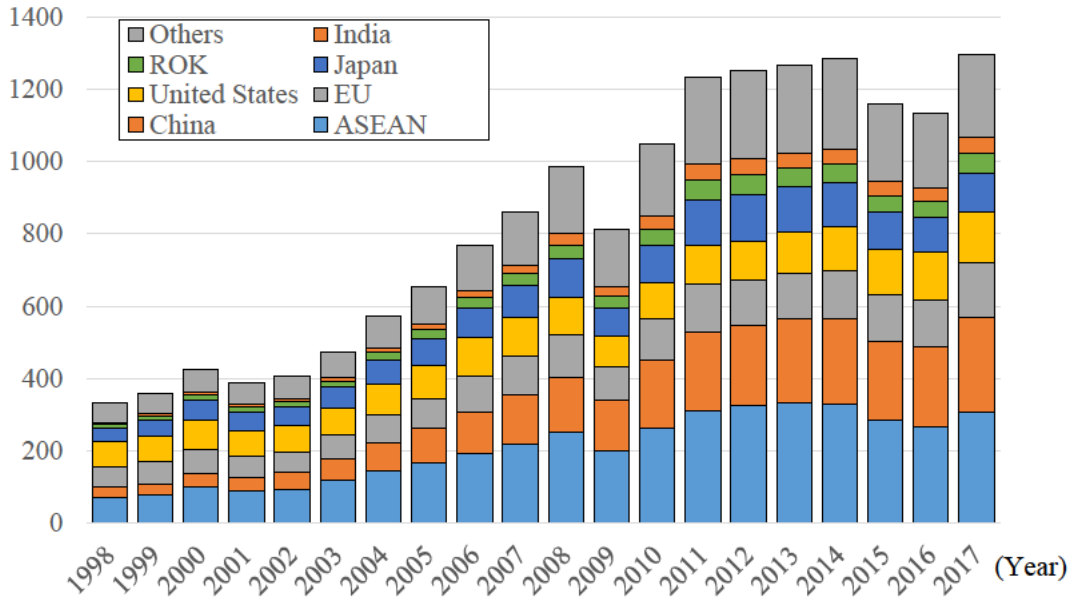
(A) Underlying firmness of intra-regional trade and increases in dependency on China and trade deficits

Since the beginning of the 2000s, ASEAN’s trade with the rest of the world has been expanding. Although the value of trade declined in 2015 and 2016 due to the slow trade phenomenon caused by China’s economic slowdown and a drop in the crude oil price, it recovered in 2017.

The value of ASEAN’s exports to the rest of the world increased 3.9-fold over the 20 years from 1998 to 2017. While the value of exports increased 2.1-fold in trade with the United States, 2.6-fold in trade with the EU and 2.8-fold in trade with Japan, it expanded much more, 8.9-fold, in trade with China. ASEAN’s intra-region trade increased steadily, 4.4-fold, although it has recently declined (Figure I-2-3-1-12).

Figure I-2-3-1-12 Changes in export values and destinations in ASEAN

(Billion dollars)

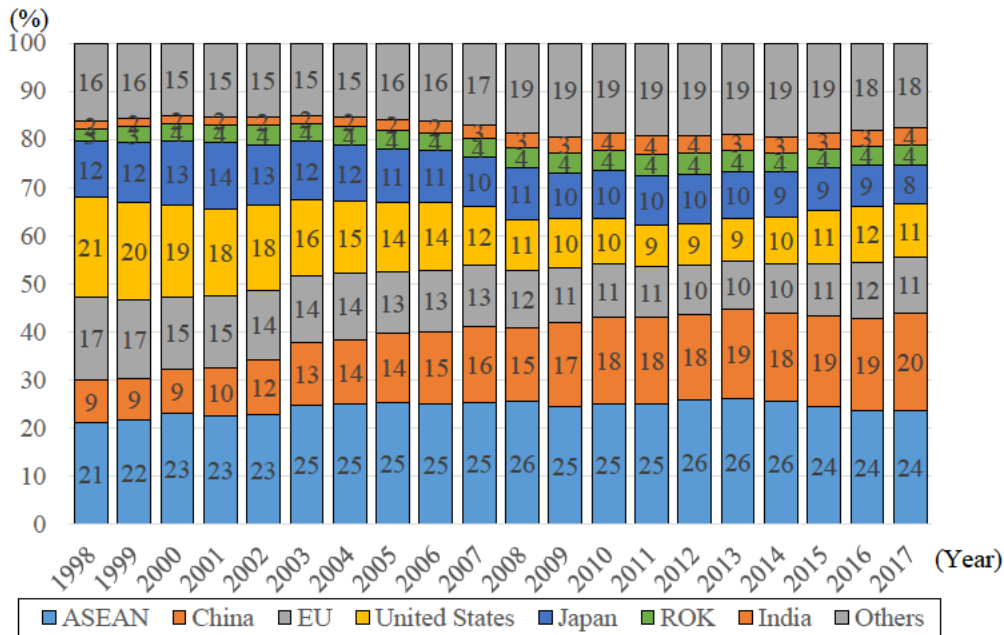


Notes: The category “China” includes Mainland China, Hong Kong and Macau.

Source: Direction of Trade Statistics (DOTS) (IMF).

Over the same period, the shares of exports to the United States, the EU and Japan in ASEAN’s overall exports declined from 21% to 11%, from 17% to 11% and from 12% to 8%, respectively, while the share of exports to China rose from 9% to 20%. The share of intra-region exports increased steadily, from 21% to 24%, although it has recently declined (Figure I-2-3-1-13).

Figure I-2-3-1-13 Changes in shares of export destinations in ASEAN

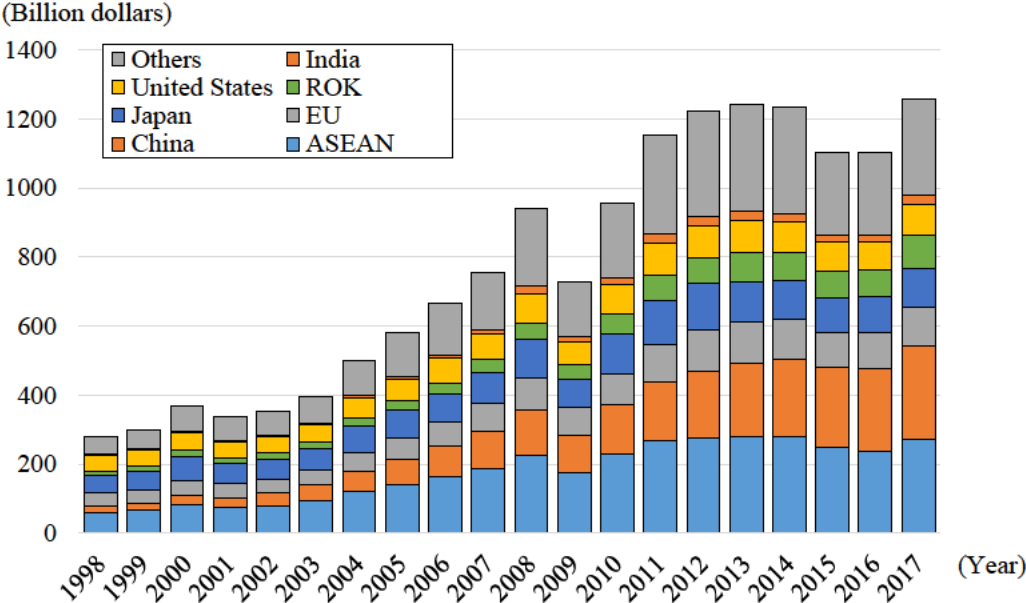


Notes: The category “China” includes Mainland China, Hong Kong and Macau.

Source: DOTS (IMF).

Meanwhile, the value of ASEAN’s imports from the rest of the world increased 4.5-fold over the same period. The value of imports increased 1.9-fold in trade with the United States, 2.2-fold in trade with Japan and 3-fold in trade with the EU, while it expanded much more, 13.9-fold, in trade with China. ASEAN’s intra-region imports increased steadily, 4.6-fold (Figure I-2-3-1-14).

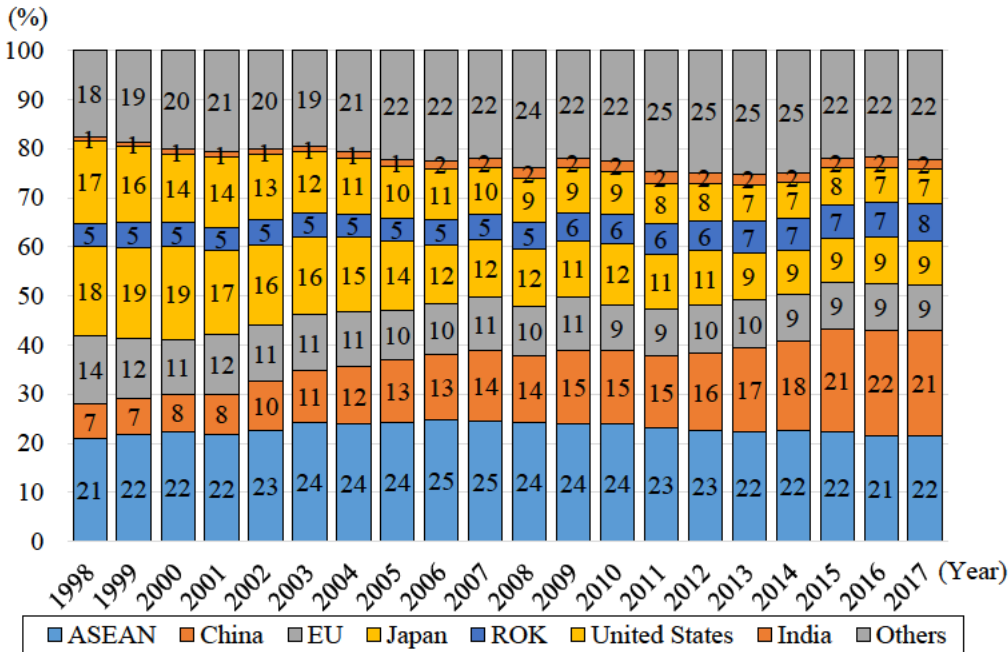
Figure I-2-3-1-14 Changes in import values and sources in ASEAN



Notes: The category “China” includes Mainland China, Hong Kong and Macau.
 Source: DOTS (IMF).

Over the same period, the shares of imports from the United States, Japan and the EU in ASEAN’s overall imports declined, from 17% to 7%, from 18% to 9% and from 14% to 9%, respectively, while the share of imports from China rose from 7% to 21%. The share of intra-region imports remained almost flat, inching up from 21% to 22%, but it has been declining after peaking at 25% in 2006 and 2007 (Figure I-2-3-1-15).

Figure I-2-3-1-15 Changes in shares of import sources in ASEAN



Notes: The category “China” includes Mainland China, Hong Kong and Macau.
 Source: DOTS (IMF).

From the above, it is clear that while the shares of the United States, the EU and Japan as ASEAN’s main trading partners declined, China’s presence expanded. This is presumably related to China’s high economic growth and a significant increase in the value of Chinese trade that followed China’s accession to the WTO in 2001 and the deepening of the economic interdependence between ASEAN and China due to the ASEAN-China Free Trade Area (ACFTA), which was put into force in 2005.

Regarding ASEAN’s intra-region trade, for which tariffs were abolished by 2010 in principle (by 2015 with respect to less developed countries) under the ASEAN Trade in Goods Agreement (ATIGA), the value of trade grew steadily, while China’s share in ASEAN’s trade with the rest of the world increased.

Looking at changes (ranking, value and share) in trading partner countries of the six major ASEAN member countries¹²⁴ between 1996 and 2016, ASEAN’s dependency on China increased. For most of the six ASEAN member countries, China was either the largest or second largest export destination country. Even in the case of the Philippines, for which China was the fourth largest export destination, the share of China in the total value of exports was large (Table I-2-3-1-16). Likewise, China was the largest import source country for all of the six ASEAN member countries (Table I-2-3-1-17).

124 This refers to Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam.

Table I-2-3-1-16 Changes in the top 10 export destinations in six major ASEAN member economies

Indonesia

	1996			2001			2006		
Ranking	Destination	Total export value	Share	Destination	Total export value	Share	Destination	Total export value	Share
	World total	49,815	100.0	World total	56,321	100.0	World total	100,799	100.0
1	Japan	12,885	25.9	Japan	13,010	23.1	Japan	21,732	21.6
2	United States	6,795	13.6	United States	7,749	13.8	United States	11,232	11.1
3	Singapore	4,565	9.2	Singapore	5,364	9.5	Singapore	8,930	8.9
4	ROK	3,281	6.6	ROK	3,772	6.7	China	8,344	8.3
5	China	2,057	4.1	China	2,201	3.9	ROK	7,694	7.6
6	Netherlands	1,667	3.3	Taiwan	2,188	3.9	Malaysia	4,111	4.1
7	Hong Kong	1,625	3.3	Australia	1,845	3.3	India	3,391	3.4
8	Taiwan	1,609	3.2	Malaysia	1,779	3.2	Australia	2,771	2.7
9	Germany	1,489	3.0	Netherlands	1,498	2.7	Taiwan	2,735	2.7
10	Australia	1,202	2.4	United Kingdom	1,383	2.5	Thailand	2,702	2.7

	2011			2016		
Ranking	Destination	Total export value	Share	Destination	Total export value	Share
	World total	203,497	100.0	World total	144,490	100.0
1	Japan	33,715	16.6	China	16,786	11.6
2	China	22,941	11.3	United States	16,141	11.2
3	Singapore	18,444	9.1	Japan	16,102	11.1
4	United States	16,459	8.1	Singapore	11,246	7.8
5	ROK	16,389	8.1	India	10,094	7.0
6	India	13,336	6.6	Malaysia	7,112	4.9
7	Malaysia	10,996	5.4	ROK	7,008	4.9
8	Taiwan	6,585	3.2	Thailand	5,392	3.7

9	Thailand	5,897	2.9	Philippines	5,271	3.6
10	Australia	5,583	2.7	Taiwan	3,653	2.5

Malaysia

Ranking	1997			2001			2006		
	Destination	Total export value	Share	Destination	Total export value	Share	Destination	Total export value	Share
	World total	78,620	100.0	World total	87,969	100.0	World total	160,835	100.0
1	Singapore	15,844	20.2	United States	17,794	20.2	United States	30,063	18.7
2	United States	14,523	18.5	Singapore	14,906	16.9	Singapore	24,607	15.3
3	Japan	9,872	12.6	Japan	11,682	13.3	Japan	14,320	8.9
4	Hong Kong	4,349	5.5	Netherlands	4,063	4.6	China	11,642	7.2
5	Taiwan	3,416	4.3	Hong Kong	4,062	4.6	Thailand	8,498	5.3
6	Netherlands	3,081	3.9	China	3,864	4.4	Hong Kong	7,967	5.0
7	Thailand	2,864	3.6	Thailand	3,357	3.8	Netherlands	5,900	3.7
8	United Kingdom	2,590	3.3	Taiwan	3,202	3.6	ROK	5,835	3.6
9	ROK	2,499	3.2	ROK	2,923	3.3	India	5,201	3.2
10	Germany	2,276	2.9	United Kingdom	2,305	2.6	Australia	4,571	2.8

Ranking	2011			2016		
	Destination	Total export value	Share	Destination	Total export value	Share
	World total	228,290	100.0	World total	189,988	100.0
1	China	29,953	13.1	Singapore	27,639	14.5
2	Singapore	28,841	12.6	China	23,764	12.5
3	Japan	26,591	11.6	United States	19,397	10.2
4	United States	18,865	8.3	Japan	15,371	8.1

5	Thailand	11,711	5.1	Thailand	10,638	5.6
6	Hong Kong	10,229	4.5	Hong Kong	9,094	4.8
7	India	9,214	4.0	India	7,733	4.1
8	ROK	8,589	3.8	Indonesia	6,748	3.6
9	Australia	8,398	3.7	Australia	6,468	3.4
10	Taiwan	7,599	3.3	Viet Nam	5,756	3.0

Notes: As no official values in 1996 have been released, this table shows the data in 1997 as the closest values to those in 1996.

Philippines

Ranking	1997			2001			2006		
	Destination	Total export value	Share	Destination	Total export value	Share	Destination	Total export value	Share
	World total	25,228	100.0	World total	32,151	100.0	World total	47,410	100.0
1	United States	8,330	33.0	United States	8,843	27.5	United States	8,655	18.3
2	Japan	4,192	16.6	Japan	5,055	15.7	Japan	7,916	16.7
3	Netherlands	1,663	6.6	Netherlands	2,976	9.3	Netherlands	4,769	10.1
4	Singapore	1,621	6.4	Singapore	2,308	7.2	China	4,628	9.8
5	Hong Kong	1,172	4.6	Taiwan	2,127	6.6	Hong Kong	3,706	7.8
6	Taiwan	1,169	4.6	Hong Kong	1,580	4.9	Singapore	3,505	7.4
7	United Kingdom	1,086	4.3	Thailand	1,358	4.2	Malaysia	2,620	5.5
8	Germany	1,060	4.2	Germany	1,324	4.1	Taiwan	2,010	4.2
9	Thailand	856	3.4	Malaysia	1,105	3.4	Germany	1,781	3.8
10	Malaysia	631	2.5	ROK	1,044	3.2	ROK	1,423	3.0

Ranking	2011			2016		
	Destination	Total export value	Share	Destination	Total export value	Share
	World total	48,042	100.0	World total	56,313	100.0
1	Japan	8,865	18.5	Japan	11,674	20.7
2	United States	7,080	14.7	United States	8,661	15.4
3	China	6,102	12.7	Hong Kong	6,583	11.7
4	Singapore	4,278	8.9	China	6,192	11.0
5	Hong Kong	3,699	7.7	Singapore	3,701	6.6
6	ROK	2,196	4.6	Germany	2,293	4.1
7	Taiwan	2,003	4.2	Thailand	2,130	3.8
8	Thailand	1,904	4.0	ROK	2,095	3.7
9	Netherlands	1,745	3.6	Taiwan	2,056	3.7
10	Germany	1,729	3.6	Netherlands	1,716	3.0

Notes: As no official values in 1996 have been released, this table shows the data in 1997 as the closest values to those in 1996.

Singapore

Ranking	1999			2001			2006		
	Destination	Total export value	Share	Destination	Total export value	Share	Destination	Total export value	Share
	World total	114,701	100.0	World total	121,691	100.0	World total	271,916	100.0
1	United States	21,966	19.2	Malaysia	21,107	17.3	Malaysia	35,530	13.1
2	Malaysia	18,995	16.6	United States	18,728	15.4	Hong Kong	27,323	10.0
3	Hong Kong	8,805	7.7	Hong Kong	10,814	8.9	United States	26,971	9.9
4	Japan	8,513	7.4	Japan	9,331	7.7	China	26,514	9.8
5	Taiwan	5,596	4.9	Taiwan	6,260	5.1	Indonesia	24,903	9.2
6	Thailand	5,039	4.4	China	5,326	4.4	Japan	14,858	5.5

7	United Kingdom	4,277	3.7	Thailand	5,295	4.4	Thailand	11,306	4.2
8	China	3,920	3.4	ROK	4,684	3.8	Australia	10,189	3.7
9	Netherlands	3,859	3.4	Germany	4,294	3.5	Taiwan	9,481	3.5
10	ROK	3,558	3.1	Netherlands	4,031	3.3	ROK	8,737	3.2

Ranking	2011			2016		
	Destination	Total export value	Share	Destination	Total export value	Share
	World total	409,722	100.0	World total	329,910	100.0
1	Malaysia	50,034	12.2	China	42,839	13.0
2	Hong Kong	45,174	11.0	Hong Kong	41,618	12.6
3	Indonesia	42,818	10.5	Malaysia	35,010	10.6
4	China	42,685	10.4	Indonesia	25,787	7.8
5	United States	21,996	5.4	United States	21,505	6.5
6	Japan	18,390	4.5	Taiwan	14,731	4.5
7	Australia	16,047	3.9	Japan	14,568	4.4
8	ROK	15,478	3.8	ROK	14,514	4.4
9	Taiwan	14,618	3.6	Thailand	12,989	3.9
10	India	14,063	3.4	Viet Nam	11,355	3.4

Notes: As no official values in 1996 have been released, this table shows the data in 1999 as the closest values to those in 1996.

Thailand

Ranking	1998			2001			2006		
	Destination	Total export value	Share	Destination	Total export value	Share	Destination	Total export value	Share
	World total	54,344	100.0	World total	64,909	100.0	World total	130,621	100.0
1	United States	12,142	22.3	United States	13,193	20.3	United States	19,609	15.0
2	Japan	7,470	13.7	Japan	9,942	15.3	Japan	16,565	12.7
3	Singapore	4,659	8.6	Singapore	5,263	8.1	China	11,797	9.0

4	Hong Kong	2,769	5.1	Hong Kong	3,284	5.1	Singapore	8,401	6.4
5	Netherlands	2,180	4.0	China	2,850	4.4	Hong Kong	7,185	5.5
6	United Kingdom	2,110	3.9	Malaysia	2,713	4.2	Malaysia	6,661	5.1
7	Malaysia	1,776	3.3	United Kingdom	2,321	3.6	Australia	4,383	3.4
8	China	1,766	3.2	Netherlands	2,023	3.1	United Kingdom	3,427	2.6
9	Taiwan	1,736	3.2	Taiwan	1,908	2.9	Taiwan	3,383	2.6
10	Germany	1,550	2.9	Germany	1,562	2.4	Indonesia	3,335	2.6

Ranking	2011			2016		
	Destination	Total export value	Share	Destination	Total export value	Share
	World total	220,373	100.0	World total	213,660	100.0
1	China	25,987	11.8	United States	24,335	11.4
2	Japan	23,629	10.7	China	23,582	11.0
3	United States	21,563	9.8	Japan	20,424	9.6
4	Malaysia	12,274	5.6	Hong Kong	11,395	5.3
5	Hong Kong	11,834	5.4	Australia	10,238	4.8
6	Singapore	11,309	5.1	Malaysia	9,543	4.5
7	Indonesia	9,979	4.5	Viet Nam	9,340	4.4
8	Australia	7,922	3.6	Singapore	8,040	3.8
9	Viet Nam	6,990	3.2	Indonesia	8,029	3.8
10	India	5,132	2.3	Philippines	6,353	3.0

Notes: As no official values in 1996 have been released, this table shows the data in 1998 as the closest values to those in 1996.

Viet Nam

Ranking	2000			2001			2006		
	Destination	Total export value	Share	Destination	Total export value	Share	Destination	Total export value	Share
	World total	14,483	100.0	World total	15,029	100.0	World total	39,826	100.0
1	Japan	2,575	17.8	Japan	2,510	16.7	United States	7,850	19.7
2	China	1,536	10.6	China	1,417	9.4	Japan	5,240	13.2
3	Australia	1,272	8.8	United States	1,066	7.1	Australia	3,689	9.3
4	Singapore	886	6.1	Singapore	1,044	6.9	China	3,243	8.1
5	Other Asian economies	757	5.2	Australia	1,042	6.9	Singapore	1,659	4.2
6	United States	733	5.1	Other Asian economies	806	5.4	Germany	1,445	3.6
7	Germany	730	5.0	Germany	722	4.8	Malaysia	1,217	3.1
8	United Kingdom	479	3.3	United Kingdom	512	3.4	United Kingdom	1,180	3.0
9	Philippines	478	3.3	France	469	3.1	Other Asian economies	969	2.4
10	Malaysia	414	2.9	ROK	406	2.7	Indonesia	958	2.4

Ranking	2011			2016		
	Destination	Total export value	Share	Destination	Total export value	Share
	World total	96,906	100.0	World total	176,581	100.0
1	United States	16,970	17.5	United States	38,473	21.8
2	China	11,613	12.0	China	21,950	12.4
3	Japan	11,092	11.4	Japan	14,671	8.3
4	ROK	4,867	5.0	ROK	11,406	6.5
5	Germany	3,367	3.5	Hong Kong	6,088	3.4
6	Malaysia	2,771	2.9	Netherlands	6,012	3.4
7	Australia	2,602	2.7	Germany	5,961	3.4
8	Cambodia	2,519	2.6	United Arab Emirates	5,000	2.8

9	United Kingdom	2,398	2.5	United Kingdom	4,898	2.8
10	Indonesia	2,359	2.4	Thailand	3,691	2.1

Notes: As no official values in 1996 have been released, this table shows the data in 2000 as the closest values to those in 1996.

Notes:

1. The unit in the tables is “million dollars” as for export values and “percentage (%)” as for shares.
2. The intra-ASEAN region is shown in a faint-pink background for each column.

Source: GTA.

Table I-2-3-1-17 Changes in the top 10 import sources in six major ASEAN member economies
Indonesia

Ranking	1996			2001			2006		
	Import source	Import value	Share	Import source	Import value	Share	Import source	Import value	Share
	World	42,929	100.0	World	30,962	100.0	World	61,065	100.0
1	Japan	8,504	19.8	Japan	4,689	15.1	Singapore	10,035	16.4
2	United States	5,060	11.8	United States	3,208	10.4	China	6,637	10.9
3	Germany	3,001	7.0	Singapore	3,147	10.2	Japan	5,516	9.0
4	Singapore	2,875	6.7	ROK	2,209	7.1	United States	4,057	6.6
5	Australia	2,535	5.9	China	1,843	6.0	Saudi Arabia	3,384	5.5
6	ROK	2,411	5.6	Australia	1,814	5.9	Malaysia	3,193	5.2
7	Taiwan	1,664	3.9	Saudi Arabia	1,314	4.2	Australia	2,986	4.9
8	China	1,598	3.7	Germany	1,301	4.2	Thailand	2,983	4.9
9	Italy	1,212	2.8	Taiwan	1,071	3.5	ROK	2,876	4.7
10	United Kingdom	1,118	2.6	Malaysia	1,005	3.2	Brunei Darussalam	1,607	2.6

Ranking	2011			2016		
	Import source	Import value	Share	Import source	Import value	Share
	World	177,436	100.0	World	135,653	100.0
1	China	26,212	14.8	China	30,800	22.7
2	Singapore	25,965	14.6	Singapore	14,548	10.7

3	Japan	19,437	11.0	Japan	12,985	9.6
4	ROK	13,000	7.3	Thailand	8,667	6.4
5	United States	10,813	6.1	United States	7,298	5.4
6	Malaysia	10,405	5.9	Malaysia	7,201	5.3
7	Thailand	10,405	5.9	ROK	6,675	4.9
8	Saudi Arabia	5,427	3.1	Australia	5,261	3.9
9	Australia	5,177	2.9	Viet Nam	3,228	2.4
10	India	4,322	2.4	Germany	3,159	2.3

Malaysia

Ranking	1997			2001			2006		
	Import source	Import value	Share	Import source	Import value	Share	Import source	Import value	Share
	World	78,917	100.0	World	73,744	100.0	World	130,511	100.0
1	Japan	17,337	22.0	Japan	14,145	19.2	Japan	17,332	13.3
2	United States	13,217	16.7	United States	11,811	16.0	United States	16,383	12.6
3	Singapore	10,415	13.2	Singapore	9,303	12.6	China	15,905	12.2
4	ROK	4,073	5.2	Taiwan	4,192	5.7	Singapore	15,244	11.7
5	Taiwan	3,768	4.8	China	3,809	5.2	Thailand	7,169	5.5
6	Germany	3,440	4.4	ROK	2,960	4.0	Taiwan	7,152	5.5
7	Thailand	3,087	3.9	Thailand	2,926	4.0	ROK	7,066	5.4
8	China	2,235	2.8	Germany	2,750	3.7	Germany	5,765	4.4
9	United Kingdom	2,077	2.6	Indonesia	2,246	3.0	Indonesia	4,942	3.8
10	Australia	1,965	2.5	Hong Kong	1,859	2.5	Hong Kong	3,452	2.6

Ranking	2011			2016		
	Import source	Import value	Share	Import source	Import value	Share
	World	187,640	100.0	World	168,722	100.0
1	China	24,747	13.2	China	34,361	20.4
2	Singapore	24,120	12.9	Singapore	17,484	10.4
3	Japan	21,382	11.4	Japan	13,770	8.2
4	United States	18,137	9.7	United States	13,446	8.0

5	Indonesia	11,486	6.1	Thailand	10,221	6.1
6	Thailand	11,286	6.0	Taiwan	10,104	6.0
7	Taiwan	8,884	4.7	ROK	8,881	5.3
8	ROK	7,616	4.1	Indonesia	7,111	4.2
9	Germany	7,185	3.8	Germany	5,749	3.4
10	Hong Kong	4,446	2.4	Viet Nam	4,531	2.7

Notes: As no official values in 1996 have been released, this table shows the data in 1997 as the closest values to those in 1996.

Philippines

Ranking	1997			2001			2006		
	Import source	Import value	Share	Import source	Import value	Share	Import source	Import value	Share
	World	35,934	100.0	World	33,057	100.0	World	51,774	100.0
1	Japan	7,414	20.6	Japan	6,633	20.1	United States	8,436	16.3
2	United States	7,153	19.9	United States	6,410	19.4	Japan	7,270	14.0
3	ROK	2,182	6.1	ROK	2,082	6.3	Singapore	4,379	8.5
4	Singapore	2,171	6.0	Singapore	2,073	6.3	Taiwan	4,145	8.0
5	Taiwan	1,808	5.0	Taiwan	1,970	6.0	China	3,647	7.0
6	Hong Kong	1,549	4.3	Hong Kong	1,335	4.0	ROK	3,200	6.2
7	Germany	1,180	3.3	Malaysia	1,073	3.2	Saudi Arabia	2,935	5.7
8	Saudi Arabia	1,058	2.9	China	975	2.9	Malaysia	2,097	4.1
9	Australia	955	2.7	Thailand	925	2.8	Hong Kong	2,096	4.0
10	Malaysia	941	2.6	Saudi Arabia	887	2.7	Thailand	2,075	4.0

Ranking	2011			2016		
	Import source	Import value	Share	Import source	Import value	Share
	World	60,144	100.0	World	80,834	100.0
1	Japan	6,510	10.8	China	14,968	18.5
2	United States	6,501	10.8	Japan	9,519	11.8
3	China	6,059	10.1	United States	7,164	8.9
4	Singapore	4,893	8.1	Thailand	6,424	7.9
5	ROK	4,392	7.3	Singapore	5,314	6.6

6	Taiwan	4,169	6.9	ROK	5,301	6.6
7	Thailand	3,462	5.8	Taiwan	5,066	6.3
8	Saudi Arabia	3,223	5.4	Indonesia	4,424	5.5
9	Malaysia	2,593	4.3	Malaysia	3,246	4.0
10	Indonesia	2,372	3.9	Hong Kong	2,393	3.0

Notes: As no official values in 1996 have been released, this table shows the data in 1999 as the closest values to those in 1996.

Singapore

Ranking	1999			2001			2006		
	Import source	Import value	Share	Import source	Import value	Share	Import source	Import value	Share
	World	111,080	100.0	World	115,943	100.0	World	238,900	100.0
1	United States	18,921	17.0	Malaysia	20,077	17.3	Malaysia	31,194	13.1
2	Japan	18,492	16.6	United States	19,064	16.4	United States	29,967	12.5
3	Malaysia	17,288	15.6	Japan	16,082	13.9	China	27,248	11.4
4	China	5,698	5.1	China	7,192	6.2	Japan	19,935	8.3
5	Thailand	5,247	4.7	Thailand	5,156	4.4	Taiwan	15,253	6.4
6	Taiwan	4,452	4.0	Taiwan	4,930	4.3	Indonesia	14,759	6.2
7	ROK	4,171	3.8	Saudi Arabia	4,227	3.6	ROK	10,480	4.4
8	Germany	3,608	3.2	Germany	3,832	3.3	Saudi Arabia	9,297	3.9
9	Saudi Arabia	3,271	2.9	ROK	3,821	3.3	Thailand	8,725	3.7
10	Hong Kong	3,188	2.9	Hong Kong	2,783	2.4	Germany	6,829	2.9

Ranking	2011			2016		
	Import source	Import value	Share	Import source	Import value	Share
	World	365,961	100.0	World	283,043	100.0
1	Malaysia	39,149	10.7	China	40,386	14.3
2	United States	39,020	10.7	Malaysia	32,261	11.4
3	China	38,003	10.4	United States	30,551	10.8
4	Japan	26,244	7.2	Taiwan	23,300	8.2
5	ROK	21,753	5.9	Japan	19,902	7.0
6	Taiwan	21,743	5.9	ROK	17,003	6.0

7	Indonesia	19,309	5.3	Indonesia	13,468	4.8
8	Saudi Arabia	17,630	4.8	Germany	8,693	3.1
9	India	14,149	3.9	France	8,551	3.0
10	United Arab Emirates	11,639	3.2	Saudi Arabia	8,113	2.9

Notes: As no official values in 1996 have been released, this table shows the data in 1999 as the closest values to those in 1996.

Thailand

	1998			2001			2006		
Ranking	Import source	Import value	Share	Import source	Import value	Share	Import source	Import value	Share
	World	42,986	100.0	World	61,952	100.0	World	128,652	100.0
1	Japan	10,179	23.7	Japan	13,858	22.4	Japan	25,848	20.1
2	United States	6,054	14.1	United States	7,177	11.6	China	13,642	10.6
3	Singapore	2,384	5.5	China	3,705	6.0	United States	8,628	6.7
4	Taiwan	2,241	5.2	Malaysia	3,072	5.0	Malaysia	8,471	6.6
5	Malaysia	2,199	5.1	Singapore	2,849	4.6	United Arab Emirates	7,218	5.6
6	Germany	1,825	4.2	Taiwan	2,595	4.2	Singapore	5,732	4.5
7	China	1,822	4.2	Germany	2,557	4.1	Taiwan	5,153	4.0
8	ROK	1,496	3.5	ROK	2,118	3.4	ROK	5,072	3.9
9	Oman	1,109	2.6	United Arab Emirates	1,526	2.5	Saudi Arabia	4,261	3.3
10	Australia	897	2.1	Australia	1,377	2.2	Indonesia	3,463	2.7

	2011			2016		
Ranking	Import source	Import value	Share	Import source	Import value	Share
	World	229,300	100.0	World	195,783	100.0
1	Japan	42,298	18.4	China	42,262	21.6
2	China	30,575	13.3	Japan	30,864	15.8
3	United Arab Emirates	14,509	6.3	United States	12,128	6.2
4	United States	13,416	5.9	Malaysia	10,956	5.6

5	Malaysia	12,361	5.4	ROK	7,317	3.7
6	ROK	9,240	4.0	Taiwan	7,173	3.7
7	Switzerland	8,857	3.9	Singapore	6,550	3.3
8	Australia	7,956	3.5	Indonesia	6,414	3.3
9	Singapore	7,809	3.4	United Arab Emirates	6,199	3.2
10	Taiwan	7,525	3.3	Germany	5,902	3.0

Notes: As no official values in 1996 have been released, this table shows the data in 1998 as the closest values to those in 1996.

Viet Nam

Ranking	2000			2001			2006		
	Import source	Import value	Share	Import source	Import value	Share	Import source	Import value	Share
	World	15,637	100.0	World	16,218	100.0	World	44,891	100.0
1	Singapore	2,694	17.2	Singapore	2,478	15.3	China	7,391	16.5
2	Japan	2,301	14.7	Japan	2,183	13.5	Singapore	6,274	14.0
3	Other Asian economies	1,880	12.0	Other Asian economies	2,009	12.4	Other Asian economies	4,825	10.7
4	ROK	1,754	11.2	ROK	1,887	11.6	Japan	4,702	10.5
5	China	1,401	9.0	China	1,606	9.9	ROK	3,908	8.7
6	Thailand	811	5.2	Thailand	792	4.9	Thailand	3,034	6.8
7	Hong Kong	597	3.8	Hong Kong	538	3.3	Malaysia	1,482	3.3
8	Malaysia	389	2.5	Malaysia	464	2.9	Hong Kong	1,441	3.2
9	United States	364	2.3	United States	411	2.5	Switzerland	1,357	3.0
10	Indonesia	345	2.2	Germany	397	2.4	Australia	1,100	2.5

Ranking	2011			2016		
	Import source	Import value	Share	Import source	Import value	Share
	World	106,750	100.0	World	174,978	100.0
1	China	24,866	23.3	China	50,038	28.6
2	ROK	13,176	12.3	ROK	32,193	18.4
3	Japan	10,401	9.7	Japan	15,098	8.6

4	Other Asian economies	8,557	8.0	Other Asian economies	11,242	6.4
5	Singapore	6,391	6.0	Thailand	8,855	5.1
6	Thailand	6,384	6.0	United States	8,712	5.0
7	United States	4,555	4.3	Malaysia	5,174	3.0
8	Malaysia	3,920	3.7	Singapore	4,769	2.7
9	India	2,346	2.2	Indonesia	2,992	1.7
10	Indonesia	2,248	2.1	Germany	2,850	1.6

Notes: As no official values in 1996 have been released, this table shows the data in 2000 as the closest values to those in 1996.

Notes:

1. The unit in the tables is “million dollars” as for export values and “percentage (%)” as for shares.
2. The intra-ASEAN region is shown in a faint-pink background for each column.

Source: GTA.

A plotting of the total value of trade between ASEAN member countries and China¹²⁵ and ASEAN member countries’ dependency on China in imports and exports shows that China’s influence on less developed countries, such as Cambodia, Lao PDR and Myanmar, is strong as their total value of trade is relatively small, that Viet Nam’s value of trade is similar to Singapore’s although Viet Nam is less developed, and that there are more countries that are dependent on China in imports than countries that are dependent on it in exports (Figure I-2-3-1-18).

From the above, it is clear that ASEAN’s dependency on China in trade is high and that the ASEAN economy, whose growth is driven mainly by private consumption and exports, is closely linked with the trends in the Chinese economy.

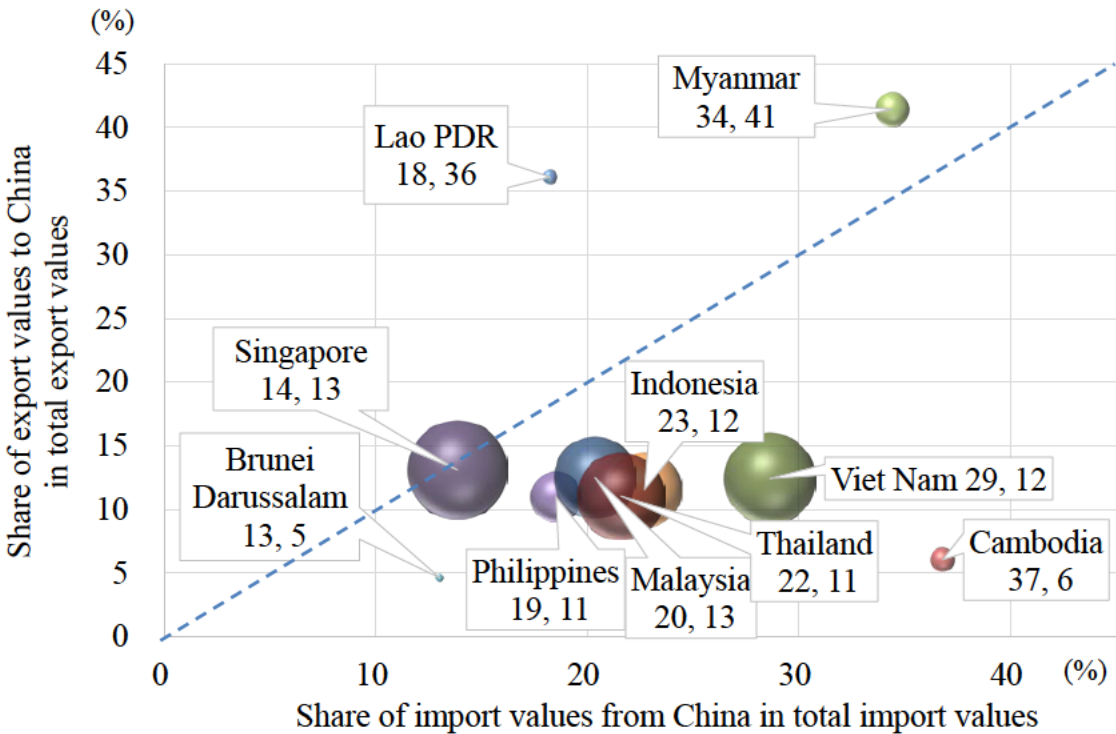
Next, we will look at changes in ASEAN’s trade balance with China.¹²⁶ ASEAN’s trade deficit with China is growing as a trend. In particular, since 2010, when ASEAN was affected by the global economic crisis, the deficit has expanded rapidly (Figures I-2-3-1-19 and I-2-3-1-20).

A comparison of the breakdown of the trade balance between 2007 and 2016 shows that the product items that made the greatest contributions to the expansion of the trade deficit were general machinery and parts (HS84), electrical machinery and parts (HS85), iron and steel (HS72) and steel products (HS73) (Figure I-2-3-1-21).

125 Figures published by the ASEAN Secretariat were used.

126 Figures published by the ASEAN Secretariat were used.

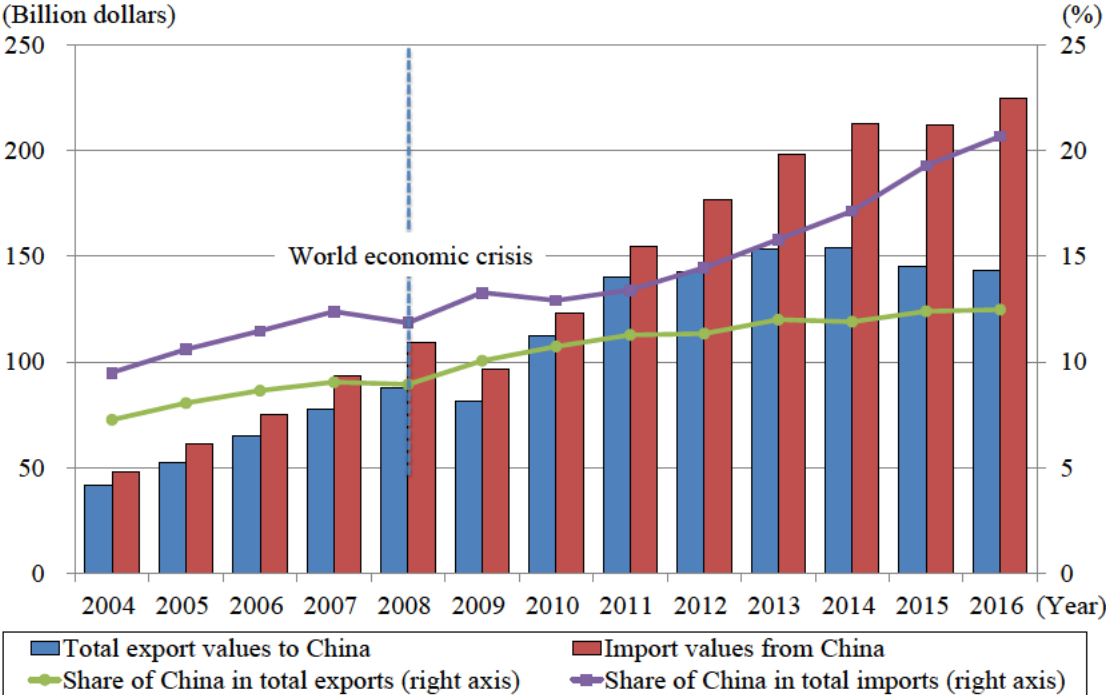
Figure I-2-3-1-18 Shares of China in trade by ASEAN member economies



Notes: This figure targets values in 2016. The size of a bubble represents the total values of trade with China.

Source: ASEAN Secretariat.

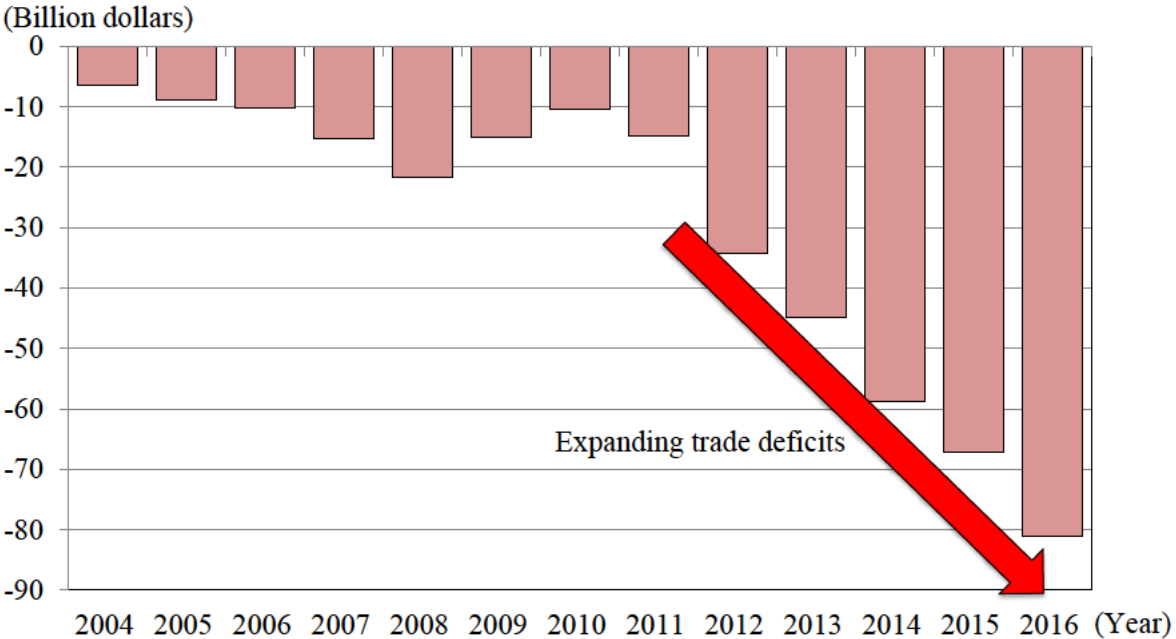
Figure I-2-3-1-19 Changes in values of ASEAN’s trade with China



Notes: This figure targets Mainland China alone and does not include Hong Kong or Macau.

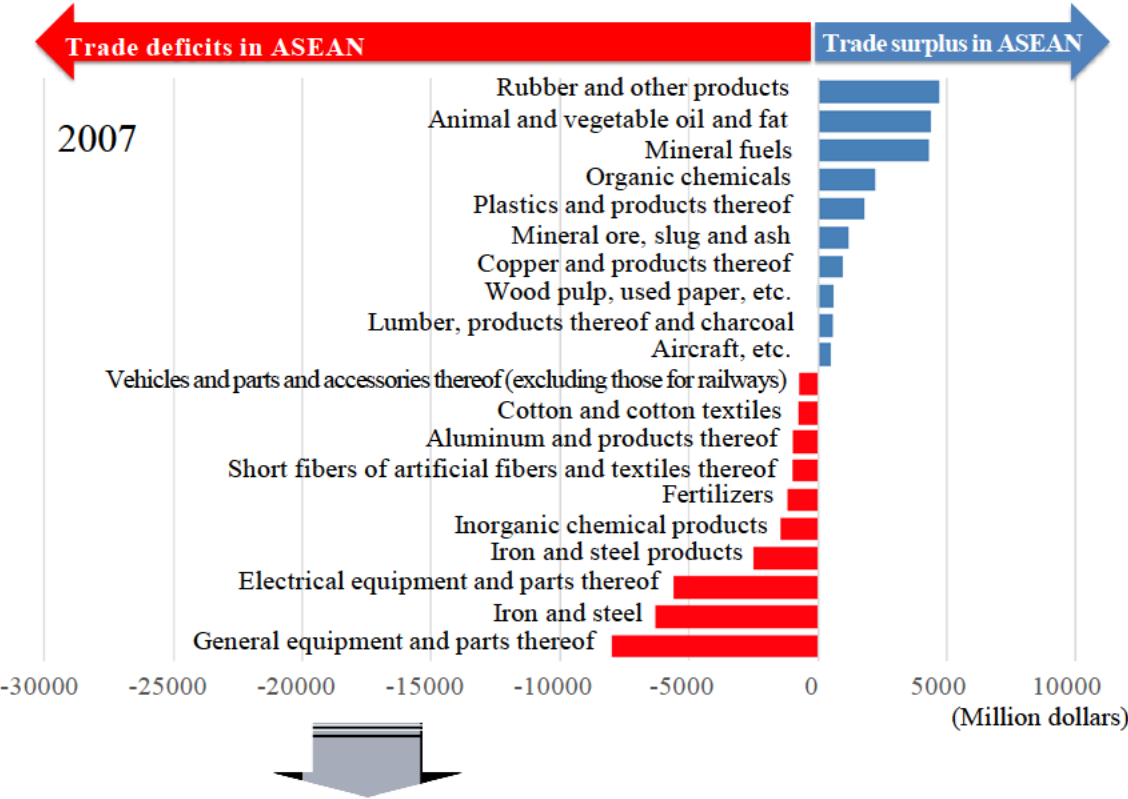
Source: ASEAN Secretariat.

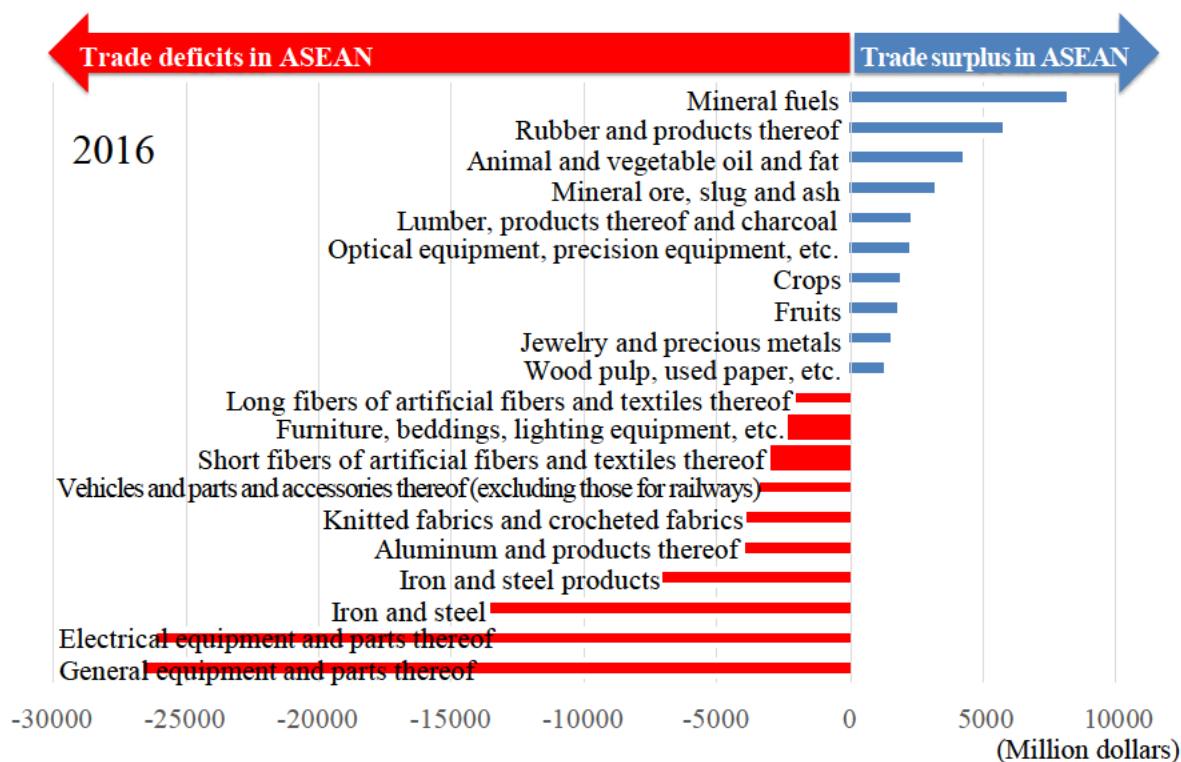
Figure I-2-3-1-20 Changes in ASEAN’s trade balance with China



Notes: This figure targets Mainland China alone and does not include Hong Kong or Macau.
 Source: ASEAN Secretariat.

Figure I-2-3-1-21 Item-based breakdowns of balance of ASEAN’s trade with China (comparison of data between 2007 and 2016)





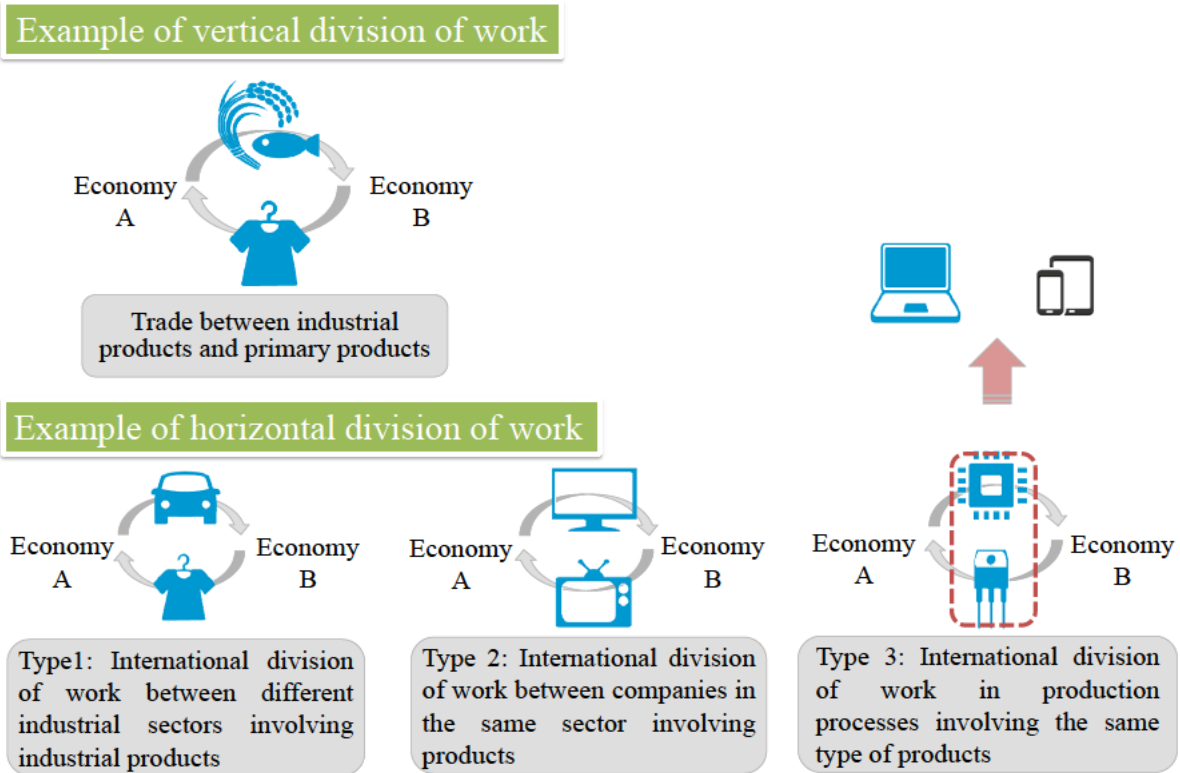
Source: ASEAN Secretariat.

(B) Changes in the structure of trade with China

Next, we will look at changes in the structure of trade between ASEAN and China while taking into consideration changes in the lineup of product items and the situation of trade in intermediate goods.

First, we will cite a typical example of a model of division of work (Figure I-2-3-1-22). Generally speaking, trade (division of work) is broadly divided into vertical division of work and horizontal division of work. A typical example of vertical division of work is trade between advanced economies and developing economies in which the former export industrial products to and import primary products from the latter, and in this case, it is assumed that the value added of industrial products is higher than the value added of primary products. Meanwhile, there are three typical examples of vertical division of work--Type 1 (trade in industrial products conducted between different industrial sectors), Type 2 (trade in industrial products conducted within the same industrial sector), and Type 3 (trade in parts conducted for the purpose of production of the same product).

Figure I-2-3-1-22 Models of vertical division of work and horizontal division of work



Source: Miyajima (2016).

Let us look at changes in the top 10 items of trade between ASEAN and China in 1997 to 2017 based on the classification of items by four-digit HS code.

With respect to exports from ASEAN to China, the shares of primary products and processed products were large in 1997. More specifically, among the top 10 items were three oil-related products--refined oil products, ranked No. 1, crude oil, ranked No. 2 and gas oil, ranked No. 10. There were two agriculture-related products--palm oil, ranked No. 4, and natural rubber, ranked No. 6--and one wood-related product, plywood, which was ranked No. 5. Although there were two IT-related products (including both finished goods and parts; the same shall apply hereinafter)--computer parts, ranked No. 3 and integrated circuits, ranked No. 7--their shares in the total value of exports were still small (Table I-2-3-1-23).

Table I-2-3-1-23 Changes in the top 10 export items from ASEAN to China

Top 10 export items from ASEAN to China							
1997				2002			
Ranking	Export item (four-digit HS code)	Export value (million dollars)	Share	Ranking	Export item (four-digit HS code)	Export value (million dollars)	Share
1	Oil refinery products (2710)	1,655	13.4%	1	Integrated circuits (8542)	6,856	22.0%
2	Crude oil (2709)	1,392	11.3%	2	Computer parts (8473)	2,027	6.5%
3	Computer parts (8473)	1,143	9.3%	3	Crude oil (2709)	2,019	6.5%
4	Palm oil (1511)	601	4.9%	4	Computer-related products (8471)	1,889	6.1%
5	Plywood (4412)	552	4.5%	5	Oil refinery products (2710)	1,281	4.1%
6	Natural rubber (4001)	434	3.5%	6	Semiconductor devices (8541)	876	2.8%
7	Integrated circuits (8542)	354	2.9%	7	Palm oil (1511)	848	2.7%
8	Polymers of ethylene (3901)	234	1.9%	8	Natural rubber (4001)	683	2.2%
9	Polymers of styrene (3903)	225	1.8%	9	Polymers of ethylene (3901)	654	2.1%
10	Light oil (2711)	206	1.7%	10	Wood (4407)	545	1.7%
	Total value	12,357	100.0%		Total value	31,193	100.0%

Top 10 export items from ASEAN to China							
2007				2012			
Ranking	Export item (four-digit HS code)	Export value (million dollars)	Share	Ranking	Export item (four-digit HS code)	Export value (million dollars)	Share
1	Integrated circuits (8542)	35,289	32.6%	1	Integrated circuits (8542)	44,219	22.6%
2	Computer-related products (8471)	9,689	8.9%	2	Computer-related products (8471)	15,875	8.1%

3	Palm oil (1511)	3,640	3.4%	3	Oil refinery products (2710)	8,253	4.2%
4	Oil refinery products (2710)	3,366	3.1%	4	Coal (2701)	7,608	3.9%
5	Natural rubber (4001)	3,240	3.0%	5	Natural rubber (4001)	6,751	3.4%
6	Computer parts (8473)	2,892	2.7%	6	Palm oil (1511)	6,467	3.3%
7	Semiconductor devices (8541)	2,744	2.5%	7	Computer parts (8473)	4,745	2.4%
8	Crude oil (2709)	2,639	2.4%	8	Nickel ores (2604)	4,624	2.4%
9	Mobile phones (8517)	1,932	1.8%	9	Semiconductor devices (8541)	4,317	2.2%
10	Coal (2701)	1,690	1.6%	10	Compounded rubber (4005)	4,167	2.1%
	Total value	108,381	100.0%		Total value	195,728	100.0%

Top 10 export items from ASEAN to China			
2017			
Ranking	Export item (four-digit HS code)	Export value (million dollars)	Share
1	Integrated circuits (8542)	46,436	21.1%
2	Mobile phones (8517)	12,825	5.8%
3	Computer-related products (8471)	9,986	4.5%
4	Semiconductor devices (8541)	5,476	2.5%
5	Synthetic rubber (4002)	5,274	2.4%
6	Natural rubber (4001)	4,862	2.2%
7	Oil refinery products (2710)	4,819	2.2%

8	Crude oil (2709)	4,739	2.2%
9	Light oil (2711)	4,260	1.9%
10	Products of the distillation of coal tar (2707)	4,030	1.8%
	Total value	220,013	100.0%

Notes: This table is based on the report released by China. IT-related items are shown in a yellow background for each column.

Source: GTA.

Table I-2-3-1-24 Changes in the top 10 import items from China to ASEAN

Top 10 import items from ASEAN to China							
1997				2002			
Ranking	Import item (four-digit HS code)	Import value (million dollars)	Share	Ranking	Import item (four-digit HS code)	Import value (million dollars)	Share
1	Computer parts (8473)	352	2.8%	1	Computer parts (8473)	2,125	9.0%
2	Oil refinery products (2710)	323	2.5%	2	Oil refinery products (2710)	1,199	5.1%
3	Unwrought zinc (7901)	317	2.5%	3	Integrated circuits (8542)	1,054	4.5%
4	Cruise ships, cargo ships, etc. (8901)	317	2.5%	4	Transmission apparatus, etc. (8525)	762	3.2%
5	Computer-related products (8471)	311	2.4%	5	Computer-related products (8471)	703	3.0%
6	Semifinished products of iron or steel (7207)	285	2.2%	6	Parts of transmission apparatus (8529)	459	1.9%
7	Corn (maize) (1005)	283	2.2%	7	Corn (maize) (1005)	419	1.8%
8	Crude oil (2709)	277	2.2%	8	Parts of reproducing apparatus (8522)	395	1.7%
9	Processed tobacco (2402)	253	2.0%	9	Semiconductor devices (8541)	342	1.5%
10	Parts of reproducing apparatus (8522)	200	1.6%	10	Crude oil (2709)	300	1.3%
	Total value	12,698	100.0%		Total value	23,574	100.0%

Top 10 import items from ASEAN to China							
2007				2012			
Ranking	Import item (four-digit HS code)	Import value (million dollars)	Share	Ranking	Import item (four-digit HS code)	Import value (million dollars)	Share
1	Mobile phones (8517)	6,533	6.9%	1	Computer-related products (8471)	7,862	3.9%
2	Integrated circuits (8542)	5,482	5.8%	2	Mobile phones (8517)	7,812	3.8%
3	Computer parts (8473)	3,975	4.2%	3	Integrated circuits (8542)	6,902	3.4%
4	Oil refinery products (2710)	3,389	3.6%	4	Oil refinery products (2710)	6,155	3.0%
5	Computer-related products (8471)	3,380	3.6%	5	Cruise ships, cargo ships, etc. (8901)	5,552	2.7%
6	Cruise ships, cargo ships, etc. (8901)	2,332	2.5%	6	Liquid crystal devices and laser equipment (9013)	4,511	2.2%
7	Liquid crystal devices and laser equipment (9013)	1,815	1.9%	7	Women's clothing (6104)	4,461	2.2%
8	Flat-rolled products of iron or steel (hot- rolled products) (7208)	1,659	1.8%	8	Parts of furniture (9403)	3,442	1.7%
9	Semifinished products of iron or steel (7207)	1,239	1.3%	9	Computer parts (8473)	3,150	1.5%
10	Printing machines (8443)	1,213	1.3%	10	Electrical transformers (8504)	2,180	1.1%
	Total value	94,243	100.0%		Total value	203,924	100.0%

Top 10 import items from ASEAN to China			
2017			
Ranking	Import item (four-digit HS code)	Import value (million dollars)	Share
1	Mobile phones (8517)	20,232	7.2%
2	Integrated circuits (8542)	12,813	4.6%
3	Oil refinery products (2710)	11,270	4.0%
4	Computer-related products (8471)	7,463	2.7%
5	Other knitted or crocheted fabrics (6006)	3,650	1.3%
6	Liquid crystal devices and laser equipment (9013)	3,453	1.2%
7	Woven fabrics of synthetic filament yarn (5407)	3,319	1.2%
8	Flat-rolled products of iron or steel (7210)	3,152	1.1%
9	Computer parts (8473)	3,066	1.1%
10	Flat-rolled products of other alloy steel (7225)	3,013	1.1%
	Total value	281,327	100.0%

Notes: This table is based on the report released by China. IT-related items are shown in a yellow background for each column.

Source: GTA.

On the other hand, among the main items of import by ASEAN from China in 1997 were industrial products, including cruise ships/cargo ships, etc., ranked No. 4, and semi-finished products of steel, ranked No. 6. There were also three IT-related products among the top 10 items of import, including computer parts, ranked No. 1 (Table I-2-3-1-24).

In the 2000s, the value of trade in IT-related products increased year after year in terms of both

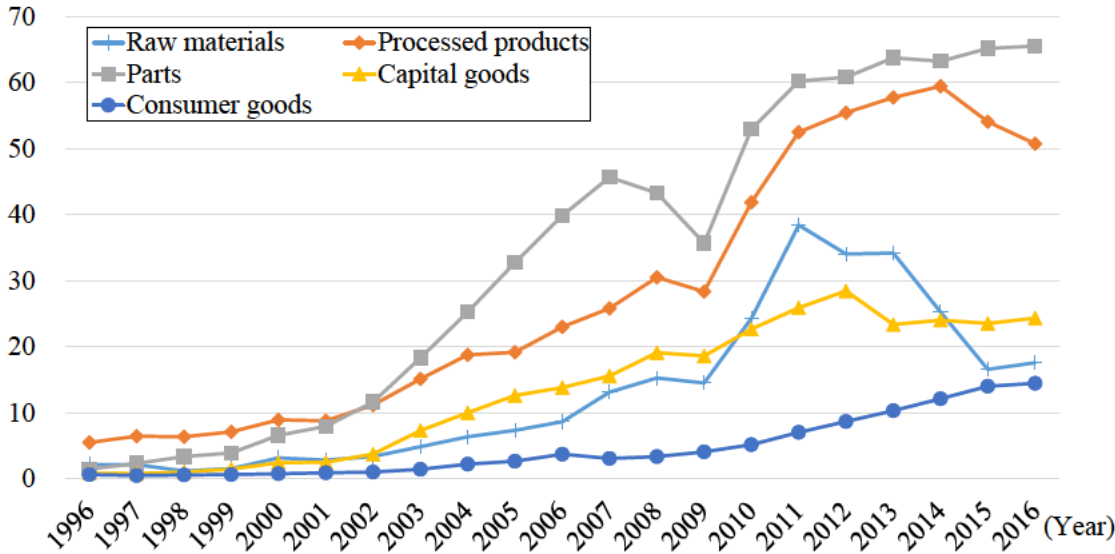
imports and exports, and the share of those products in the total value of trade also grew. In particular, the increase was conspicuous for computer-related products (HS8471), computer parts (HS8473) and integrated circuits (HS8542). In 2007, mobile phones (HS8517) (including both finished products and parts; the same shall apply hereinafter), which was not among the top 10 in 2006, rose to No. 9 in exports and leaped to No. 1 in imports.

ASEAN and China rapidly developed horizontal division of work, whereby they manufactured IT-related products while exporting to and importing from each other those products. As IT-related appliances of the same HS code are major items of both import and export, trade between ASEAN and China can be classified primarily as Type 3 horizontal division of work according to Figure I-2-3-1-22.

However, while horizontal division of work exists as described above, there still remains the traditional vertical division of work--ASEAN exporting primary products, such as mineral fuels (mainly crude oil, gas oil and coal) and natural rubber, to China and importing industrial products, such as refined oil products, textiles, steel and furniture from it--and recently, the presence of the traditional vertical division of work appears to be increasing.

Looking at changes in trade between ASEAN and China by production process,¹²⁷ it is clear that parts are the main items of export and processed products are the main item of import (Figures I-2-3-1-25 and I-2-3-1-26).

Figure I-2-3-1-25 Changes in exports from ASEAN to China (values by production process)
(Billion dollars)

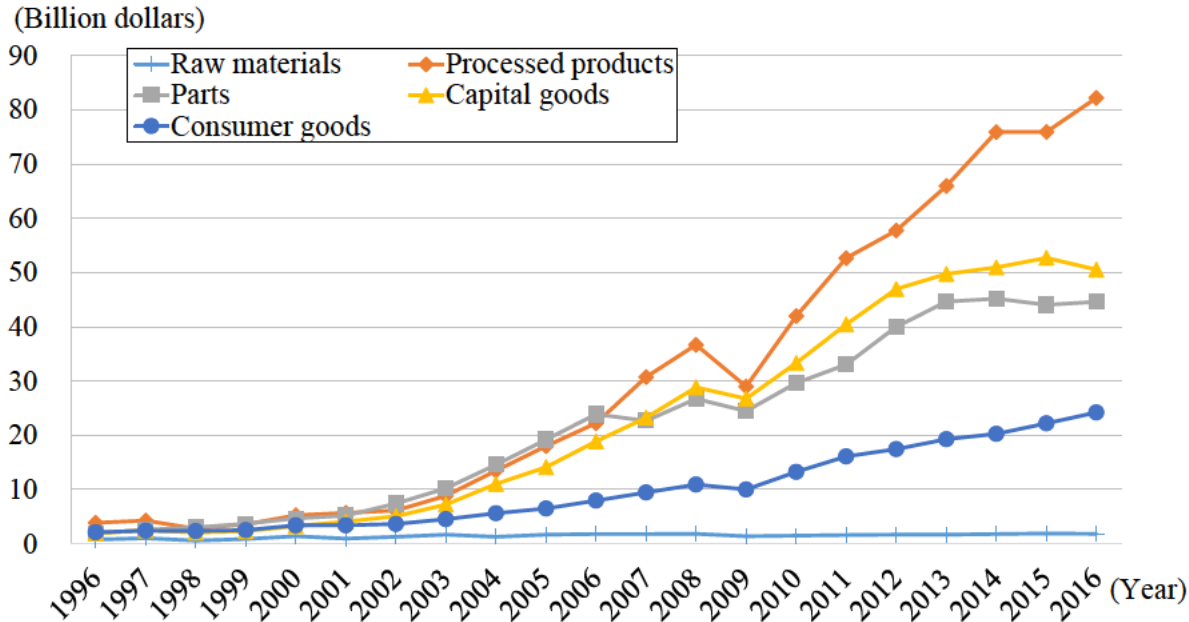


Notes: Target economies do not include Lao PDR or Myanmar.

Source: RIETI-TID 2016.

127 Based on the classification of RIETI TID (2016). Industries classified into 13 sectors are further classified into three categories (five subcategories)--raw materials, intermediate goods (processed products and parts) and final goods (capital goods and consumer goods). This is a classification made in accordance with the SNA (System of National Account) after classifying trade data concerning individual industries into three categories according to the nature of the production process of traded goods based on the BEC (Broad Economic Categories) of the United Nations (<https://www.rieti.go.jp/ip/projects/rieti-tid/>).

Figure I-2-3-1-26 Changes in imports from China to ASEAN (values by production process)

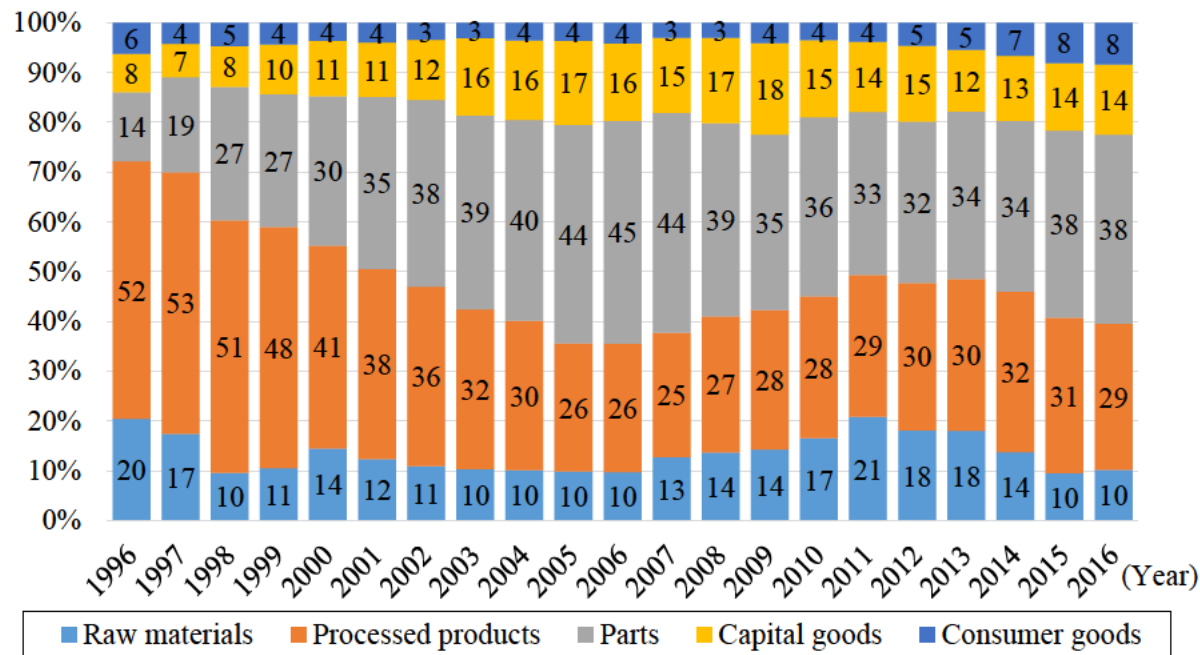


Notes: Target economies do not include Lao PDR or Myanmar.

Source: RIETI-TID 2016.

Although the share of parts in exports to China trended downward after increasing from 14% in 1996 and peaking at 45% in 2006, it has increased again since 2015 (Figure I-2-3-1-27). The share of processed products in imports from China has been trending upward (Figure I-2-3-1-28).

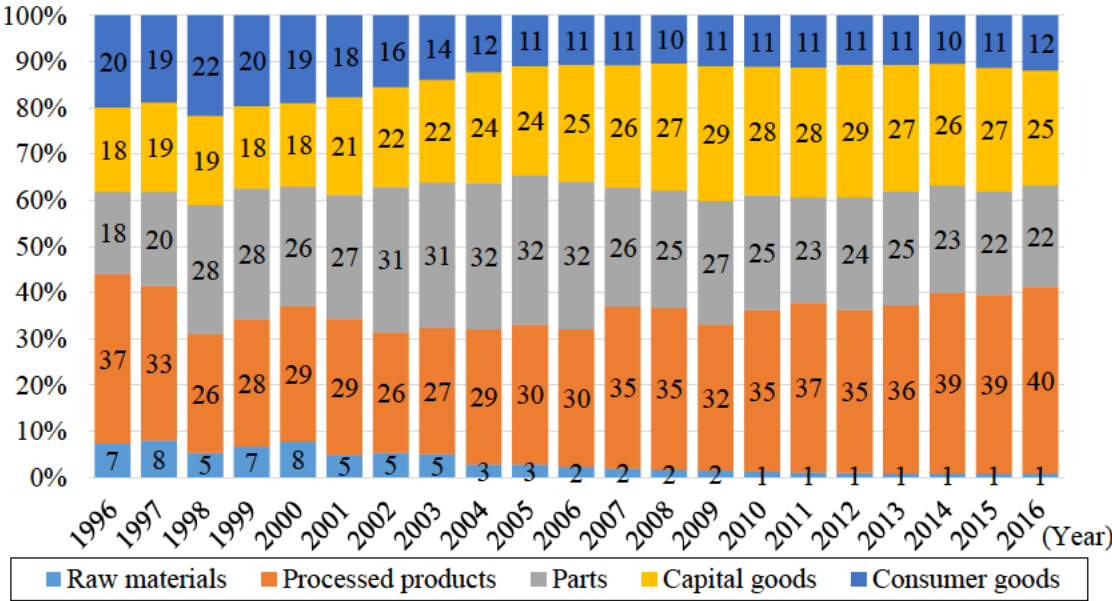
Figure I-2-3-1-27 Changes in exports from ASEAN to China (shares by production process)



Notes: Target economies do not include Lao PDR or Myanmar.

Source: RIETI-TID 2016.

Figure I-2-3-1-28 Changes in imports from China to ASEAN (shares by production process)



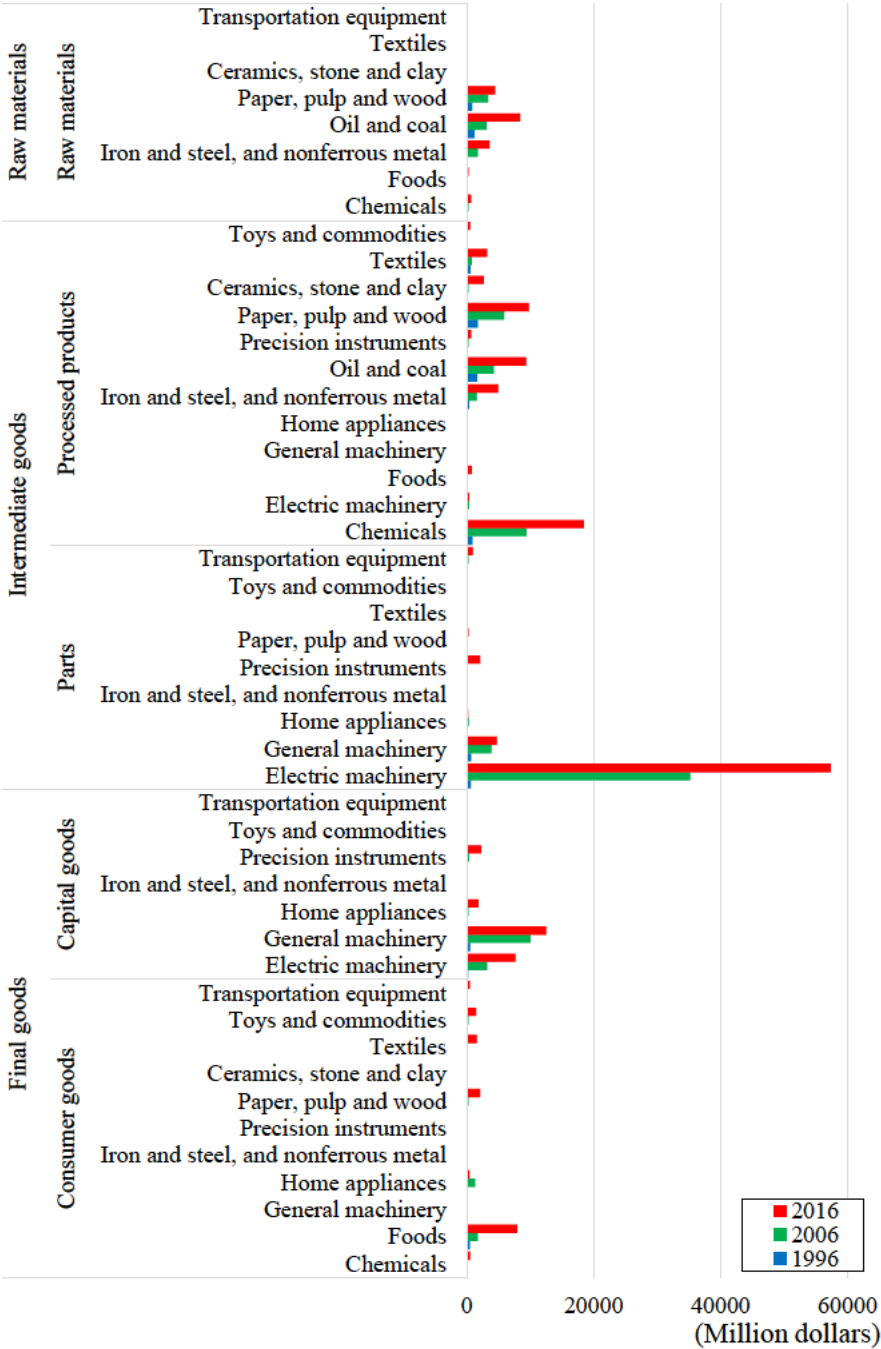
Notes: Target economies do not include Lao PDR or Myanmar.

Source: RIETI-TID 2016.

In addition, the examination of the breakdown of trade between ASEAN and China by production process shows that intermediate goods (processed products and parts), particularly electric machinery parts, have a large share in mutual trade, a situation that indicates that Type 3 horizontal division of work has been well developed with respect to electrical machinery. This is presumably related to the global value chain that has been developed in East Asia by the electrical machinery industry.

One notable point is that ASEAN’s exports are heavily concentrated in intermediate goods (parts) related to electrical machinery. If in-sourcing of electrical machinery parts increases in China in the future, that could drastically change the structure of trade between ASEAN and China (Figure I-2-3-1-29).

**Figure I-2-3-1-29 Exports from ASEAN to China (values by production process and by item)
(as of 1996, 2006 and 2016)**

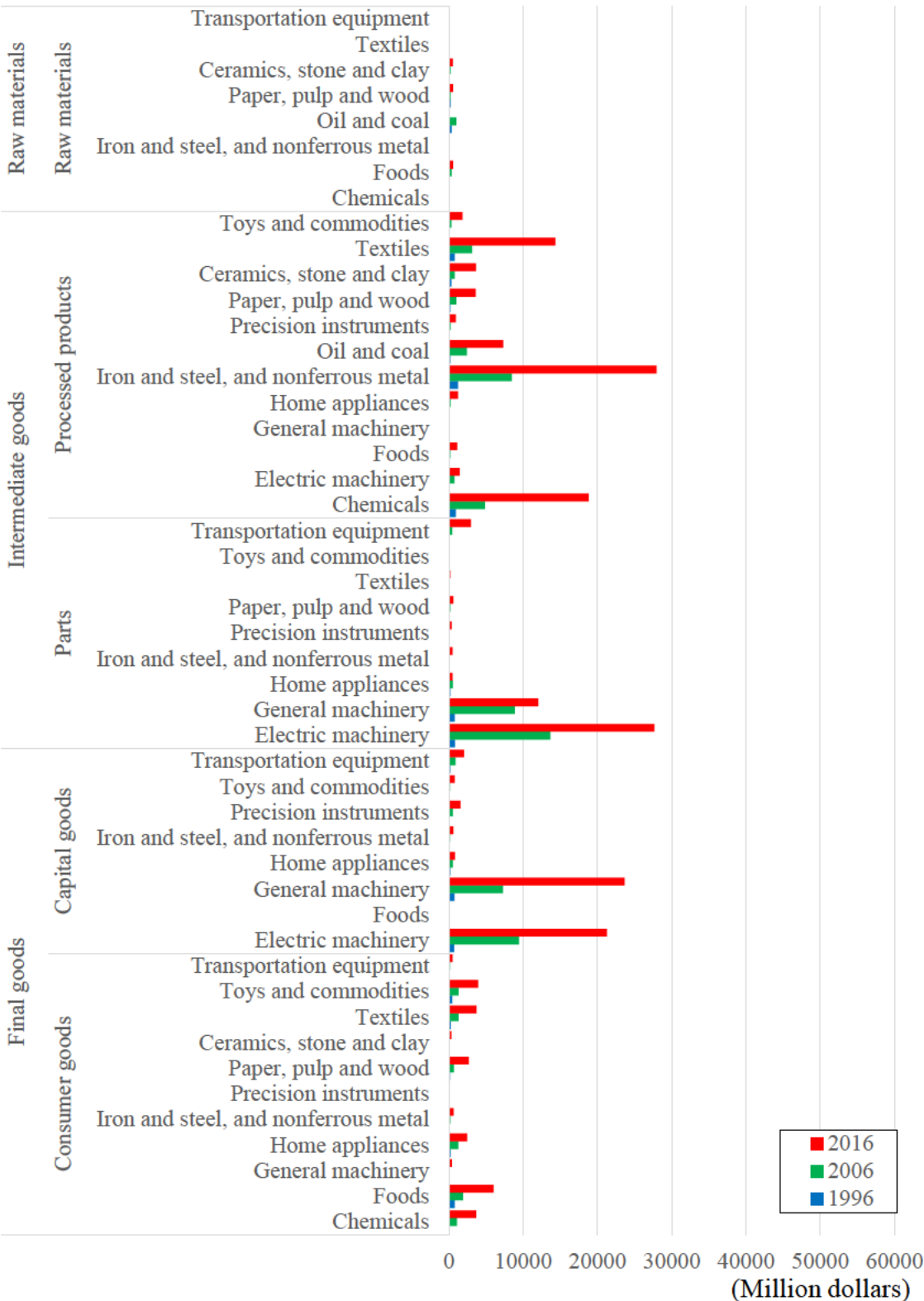


Notes: Target economies do not include Myanmar or Lao PDR.

Source: RIETI-TID 2016.

Another notable point is the large share of processed steel and non-ferrous products, electrical machinery and general machinery (all of which are capital goods) in imports from China. This is presumably because of robust demand for infrastructure and private consumption in ASEAN (Figure I-2-3-1-30). Other characteristics of trade between ASEAN and China are summarized in the table below (Table I-2-3-1-31).

**Figure I-2-3-1-30 Imports from China to ASEAN (values by production process and by item)
(as of 1996, 2006 and 2016)**



Notes: Target economies do not include Myanmar or Lao PDR.

Source: RIETI-TID 2016.

Table I-2-3-1-31 Characteristics of ASEAN’s trade with China
(values by production process and by item)

Overview		The trade values of intermediate goods (both processed products and parts) and those of capital goods account for the larger share of the total trade values.
Raw materials		Exports from ASEAN to China tend to increase (mainly in the fields of oil and coal, iron and steel, and nonferrous metal, and paper, pulp and wood).
Intermediate goods	Processed products	Trade of chemicals is bilaterally proactive between ASEAN and China.
		As for iron and steel and nonferrous metal and textiles, the volume of imports from China to ASEAN is significantly large.
	Parts	Trade of electrical machinery is bilaterally proactive between ASEAN and China. The volume of exports from ASEAN is more than twice as large as the imports.
		Trade of general machinery is bilaterally proactive between ASEAN and China, which is not as proactive as electric machinery. The volume of exports from ASEAN is less than half of that of imports.
Capital goods		Trade of general machinery is bilaterally proactive between ASEAN and China. The volume of exports from ASEAN is less than half of that of imports.
		Trade of electrical machinery is bilaterally proactive between ASEAN and China. The volume of exports from ASEAN is about 30% of the imports.
Consumer goods		Trade of foods is bilaterally proactive between ASEAN and China. The volume of exports from ASEAN is about 1.6 times that of imports.
		As for toys and commodities, chemicals, textiles, and paper, pulp and wood, the volume of imports to ASEAN is larger than that of exports from ASEAN and tends to increase.

Source: METI.

(C) Structure of the division of work with China—analysis based on the intra-industry trade index

Here, we will examine changes in the structure of the division of work between ASEAN and China during 1996 to 2017 by analyzing¹²⁸ how and to what degree horizontal and vertical trade (division of work) has progressed based on the intra-industry trade index (trade specialization coefficient).¹²⁹

128 Through the method of Miyajima and Oizumi (2008).

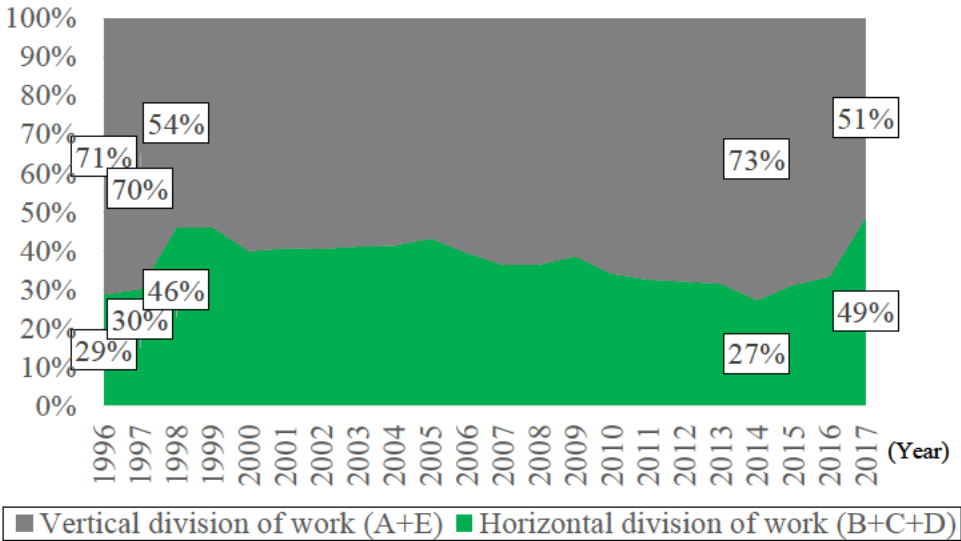
129 GTA figures reported by China were used. The index was calculated based on a four-digit HS code (a total of 1,264 product items). The intra-industry trade index is calculated through the following formula: The intra-industry trade index concerning ASEAN trade with China = (ASEAN exports – ASEAN imports) / (ASEAN exports + ASEAN imports)
The intra-industry trade index takes a value ranging from minus 1 to plus 1. The closer to plus 1 the value is, the higher ASEAN exports’ competitiveness against China is. The closer to minus 1 the value is, the lower ASEAN exports’ competitiveness is. The closer to 0 the value is, the more similar the range of ASEAN’s items of import from and export to China is to the range of China’s items of import from and export to ASEAN (intra-industry trade). In order to make clear the share of intra-industry trade in overall trade, product items are classified into the following five categories according to the level of the index value calculated.

First, regarding the breakdown of ASEAN-China trade based on a two-group classification-- vertical division of work and horizontal division of work--the share of horizontal division of work, which was only 29% in 1996 and 30% in 1997, rose steeply to 46% in 1998 and stayed between 40% and 50% until 2005. However, from 2006 onwards, the share of horizontal division of work generally continued to decline until falling to 27% in 2014, while the presence of vertical division of work increased. Since 2015, the share of horizontal division of work resumed rising, and in 2017, it came to 49%, almost equal to the share of vertical division of work (Figure I-2-3-1-32).

According to a more detailed five-group classification, the share of “items of particular advantage for ASEAN” was consistently larger than the share of “items of particular advantage for China” during the period except in 1997 and 1998, but since 2012, the share of “items of particular advantage for China” has continued to be larger (Figure I-2-3-1-33).

Next, we will look at Figures I-2-3-1-32 and I-2-3-1-33 in terms of trade value. Although the value of horizontal division of work increased in the 2000s, the value of vertical division of work was consistently higher than the share of horizontal division of work. Between 2009 and 2014, the value of vertical division of work increased steeply, but since 2015, it declined sharply and in 2017, it became almost equal to the value of horizontal division of work (Figure I-2-3-1-34).

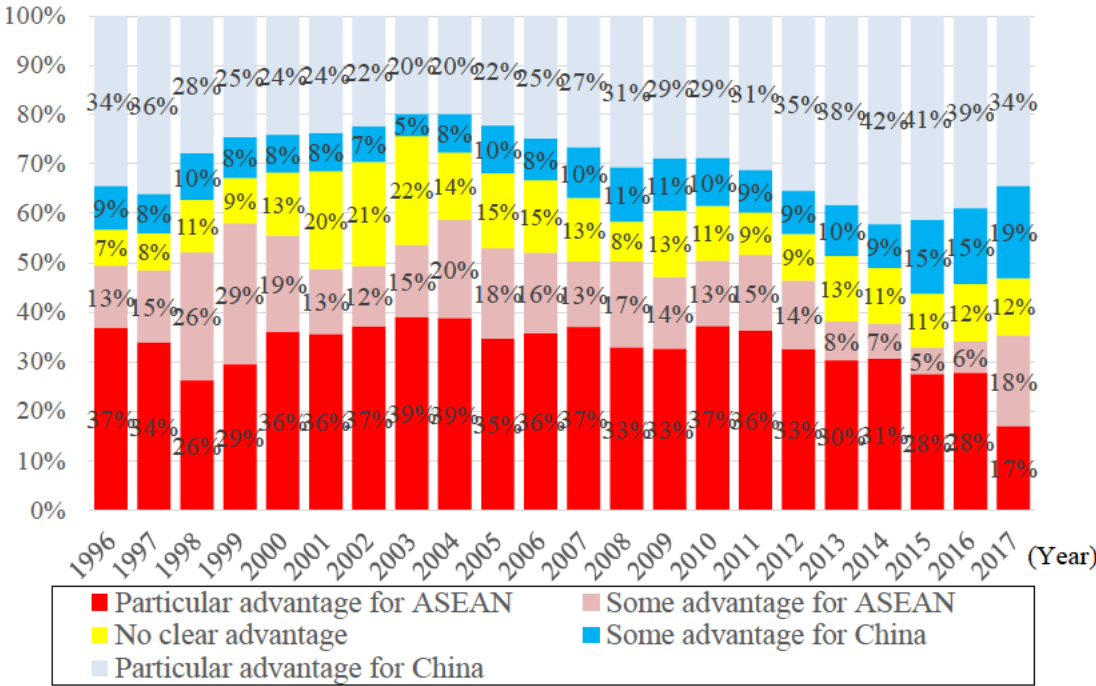
Figure I-2-3-1-32 ASEAN’s trade with China: Changes in two-group-classification shares based on the intra-industry trade index



Source: GTA.

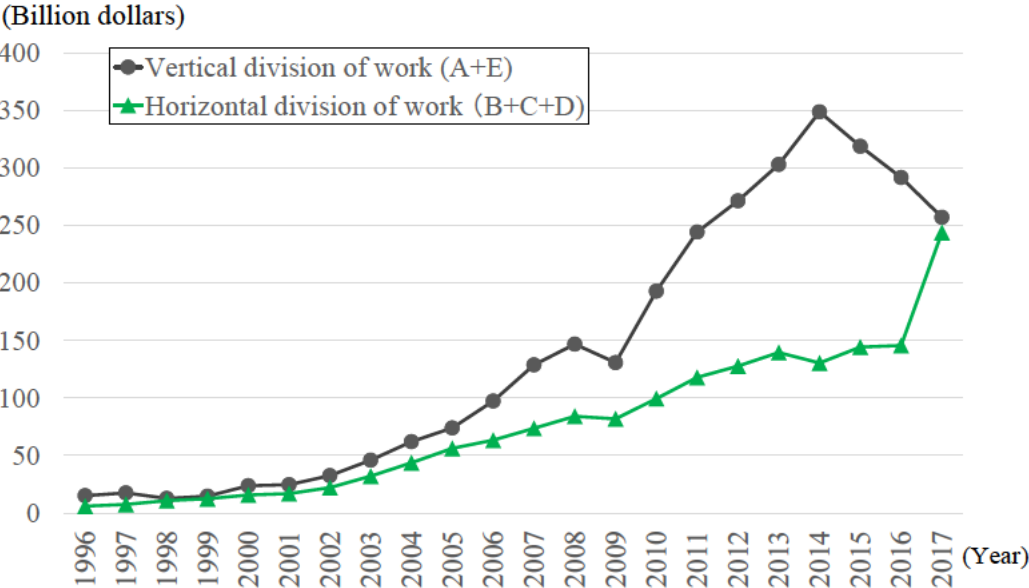
- A: Items of particular advantage for ASEAN (the index value is higher than 0.6)
 - B: Items of some advantage for ASEAN (the index value is higher than plus 0.2 and equal to or lower than plus 0.6)
 - C: Items of no clear advantage (the index value is equal to or higher than minus 0.2 and equal to or lower than plus 0.2)
 - D: Items of some advantage for China (the index value is equal to or higher than minus 6 and lower than minus 0.2)
 - E: Items of particular advantage for China (the index value is lower than minus 0.6)
- Under this method, the share of each of the above categories in the total value of trade is calculated, and the compound of B, C, and D is regarded as the horizontal trade (division of work) index, while the compound of A and E is regarded as the vertical trade (division of work) index.

Figure I-2-3-1-33 ASEAN’s trade with China: Changes in five-group-classification shares based on the intra-industry trade index



Notes: This figure shows values reported by China, setting the total trade values as 100.
Source: GTA.

Figure I-2-3-1-34 ASEAN’s trade with China: Changes in trade values of horizontal and vertical divisions of work



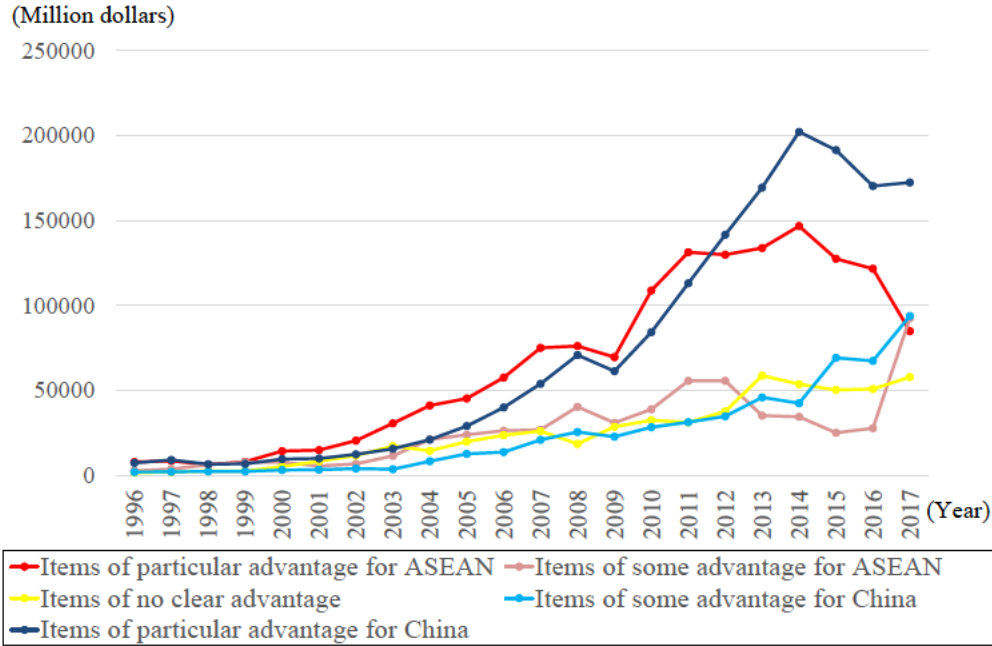
Source: GTA.

According to a more detailed five-group classification, an increase in the value of “items of particular advantage for China” made the primary contributions to the increase in the value of vertical division of work between 2009 and 2014, while a decrease in the value of “items of particular advantage for ASEAN”

made the primary contributions to the increase in the value of horizontal division of work since 2014. The value of “items of no clear advantage” did not change significantly and remained low (Figure I-2-3-1-35).

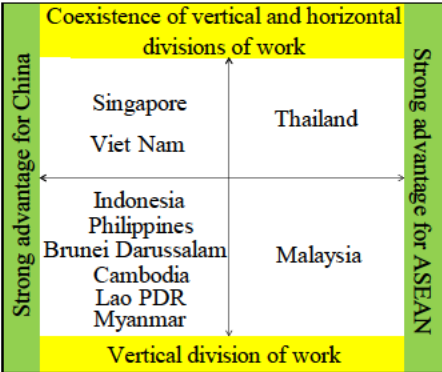
If the results shown in Figure I-2-3-1-35 are classified by country, it is clear that the characteristics of trade differ from country to country. The ASEAN member countries were broadly classified into four groups (Figure I-2-3-1-36).

Figure I-2-3-1-35 ASEAN’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



Source: GTA.

Figure I-2-3-1-36 ASEAN member economies’ trade with China: Grouping by type of division of work (conceptual picture)

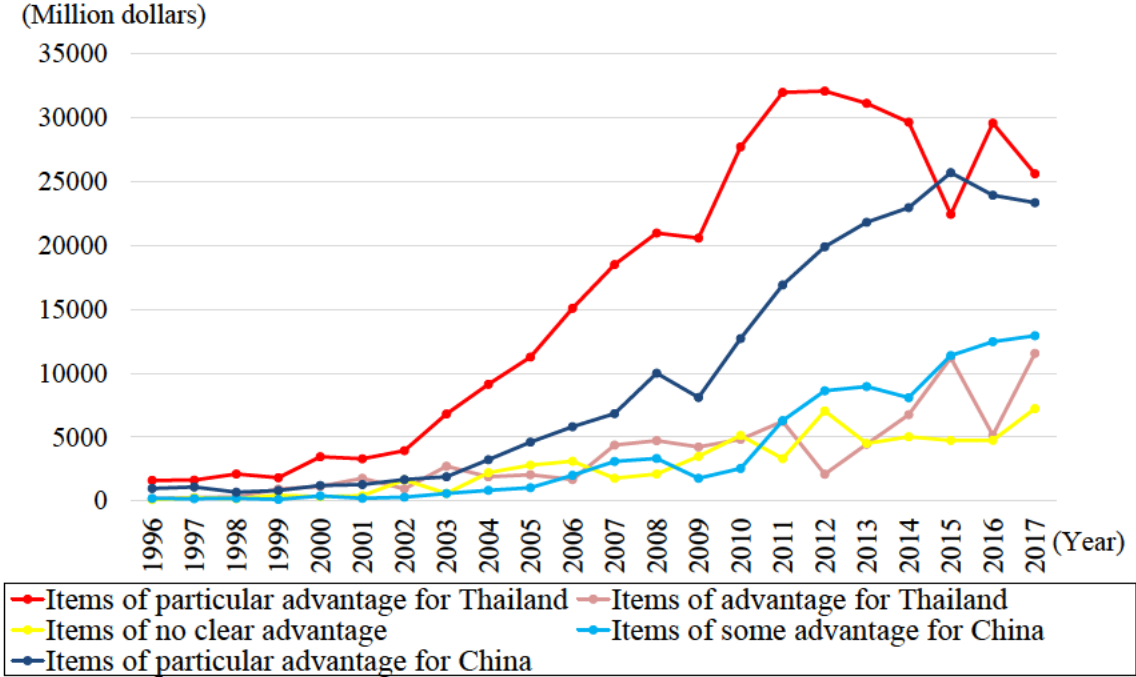


Notes; As this figure shows a conceptual picture of the four-group classification, the position of target economies and other data do not always show exact values.

Source: METI.

[Coexistence of vertical and horizontal divisions of work and values of items of particular advantage for ASEAN or China: ASEAN > China]

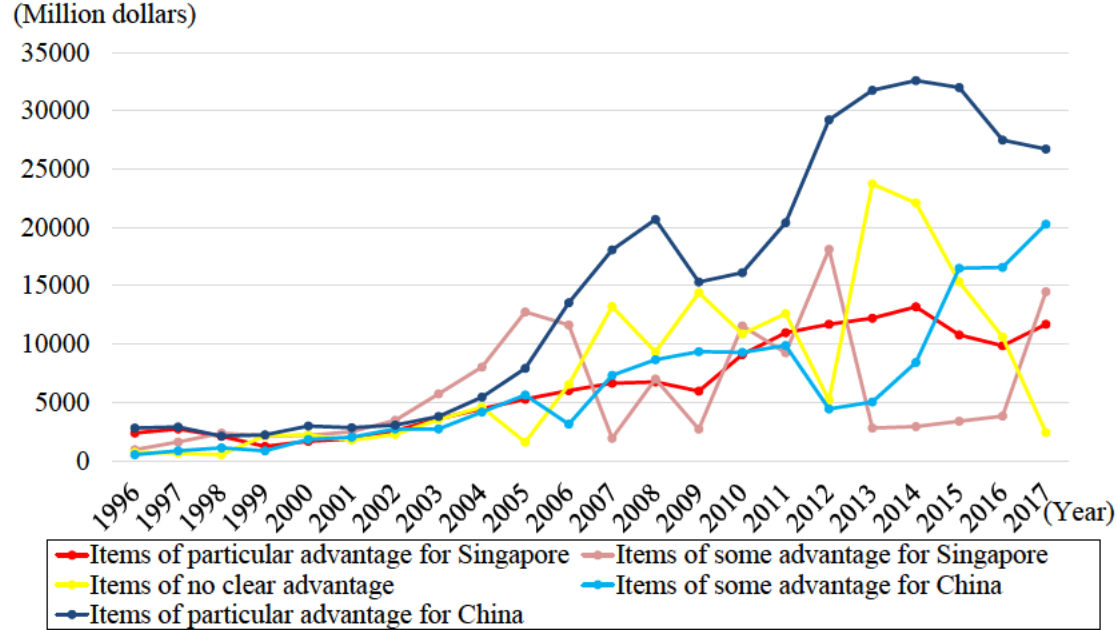
Figure I-2-3-1-37 Thailand’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



Source: GTA.

[Coexistence of vertical and horizontal divisions of work and values of items of particular advantage for ASEAN or China: China> ASEAN]

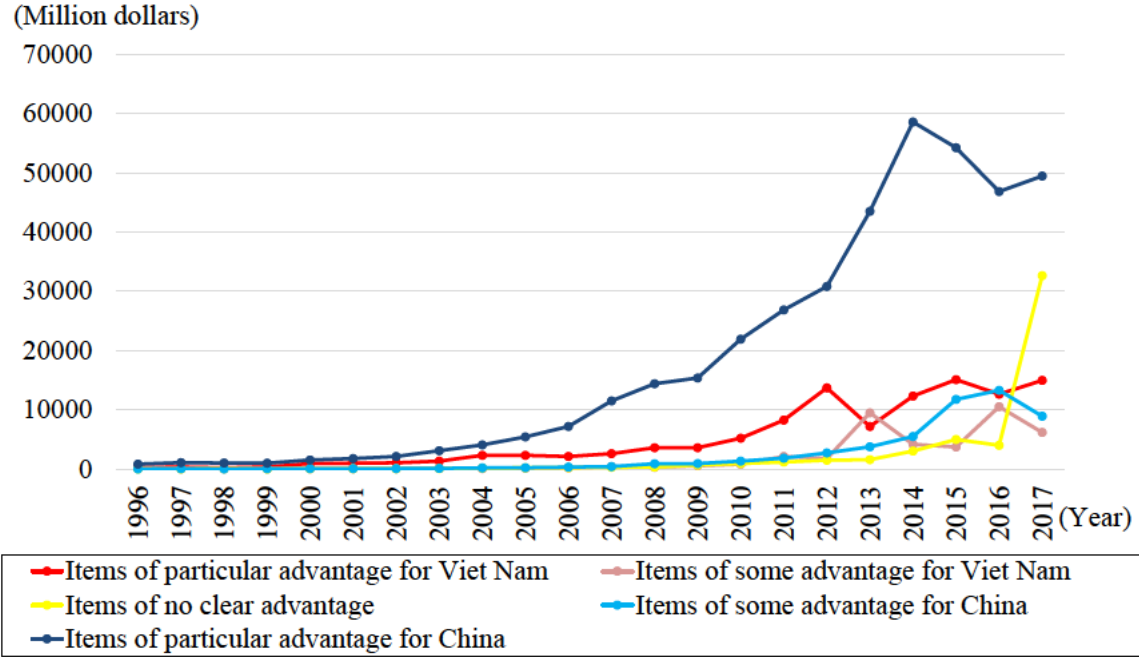
Figure I-2-3-1-38 Singapore’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



Source: GTA.

[Vertical division of work and values of items of particular advantage for ASEAN or China: ASEAN > China]

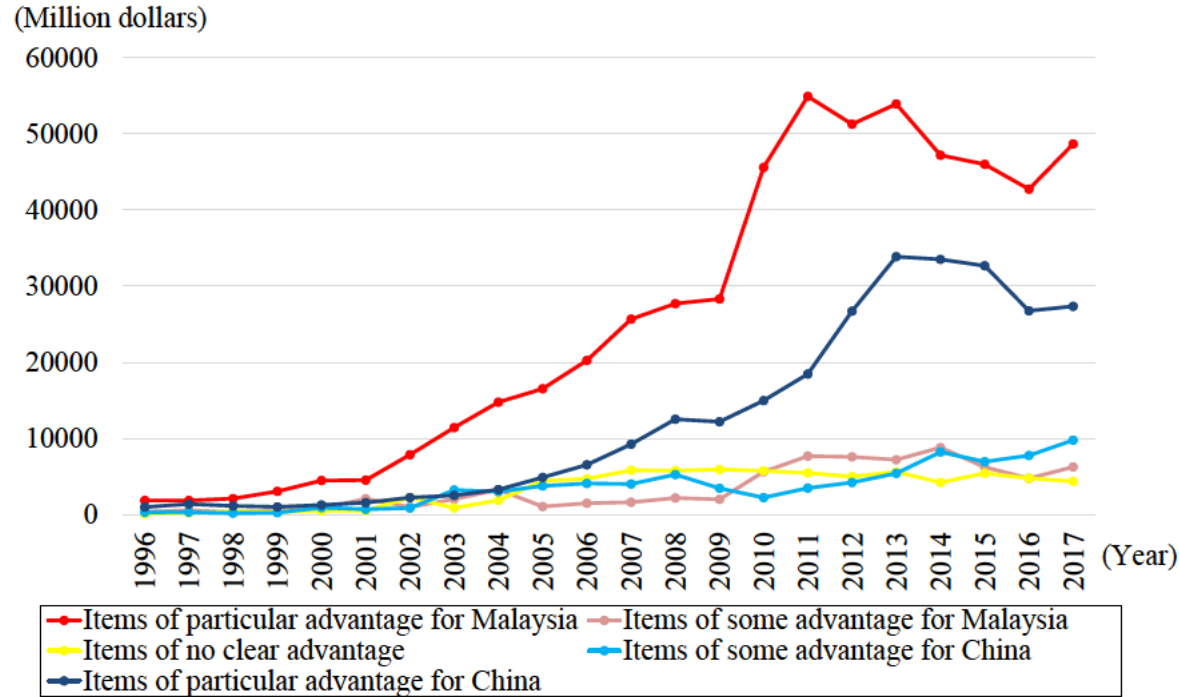
Figure I-2-3-1-39 Viet Nam’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



Source: GTA.

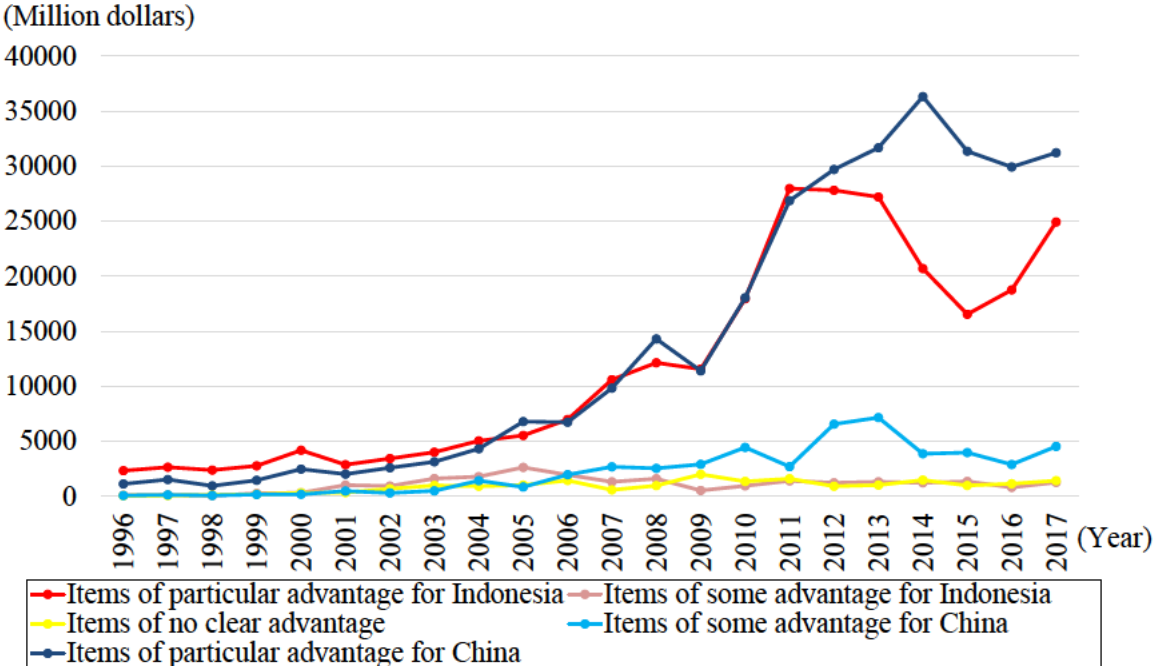
[Vertical division of work and values of items of particular advantage for ASEAN or China:
China > ASEAN]

Figure I-2-3-1-40 Malaysia’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



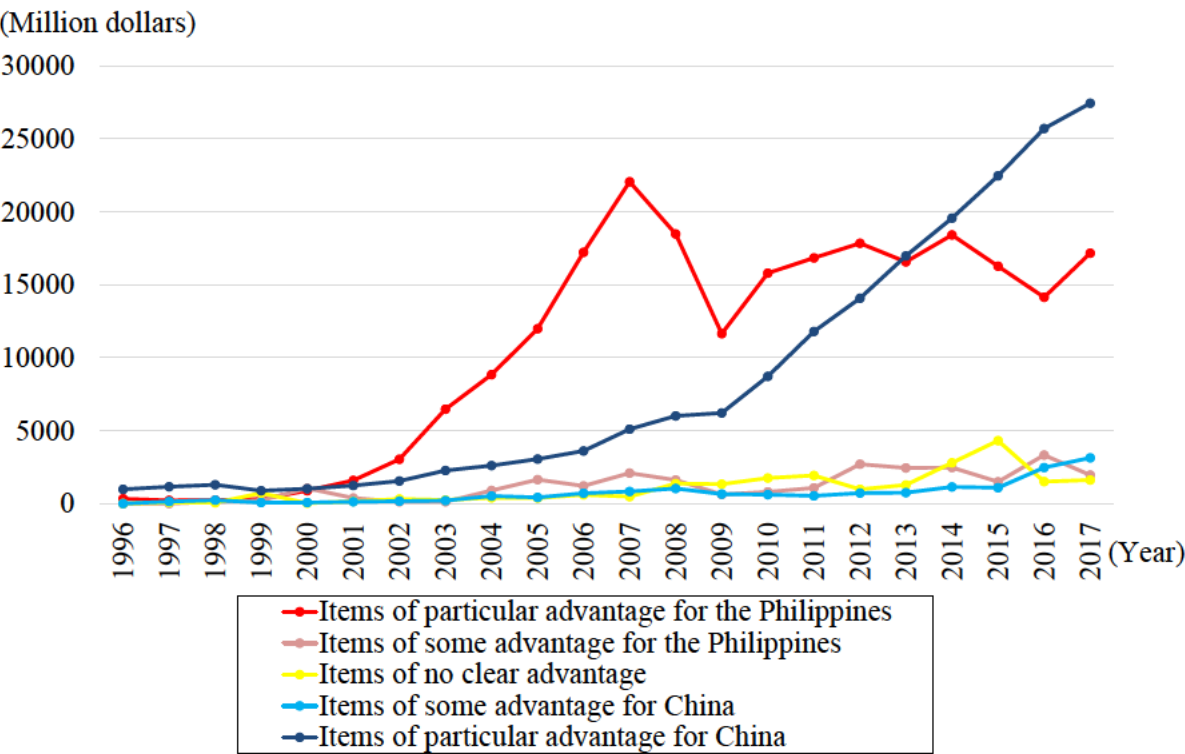
Source: GTA.

Figure I-2-3-1-41 Indonesia’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



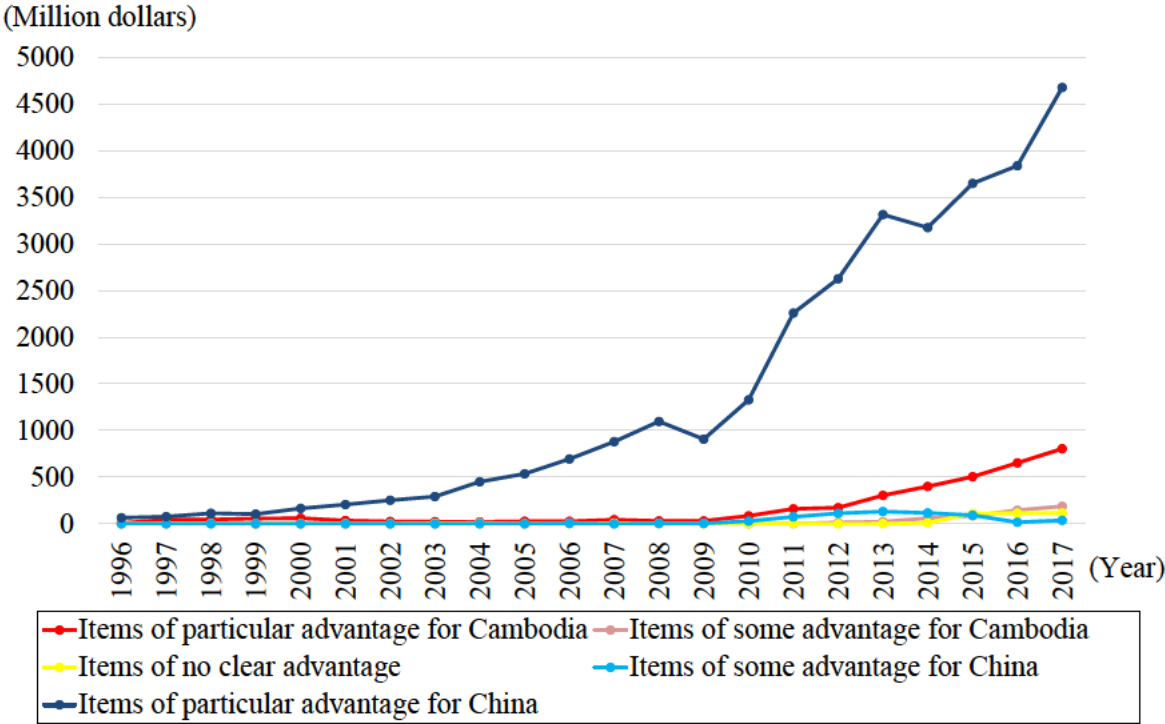
Source: GTA.

Figure I-2-3-1-42 Philippines’ trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



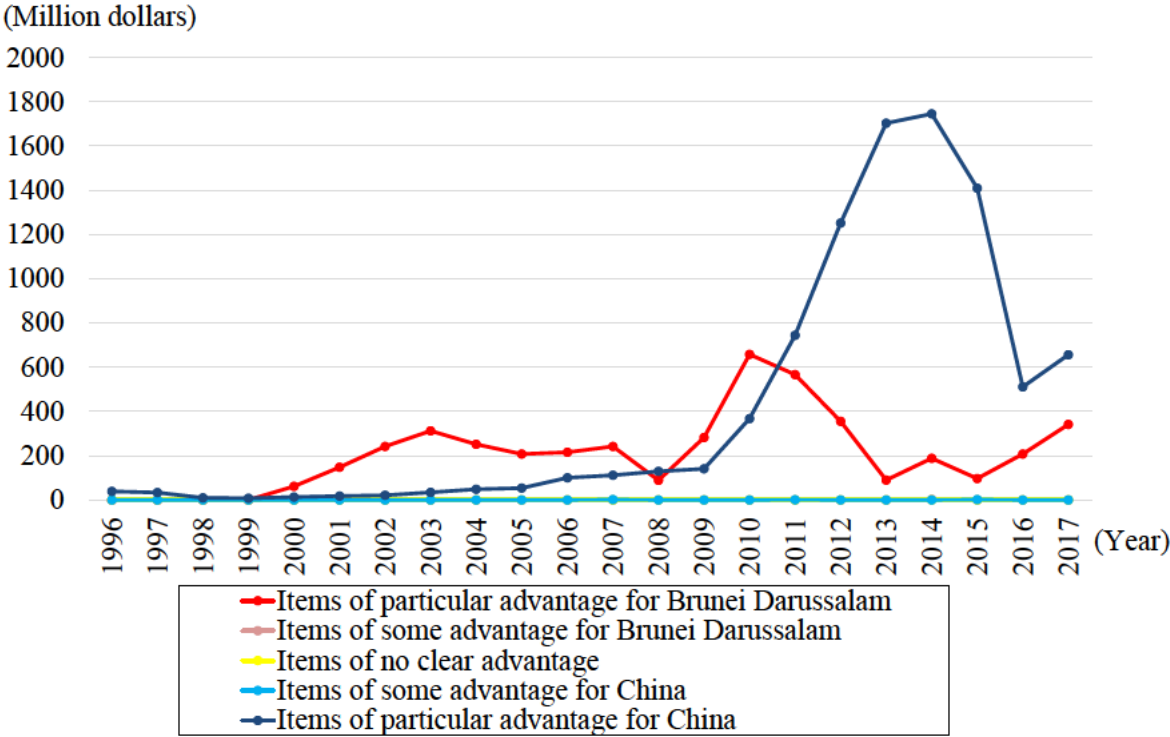
Source: GTA.

Figure I-2-3-1-43 Cambodia’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



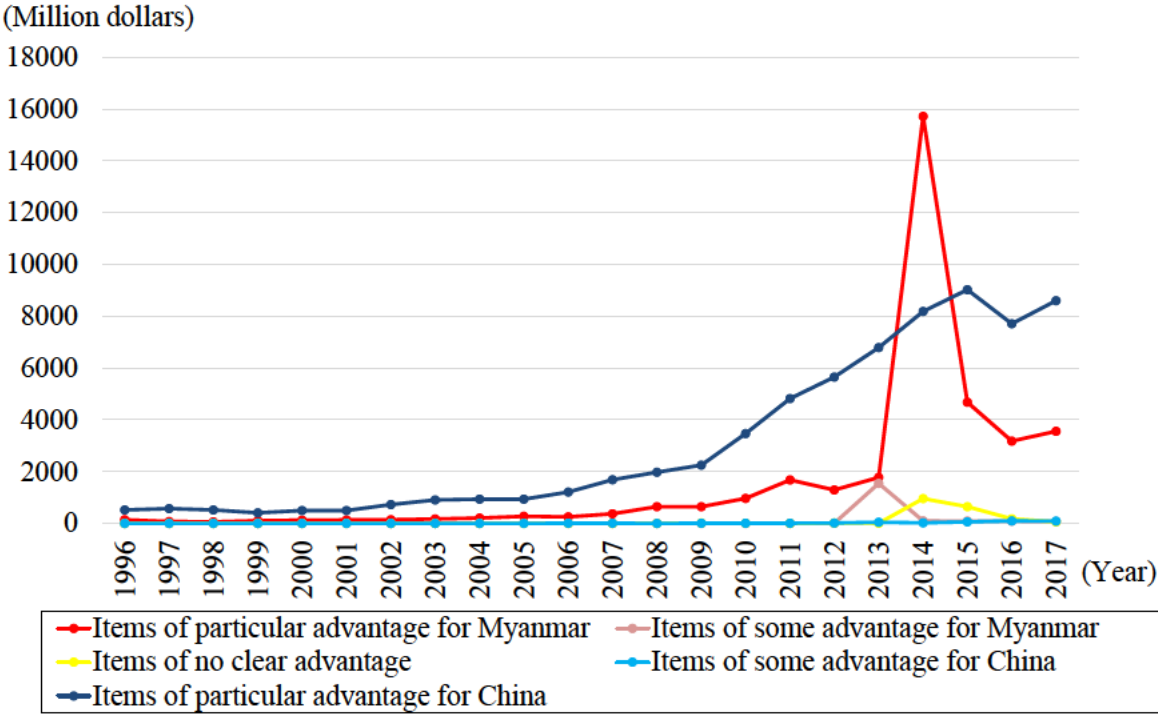
Source: GTA.

Figure I-2-3-1-44 Brunei Darussalam’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



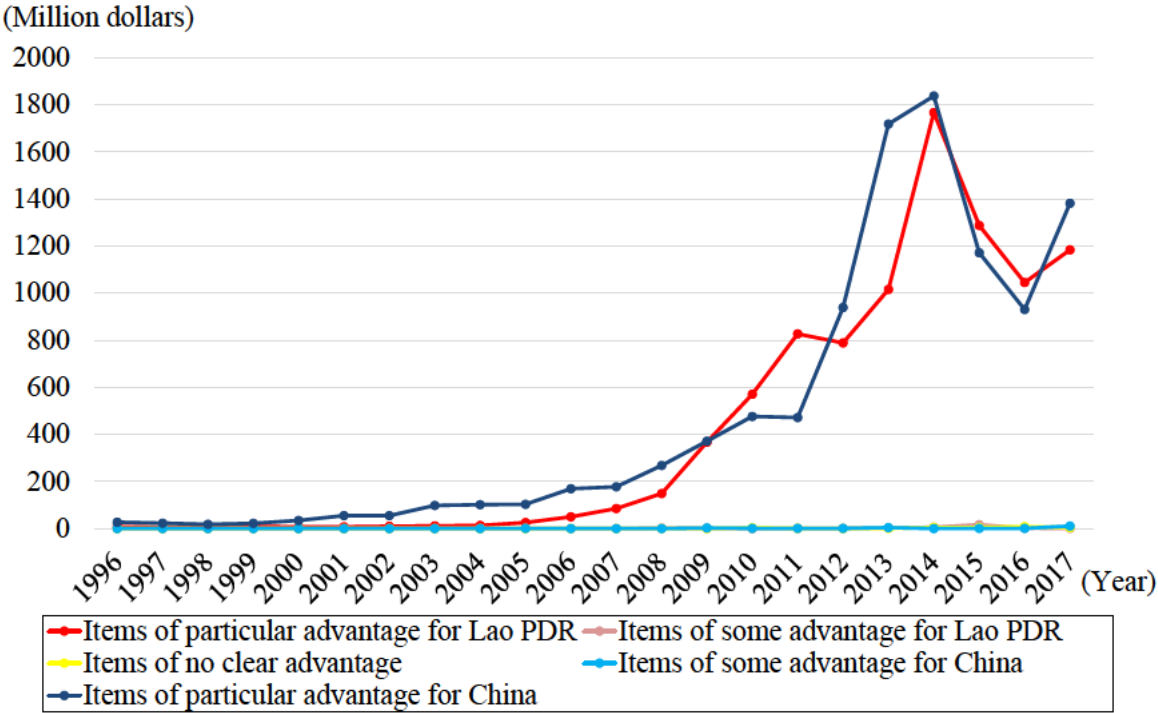
Source: GTA.

Figure I-2-3-1-45 Myanmar’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



Source: GTA.

Figure I-2-3-1-46 Lao PDR’s trade with China: Changes in five-group-classification trade values based on the intra-industry trade index



Source: GTA.

From the above examination of trade between ASEAN and China, the following conclusions may be reached.

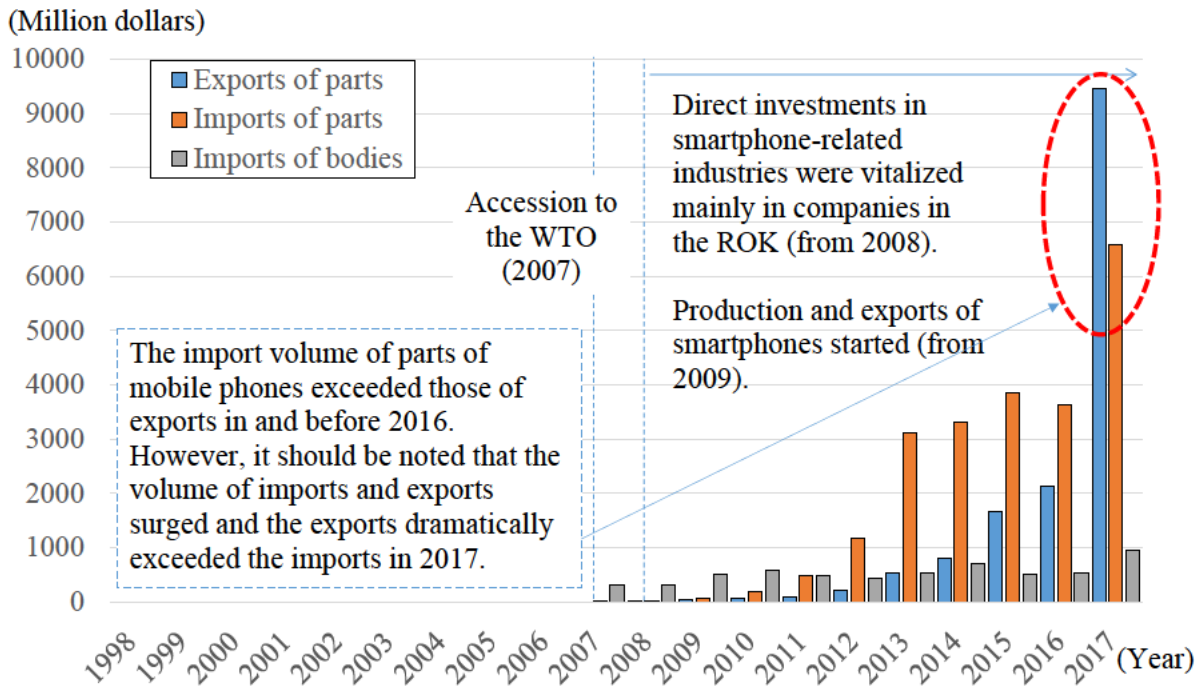
- Before 2000, trade between ASEAN and China showed strong characteristics of vertical division of work, with ASEAN exporting natural resources, agricultural products and related processed products while importing industrial products. However, since the 2000s, IT-related products became the main items of trade in terms of both import and export against the backdrop of growing global demand for such products, resulting in a significant development of horizontal division of work.
- Despite the development of horizontal division of work, the share of vertical division of work has been consistently larger than the share of horizontal division of work, and the presence of vertical division of work has grown further since 2009. This is probably because in trade with China, ASEAN still continues to have an advantage in primary products (e.g., natural rubber in Thailand, palm oil in Malaysia and crude oil in Indonesia), including product items for which it has traditionally been competitive. Another probable reason is that as less developed ASEAN member countries, such as Cambodia, Lao PDR and Myanmar, have strengthened their relationship of near-complete vertical division of work with China in recent years, this trend is becoming stronger in the whole of ASEAN.
- In a vertical division of work in which one side exports primary products to the other side in exchange for importing industrial products, it is assumed that the value added of industrial products is higher, and this is considered to be one of the factors behind ASEAN's trade deficit with China. To resolve the deficit, ASEAN, particularly member countries rich in primary products, will need to promote industrial sophistication while taking advantage of their strengths in those resources.
- Since 2015, the share of horizontal division of work resumed rising, and in 2017, it became almost equal to the share of vertical division of work. This is considered to be mainly because of external factors, such as a decline in the prices of crude oil and other resources and the slowdown of the Chinese economy, but it may also reflect a new stage of division of work.
- The examination of factors behind the increase in the share of horizontal division of work since 2015 shows that mobile phones (HS8517) and integrated circuits (HS8542) in Viet Nam,¹³⁰ computer-related products (HS8471) in Thailand,¹³¹ and integrated circuits (HS8542) in Singapore¹³² made the primary contributions to the increase (Figures I-2-3-1-47 to I-2-3-1-50). All these figures indicate that the trade structure concerning the relevant product items changed rapidly.
- Factors behind the rapid change in the trade structure are considered to include changes in global demand and changes in supply chains related to the selection of business locations by global companies.

130 The category of integrated circuits changed from “items of particular advantage for Viet Nam” in 2015 to “items of some advantage for Viet Nam” in 2016 and to “items of no clear advantage” in 2017. Meanwhile, the category of mobile phones changed from “items of particular advantage for China” in 2015 to “items of some advantage for China” in 2016 and to “items of no clear advantage” in 2017.

131 The category of computer-related products changed from “items of some advantage for Thailand” in 2015 to “items of particular advantage for Thailand” in 2016 and to “items of some advantage for Thailand” in 2017.

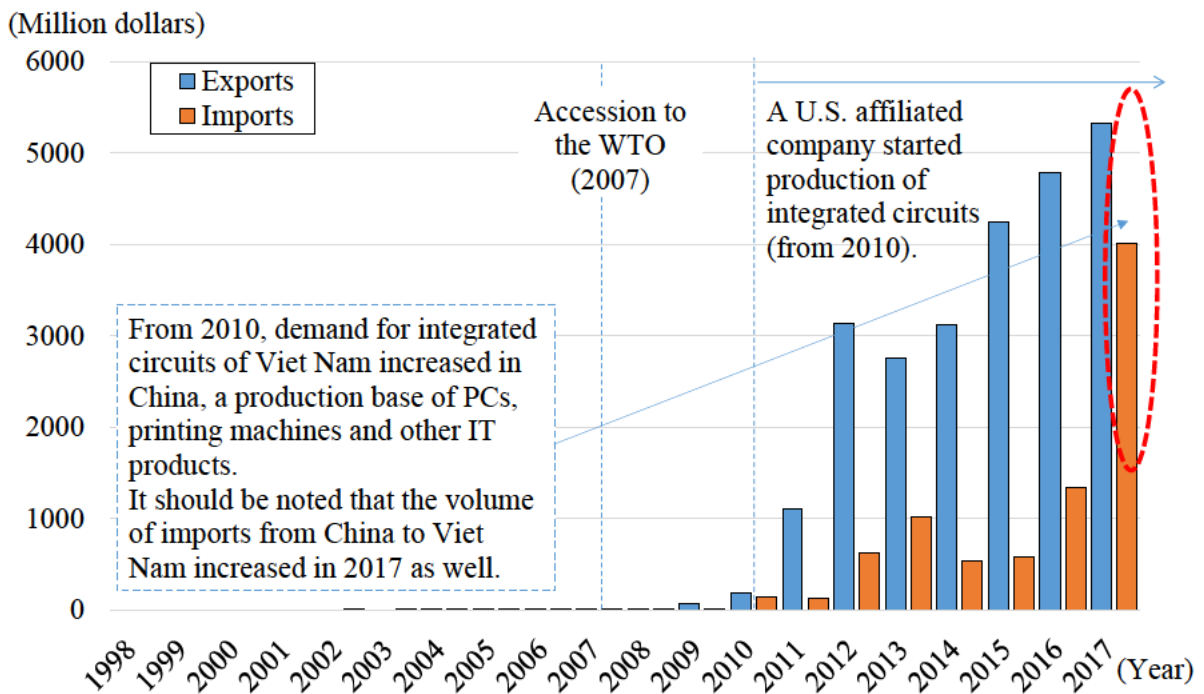
132 The category of integrated circuits changed from “items of no clear advantage” in 2015 and 2016 to “items of some advantage for Singapore” in 2017.

Figure I-2-3-1-47 Changes in values of Viet Nam’s trade with China involving mobile phones (HS8517)



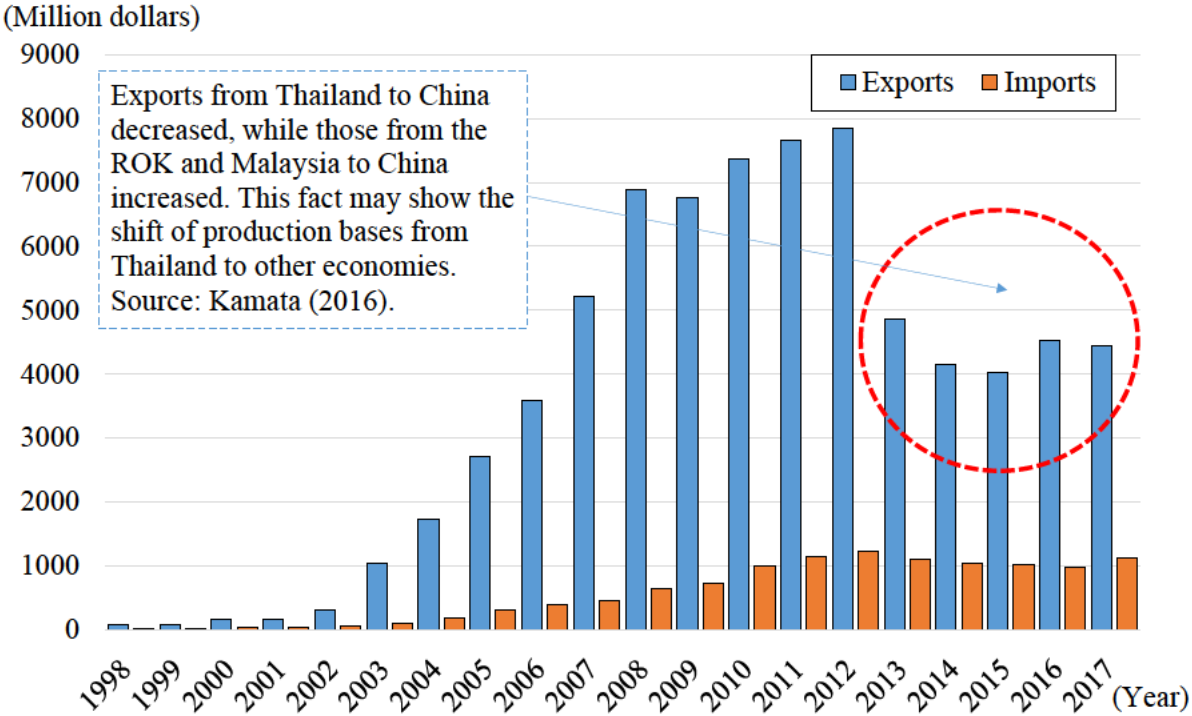
Source: GTA.

Figure I-2-3-1-48 Changes in values of Viet Nam’s trade with China involving integrated circuits (HS8542)



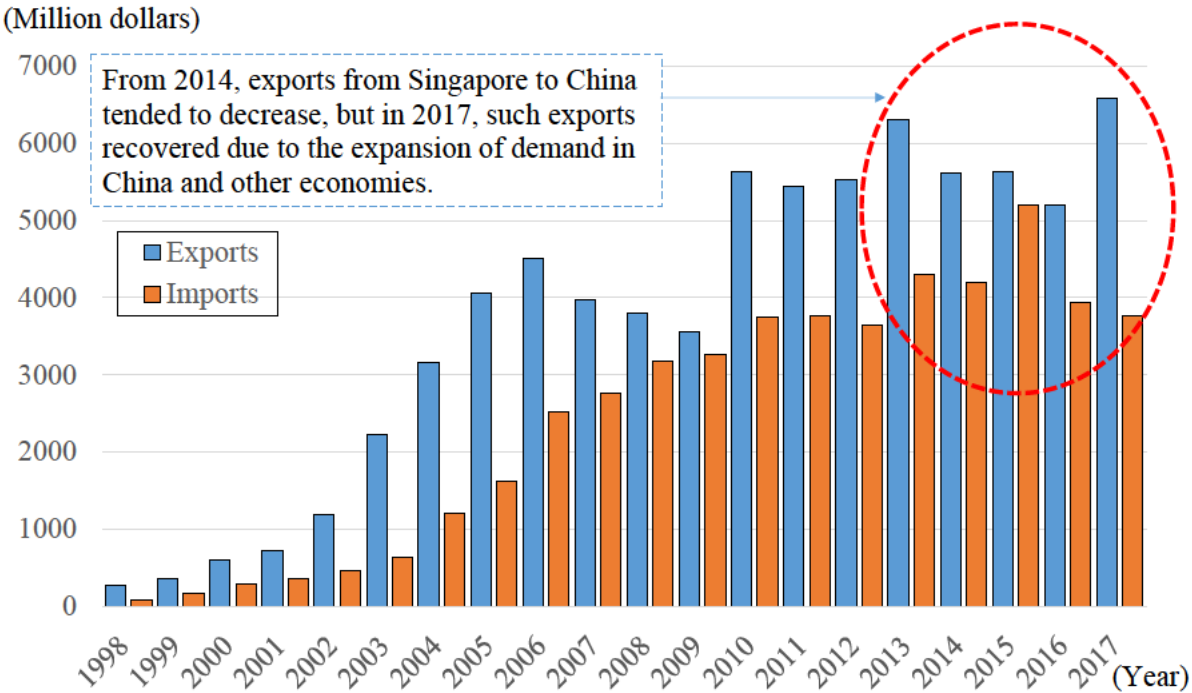
Source: GTA.

Figure I-2-3-1-49 Changes in values of Thailand’s trade with China involving computer-related products (HS8471)



Source: GTA.

Figure I-2-3-1-50 Changes in values of Singapore’s trade with China involving integrated circuits (HS8542)



Notes: GTA.

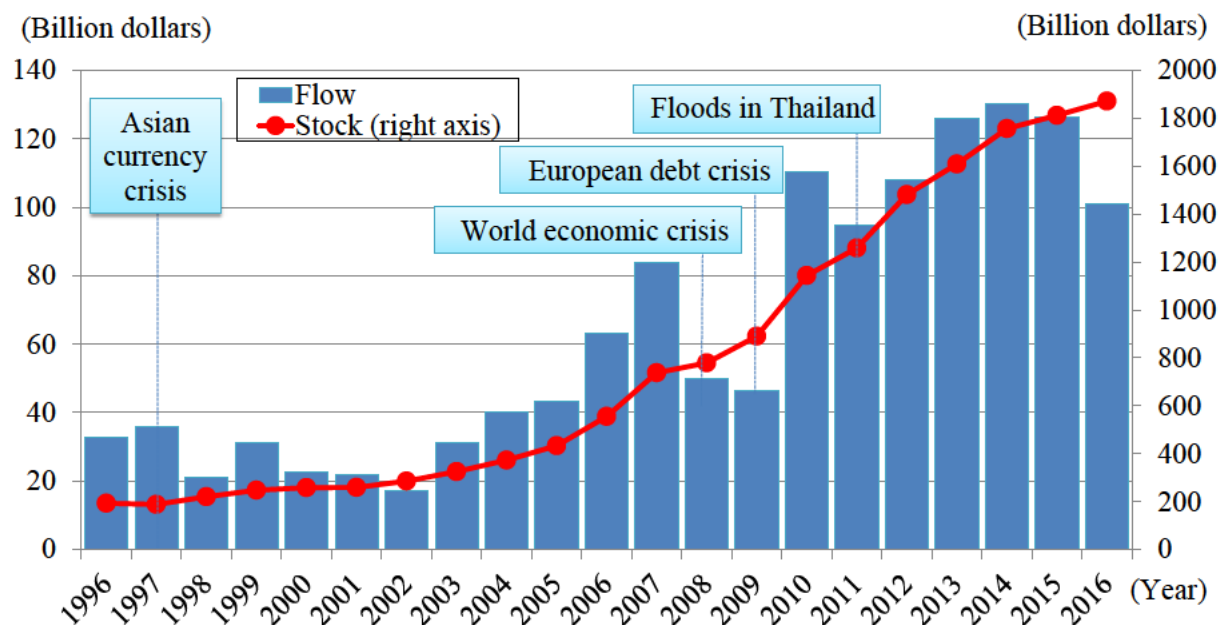
(4) Changes in foreign direct investments by ASEAN

The expansion of ASEAN's trade and deepening of international division of work, which were discussed earlier, are closely related to an increase in foreign direct investments. That is because foreign direct investments have played a significant role in ASEAN's economic development and industrialization. Here, we will examine changes in ASEAN's foreign direct investments.

(A) Inward foreign direct investments in ASEAN

Over the period of around 20 years from 1996 to 2016, the value of inward foreign direct investments in ASEAN by the rest of the world (on a flow basis) generally continued to increase until 2014 despite temporary declines due to the effects of the Asian currency crisis in 1997, the global economic crisis in 2008, and natural disasters. In the most recent years, in 2015 and 2016, the value of foreign direct investments in ASEAN decreased. On a stock basis, the value of foreign direct investments in ASEAN has consistently increased over the 20-year period (Figure I-2-3-1-51).

Figure I-2-3-1-51 Changes in values of inward foreign direct investments in ASEAN by the rest of the world (on a flow and stock basis)

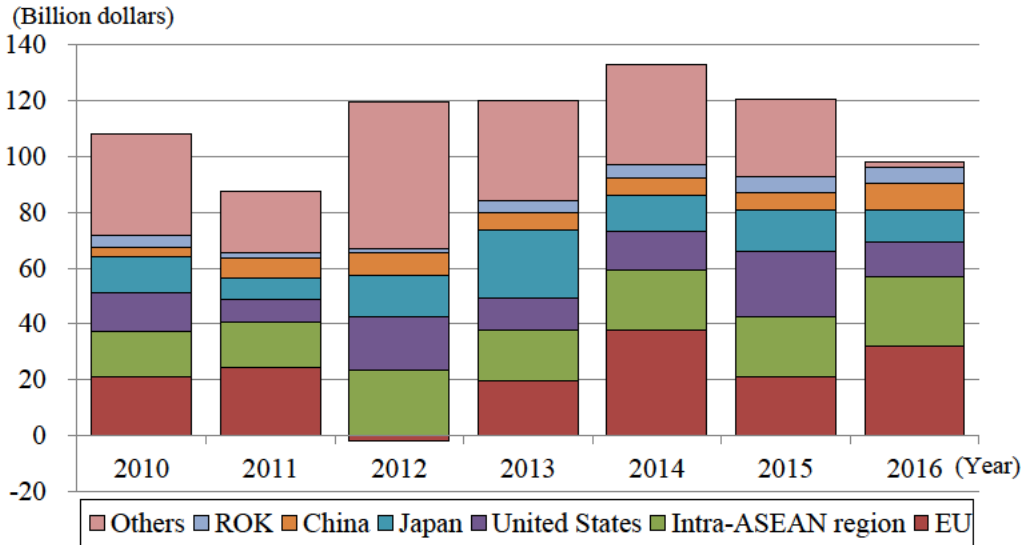


Source: UNCTAD.

Let us look at the value of foreign direct investments in ASEAN by investing country.

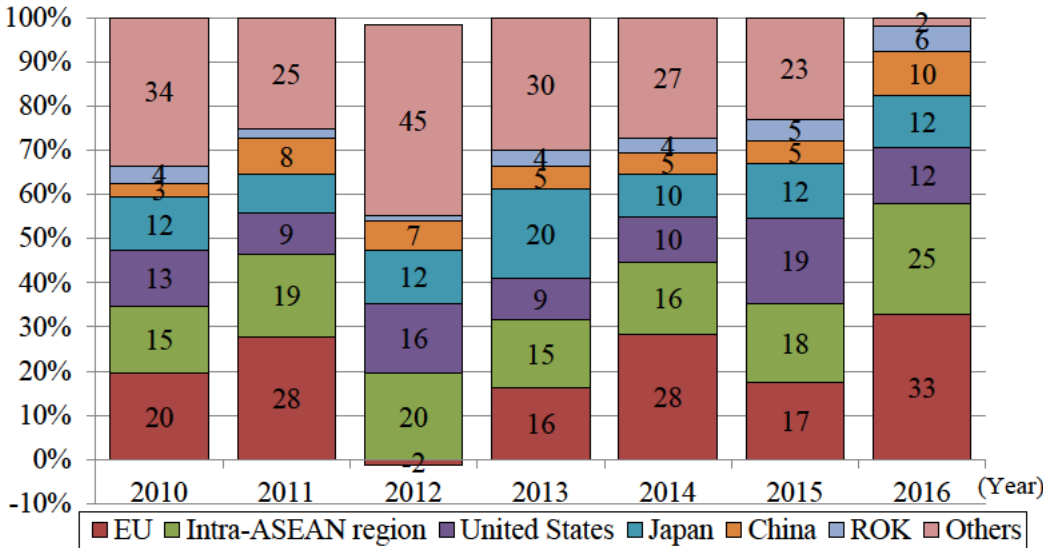
In 2016, the largest investors in value were the EU (share of 33% in the total value of investments), ASEAN member countries (25%), the United States (12%), Japan (12%), China (10%) and the ROK (6%) in that order. In the most recent seven years, the EU's share in the total value of investments was large except in 2012, when the European debt crisis broke out. Intra-regional investments by ASEAN member countries also continued to have a steady share and increased significantly in 2016 in particular. It is also notable that investments by China also increased significantly in 2016, to a level comparable with the value of investments by the United States and Japan (Figures I-2-3-1-52 and I-2-3-1-53).

Figure I-2-3-1-52 Changes in values of inward foreign direct investments in ASEAN by the rest of the world (on a flow basis; by investor economy)



Notes: The term “EU” refers to the 28 EU member economies.
 Source: ASEAN Secretariat.

Figure I-2-3-1-53 Changes in shares of inward foreign direct investments in ASEAN by the rest of the world (on a flow basis; by investor economy)

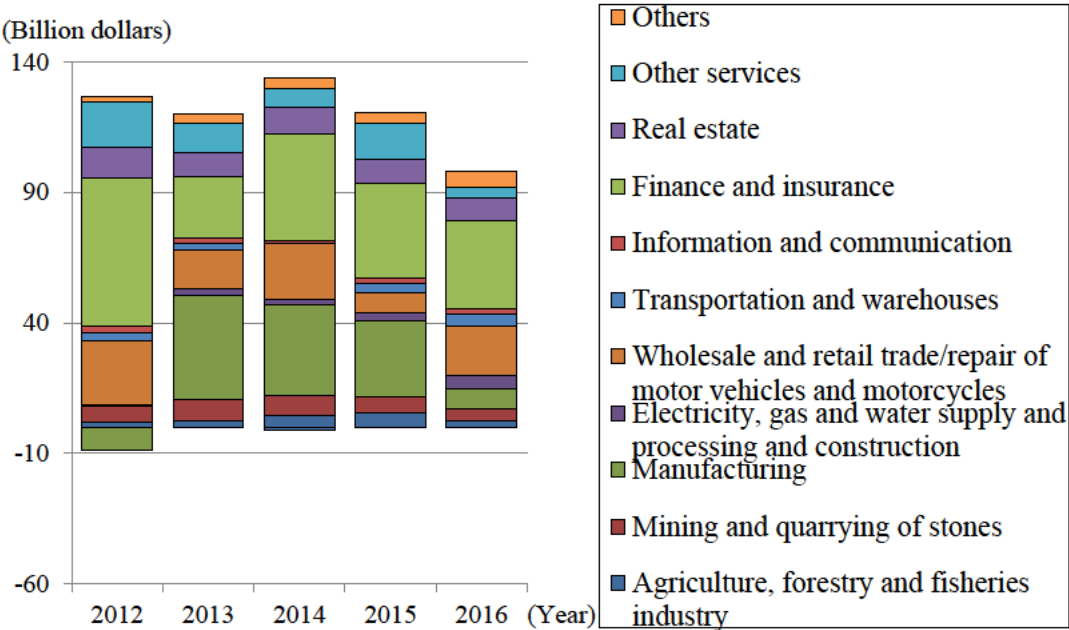


Notes: The term “EU” refers to the 28 EU member economies.
 Source: ASEAN Secretariat.

Next, we will look at the value of foreign direct investments in ASEAN by industry.

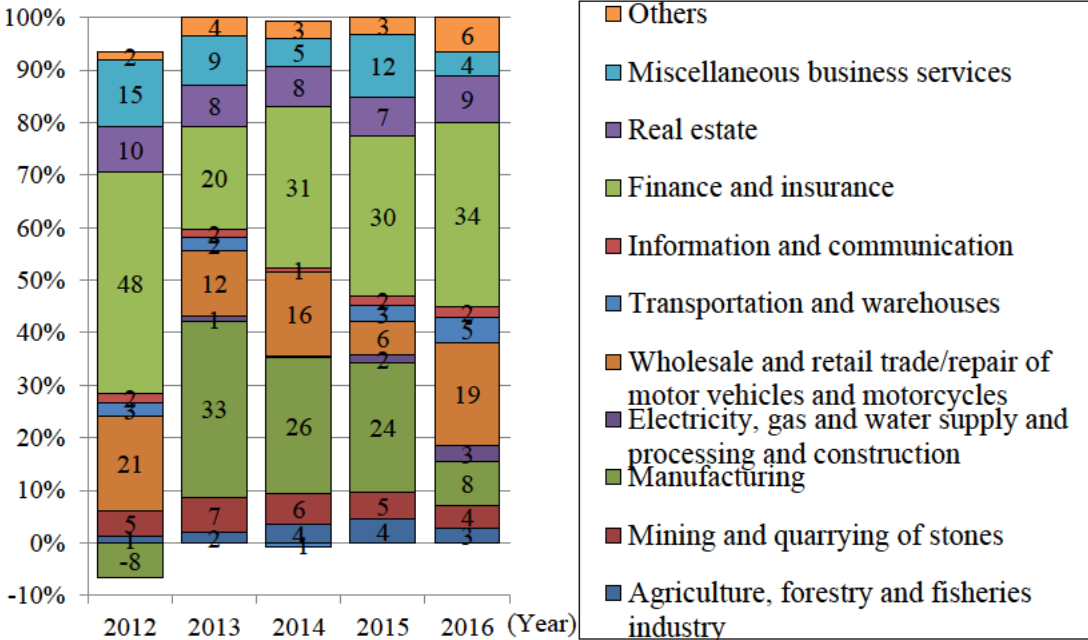
In 2016, finance and insurance received the largest value of investments (35% of the total value of investments), followed by wholesale and retail trade/repair of motor vehicles and motorcycles (20%), real estate (9%), and manufacturing (8%) in that order. Since 2013, the share of finance and insurance has continued year after year, while the share of manufacturing has declined year after year, indicating a shift of investments from manufacturing to services industries (Figures I-2-3-1-54 and I-2-3-1-55).

Figure I-2-3-1-54 Changes in values of inward foreign direct investment in ASEAN by the rest of the world (on a flow basis; by industry)



Notes: The data is on a flow basis.
Source: ASEAN Secretariat.

Figure I-2-3-1-55 Changes in inward foreign direct investment in ASEAN by the rest of the world (on a flow basis; by industry)

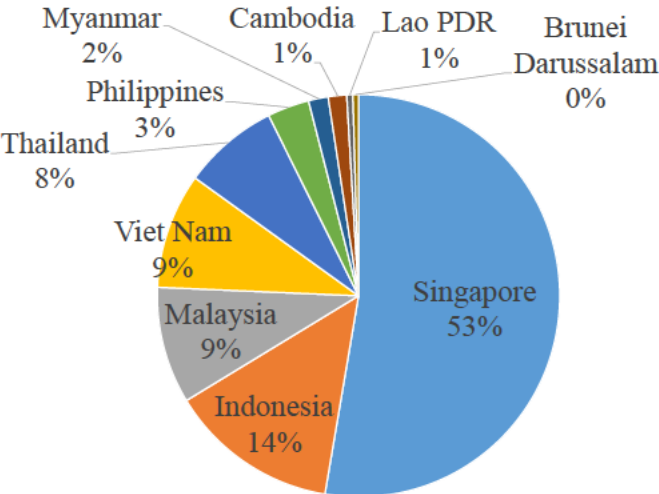


Notes: The data is on a flow basis.
Source: ASEAN Secretariat.

Next, we will look at which ASEAN member countries are receiving intra-ASEAN foreign direct investments.

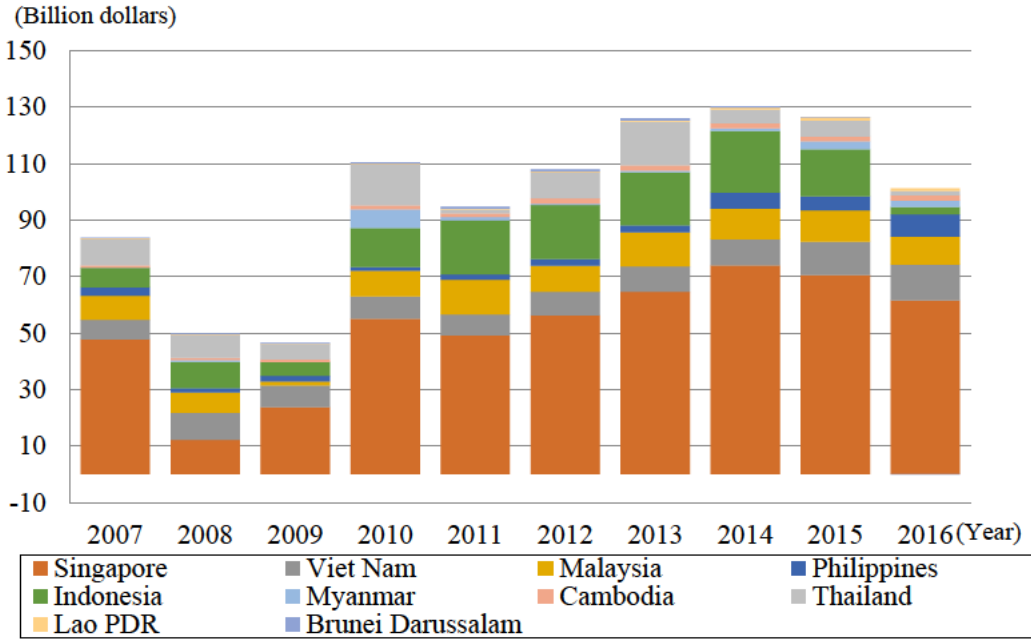
On a simple average basis, Singapore had a share of 53% in the total value of investments over the 10 years from 2007 to 2016, followed by Indonesia with 14%, Malaysia and Viet Nam with 9% each, Thailand with 8% and the Philippines with 3% (Figure I-2-3-1-56). Looking at changes in the value of investments over the same period, the value of investments in Viet Nam grew steadily as it became a production base of mobile phones, and in 2016, Viet Nam became the second largest recipient of foreign direct investments, after Singapore (Figure I-2-3-1-57).

Figure I-2-3-1-56 Breakdowns of economies in values of inward foreign direct investments in ASEAN (on a flow basis)



Notes: This figure shows the average share during the 10 years from 2007 to 2016.
Source: UNCTAD.

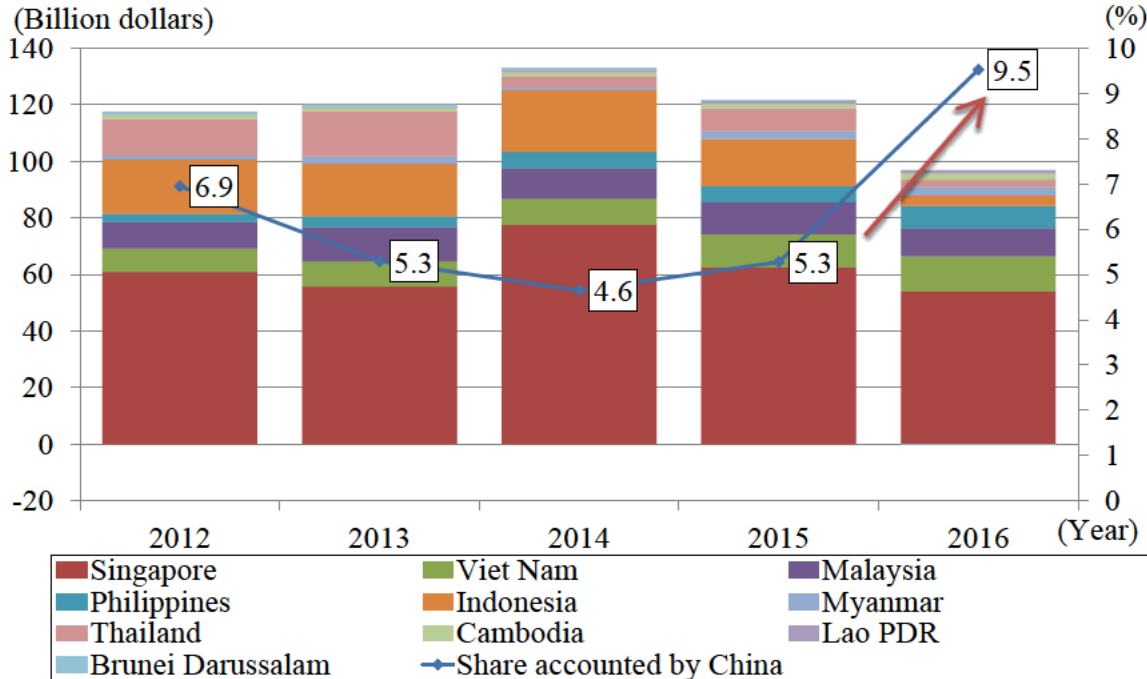
Figure I-2-3-1-57 Changes in values of inward foreign direct investments in ASEAN (on a flow basis; by economy)



Source: UNCTAD.

China's presence is also growing in terms of foreign direct investments in ASEAN. Regarding the major ASEAN member countries, China's share in the total value of foreign direct investments in the countries except for the Philippines was around 10%, although the share fluctuated over the years. Regarding less developed ASEAN member countries, China made active investments in Lao PDR, Cambodia and Myanmar; China's share was higher than 60% in Lao PDR and was around 20% to 40% in Cambodia and Myanmar (Figure I-2-3-1-58 and Table I-2-3-1-59).

Figure I-2-3-1-58 Changes in shares of China in values of inward foreign direct investments in ASEAN (on a flow basis) and those in values of China's investments in respective economies



Notes: The data is on a flow basis. This figure targets Mainland China alone.

Source: ASEAN Secretariat.

Table I-2-3-1-59 Changes in shares of China in inward foreign direct investments in ASEAN member economies (on a flow basis)

	Whole of ASEAN	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia
2012	6.9	0.0	23.6	1.8	0.0	0.4
2013	5.3	0.0	22.5	3.2	0.0	0.8
2014	4.6	0.0	32.1	4.9	67.3	2.8
2015	5.3	0.0	31.6	1.9	61.6	2.4
2016	9.5	0.0	22.0	8.2	66.0	8.9

(%)

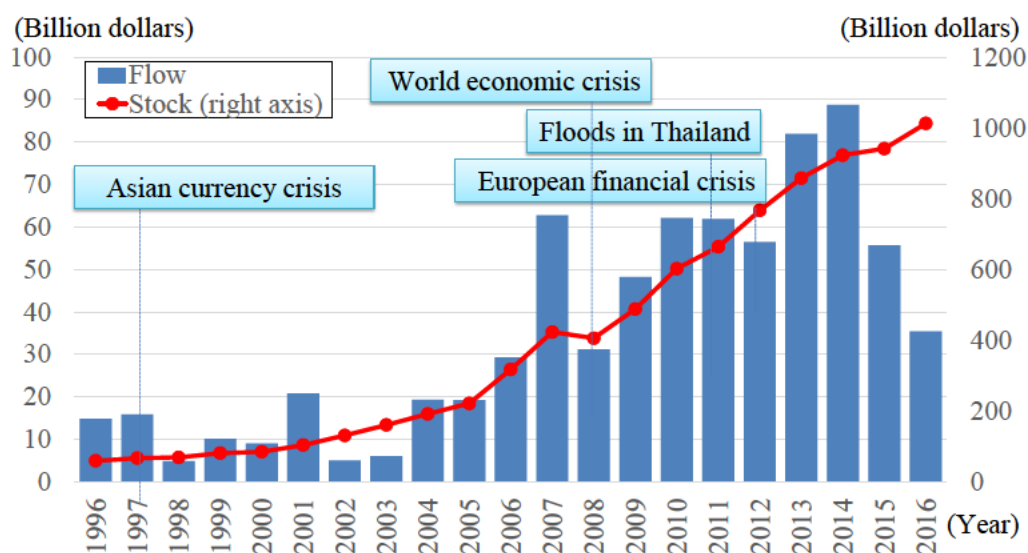
	Myanmar	Philippines	Singapore	Thailand	Viet Nam
2012	35.6	-0.1	10.1	4.6	2.3
2013	30.2	0.2	4.8	5.9	10.7
2014	7.5	0.8	4.4	-2.2	2.3
2015	1.9	1.0	6.1	3.8	3.2
2016	6.9	0.2	10.0	10.0	7.7

Source: ASEAN Secretariat.

(B) Outward foreign direct investments by ASEAN

The value of outward foreign direct investments by ASEAN is equivalent to around 54%¹³³ of the value of inward foreign direct investments in ASEAN (2016, on a stock basis). Over the 20-year period from 1996 to 2016, the value of foreign direct investments by ASEAN in the rest of the world (on a flow basis) generally continued to increase until 2014 despite temporary declines due to the effects of the Asian currency crisis in 1997, the global economic crisis in 2008, and natural disasters, as in the case of foreign direct investments in ASEAN by the rest of the world. In the most recent years, in 2015 and 2016, the value of foreign direct investments by ASEAN in the rest of the world decreased. On a stock basis, the value of foreign direct investments by ASEAN in the rest of the world consistently continued to increase over the 20-year period except in 2008, when it was affected by the global economic crisis (Figure I-2-3-1-60).

Figure I-2-3-1-60 Changes in values of outward foreign direct investments by ASEAN in the rest of the world (on a flow and stock basis)



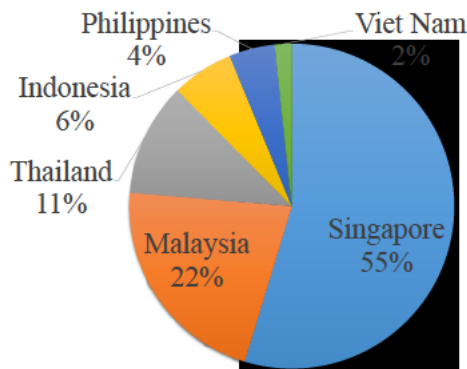
Source: UNCTAD.

¹³³ The value of inward foreign direct investments in ASEAN is around 1.9 trillion dollars, while the value of outward foreign direct investments is around 1 trillion dollars (both figures are for 2016; UNCTAD).

We will look at outward foreign direct investments by ASEAN by country.

In terms of the average share during the 10 years from 2007 to 2016, the largest investor country was Singapore (share of 55% in the total value of investments), followed by Malaysia (22%), Thailand (11%), Indonesia (6%), the Philippines (4%) and Viet Nam (2%), while the share was almost zero for Brunei Darussalam, Cambodia, Lao PDR and Myanmar (Figures I-2-3-1-61 and I-2-3-1-62).

Figure I-2-3-1-61 Shares of ASEAN member economies in values of outward foreign direct investments (on a flow basis)

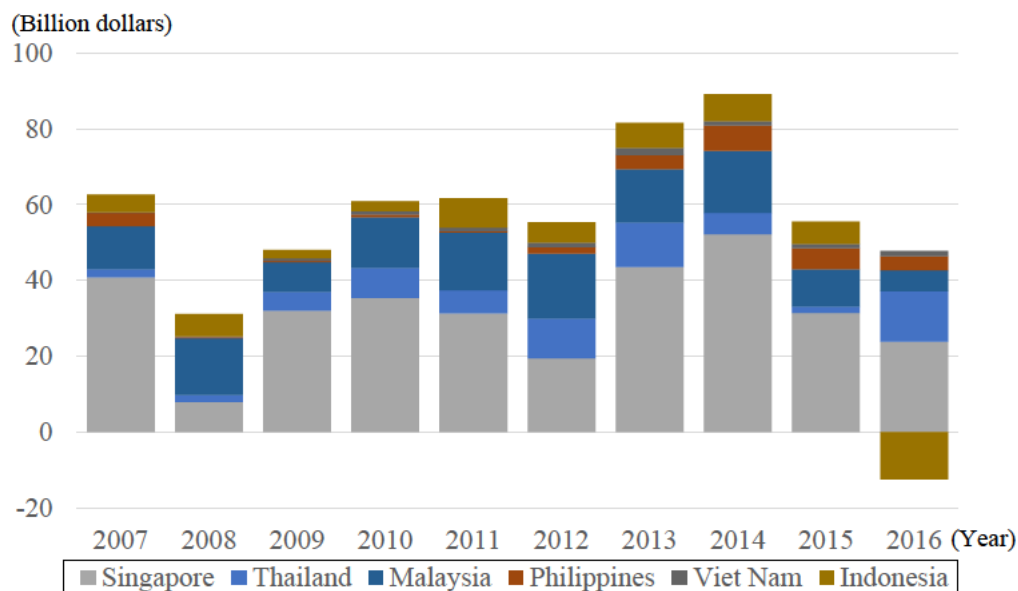


Notes: This figure shows the average share during the 10 years from 2007 to 2016.

As for Brunei Darussalam, Cambodia, Lao PDR and Myanmar, the shares are approximately 0%.

Source: UNCTAD.

Figure I-2-3-1-62 Changes in values of outward foreign direct investments by ASEAN member economies (on a flow basis)



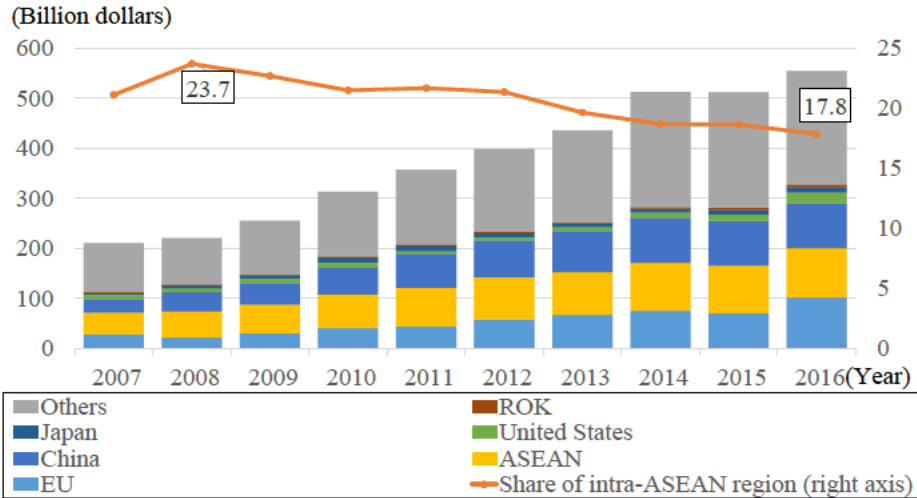
Source: UNCTAD.

Looking at changes in outward foreign direct investments by ASEAN member countries, we will check the share of intra-ASEAN investments by those countries in their total investments. As the ASEAN Secretariat does not publish data concerning ASEAN as a whole, we will look individually at

investments by Singapore, Malaysia and Thailand, the three largest investor countries that together account for around 90% of the total value of investments by ASEAN.

During the 10 years from 2007 to 2016, the annual value of foreign direct investments by Singapore continued to increase except in 2015, while the share of intra-ASEAN investments by Singapore started to decline moderately from 23.7% in 2008 and was 17.8% in 2016 (Figure I-2-3-1-63).

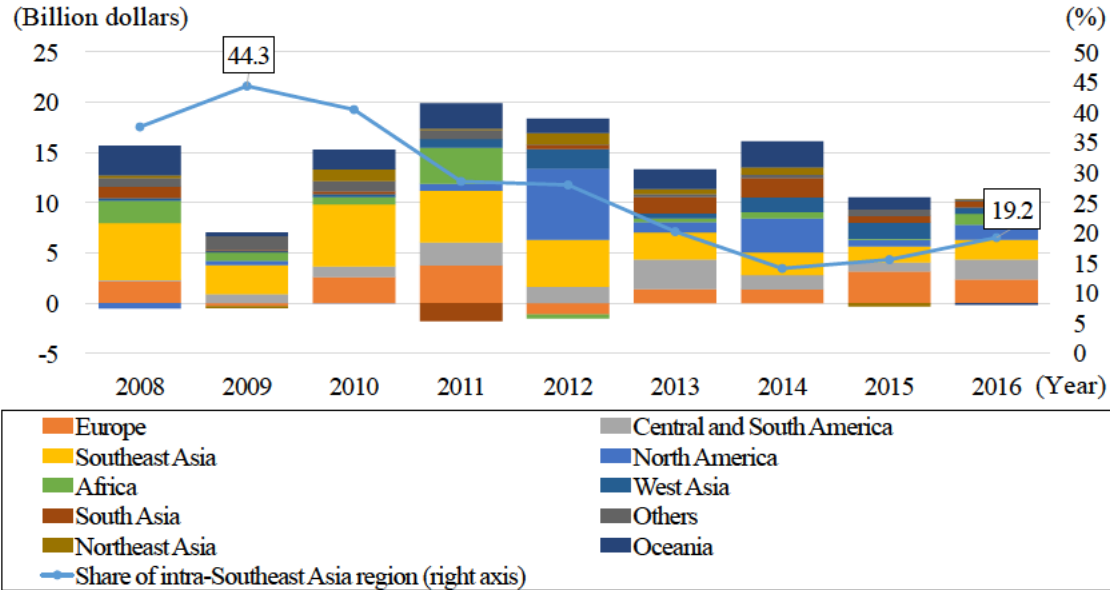
Figure I-2-3-1-63 Changes in values of outward foreign direct investments by Singapore (on a flow basis; by economy and region)



Source: Singapore Department of Statistics.

The value of foreign direct investments by Malaysia generally continued to decline, and the share of intra-ASEAN investments, which was higher than 40% in 2009 and 2010, was down to 19.2% in 2016 (Figure I-2-3-1-64).

Figure I-2-3-1-64 Changes in values of outward foreign direct investments by Malaysia (on a flow basis; by economy and region)

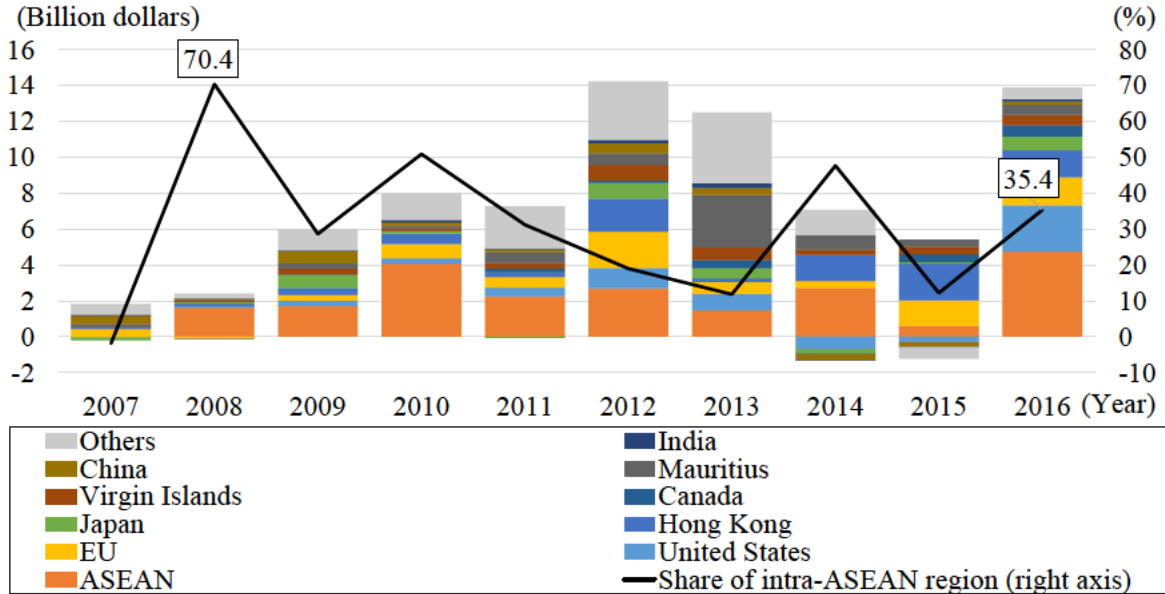


Notes: The values of outward foreign direct investments are based on the data on FDI assets in the balance of payments (results of deducting inflows from outflows). The category “Southeast Asia” based on the release is almost deemed to be equivalent to the ASEAN member economies.

Source: Central Bank of Malaysia.

The value of foreign direct investments by Thailand continued to increase between 2007 and 2012 except in 2011, but continued to decline between 2013 and 2015, before increasing steeply in 2016. The share of intra-ASEAN investments was relatively high, 35.4%, in 2016 although it irregularly fluctuated from year to year, indicating that Thailand is placing emphasis on intra-ASEAN investments (Figure I-2-3-1-65).

Figure I-2-3-1-65 Changes in values of outward foreign direct investments by Thailand (on a flow basis; by economy and region)



Source: Central Bank of Thailand, CEIC Database.

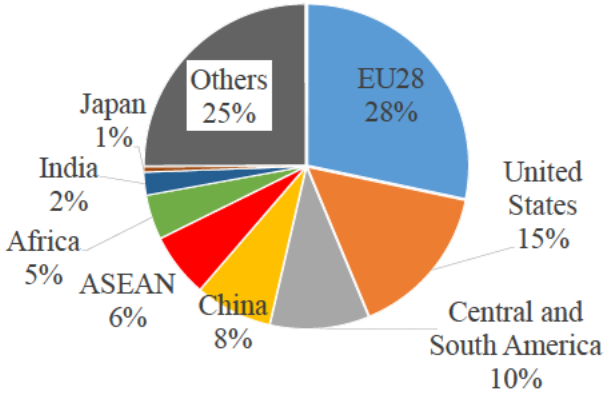
From the above data, it may be said that ASEAN’s inward and outward foreign direct investments have generally grown steadily despite a recent slowdown. On the other hand, the share of intra-ASEAN investments by ASEAN countries have been trending downward, indicating a slowdown in the momentum of the regional integration.

One of ASEAN’s main objectives in establishing the AEC is becoming a region of choice for foreign direct investments from other countries/regions. The AEC Blueprint 2025 stipulates in “3. Investment Environment” under Pillar 1 “A Highly Integrated and Cohesive Economy” that ASEAN “aims to enhance further its attractiveness as an investment destination globally through the establishment of an open, transparent and predictable investment regime in the region” through the implementation of the ASEAN Comprehensive Investment Agreement (ACIA).

In terms of the average share in global foreign direct investments during the 10 years from 2007 to 2016, the largest investment destination was the EU (share of 28%), followed by the United States (15%),

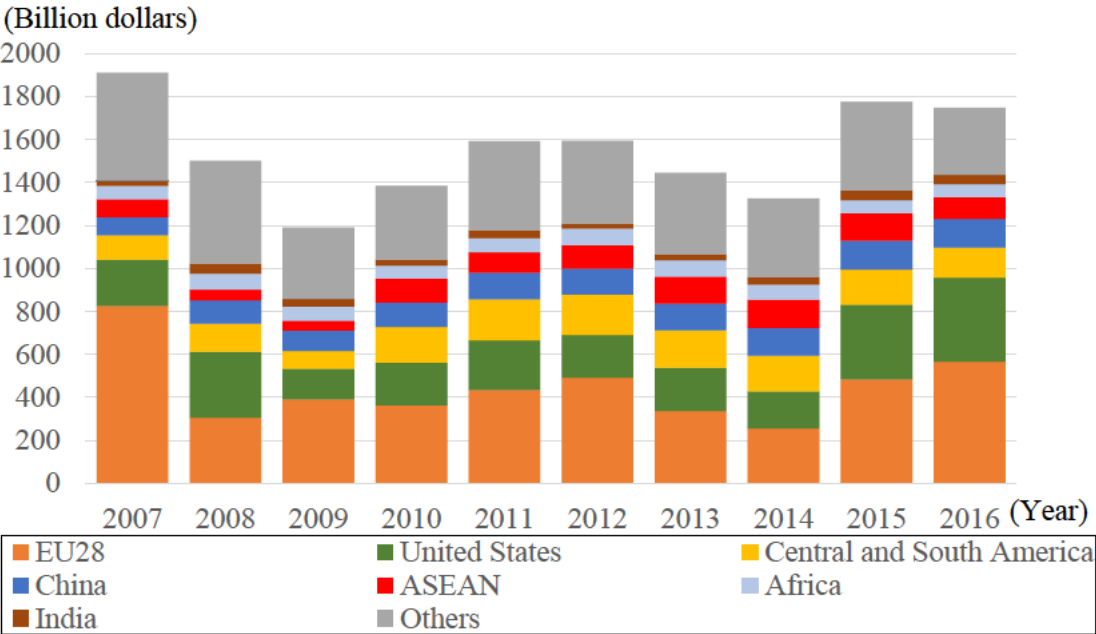
Central and South America (10%), China (8%), ASEAN (6%), Africa (5%) and India (2%) (Figure I-2-3-1-66). During the same period, although ASEAN's share was close to China's share, its growth recently slowed down as a trend compared with China's and India's shares, which are increasing moderately (Figure I-2-3-1-67).

Figure I-2-3-1-66 Shares of values of world outward foreign direct investments by economy and region as investment destination (on a flow basis)



Notes: This figure shows the average share during the 10 years from 2007 to 2016.
Source: UNCTAD.

Figure I-2-3-1-67 Changes in values of world outward foreign direct investments by economy and region as investment destination (on a flow basis)



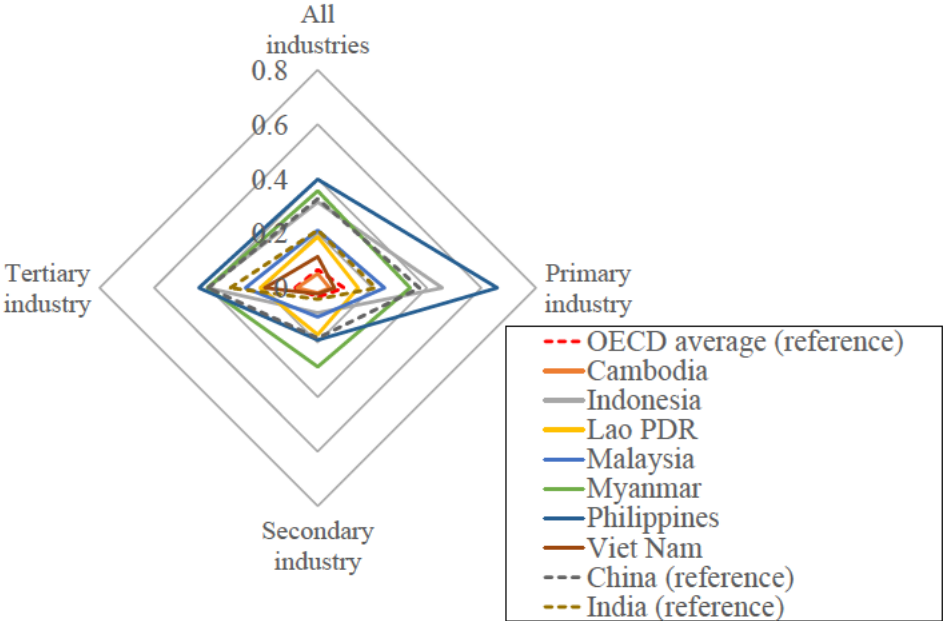
Source: UNCTAD.

Until now, ASEAN has achieved economic growth through the integration of production facilities and the expansion of trade by accepting direct investments and offshore outsourcing by foreign countries.

However, in light of the FDI (foreign direct investment) Regulatory Restrictiveness Index,¹³⁴ published by the OECD, the degree of investment regulation related to the conduct of business by foreign companies in ASEAN is high by international standards, indicating that there still remain many obstacles to investments in the region (Figure I-2-3-1-68). In addition, within ASEAN, the degree of regulation differs widely across countries. For example, the regulation in Cambodia is easier than the average degree of regulation among the OECD member countries, while the regulation in the Philippines is assessed to be the strictest in ASEAN. Moreover, individual countries are imposing a high degree of regulation on industries that they would like to protect and develop (Figures I-2-3-1-69 to I-2-3-1-76).

For ASEAN to be selected as a destination for global direct foreign investments more than before, it is essential that ASEAN as a whole promote steady implementation of liberalization through the ASEAN Framework Agreement on Services (AFAS) and ACIA and at the same time, individual ASEAN member countries implement measures to attract foreign investments, such as actively abolishing obstacles to investments.

Figure I-2-3-1-68 FDI Regulatory Restrictiveness Indices for ASEAN member economies (comparison with major economies and regions in major industries)



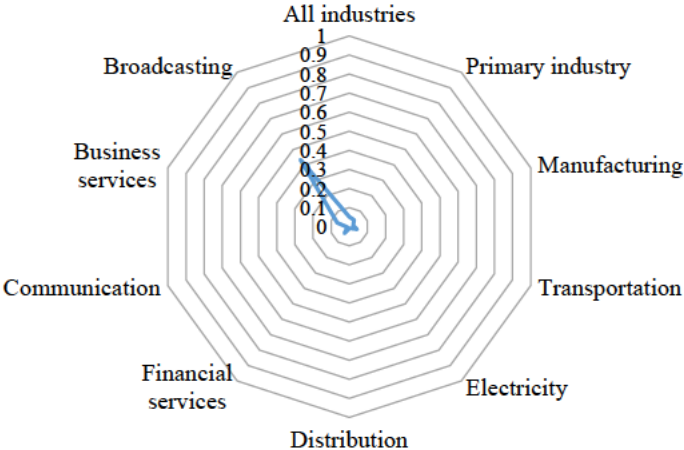
Notes: The items subject to regulations are assessed setting restrictiveness as one (1) and liberalization as zero (0).

This figure shows values in 2016.

Source: OECD.

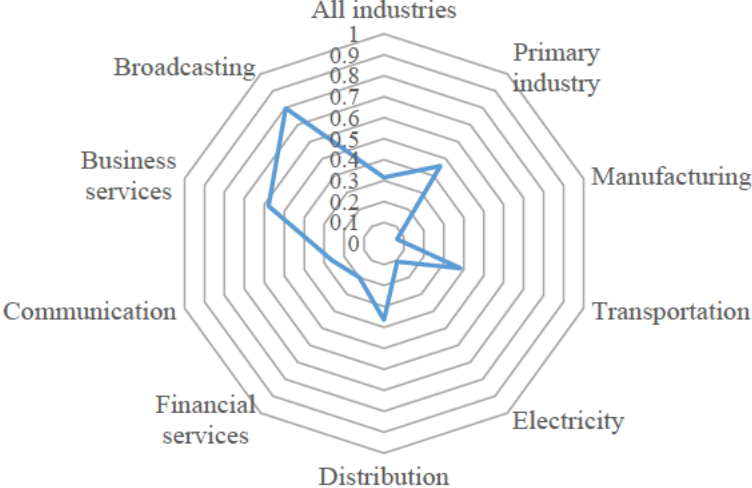
134 An index to measure statutory restrictions on foreign direct investment that is published by the OECD. The index measures statutory restrictions in 62 countries, including all OECD countries and G20 countries, and covers 22 sectors. Specifically, the measurement is conducted from the following four viewpoints related to foreign direct investment: (A) foreign equity restrictions, (B) discriminatory screening or approval mechanism, (C) restrictions on key foreign personnel, and (D) operational restrictions. When the index value is 0 (open), the degree of regulation is considered to be the weakest, and when the index value is 1 (closed), the degree of regulation is considered to be the strongest.

Figure I-2-3-1-69 FDI Regulatory Restrictiveness Indices for Cambodia (by industry)



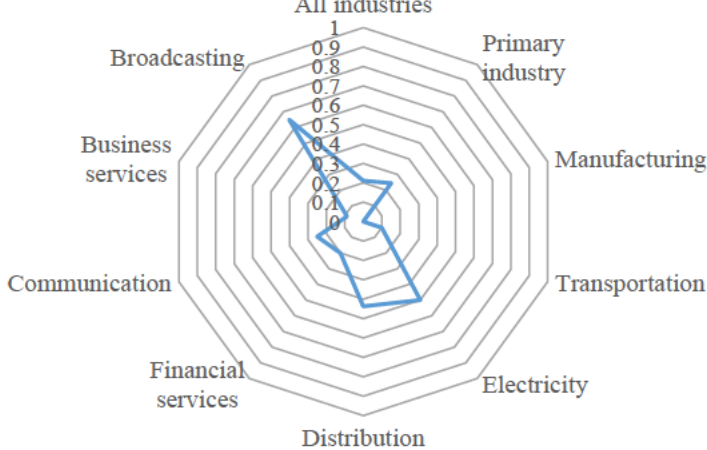
Source: OECD.

Figure I-2-3-1-70 FDI Regulatory Restrictiveness Indices for Indonesia (by industry)



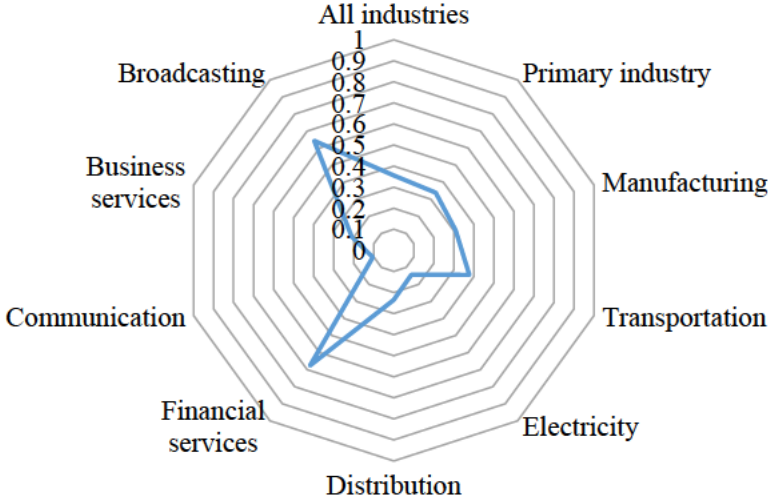
Source: OECD.

Figure I-2-3-1-71 FDI Regulatory Restrictiveness Indices for Malaysia (by industry)



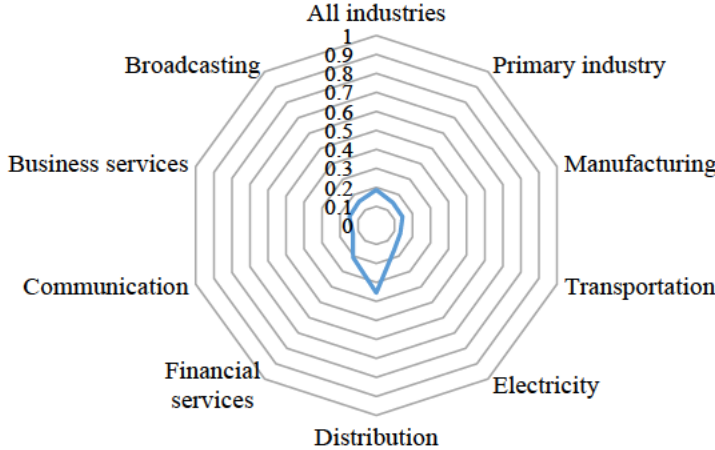
Source: OECD.

Figure I-2-3-1-72 FDI Regulatory Restrictiveness Indices for Myanmar (by industry)



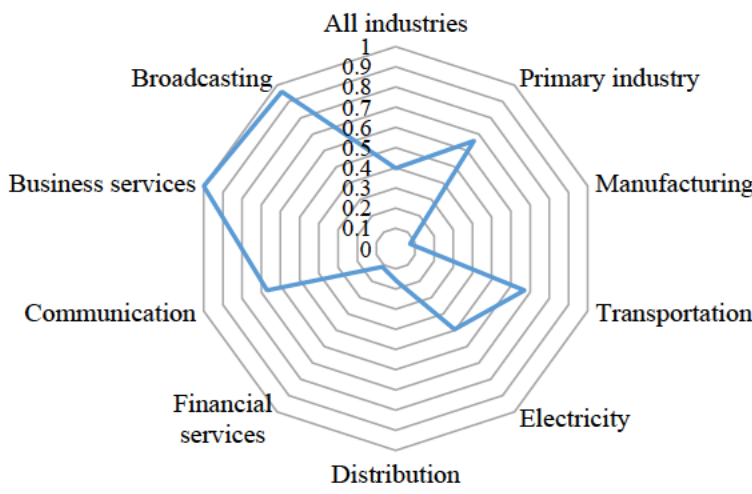
Source: OECD.

Figure I-2-3-1-73 FDI Regulatory Restrictiveness Indices for Lao PDR (by industry)



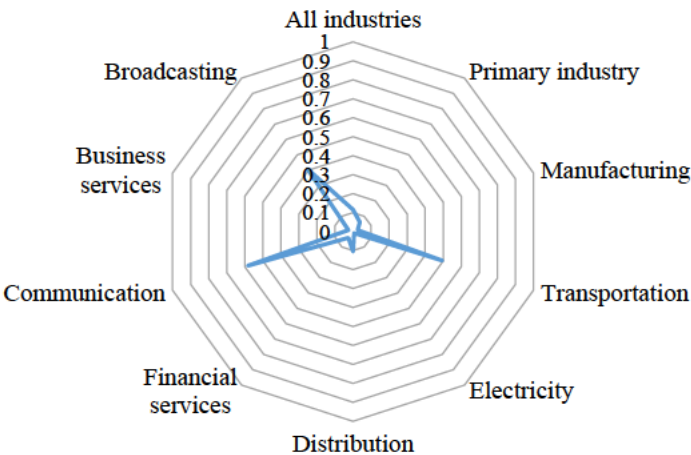
Source: OECD.

Figure I-2-3-1-74 FDI Regulatory Restrictiveness Indices for the Philippines (by industry)



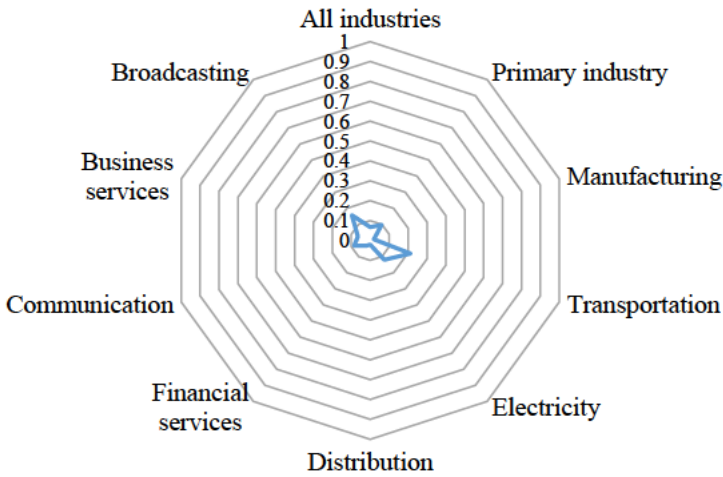
Source: OECD.

Figure I-2-3-1-75 FDI Regulatory Restrictiveness Indices for Viet Nam (by industry)



Source: OECD.

Figure I-2-3-1-76 FDI Regulatory Restrictiveness Indices for OECD (average by member economy; by industry)



Source: OECD.

(5) Free trade agreements (FTAs) related to ASEAN

Until now, ASEAN has formed five FTAs (free trade areas/agreements) with partner countries outside ASEAN (ASEAN+1 FTA), in addition to the ASEAN Free Trade Area (AFTA), an intra-regional FTA. Here, we will provide an overview of these ASEAN-related FTAs.

(A) Background to the acceleration of the formation of FTAs and an overview of individual FTAs

The formation of AFTA came against the backdrop of the simultaneous progress in globalization and regionalization around 1990.¹³⁵ Globalization was exemplified by the growing mood toward concluding an agreement on the GATT (General Agreement on Tariffs and Trade) Uruguay round of multilateral trade negotiations.¹³⁶ Regionalization was exemplified by the establishment of Mercosur in

135 Sukegawa (2016).

136 At this round, GATT was reorganized as the WTO.

South America, NAFTA in North America and the EU in Europe. Furthermore, in China, foreign investments in China were starting to become a boom following Deng Xiaoping's famous economic policy statements during his tour of southern China. Amid these global developments, awareness about the need to attract foreign investments by promoting regional integration arose among the ASEAN member countries at that time, and this led to the formation of AFTA, which was put into force in 1993.

In the 2000s, starting with the FTA with China (ACFTA), a succession of ASEAN+1 FTAs were formed, and a total of five such FTAs were formed between 2005 and 2010 (Table I-2-3-1-77). Partner countries outside ASEAN scrambled to form FTAs with ASEAN due to concerns that their competitiveness in exports to the region may weaken because of the liberalization of ASEAN-China trade.

The overview and recent situation of the individual FTAs, arranged in the order of the enforcement date, are as follows.

Table I-2-3-1-77 Years of starting negotiations, enforcement and completion of tariff reductions in terms of FTAs involving ASEAN

FTA	Partner economy	Enforcement year	Year of completion of tariff reduction		Remarks
			More developed ASEAN member economy	Less developed ASEAN member economy	
AFTA (ATIGA)	Intra-ASEAN region	1993	2010	2015 (2018)	*1
ACFTA	China	2005	2010 (2012)	2018	*2
AKFTA	ROK	2007	2012	2020	2018 only for Viet Nam
AJCEP	Japan	2008	2018-2023	2026	*3
AIFTA	India	2010	2017	2022	2020 only for the Philippines
AANZFTA	Australia and New Zealand	2010	2020	2025	2022 only for Viet Nam

*Notes:

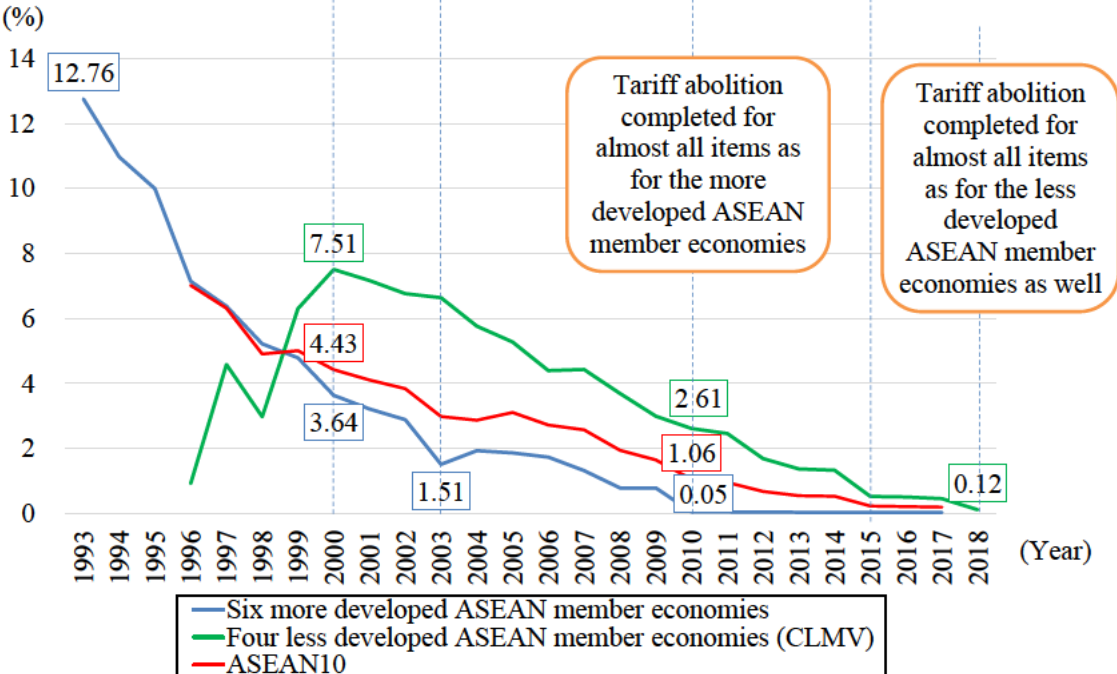
1. Regarding the less developed ASEAN member economies, a grace period for abolition of tariffs was granted to some items (covering 7% of all items) until 2018. Tariffs on unprocessed products and agricultural products that were designated as sensitive items or highly sensitive items were exempt from tariff abolition.
2. A grace period for abolition of tariffs was granted to product items in the normal track 2 (150 items) until 2012.
3. The year when a tariff reduction completed varies among economies.

Source: Sukegawa (2016).

ASEAN Trade in Goods Agreement (ATIGA)

As for the reduction or abolition of tariffs concerning trade in goods, which may be considered to be the core of the FTAs, tariffs on almost all product items were abolished by January 2010 with respect to the six more developed ASEAN member countries in accordance with the phased tariff reduction schedule¹³⁷ that gave consideration to less developed member countries. In January 2018, tariffs on all product items except for some non-processed agricultural products, weapons, ammunition and the like were abolished at once with respect to the four less developed member countries (CLMV¹³⁸) that had been granted a grace period with respect to some items on the Inclusion List (IL). As a result, the liberalization rate of the less developed member countries rose from 91.1% in 2017 to 98.0% in 2018, raising the liberalization rate of the whole of the AFTA in 2018 to 98.8%, a high level by global standards (Figure I-2-3-1-78 and Table I-2-3-1-79).

Figure I-2-3-1-78 Changes in preferential tariff rates on a simple average basis in ASEAN



Source: ASEAN Secretariat; The CLMV values in 2018 are excerpts of the calculation results in Sukegawa (2016).

137 Under the Common Effective Preferential Tariff (CEPT) Agreement, intended for the formation of AFTA, all product items are classified into five categories--(A) Inclusion List (IL), (B) Temporary Exclusion List (TEL: product items for which preparation for tariff reduction is incomplete), (C) General Exceptions (GEL: product items exempt from tariff reduction because of their national defense or academic value), (D) Sensitive List (SL: product items for which the shift to IL is made in a flexible manner, such as non-processed agricultural products) and (E) Highly Sensitive List (HSL: rice-related items)--and tariff reduction and abolition are implemented with respect to items in the IL category. Items in the TEL, SL, and HSL categories are gradually shifted to the IL category for implementation of tariff reduction and abolition. The ASEAN Trade in Goods Agreement (ATIGA), which was put into force in 2010, has unified matters and rules not covered by the CEPT Agreement.

138 The four less developed member countries--Cambodia, Lao PDR, Myanmar and Viet Nam--are referred to as "CLMV" as an acronym of their names.

Table I-2-3-1-79 FTA liberalization levels involving ASEAN

Unit: %

	AFTA (ATIGA)	ACFTA	AKFTA	AJCEP	AIFTA	AANZFTA
	Intra-ASEAN region	China	ROK	Japan	India	Australia and New Zealand
Brunei Darussalam	99.3	97.3	98.5	96.5	80.4	98.7
Indonesia	98.9	88.7	94.1	-	50.1	93.9
Malaysia	98.7	93.7	95.5	94.1	84.8	95.5
Philippines	98.6	89.4	88.5	92.4	75.6	94.7
Singapore	100.0	99.9	100.0	100.0	100.0	100.0
Thailand	99.9	90.1	89.9	93.2	75.6	98.8
Cambodia	98.5	86.7	75.4	75.4	84.1	86.2
Lao PDR	96.3	97.3	85.4	86.6	77.5	90.5
Myanmar	99.3	91.3	87.3	81.2	73.0	86.1
Viet Nam	98.1	90.4	83.8	88.6	69.3	90.6
ASEAN 10 average	98.8	92.5	89.8	89.8	77.0	93.5
Partner economies outside ASEAN	-	94.6	92.1	91.9	74.2	100.0 for both Australia and New Zealand

Notes: This table shows values as of January 2018. The AJCEP has not been enforced in Indonesia.

The data on the AFTA liberalization rates are as of January 2018.

Source: Sukegawa (2017).

ASEAN is not only reducing or abolishing tariffs concerning goods in trade but is also promoting liberalization with respect to trade in services under AFAS and with respect to investment under ACIA. In addition, with respect to the movement of people, the ASEAN Agreement on the Movement of Natural Persons¹³⁹ was put into force (June 2016), facilitating the movement of human resources within the region.

Moreover, it is noteworthy that measures to improve enforcement have been implemented, including the introduction of the ASEAN Solutions for Investments, Services and Trade (ASSIST) (August 2016), a framework for companies to directly propose solutions to problems related to trade and investment, and the adoption of the goal of reducing the cost of intra-region trade 10% by 2020 (March 2017).

139 As this agreement is intended to unify customs clearance procedures and enhance transparency with respect to personnel in senior positions or with expert skills who cross national borders in order to make business trips or move between business facilities for business purposes within the region, it does not cover unskilled workers.

ASEAN-China Free Trade Area (ACFTA)

The classification of product items covered by the ACFTA Trade in Goods Agreement is similar to the one concerning the Common Effective Preferential Tariff under AFTA.¹⁴⁰ In addition, it is said that the use of ACFTA increased because tariffs on product items in the IL for the more developed ASEAN member countries under AFTA and tariffs on product items in normal track lists for trade between those ASEAN member countries and China under ACFTA were set to be abolished in the same year, 2010.

In January 2018, tariffs on product items traded between the less developed ASEAN member countries and China were also abolished in principle. In addition, tariffs on sensitive items, which were exempt from tariff abolition, were lowered steeply, from a maximum of 20% to a maximum of 5%. Product items for which tariffs were abolished accounted for 94.8% of all items, and the proportion of items for which the tariff rate is zero or less than 5% was 98.2%. China has gone much further in reducing and abolishing tariffs in its trade with ASEAN than in its trade with other countries/regions.¹⁴¹

Another notable development in recent years is the entry-into-force of the amended ACFTA protocol in July 2016. In the chapter on trade in goods, a new section concerning customs clearance procedures and trade facilitation associated with the revision of the rules of origin was created in order to enhance transparency through the introduction of an advance notice system related to tariff classification. In addition, in the chapter on trade in services, tariff concession schedules were exchanged for the third time, and in the chapter on technical cooperation, a new paragraph related to e-commerce was added.

ASEAN-Korea Free Trade Area (AKFTA)

One notable development in recent years is the entry-into-force by August 2016 of the third protocol to amend the agreement on trade in goods between seven countries, including the ROK, Thailand, the Philippines and Malaysia. So far, measures to improve convenience have been implemented, including unifying tariff reduction schedules, under which only the modality (the tariff reduction method) was indicated with respect to each of the normal track items and sensitive track items, and preparing item-by-item, country-by-country lists.

ASEAN-Japan Comprehensive Economic Partnership (AJCEP) agreement

Among notable developments in recent years are the conclusion in November 2017 of ministerial-level negotiations on the protocol to amend the agreement to add a provision related to trade in services and investment and the start of the application in March 2018 of preferential tariffs to Indonesia, the only country among the 10 ASEAN member countries to which such tariffs had not been applied under this agreement.

ASEAN-India Free Trade Agreement (AIFTA)

Under AIFTA, 80% of all product items, which account for 75% of the total value of trade, were designated as normal track items, with tariff abolition scheduled for some items by the end of 2013 and for others by the end of 2016. For 4% of sensitive items, which account for around 10% of the total, tariff abolition is scheduled for the end of 2019. In 2015, the agreement on services and investment was put into force.

140 All product items are classified into the following categories: (A) "Early Harvest" items (agricultural products), (B) "Normal Track" items, (C) "Sensitive" items and (D) "Highly Sensitive" items

141 Oizumi (2018).

ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA)

What is distinctive about AANZFTA is that it covers, for the first time, e-commerce, the movement of people, intellectual property and competition policy, which are not covered by the above four FTAs, in addition to trade in goods and services, investment and economic cooperation. More developed ASEAN member countries were required to abolish tariffs on around 90% of all product items in 2013, while less developed ones are required to do so in or later than 2020.

FTAs with other countries/regions

In November 2017, ASEAN concluded an FTA and an investment agreement with Hong Kong, which are scheduled to be put into force in January 2019.

(B) Effects of the formation of the FTAs and future developments

The tariff abolition rate relative to all product items differs across the above FTAs. The average tariff abolition rate for the 10 ASEAN member countries is highest, 98.8%, under ATIGA, followed by 93.5% under AANZFTA, 92.5% under ACFTA, 89.8% under AKFTA and AJCEP and 77% under AIFTA (Table I-2-3-1-79).

The high degree of liberalization under ATIGA has brought benefits in terms of promoting division of work within ASEAN, enhancing industrial competitiveness in individual countries, and attracting investments by foreign companies by emphasizing the scale merit of the market. On the other hand, the possibility cannot be denied that it will create problems--for example, while some countries may be selected as the destination for investment, others may not. Therefore, there are also activities that run counter to the liberalization, such as protecting domestic industries by creating non-tariff barriers in exchange for abolishing tariffs.¹⁴²

The current focus of attention is RCEP, which ASEAN aims to conclude as an FTA that goes beyond the ASEAN+1 framework and which would be a comprehensive agreement whose fields of negotiation include trade in goods and services, investment, economic and technical cooperation, intellectual property, competition, and dispute settlement. As ASEAN, which has proposed RCEP, has a significant role to play, it is trying to exert initiative under the regional economic framework of the Asia-Pacific region by promoting RCEP at the same time as deepening the AEC.

2. India

Here, we will provide an overview of economic trends in India, which has actively carried out structural reforms since the inauguration of the Modi administration in May 2014 under the banner of creating a “New India” by 2022 and where the digital economy is rapidly developing.

(1) Macroeconomic trends

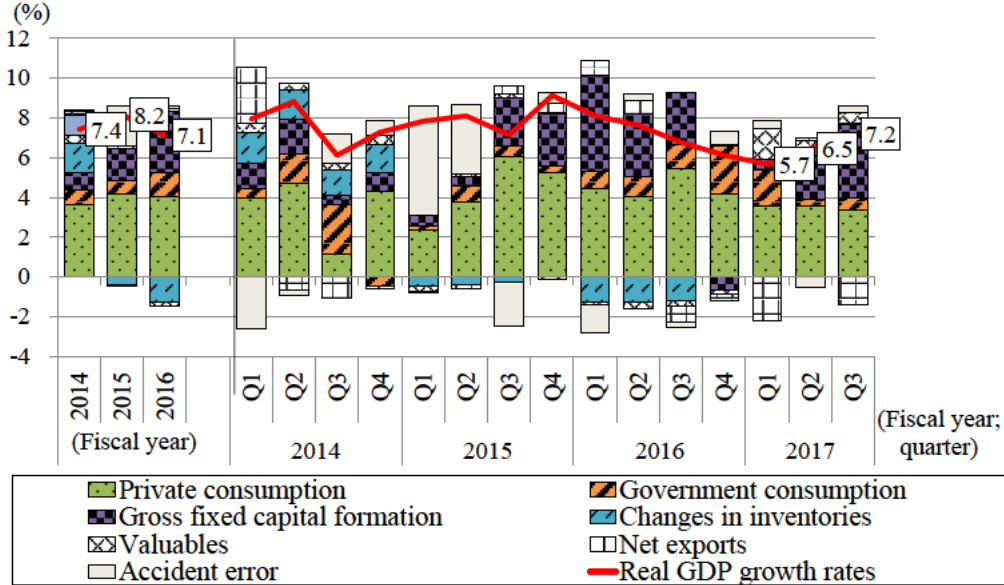
(A) GDP (GVA¹⁴³)

142 For example, Viet Nam, in which the auto industry is immature, abolished tariffs on automobiles in 2018 based on ATIGA, and at the same time, it made the procedures necessary for import more complex than before. As a result, Viet Nam was accused of virtually making the tariff abolition ineffective.

143 Real gross value added estimated from the viewpoint of production. The trend in GVA is considered to track the trend in monthly economic indicators more closely than the trend in GDP, which is affected by net indirect taxes, does.

The real GDP growth rate (on a fiscal year basis¹⁴⁴; compared with the previous year or the same period of the previous year hereinafter) increased from fiscal 2014 to 7.9%. In fiscal 2017, the growth temporarily slowed down due to confusion created by the implementation of major reform measures such as the abolition of high-denomination banknotes in November 2016 and the introduction of Goods and Services Tax (GST) in July 2017. However, because of a recovery in public- and private-sector capital investments, the growth rate resumed rising after hitting bottom at 5.7% in the first quarter and continued to rise until the third quarter. Although the contribution by private consumption, which accounts for around 50-60% of GDP, has recently declined somewhat, it still remains steady (Figure I-2-3-2-1).

Figure I-2-3-2-1 Changes in real GDP growth rates and contributions by expenditure in India



Notes: The fiscal years in this figure represent the budget years from April to March in the following year.

Source: Census of India, CEIC Database.

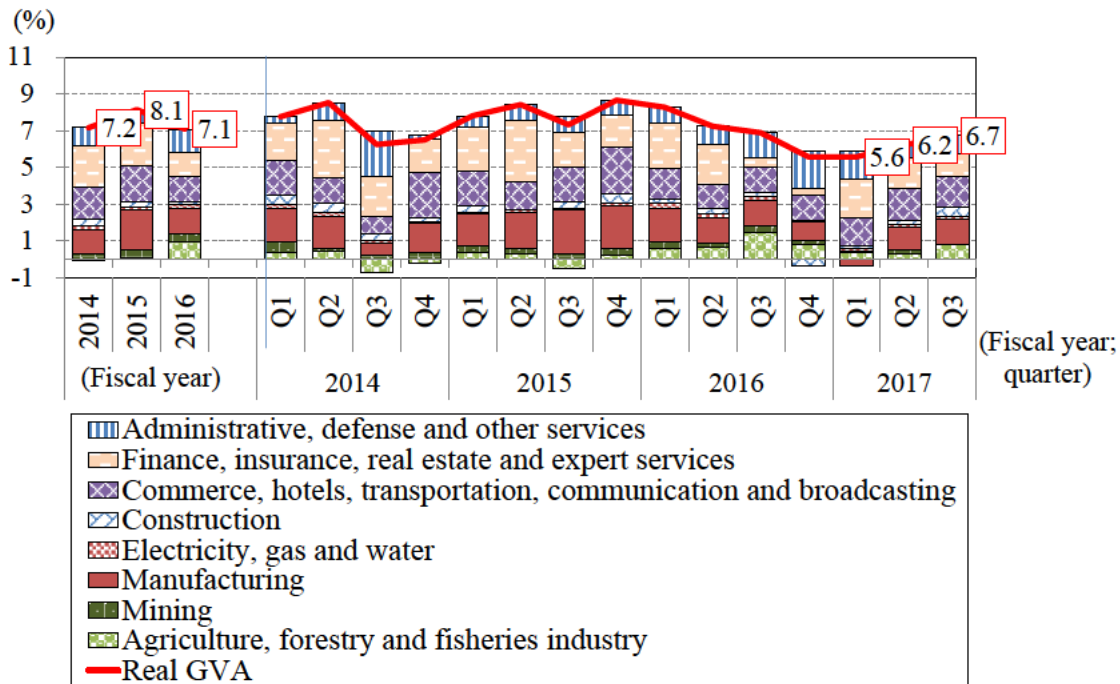
The trend in the real GVA growth rate was similar to the trend in the real GDP growth rate, with the services industry, which accounts for around 50-60% of GVA, making the primary contribution to the growth. The contribution by the manufacturing industry, which accounts for slightly less than 20% of GVA,¹⁴⁵ increased in fiscal 2014 and 2015 thanks to the successful results of active efforts to attract direct investments by foreign companies under the “Make in India” campaign.¹⁴⁶ Later, although the growth in the contribution slowed down in fiscal 2016 and turned negative in the first quarter of 2017 due to the effects of the abovementioned structural reform measures, the contribution recovered in the

144 A fiscal year in India starts in April and ends in March in the following year, as is the case in Japan.
 145 In fiscal 2017, the manufacturing industry accounted for 18.2% of the total GVA.
 146 A policy for promoting the manufacturing industry intended to raise its share in GDP from 15% at the time to 25%. Now, “Make in India 2.0,” an updated version of “Make in India” is being advocated. Under this plan, five sectors--capital goods, automobiles, defense, pharmaceuticals and renewable energy--have been cited as sectors in which double-digit growth can be expected.

second and third quarters (Figure I-2-3-2-2).

The IMF estimates India's real GDP growth rate at 6.7% in fiscal 2017, 7.4% in fiscal 2018, and 7.8% in fiscal 2019. These figures are the highest growth rates among major countries (Figure I-2-3-2-3).

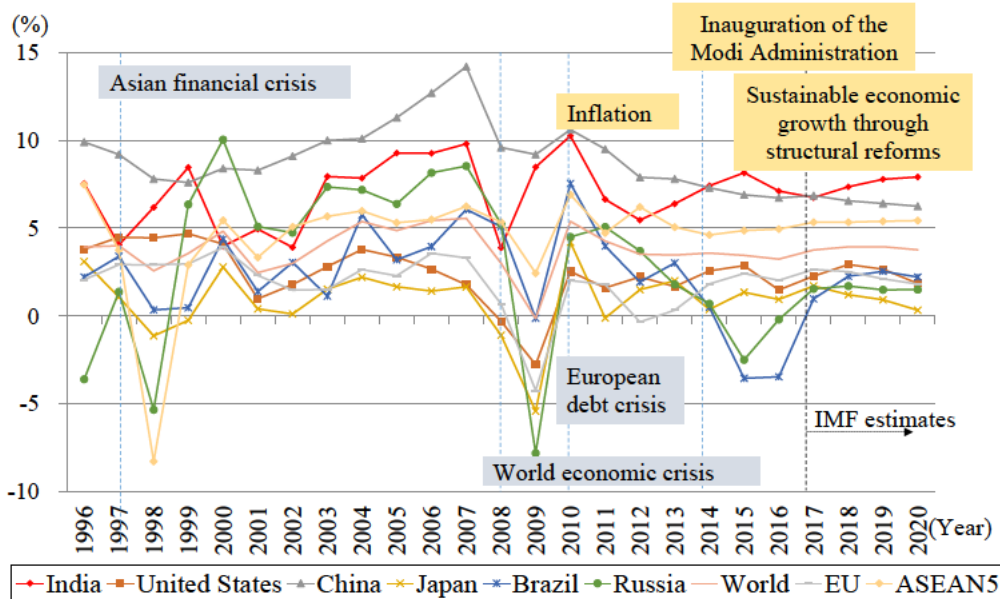
Figure I-2-3-2-2 Changes in real GVA growth rates and contributions by industry in India



Notes: The fiscal years in this figure represent budget years from April to March in the following year.

Source: Census of India, CEIC Database.

Figure I-2-3-2-3 Changes in real GDP growth rates in India (comparison with major economies and regions)

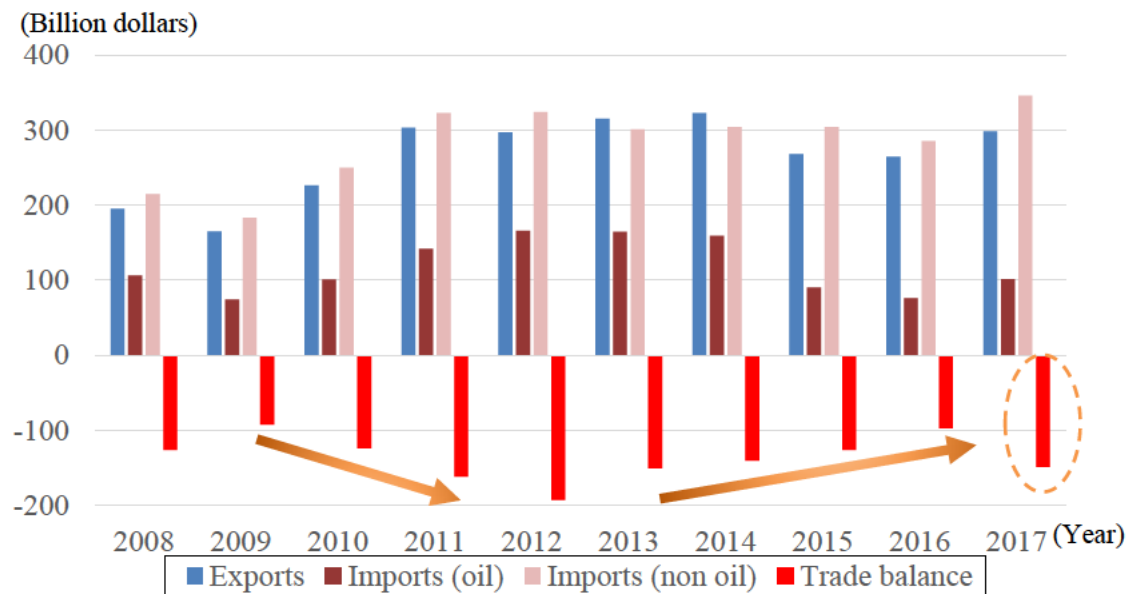


Source: WEO Database (IMF, April 2018).

(B) Trade

India has been chronically recording a trade deficit, and the trend in the deficit is significantly affected by the price of crude oil, which accounts for around half of the country's imports. From 2013 onwards, the deficit was trending downward due to a decline in the crude oil price and other factors, but in 2017, the deficit resumed growing due to a recovery in the crude oil price. In 2017, growth in domestic demand for product items other than crude oil¹⁴⁷ also contributed to the expansion of the trade deficit (Figure I-2-3-2-4).

Figure I-2-3-2-4 Changes in trade balance in India



Notes: The total import values are the total values in the categories “oil” and “non oil.”

Source: Ministry of Commerce and Industry of India, CEIC Database.

Next, we will compare changes in the lineup of major trading partner countries/regions and items of trade between 2008 and 2017.

The United States replaced the United Arab Emirates as the largest export destination. The United States' share as an export destination grew from 11.5% to 15.4%. China was the largest import source in both 2008 and 2017, and China's share as an import source increased from 10.5% to 16.2%. Among trading partner regions, the EU28's share declined both as an export destination and as an import source, while ASEAN's share grew. Another notable point is an increase in exports to SAARC¹⁴⁸ (Table I-2-3-2-5). The lineup of trading partners and items may change again in the future and India's relationship with trading partners may deepen further due to changes in the supply chain, the enhancement of relationships with neighboring countries under the Modi administration's “Neighborhood First” policy, and the enhancement of the relationship with ASEAN under the “Act East” policy.

¹⁴⁷ The breakdown is not described in Figure I-2-3-2-4, but the examination of trade data shows that an increase in domestic demand for gold and mobile phone-related parts is the main factor.

¹⁴⁸ This refers to the South Asian Association for Regional Cooperation, the members of which are eight Southwest Asian countries (India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, the Maldives and Afghanistan).

**Table I-2-3-2-5 Comparison of trade values and composition rates in India as of 2008 and 2017
(by major economy and region)**

Unit: Million dollars; %

	Exports			
	2008	2017	2008	2017
	Value	Value	Composition rate	Composition rate
United States	22,364	45,831	11.5	15.4
United Arab Emirates	24,442	29,728	12.5	10.0
Hong Kong	7,039	15,160	3.6	5.1
China	10,537	12,530	5.4	4.2
Singapore	9,112	11,156	4.7	3.8
United Kingdom	6,989	8,957	3.6	3.0
Germany	6,347	8,282	3.3	2.8
Viet Nam	2,000	8,157	1.0	2.7
Bangladesh	2,970	7,858	1.5	2.6
Belgium	4,853	6,227	2.5	2.1
EU28	40,714	51,092	20.9	17.2
ASEAN10	20,375	35,289	10.4	11.9
SAARC	9,555	20,707	4.9	7.0
World total (including others)	195,070	296,759	100	100

Unit: Million dollars; %

	Imports			
	2008	2017	2008	2017
	Value	Value	Composition rate	Composition rate
China	33,606	72,055	10.5	16.2
United States	18,614	24,648	5.8	5.5
United Arab Emirates	24,479	23,007	7.6	5.2
Switzerland	13,048	20,544	4.1	4.6
Saudi Arabia	23,204	20,428	7.2	4.6
Indonesia	6,389	16,257	2.0	3.7
ROK	8,896	16,143	2.8	3.6
Iraq	9,603	14,975	3.0	3.4

Australia	11,126	14,359	3.5	3.2
Germany	11,920	12,807	3.7	2.9
EU28	43,706	46,255	13.6	10.4
ASEAN10	27,338	45,371	8.5	10.2
SAARC	1,871	2,541	0.6	0.6
World total	321,410	445,024	100	100

Notes: The columns in red show the comparison rates that increased from 2008.

Source: GTA.

Likewise, we will look at changes in the lineup of major items of trade. While the share remained large for gems/jewelry and mineral fuels in terms of both import and export,¹⁴⁹ it is noteworthy that exports of general machinery and vehicles and imports of electrical machinery increased (Table I-2-3-2-6).¹⁵⁰

Table I-2-3-2-6 Comparison of trade values and composition rates in India as of 2008 and 2017 (by major item)

Unit: Million dollars; %

		Exports			
		2008	2017	2008	2017
HS	Product Item	Value	Value	Composition rate	Composition rate
71	Gems and jewelry (polished diamonds, etc.)	28,092	42,778	14.4	14.4
27	Mineral fuels (oil products)	31,827	34,391	16.3	11.6
84	General machinery (turbo engines, cocks, etc.)	8,174	16,764	4.2	5.6
87	Vehicles and parts thereof (excluding those for railways; mainly for automobiles, motorcycles and parts thereof)	6,028	16,374	3.1	5.5
29	Organic chemicals	7,919	13,454	4.1	4.5
30	Pharmaceutical products	5,111	12,907	2.6	4.3
72	Iron and steel (flat-rolled products, etc.)	8,449	11,793	4.3	4.0
62	Clothing and accessories thereof (excluding knitted fabrics and crocheted fabrics)	5,986	9,038	3.1	3.0

149 In India's trade, processed trade has a large share, including exports of oil products domestically refined from imported crude oil and exports of jewelry made of domestically polished imported diamond and other gemstones.

150 Japan is the 19th largest export destination and 14th largest import source for India. India mainly exports mineral fuels (oil products, etc.) to Japan and imports general machinery (printing presses, printers, etc.).

85	Electrical machinery (transformers, equipment related to mobile phones, etc.)	9,170	8,856	4.7	3.0
61	Clothing and accessories thereof (excluding knitted fabrics and crocheted fabrics)	4,698	8,396	2.4	2.8
	World total (including others)	195,070	296,759	100	100

Unit: Million dollars; %

HS	Product Item	Imports			
		2008	2017	2008	2017
		Value	Value	Composition rate	Composition rate
27	Mineral fuels (crude oil and coal)	117,060	120,955	36.4	27.2
71	Gems and jewelry (gold, diamonds, etc.)	42,619	74,571	13.3	16.8
85	Electrical machinery (parts, related equipment and bodies of mobile phones, etc.)	25,249	46,839	7.9	10.5
84	General machinery (computers and peripherals)	29,257	35,968	9.1	8.1
29	Organic chemicals	9,043	17,982	2.8	4.0
39	Plastics and products thereof	4,645	13,037	1.4	2.9
15	Animal and vegetable oil and fat	3,110	11,901	1.0	2.7
72	Iron and steel (scrap iron to be remolten, etc.)	10,824	10,030	3.4	2.3
90	Optical equipment and precision equipment	4,977	8,451	1.5	1.9
88	Aircraft and parts thereof	4,412	6,955	1.4	1.6
	World total (including others)	321,410	445,024	100	100

Notes: The columns in red show the comparison rates that increased from those in 2008.

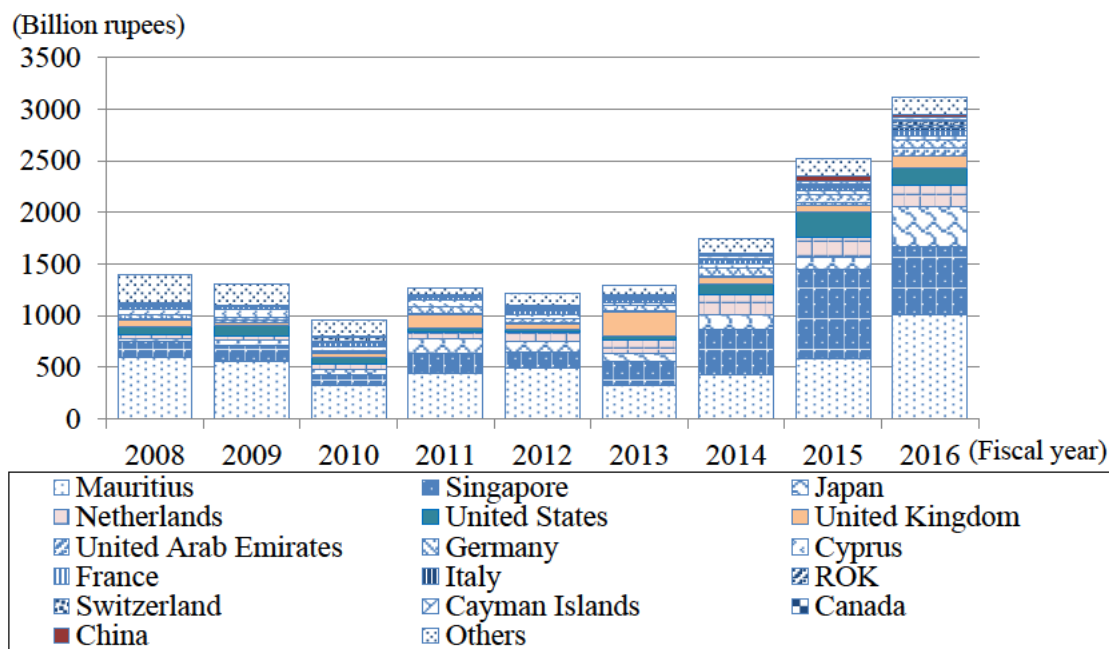
Source: GTA.

(C) Investment

Inward foreign direct investments have increased rapidly since fiscal 2014, when the Modi administration was inaugurated. By country, Mauritius was the top investor in fiscal 2016, followed by Singapore and Japan¹⁵¹ in that order (Figure I-2-3-2-7). By industry, investment in such sectors as communication, trade and electrical equipment has been active in recent years (Figure I-2-3-2-8).

151 The main sectors that received investments from Japan were manufacturing, mainly transportation equipment, and insurance and financial services.

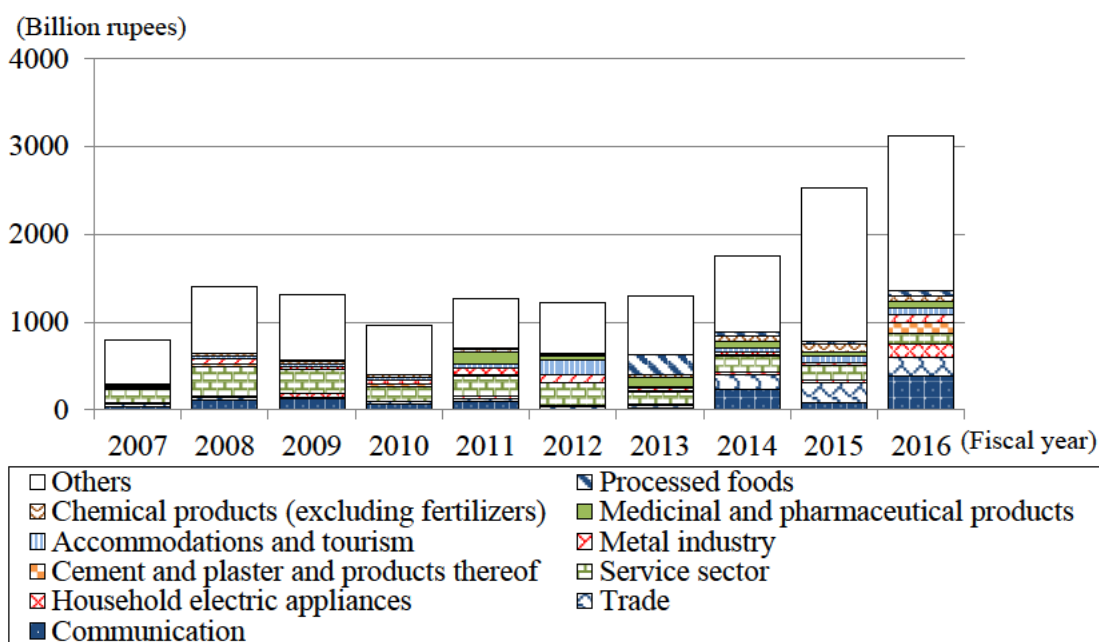
Figure I-2-3-2-7 Changes in values of inward foreign direct investments in India (by economy)



Notes: This figure shows the data based on the fiscal years (from April to March in the following year).

Source: Department of Industrial Policy and Promotion of India.

Figure I-2-3-2-8 Changes in values of inward foreign direct investments in India (by industry)



Notes: This figure shows the data based on the fiscal years (from March to April in the following year).

It targets the top ten fields.

Source: Department of Industrial Policy and Promotion of India, CEIC Database.

(2) Promotion of globalization and continuation of structural reform

In January 2018, Prime Minister Modi made a keynote speech at the opening of the World Economic Forum Annual Meeting (Davos meeting), in which he raised alarms about the global tilt toward

protectionism and emphasized that globalization should be promoted.¹⁵² He also mentioned that in the past 20 years, the world has changed dramatically because of advances in IT (information technology) and sciences and called for the establishment of a multipolar new international order that includes emerging economies. Concerning domestic policy measures, Prime Minister Modi expressed his intention to continue fundamental social and economic reforms and appealed for attention to the progress made in market-opening policy measures and tax system reform that were intended to attract foreign capital.

Since taking office in May 2014, on the back of a high support rate,¹⁵³ Prime Minister Modi has implemented a quick succession of structural reform measures that were previously difficult to carry out. Among the historic major reforms implemented by him are the abolition of high-denomination banknotes,¹⁵⁴ which was carried out in November 2016 without prior notice, and the introduction in July 2017 of the GST, which unified a complex web of multiple taxes.

Although these drastic structural reform measures have caused temporary confusion and a growth slowdown, they are being supported both within and outside India as processes essential for developing India from an emerging economy to a major global power and achieving sustainable growth.¹⁵⁵

(3) Progress in the Digital India ICT policy

The Modi administration's structural reform measures include many campaigns, such as "Make in India," "Skill India," "Startup India," "Clean India," and "Smart City." Here, from among those campaigns, we will take up "Digital India," which is closely related to the Indian people's everyday life and which has rapidly made progress in recent years.

This is an ICT policy initiative announced in August 2014 as a flagship structural reform. It focuses on the following three objectives¹⁵⁶: (A) providing digital infrastructure to all Indian people; (B) introducing on-demand administrative services; and (C) empowering the Indian people through digitization. In order to achieve these objectives, nine pillars have been set and plans are scheduled to be gradually implemented by fiscal 2018 to provide all villages with digitized e-administrative services (Figure I-2-3-2-9).

The Indian government's website uses pictograms and pictures as a way to raise awareness of digital policy measures widely among the Indian people and promote the use of digital services by facilitating understanding through visual representations (Figure I-2-3-2-10).

152 India participated in the Davos meeting for the first time in around 20 years since 1997, and this was the first keynote speech made by an Indian leader.

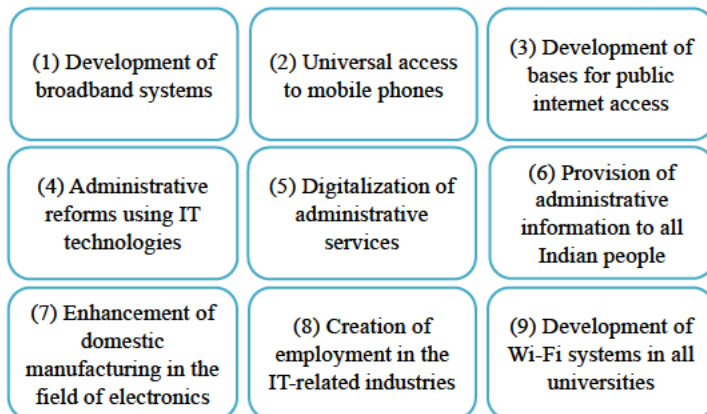
153 According to a survey by Pew Research Center, the support rate was 88% in November 2017, three years after he took office.

154 In a televised speech at 8 p.m. November 8, 2016, Prime Minister Modi announced that the existing 500-rupee note (equivalent to approx. 800 yen; 1 rupee = approximately 1.6 yen) and the existing 1,000-rupee note would become invalid at midnight November 9 (only four hours after the speech). The Indian people had to either deposit the obsolete notes at banks or exchange them for new notes (500-rupee and 2,000-rupee notes) from November 10 till December 30, 2016. As a result, more Indian people opened bank accounts. According to the Reserve Bank of India, 90% of all obsolete notes in circulation were recovered within one month after the announcement.

155 The Mumbai Sensex, India's major stock price index, was continuing to rewrite its record high (as of February 2018), and in November 2017, Moody's, a credit rating agency, upgraded India's rating (from Baa3 to Baa2; foreign-currency basis) for the first time in around 14 years since January 2004.

156 The government of India describes these as the three key vision areas.

Figure I-2-3-2-9 Nine pillars for achieving the Digital India campaign



Source: Ministry of Electronics and Information Technology of India.

Figure I-2-3-2-10 Top pages on the website of the Indian government for raising public awareness of a variety of digital policies in India (four examples)



Source: Excerpts from the website of the Indian government.

(A) Dissemination of national identification (ID) number (Aadhaar)

The personal identification number, known as Aadhaar, is based on a biometric authentication system¹⁵⁷ using fingerprint and iris recognition. Under this system, a 12-digit number is assigned to each individual. Of the total population of 1.31 billion people, the ID number has been assigned to around 90% by now according to published data, making this system the largest ID platform in the world.¹⁵⁸

Aadhaar was originally intended to improve the efficiency of administrative services by securing the provision of security and other administrative services to poor families with inadequate identity documentation. In addition, the government provides new systems and services linked with Aadhaar so that the ID number can be used as a way of financial inclusion.^{159 160}

157 This large-scale biometric authentication system has been provided by NEC Corporation of Japan. According to a press release issued by NEC, the company’s fingerprint and facial recognition technology is assessed to have the highest level of recognition accuracy in the world based on a benchmark test implemented by the U.S. National Institute of Standards and Technology.

158 Although the issuance started in 2010, the number of registered people has increased rapidly under the Modi administration.

159 In many cases, financial inclusion refers to a policy of providing poor people with low-cost access to financial services.

160 Multiple lawsuits have been filed from the viewpoints of privacy protection and information leakage. The plaintiff side argues that the acquisition of fingerprint and iris information is an infringement on the right to privacy, while the government made a counterargument that the constitution does not prescribe

(B) Dissemination of cashless payment among the Indian people

In India, as the bank account ownership rate is low, the cash transaction rate is said to be around 80-90%.¹⁶¹ There are many rural regions where no bank branch or ATM exists. Cash transactions are inefficient, and in addition, the prevalence of cash transactions was posing a serious problem as it made it difficult for the government to keep track of the actual state of the economy.

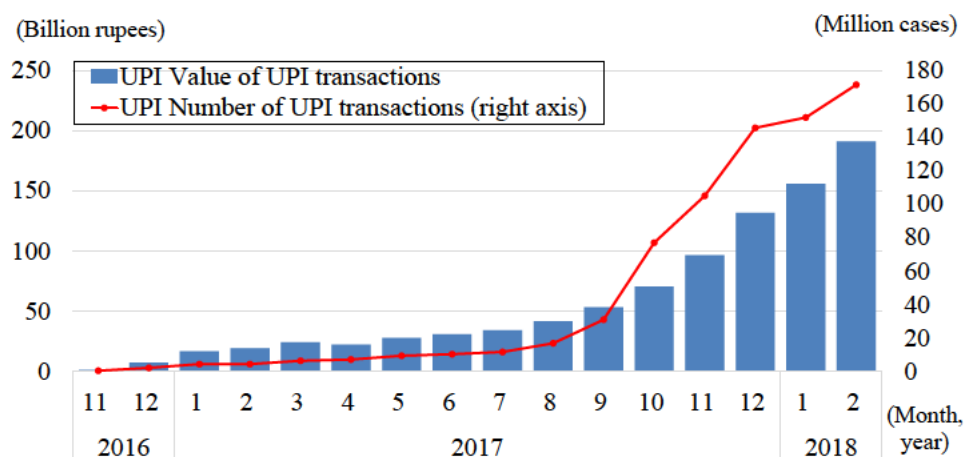
The abolition of high-denomination banknotes, one of the abovementioned structural reform measures, was intended primarily to eradicate black money.¹⁶² However, it turned out to be a major catalyst for the Indian people to shift from cash payment to electronic (cashless) payment. Furthermore, the dissemination of the personal ID number system and the improvement of convenience of means of electronic payment are accelerating the shift to cashless payment in India.

(C) Various means of payment and improvement of convenience due to public-private collaboration

Among major means of electronic payment in India are UPI, USSD, debit card payment, credit card payment, PPI, and mobile banking. Let us look at changes in the value and number of transactions since November 2016, when high-denomination banknotes were abolished.

UPI (Unified Payment Interface) is a payment platform whereby users download a banking service app to their smartphones and make money transfer or payment at retail stores in real time. Transactions using UPI have recently been increasingly rapidly as the government is devoting the greatest effort to its dissemination (Figure I-2-3-2-11).

Figure I-2-3-2-11 Changes in values and the number of transactions using UPI



Notes and source: Reserve Bank of India.

privacy as a basic human right. The Supreme Court expressed the view that as the right to privacy is prescribed by the constitution, consideration should be given to the risk of Aadhaar infringing privacy. Against this backdrop, the government is being forced to revise the way of using this system in the future. The deadline for linking Aadhaar to bank accounts, which was set for the end of March 2018, has been extended, with a new deadline still undecided (as of April 2018).

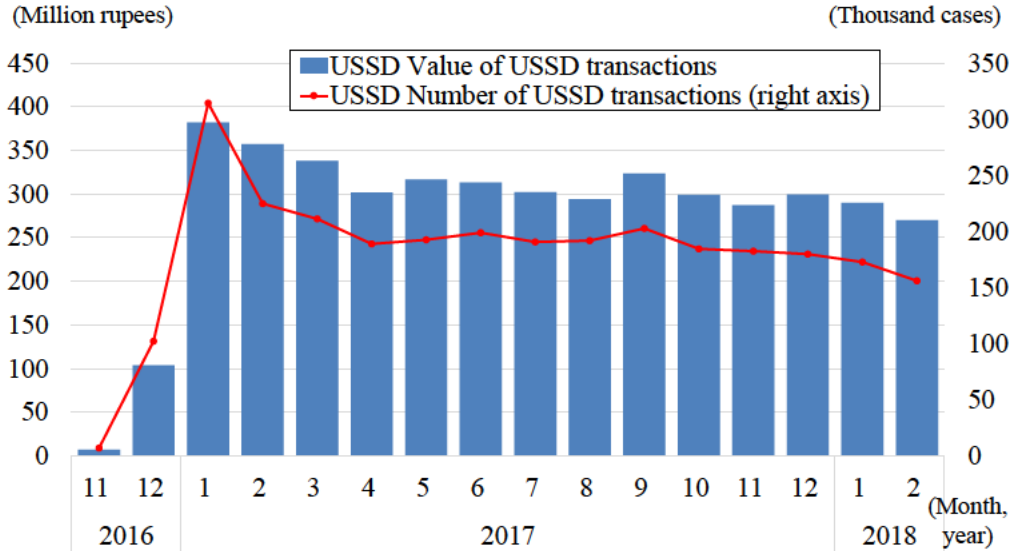
161 Even for the purchase of high-priced products, such as automobiles and motorcycles, cash payment is chosen in many cases in India (cash payment is said to be chosen for around 10-20% of all automobile purchases and for around 60% of all motorcycle purchases).

162 India's underground economy is said to account for around 20% of GDP, so black money, which is not reflected in statistical data, has for many years been regarded as a problem.

USSD (Unstructured Supplementary Service Data) is a financial service that has been provided since 2012 mainly from the viewpoint of financial inclusion. It enables money transfer using the basic functions of SMS and mobile phones (feature phones) even in the absence of smartphones or an internet environment. Although the scale of transactions is small, this service is compatible with 12 languages and is said to have contributed significantly to a rise in the usage rate of financial services in rural areas. Although the usage of USSD has remained steady recently, both the value and number of transactions are trending downward (Figure I-2-3-2-12).

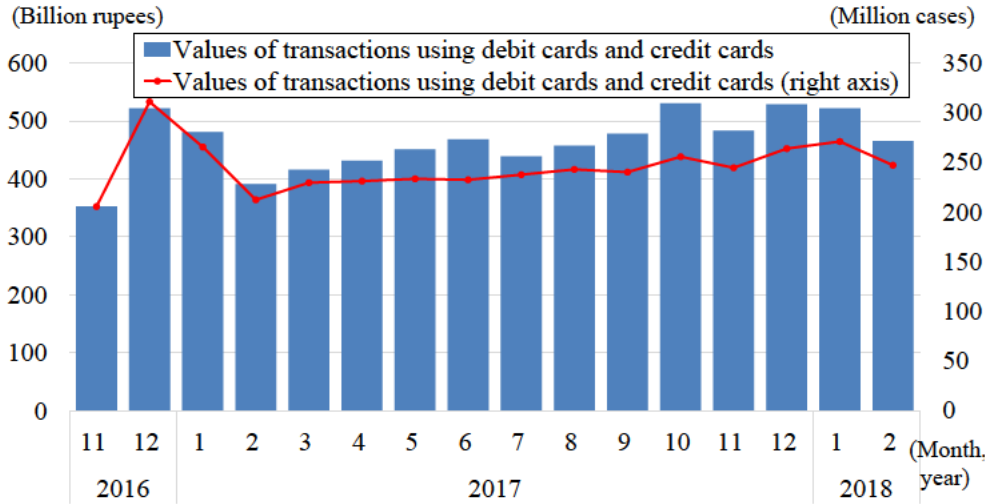
Debit card and credit card payment is made through POS (point of sales). The number of transactions is the largest of all means of payment, and both the number and value of transactions are trending upward (Figure I-2-3-2-13).

Figure I-2-3-2-12 Changes in values and the number of transactions of USSD



Notes and source: Reserve Bank of India.

Figure I-2-3-2-13 Changes in values and the number of transactions using debit cards and credit cards through POS

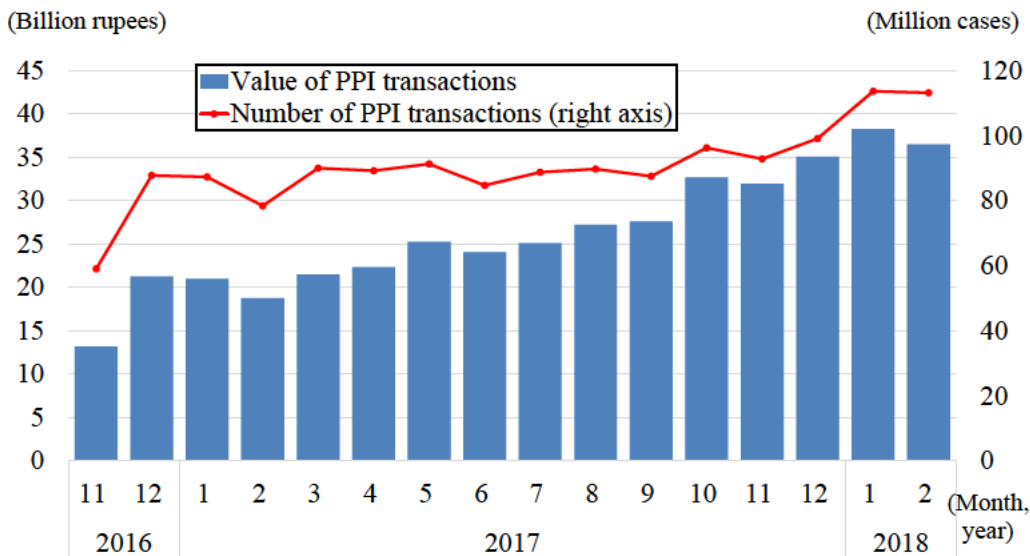


Notes and source: Reserve Bank of India.

PPI (Prepaid Payment Instrument) refers to an electronic prepaid payment system, such as e-wallet. This requires the loading of funds before payment via debit card or internet banking. It is used for online shopping and smartphone-based payment at stores. Although there is an upper limit on the usage value, both the value and number of transactions conducted through PPI are trending upward (Figure I-2-3-2-14).

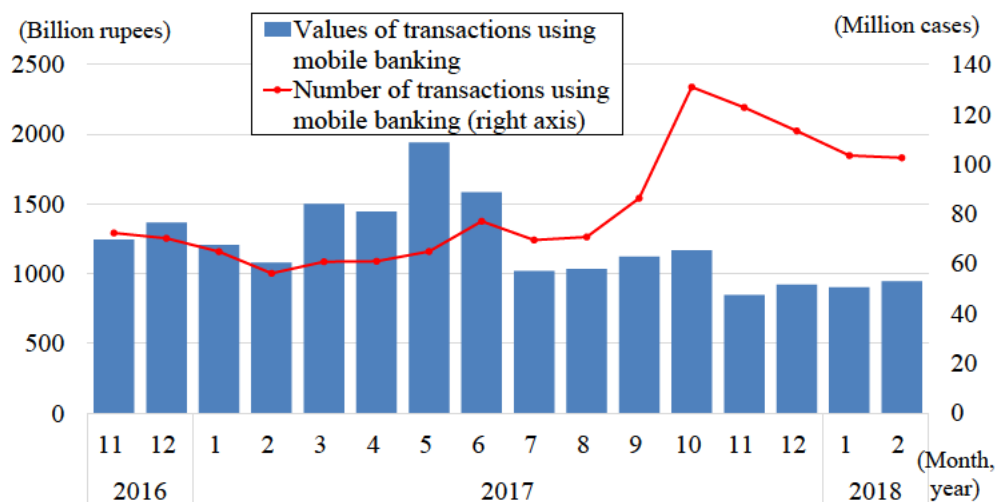
Mobile banking refers to internet banking service used via mobile phone. Recently, the downtrend in mobile banking transactions has been conspicuous (Figure I-2-3-2-15).

Figure I-2-3-2-14 Changes in values and the number of transactions using PPI



Notes and source: Reserve Bank of India.

Figure I-2-3-2-15 Changes in values and the number of transactions using mobile banking



Notes and source: Reserve Bank of India.

To sum up, immediately after the abolition of high-denomination banknotes, electronic payment transactions generally increased, but since then, the direction of the trend has differed across the various means of payment. That is presumably because people prefer the means that suit their respective needs

and also because usage is concentrating on means of high convenience following an increase in the range of services available.

The progress in the shift to cashless payment in India is not only attributable to promotion by the government but is also due in large part to the effects of entry by private-sector companies. For example, PayTM, the largest e-wallet service in India that has adopted the PPI system, can be used anywhere, from food stands to large shopping malls, as it is supported for its ease of use.¹⁶³ As entry by foreign companies is also increasing,¹⁶⁴ the digital payment market is expanding (Figure I-2-3-2-16).

Figure I-2-3-2-16 Photos of a food stand and a food truck in Delhi
(examples of dissemination of cashless payment)



Notes: The photos show a truck of Chinese foods at which a variety of credit cards can be used for payment (left) and an ice cream stand at which PayTM is can be used for payment (right).

Not a few such stands and trucks refuse payment by cash as they have no change.

Source: METI (the photos were taken in Delhi in March 2018).

The Modi administration's digital policy is different from the previous administration's policy in that instead of closing systems related to its various digital policy measures to administrative services, the administration has adopted an open architecture¹⁶⁵ capable of collaboration with various private-sector services. First, infrastructure was developed under the government's initiative,¹⁶⁶ and then, domestic and foreign companies entered the market, linking their services with each other. As people came to use services whose convenience improved, the usage rate of the infrastructure developed by the government rose to a high level as a result. That is how the digital policy has unfolded.

(4) Expansion of the e-commerce market

(A) Rapidly expanding e-commerce market

The value of e-commerce-based retail sales in India is forecast to continue increasing year after year,

163 Users load the necessary amount of money from bank accounts into a specialized e-wallet app and make payment through a specialized QR code system at stores.

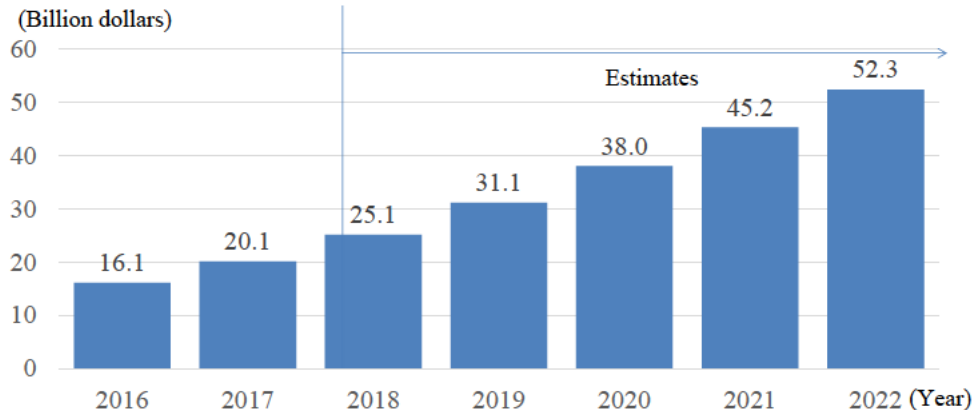
164 Examples include Google Tez and Amazon Pay of the United States and Samsung Pay of the ROK. Currently (as of March 2018), WhatsApp under Facebook is reportedly conducting a test in preparation for starting an e-payment service. As WhatsApp is a messaging app used by more than 200 million people in India, its entry is expected to drastically change the e-payment market in the future.

165 Open architecture refers to a system under which use of hardware and software is made wholly or partially open to the public so that anyone can make products in accordance with specifications made public.

166 Actually, National Payments Corporation of India (NPCI) is responsible for infrastructure development.

from 20.1 billion dollars in 2017 to 52.3 billion dollars in 2022 (Figure I-2-3-2-17). A comparison with major countries around the world shows that although the value of e-commerce transactions in India is lower than the value in countries where e-commerce is advanced, such as China and the United States, the average growth rate is as high as 39.4% (from 2016 to 2020), according to a certain estimate, indicating that e-commerce transactions will rapidly increase in India (Figure I-2-3-2-18). In 2024, India is expected to surpass Japan to become the second largest e-commerce market in the Asia-Pacific region and the fourth largest in the world, according to a certain estimate.¹⁶⁷

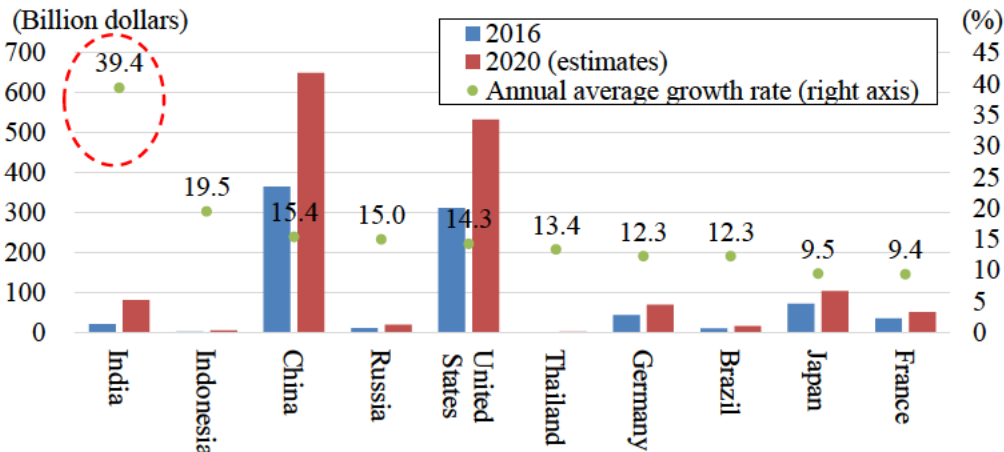
Figure I-2-3-2-17 Changes in e-commerce-based retail sales in India



Notes: This figure shows sales of business-to-consumer goods, including the data on purchases of desktop computers (laptop computers) and mobile devices (smartphones and tablets) but does not show sales of consumer-to-consumer goods, e.g., resale of secondhand goods, or those of e-services (downloaded electronic media content, etc.).

Source: Statista.

Figure I-2-3-2-18 Sales value of e-commerce transactions (business-to-consumer) in India (comparison with major economies)



Notes: The values of transactions are estimated values released by EuroMonitor.

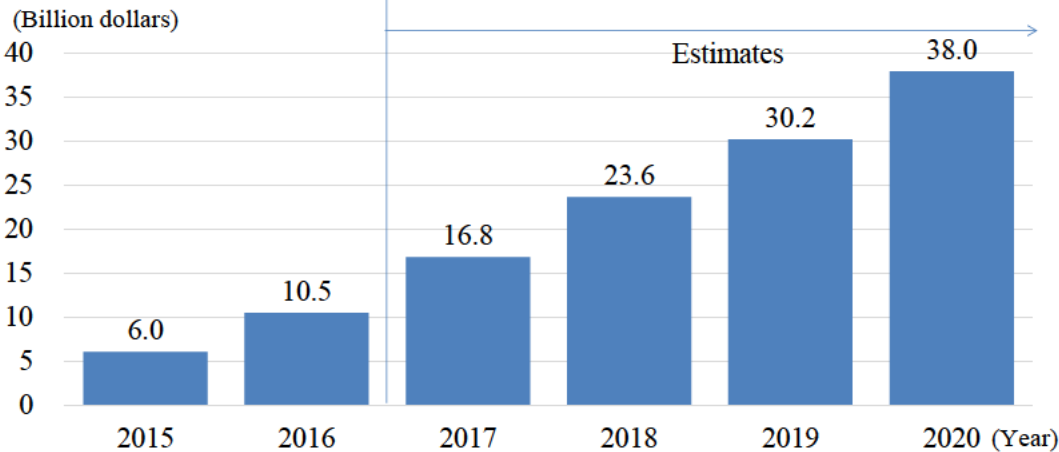
Source: *Establishment of Trade Rules for E-Commerce* (JETRO).

167 See Part II, Chapter 1, Section 1, Subsection 2 “Expansion of digital trade.”

(B) M-commerce (mobile e-commerce) leading the market

According to a joint survey by the Associated Chambers of Commerce & Industry of India (ASSOCHAM) and Deloitte, of all online product purchases¹⁶⁸ in 2017, 82%¹⁶⁹ were conducted via mobile devices. While the internet environment in India is still less developed than the environment in other major countries, the number of mobile phone owners, who mainly own smartphones, is increasing year after year as a result of an increase in access speed due to the introduction of 4G in 2016 and a decline in subscription fees, and this growth is leading the online shopping market (Figures I-2-3-2-19 and I-2-3-2-20).

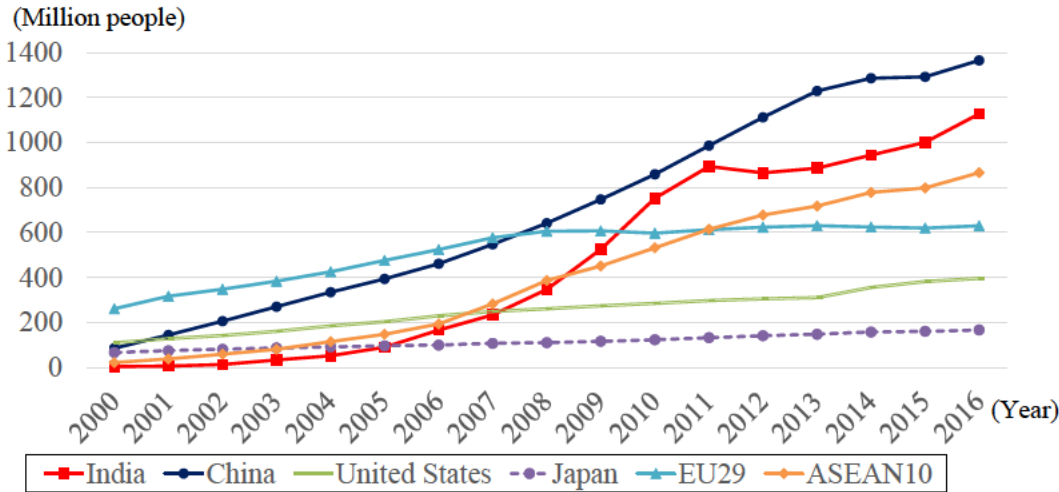
Figure I-2-3-2-19 Changes in values of retail sales in mobile e-commerce in India



Notes: This figure shows purchases through mobile devices (smartphones, tablets, etc.) and includes both goods and services, except travel and tickets for events.

Source: Statista.

Figure I-2-3-2-20 Changes in the number of subscribers for mobile phones (comparison with major economies and regions)



168 In the report, the words “shopping queries” are used.
 169 The proportion was 76% in 2016.

Notes: The Telecom Regulatory Authority of India (TRAI) explains that a decrease in 2012 was caused by some mobile-phone operators' large-scale suspension of SIM cards that had not been used for over a certain period of time and not caused by a decrease in the number of users. A dramatic increase in subscribers caused a problem of number allocation, and this might be a factor behind this decrease.

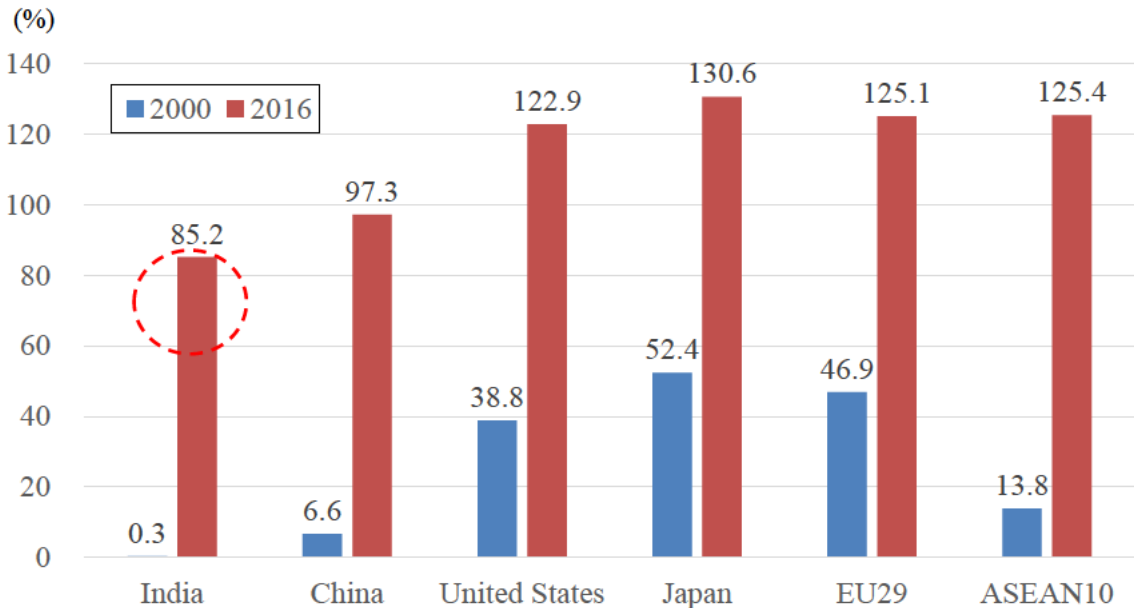
Source: International Telecommunication Union (ITU).

Reflecting this situation, e-commerce is often referred to as m-commerce (mobile e-commerce) in India. Unlike advanced economies, India is leapfrogging to mobile e-commerce because it is lagging far behind them in the development of infrastructure such as fixed-line telephone circuits. Some companies are making moves to shift to services focusing on users of smartphones and other mobile devices, such as closing internet websites and only providing apps downloadable to smartphones.

The percentage rate of mobile phone subscribers in India was 85.2% in 2016, indicating that there is still room for an increase compared with the situation in major countries/regions. In addition, as the rate is 159.4% in urban areas while the rate is only 56.3% in rural areas, the e-commerce market is expected to expand further if users in rural areas increase (Figure I-2-3-2-21).

Figure I-2-3-2-21 Shares of subscribers of mobile phones (comparison with major economies and regions) and breakdowns of subscribers by city and regional area in India

Breakdowns of Indian subscribers			
	Number of subscribers (million)	Share of subscribers (%)	Density of subscribers (%)
Total	1162.5	100.0	88.8
City	664.9	56.7	159.4
Regional area	497.5	43.3	56.3



Source: ITU; as for the breakdowns in India, the Telecom Regulatory Authority of India.

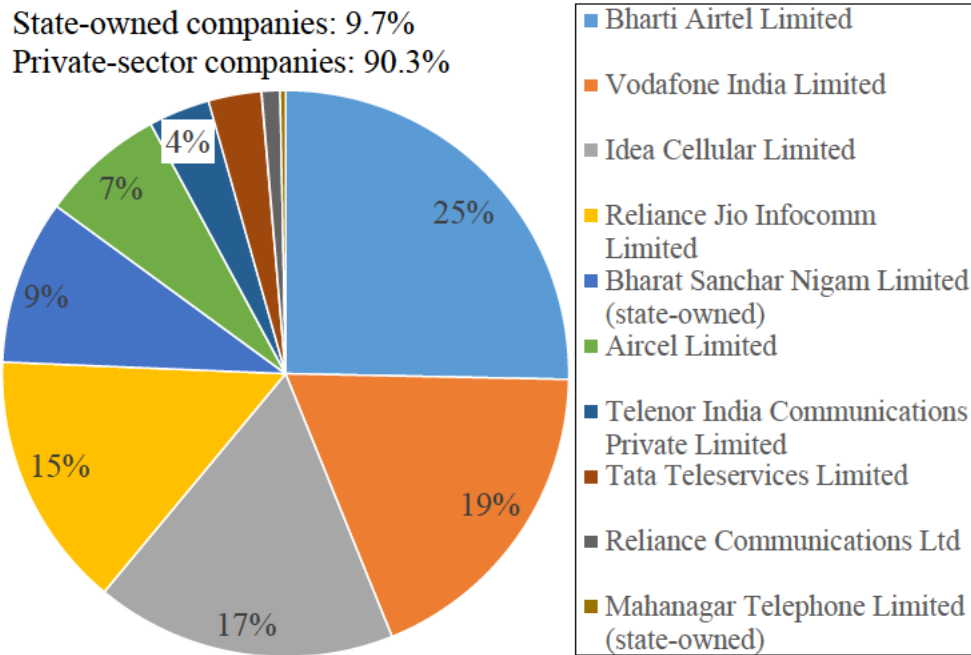
(C) Intensifying competition among IT-related companies, including local and foreign companies

In recent years, competition among IT-related companies including local and foreign companies has been intensifying.

For example, in the aforementioned e-commerce market, in which huge companies have dominant shares, competition is escalating in such activities as making additional investments and acquiring companies. This situation applies not only to huge companies but also to e-commerce business operators providing specialized services, such as travel- and health-related services, and car hailing, and companies providing payment services that were mentioned earlier.¹⁷⁰

Concerning mobile phones, for which digitization is being promoted, there are 10 mobile phone carriers (two state-owned companies and eight private-sector companies), indicating the presence of intense competition in the Indian communication industry.¹⁷¹ Due to price competition by companies trying to capture customers, the communication industry has a low-profit structure¹⁷² (Figure I-2-3-2-22).

Figure I-2-3-2-22 Dominant shares of mobile phone carriers in the total number of users



Source: Telecom Regulatory Authority of India, as of January 31, 2018.

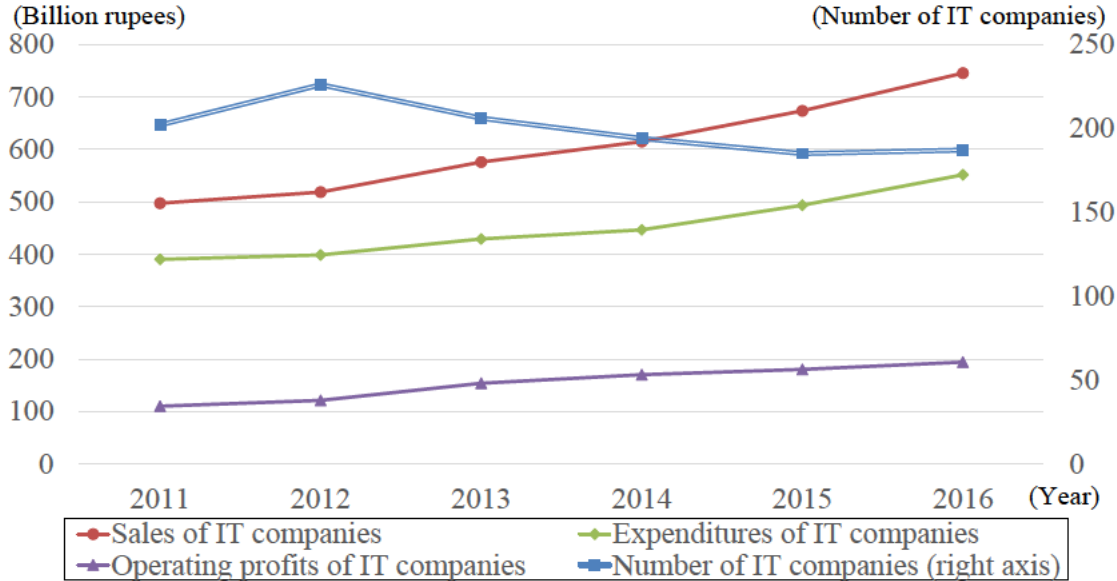
170 The launch of the “Startup India” initiative to support venture companies, including corporate tax deduction, by Prime Minister Modi in 2016 promoted an increase in the number of venture companies specialized in niche sectors. The abundance of IT engineers in India is also considered to be a background factor for the creation of many companies in the e-commerce sector.

171 The Telecom Regulatory Authority of India publishes “Access Service Provider-wise Market Share in term of Wireless Subscribers” every month (<http://tra.gov.in/release-publication/reports/telecom-subscriptions-reports>).

172 It is said that the communication industry’s low-profit structure has become worse than before because of entry by new business operators in recent years. For example, in response to steep reduction of communication fees, including free-of-charge provision of voice communication, by a new business operator, other companies have been forced to reduce their fees in order to retain customers.

In recent years, the number IT companies has been trending downward, while the profit level has been increasing slightly as a trend. These trends indicate that IT companies are implementing business restructuring measures, including M&As, in order to correct their low-profit structure. In addition, the shakeout of companies is expected to continue in the future amid a glut of companies in the market (Figure I-2-3-2-23).

Figure I-2-3-2-23 Changes in the number, sales, expenditures and operating profits of IT companies in India



Notes: This figure is based on the values reported by the companies as of December in the target years.
 Source: Reserve Bank of India, CEIC Database.