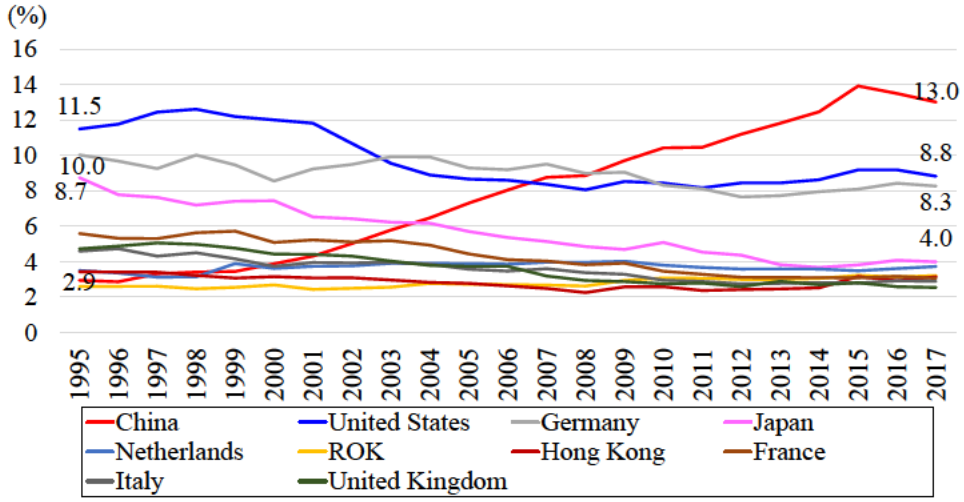
Section 3 Trends of China's External trade and investment

1. Trade

(1) Overview of trade between China and the rest of the world

China became one of the two largest trading countries in the world, along with the United States, over a period of around 15 years after its accession to the WTO in 2001. In terms of share in the global total value of exports by country, only China has continued to increase its share, while all major advanced economies' shares declined. China overtook Japan in 2004, the United States in 2007 and Germany in 2009, and it was the largest exporting country in 2017 with a share of 13.0%. Around the year 2000, the United States had the world's largest share, around 12%, but thereafter, the U.S. share gradually declined and it was 8.8% in 2017, the second largest, after China's share (Figure II-3-3-1-1).

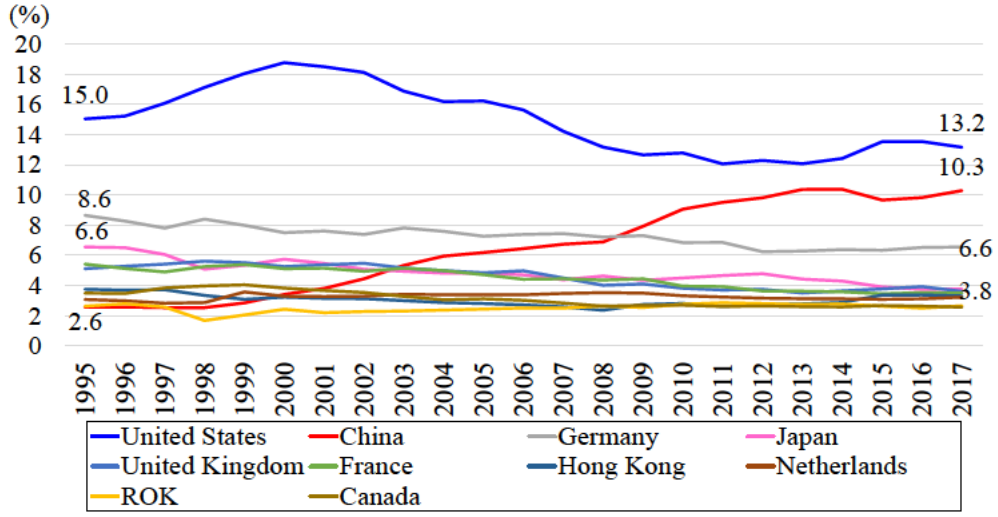
Figure II-3-3-1-1 Shares of the global total values of exports by major country



Notes: This figure shows shares of the top 10 countries in the world total value of exports as of 2016.
Source: Direction of Trade Statistics (DOTS) (IMF).

Next, in terms of share in the global total value of imports by country, China's share increased significantly while major advanced economies' shares declined, as in the case of exports. China overtook Japan in 2003 and Germany in 2009, and it was the second largest importing country in 2017 with a share of 10.3%, after the United States. This indicates that China has gained a strong influence over global trade as a production base for the world and as the second largest market after the United States. In this respect, India, which has the potential to become a huge market, as China has done, in terms of population size, has yet to have a presence as large as that of China in terms of trade. India's shares in global exports and imports remain low, 1.7% and 2.4% (2017), respectively (Figure II-3-3-1-2).

Figure II-3-3-1-2 Shares of the global total value of imports by major country



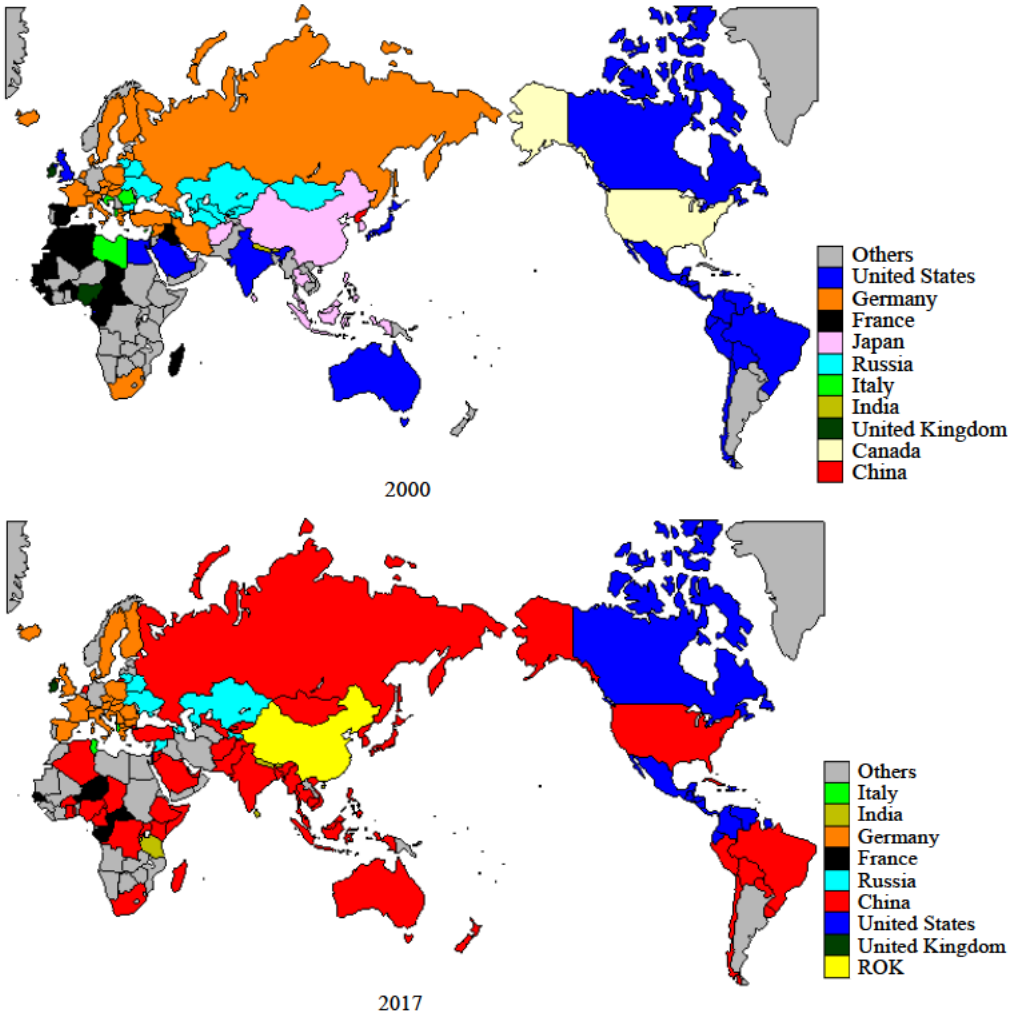
Notes: This figure shows shares of the top 10 countries in the global total value of imports as of 2016.
Source: DOTS (IMF).

Next, we will look at the growing presence of China as a trading partner for around the world.

First, looking at the largest import partner country of each country, a geographical neighboring country was the largest import partner country in many cases in 2000. For European countries except for some, including the United Kingdom, Germany was the largest import source country, while for Asian countries, Japan was the largest import source country. For North, Central and South American countries, the United States was the largest import source country. However, in 2017, China was the largest import source country for many countries excluding Canada, Mexico and some countries in Central and South America and European countries. Countries for which China was the largest import source country accounted for around 30% of all countries and regions (57 countries/regions out of the total of 189 countries/regions[133]). China's share as an import source country for other countries was by far the largest in the world compared with the share of around 15% (28 countries/regions) for the United States, the second largest import source country, and the share of 13% (24 countries/regions) for Germany, the third largest. For Canada, Mexico and European countries, the main industrialized country in their regions--the United States in the case of Canada and Mexico and Germany in the case of European countries--were the largest import source countries. However, China was the largest import source country for the United States and the second largest for Germany, after the Netherlands (Figure II-3-3-1-3).

133 Countries and regions for which data for 2017 were available from IMF DOTS (as of April 2018).

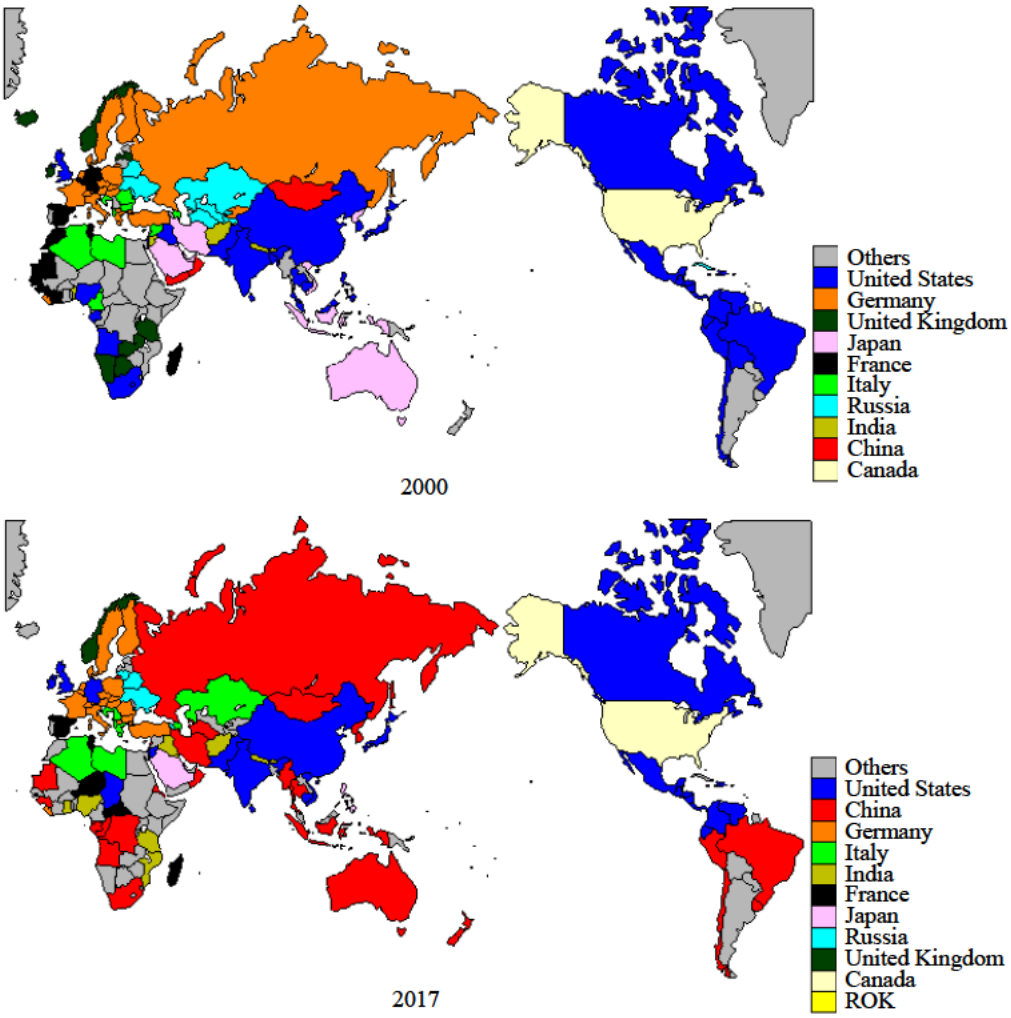
Figure II-3-3-1-3 Changes in countries as the largest import partner worldwide between 2000 and 2017



Source: DOTS (IMF).

As to which country was the largest export destination country for each country in 2000, the United States, Germany and Japan had large shares as export destination countries. However, in 2017, China replaced Japan as the largest export destination country for ASEAN and Australia. In addition, China replaced the United States as the largest export destination country for many countries in Africa and South America. China was the largest export destination country for around 16% of all countries/regions around the world (30 countries/regions out of the total of 189 countries/regions), accounting for the second largest share, after the United States, whose share was around 19% (35 countries/regions). China was followed by Germany, the third largest, with a share of around 12% (22 countries/regions) (Figure II-3-3-1-4).

Figure II-3-3-1-4 Changes in countries as the largest export partner worldwide between 2000 and 2017



Source: DOTS (IMF).

Next, we will examine specifically how China's share in other countries' overall imports and exports changed between 2000 and 2017.

First, we will look at changes in the share of exports to China in other economies' overall exports between 2000 and 2017. In the East Asia/Asia-Pacific region, China's share as an export destination economy was less than 10% for most economies in 2000. However, in 2017, its share exceeded 20% for Mongol and the ROK and rose from 6.3% to 19.0% for Japan. China's share as an export destination economy for the whole of the East Asia-Pacific region rose steeply, from 13.2% in 2000 to 31.7% in 2017, compared with increases in other regions. Other regions for which China's share as an export destination economy exceeded 10% are ASEAN (from 3.8% to 13.8%), Central and South America (from 1.0% to 10.2%), Russia/CIS (from 4.9% to 12.1%), Africa (from 2.3% to 11.9%), and the Middle East (from 6.7% to 10.6%). China's share was relatively low for North America (from 1.8% to 7.6%) and Europe (from 1.0% to 4.0%). For all regions, China's share as an export destination country rose between 2000 and 2017, but the rise was particularly steep for the East Asia-Pacific region, Turkmenistan, Myanmar, Lao PDR and Iran (Table II-3-3-1-5).

Table II-3-3-1-5 Changes in shares of exports to China in each partner economies' overall exports (changes between 2000 and 2017)

Share of exports to China	Region	2000	2017
50% or more	East Asia/ Oceania		DPRK, Mongolia, Hong Kong, Solomon Islands
	Russia/CIS		Turkmenistan
	Africa		South Sudan, Eritrea, Angola, Republic of Congo
30% or more	East Asia/ Oceania	Mongolia, Hong Kong	Australia
	Southeast Asia		Myanmar
	Middle East		Oman
	Africa		Democratic Republic of the Congo, Gabon, Mauritania, Guinea
20% or more	East Asia/ Oceania		ROK, New Caledonia, New Zealand
	Southeast Asia		Lao PDR
	Middle East	Oman, Yemen	Iran, Iraq
	Africa	Equatorial Guinea, Angola	Equatorial Guinea
	Latin America		Chile, Peru, Brazil
10% or more	East Asia/ Oceania	ROK, Macau, Solomon Islands	Japan, Macau, Papua New Guinea
	Southeast Asia	Viet Nam	Viet Nam, Singapore, Malaysia, Indonesia, Thailand, Philippines
	Russia/CIS		Uzbekistan, Tajikistan, Kazakhstan, Russia
	Middle East	Saudi Arabia	Kuwait, Saudi Arabia, Qatar, Lebanon
	Africa		Zambia, Chad, Central Africa, Cameroon, Ghana
	Latin America		Uruguay, Venezuela

Less than 10%	East Asia/ Oceania	Japan, DPRK, Australia, New Zealand, Papua New Guinea, etc.	
	Southeast Asia	Indonesia, Thailand, Singapore, Brunei Darussalam, Myanmar, Malaysia, Lao PDR, Cambodia, Philippines	Cambodia, Brunei Darussalam
	South Asia	India, Pakistan, Bangladesh, Sri Lanka	India, Pakistan, Bangladesh, Sri Lanka
	Russia/CIS	Kyrgyzstan, Kazakhstan, Russia, Uzbekistan, Tajikistan, etc.	Kyrgyzstan, Armenia, etc.
	Middle East	Iran, Iraq, Qatar, UAE, Israel, etc.	Syria, Israel, UAE, Turkey, etc.
	Africa	South Africa, Egypt, Nigeria, Algeria, etc.	Egypt, Ethiopia, Tanzania, South Africa, Nigeria, etc.
	North America	United States, Canada	United States, Canada
	Latin America	Peru, Chile, Brazil, Argentina, Mexico, etc.	Argentina, Bolivia, Colombia, Mexico etc.
	Europe	Switzerland, United Kingdom, Germany, France, Ireland, Montenegro, Serbia, Poland, Hungary, Belarus, Czech Republic, Bosnia and Herzegovina, Romania, Estonia, Slovakia, Bulgaria, etc.	Switzerland, United Kingdom, Germany, France, Ireland, Montenegro, Serbia, Poland, Hungary, Belarus, Czech Republic, Bosnia and Herzegovina, Romania, Estonia, Slovakia, Bulgaria, etc.

Notes: The economies in red are those covered by the 63 economies as targets of the One Belt, One Road initiative shown in Annex 11 of the FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment. (This is the same note as that in Table II-3-3-1-6.)

Source: DOTS (IMF), *Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2016).

A look at changes in China's share in other economies' overall imports between 2000 and 2017 shows that in the East Asia-Pacific region, the number of economies for which China's share rose increased significantly. China's share was higher than 30% for four economies in 2017, up from two in 2000, was higher than 20% for five economies, up from one, and was higher than 10% for four economies, up from two. For the whole of the region, China's share as an import source economy rose steeply, from 19.8% to 29.1%.

In the ASEAN region, while China's share was lower than 10% in all economies in 2000, it was higher than 20% in five economies and higher than 10% in all economies in 2017, with China's share for the whole of this region rising steeply, from 5.0% to 19.5%. China's share as an import source

economy increased for all other regions over the 17-year period, including North America (from 7.0% to 20.1%), Russia/CIS (from 1.7% to 20.0%), South Asia (from 3.9% to 17.8%), Central and South America (from 2.3% to 17.7%), Africa (from 3.0% to 14.1%), the Middle East (from 3.8% to 11.1%) and Europe (from 2.7% to 7.3%) (Table II-3-3-1-6).

Table II-3-3-1-6 Changes in shares of imports from China in each partner economies' overall imports (changes between 2000 and 2017)

Share of imports from China	Region	2000	2017
50% or more	East Asia/ Oceania		DPRK
30% or more	East Asia/ Oceania	Hong Kong, Macau	Hong Kong, Macau, Mongolia
	Southeast Asia		Cambodia, Myanmar
	Russia/CIS		Kyrgyzstan
	Latin America		Paraguay
20% or more	East Asia/ Oceania	DPRK	Japan, ROK, Australia, Marshall Islands
	Southeast Asia		Viet Nam, East Timor, Lao PDR, Indonesia
	South Asia		Pakistan, Bangladesh
	Russia/CIS		Uzbekistan, Russia
	Middle East		Iraq, Afghanistan
	Africa		Togo, Liberia, Ethiopia, Kenya, Rwanda
	North America		United States
	Latin America		Chile, Peru, Cuba, Bolivia, Uruguay
	Europe		Russia
10% or more	East Asia/ Oceania	Mongolia, Japan	New Zealand, Papua New Guinea, Solomon Islands, etc.
	Southeast Asia		Thailand, Malaysia, Philippines, Singapore, Brunei Darussalam
	South Asia		Sri Lanka, India, Nepal
	Russia/CIS		Kazakhstan, Armenia, Tajikistan

10% or more	Middle East	Iraq, Afghanistan	Kuwait, Saudi Arabia, Jordan, Libya, Iran, Yemen, Lebanon, Qatar, Turkey
	Africa	Rwanda	Madagascar, Democratic Republic of the Congo, Tanzania, Nigeria, Uganda, South Africa, Somalia, Algeria, Cameroon, Ghana, Liberia, Angola, etc.
	North America		Canada
	Latin America		Colombia, Argentina, Mexico, Brazil, Venezuela, Haiti, etc.
	Europe		Netherlands, Ukraine, Norway
Less than 10%	East Asia/ Oceania	ROK	
	Southeast Asia	Myanmar, Viet Nam, etc.	
	South Asia	India, Pakistan, etc.	
	Russia/CIS	Kazakhstan, Uzbekistan, Turkmenistan, etc.	Azerbaijan, Georgia, Turkmenistan
	Middle East	Syria, Bahrain, UAE, Oman	Syria, Bahrain, Israel, UAE, Oman, etc.
	Africa	South Africa, Egypt, Tunisia, Morocco, etc.	Tunisia, Egypt, Morocco, Mauritania, Central Africa, Zambia, etc.
	Latin America	Brazil, Argentina, etc.	Panama, Jamaica, El Salvador, etc.
	Europe	Switzerland, United Kingdom, Germany, France, Ireland, Montenegro, Serbia, Poland, Hungary, Belarus, Czech Republic, Bosnia and Herzegovina, Romania, Estonia, Slovakia, Bulgaria, etc.	Switzerland, United Kingdom, Germany, France, Ireland, Montenegro, Serbia, Poland, Hungary, Belarus, Czech Republic, Bosnia and Herzegovina, Romania, Estonia, Slovakia, Bulgaria, etc.

Source: DOTS (IMF), *Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2016).

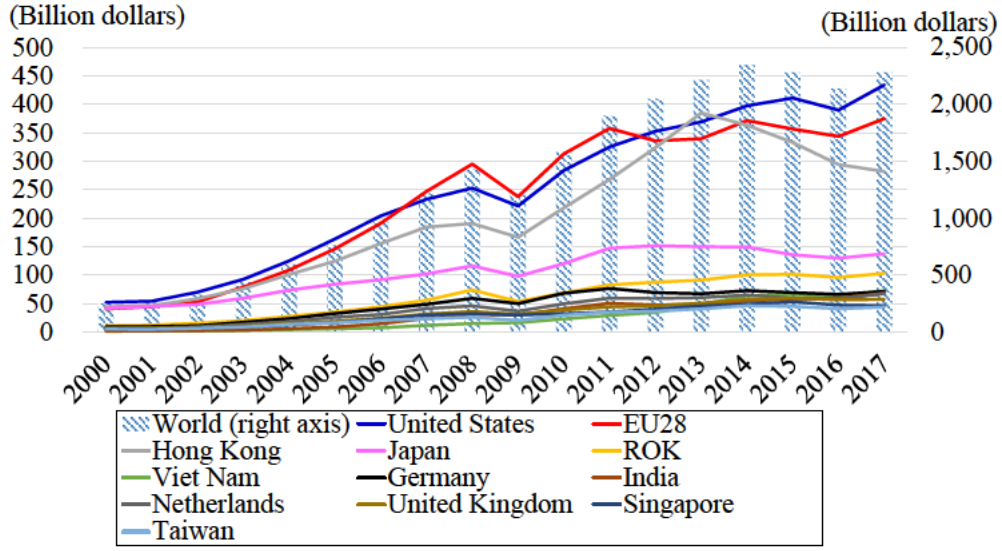
The increase in China's share as an import source economy for each region tends to be larger than the increase in its share as an export destination economy.

Next, we will look at changes in the top 10 trading partner countries/regions for China.

First, looking at the top 10 export destination countries/regions for China, the United States was the largest export destination in 2017, followed by the EU28, Hong Kong, Japan, and the ROK. These five

countries/regions are the same ones that constituted the top 5 in 2000 (Figure II-3-3-1-7). On the other hand, the share of exports to the United States in the total value of China's exports started to decline in 2006, from more than 20%, but it started to rise in 2015 and was 19.0% in 2017. The share of exports to the EU28, which has been trending downward since 2011, was 16.4% in 2017. The share of exports to the top 10 export destination countries/regions in the total value of China's exports declined from 80.7% in 2000 to 64.5% in 2017, indicating that export destinations have become more diverse. In 2017, Viet Nam and India were among the top 10 export destinations (Table II-3-3-1-8).

Figure II-3-3-1-7 Changes in China's exports to major partners



Source: DOTS (IMF).

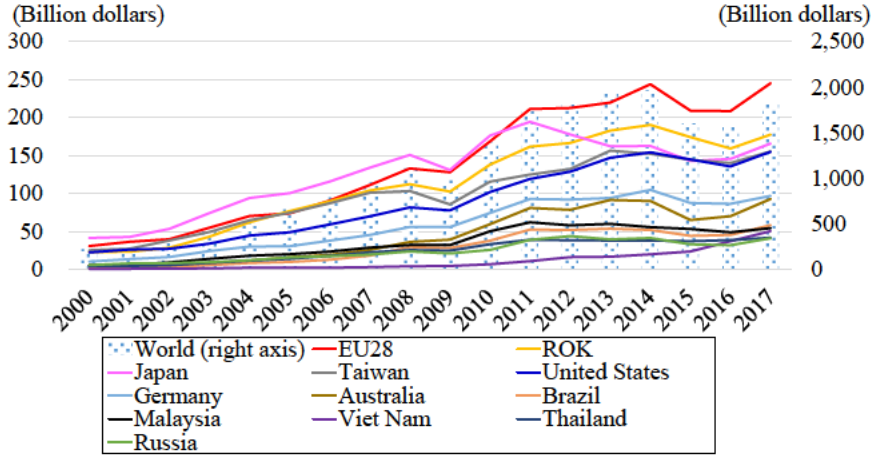
Table II-3-3-1-8 Changes in shares of the top 10 China's export destination countries/regions

2000			2017	
Ranking	Partner country/region	Exports	Partner country/region	Exports
1	United States	20.9%	United States	19.0%
2	Hong Kong	17.9%	EU28	16.4%
3	Japan	16.7%	Hong Kong	12.4%
4	EU28	16.3%	Japan	6.0%
5	ROK	4.5%	ROK	4.5%
6	Germany	3.7%	Viet Nam	3.2%
7	Netherlands	2.7%	Germany	3.1%
8	United Kingdom	2.5%	India	3.0%
9	Singapore	2.3%	Netherlands	3.0%
10	Taiwan	2.0%	United Kingdom	2.5%

Source: DOTS (IMF).

Looking at the top 10 import source countries/regions for China, the EU was the largest import source region, followed by the ROK and Japan. The top five countries/regions--the EU, the ROK, Japan, Taiwan and the United States--remained unchanged between 2000 and 2017 (Figure II-3-3-1-9). While the shares of the United States and the EU as import source countries increased, Japan's share fell steeply, from 18.4% in 2000 to 9.0% in 2017 (Table II-3-3-1-10). The share of imports from the top 10 import source countries/regions[134] in the total value of China's imports fell slightly, from 64.1% in 2000 to 60.3% in 2017.

Figure II-3-3-1-9 Changes in China's imports from major partners



Source: DOTS (IMF).

Table II-3-3-1-10 Changes in shares of the top 10 China's import source countries/regions

	2000		2017	
	Partner country/region	Imports	Partner country/region	Imports
1	Japan	18.4%	EU28	13.4%
2	EU28	11.3%	ROK	9.7%
3	Taiwan	10.3%	Japan	9.0%
4	ROK	9.9%	Taiwan	8.5%
5	United States	4.6%	Unites States	8.5%
6	Germany	4.2%	Germany	5.1%
7	Hong Kong	2.6%	Australia	3.2%
8	Russia	2.4%	Brazil	3.0%
9	Malaysia	2.3%	Malaysia	2.8%
10	Australia	2.2%	Viet Nam	2.3%

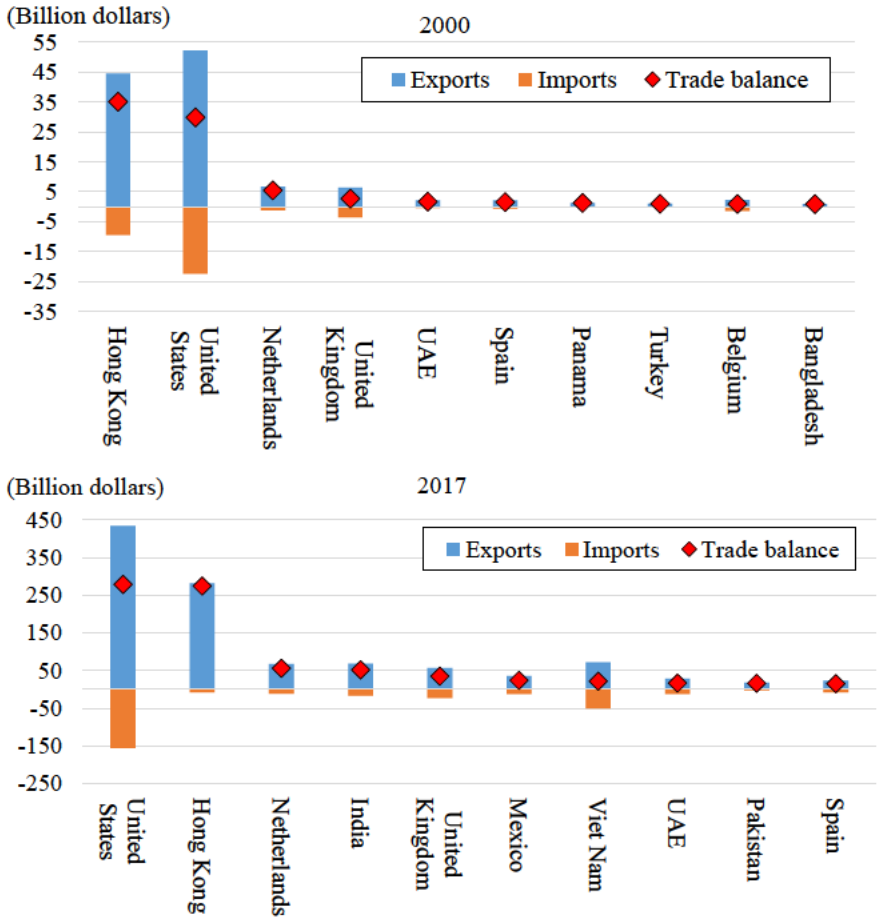
Source: DOTS (IMF).

134 In order to avoid double counting, the value of trade by the EU member countries among the top 10 countries/regions in the figure, namely the United Kingdom, Germany and the Netherlands, were excluded from the calculation of the shares.

Next, based on Chinese trade statistics, we will look at changes in the top 10 trading surplus and deficit partner countries/regions for China (trade surplus partners are countries/regions whose trade with China generates a surplus on the Chinese side and trade deficit partners are countries/regions whose trade with China generates a deficit on the Chinese side) between 2000 and 2017.

The top three trading surplus partners--Hong Kong, the United States and the Netherlands--remained unchanged over this period. On the other hand, in 2017, India, Viet Nam, the UAE and Pakistan were among the top 10, indicating that China is actively exporting products to emerging markets (Figure II-3-3-1-11). Regarding items traded between China and the top three partners, the main items of export to the United States changed from footwear and toys to industrial products, including personal computers, etc. (HS8471) with a share of 10.1% and mobile phones (HS8517) with a share of 10.7%. As for imports from the United States, agricultural products had a large share, and the share also increased for industrial products, including aircraft and spacecraft (HS8802) with a share of 9.3%, automobiles (HS8703) with a share of 8.5%, and semiconductors (HS8542) with a share of 7.0%.

Figure II-3-3-1-11 Changes in the top 10 China's trading surplus partner countries/regions



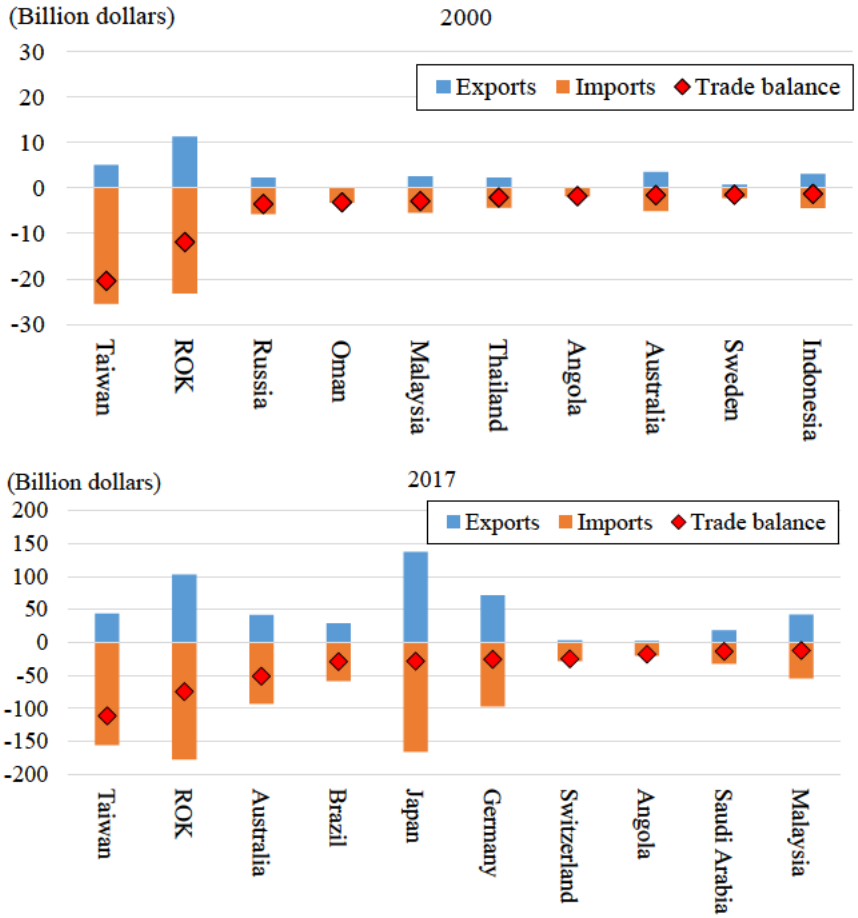
Notes: The figures show trade balance of China with the partner countries/regions based on the trade statistics of China.

Source: DOTS (IMF).

While the top two trading deficit partners--Taiwan and the ROK--remained unchanged,

industrialized countries such as Japan, Germany and Switzerland were among the top 10 in 2017. This is considered to be evidence that China has started to import capital goods, consumer goods and components with higher value added from advanced economies, indicating that the Chinese trade structure has changed (Figure II-3-3-1-12).

Figure II-3-3-1-12 Changes in the top 10 China's trading deficit partner countries/regions



Notes: The figures show trade balance of China with the partner countries/regions based on the trade statistics of China.

Source: DOTS (IMF).

Looking at items of trade (four-digit HS codes) with the top three trade deficit partners for China, semiconductors (HS8542) had a share of 19.7% in Chinese exports to Taiwan. Semiconductors (HS8542) also had the largest share, 51.9%, in Chinese imports from Taiwan, indicating that progress has been made in the division of work between the two countries in the semiconductor industry.

Previously, primary resources, such as agricultural products and coal, were the main items of export from China to the ROK, but in 2017, industrial products requiring technological capability were the main items of export, including mobile phones (HS8517) with a share of 14.3% and semiconductors (HS8542) with a share of 8.8%. Meanwhile, the main items of imports from the ROK in 2017 were semiconductors (HS8542) with a share of 36.9% and liquid crystal devices (HS9013) with a share of 5.7%. These data suggest that a supply chain has been established across the two countries in the electric

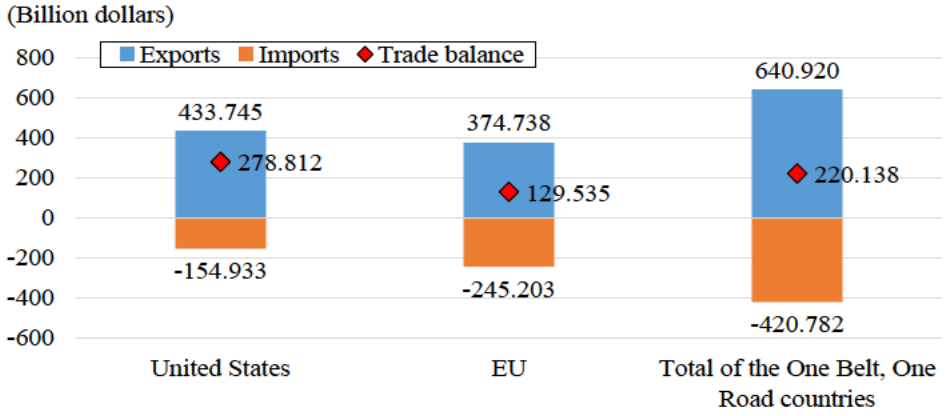
equipment industry as well.

In 2017, in trade with Australia and Brazil, ranked No. 3 and No. 4, respectively, the share of resources was large in China's imports. Iron ore, etc. (HS2601) accounted for 53.8% of imports from Australia and 29.7% of imports from Brazil. Crude oil (HS2709) accounted for 97.2% of imports from Angola and 57.6% of imports from Russia. In trade with Switzerland, watches, etc. (HS9102) accounted for the largest share, 14.4%, of imports, indicating the development of industry in China and an increase in ordinary people's consumption capacity.

Next, we will look at China's trade relationships with countries involved in the One Belt, One Road initiative (One Belt, One Road countries) that is promoted by China.[135] Of the top 10 among the One Belt, One Road countries in terms of the value of exports from China, six are ASEAN member countries (Viet Nam, Singapore, Malaysia, Thailand, Indonesia and the Philippines). The other four are India, Russia, the UAE and Iran. Of the top 10 in terms of the value of imports from China, six are also ASEAN countries, and the other four are Russia, Saudi Arabia, Iran and India, indicating that among the One Belt, One Road countries, ASEAN members have particularly strong relationships with China.

The value of trade with the One Belt, One Road countries accounted for 28.1% of the total value of China's exports in 2017 and 24.7% of the total value of imports. In trade with those countries, China had a combined surplus of 220.14 billion dollars, larger than its surplus of 129.54 billion dollars with the EU and close to its surplus of 278.81 billion dollars with the United States (Figure II-3-3-1-13).

Figure II-3-3-1-13 Comparison of trade values between China and U.S., EU, or the One Belt, One Road countries



Source: DOTS (IMF).

In trade individually with the One Belt, One Road countries, China recorded the largest trade surplus with India. While China's main items of export are mobile phones, etc., semiconductors and personal computers, the value of China's overall imports from India is much smaller than the value of its overall exports. China's main items of import are jewelry and refined copper. In trade with Viet Nam, with which China recorded the second largest trade surplus, the value of both imports and exports is large, unlike in trade with India. China's main items of export are mobile phones, etc., semiconductors and

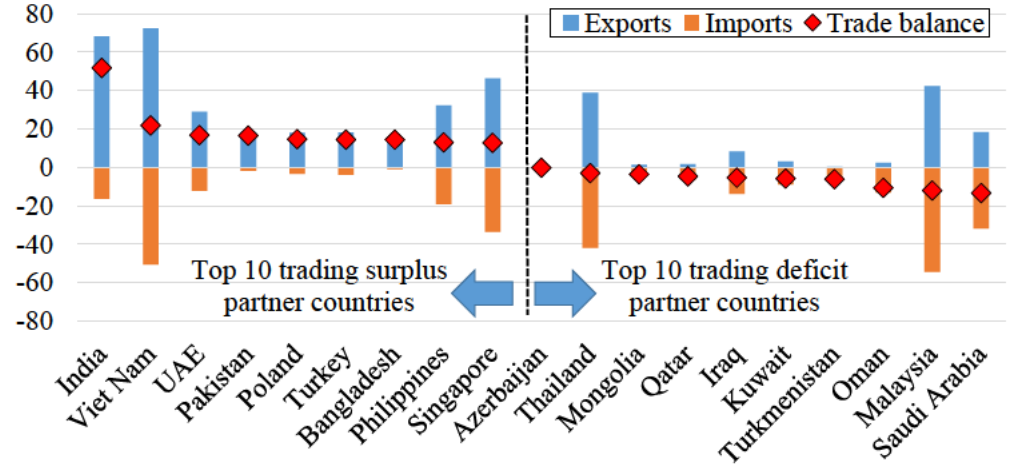
135 The countries/regions involved are 62 of the 63 countries/regions in Appendix Table 11 of the FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment for which trade data exist.

textile products, etc., while the main items of import are mobile phones, etc., semiconductors, components of television sets, and cotton yarn. This suggests that there is a division of work between the two countries with respect to electrical and textile products.

Meanwhile, China recorded the largest trade deficit with Saudi Arabia. China's main item of import is crude oil, while the main items of export are mobile phones, etc., air conditioners, and textile products. Another notable point about China's trade deficit partners among the One Belt, One Road countries is that many of them are resource-rich countries from which China mainly imports crude oil and mineral resources (Figure II-3-3-1-14).

Figure II-3-3-1-14 Trade balance between China and the One Belt, One Road countries

(Billion dollars)



Source: DOTS (IMF).

Next, we will provide an overview of China's main items of export and look at the export competitiveness of the individual items.

First, China's main items of export are electrical equipment (telephones, integrated circuits, and television sets/monitors), general machinery (automated data processing machinery, office equipment components, and printers), furniture, clothing, and precision machinery (liquid crystal devices, medical equipment and automated alignment equipment), Although many of those items are machinery products, light industry products are also included among the main items of export (Figure II-3-3-1-15).

Table II-3-3-1-15 China's exports of main items and major destination economies (2017)

(Unit: Billion dollars; %)

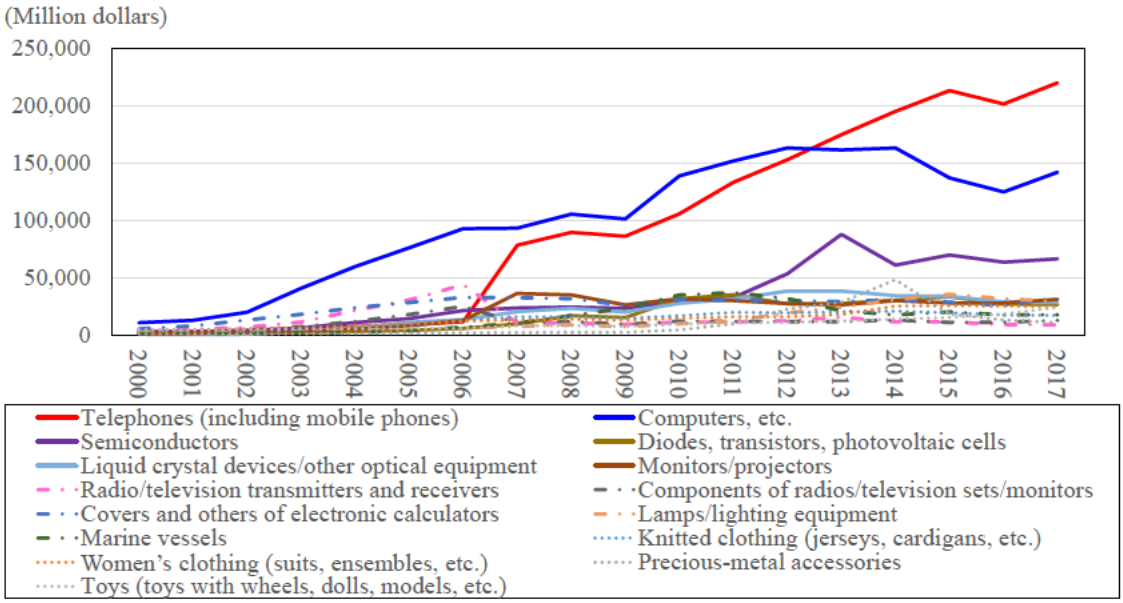
	Export values	Composition ratios	Major destination economies (export value: billion dollars)
All product items	2,279	100.0	U.S. (431.8), Hong Kong (281.0), Japan (137.1)
Electric appliances	600	26.3	Hong Kong (142.4), U.S. (107.1), ROK (35.6)
Telephones (wireless, wired)	220	9.7	Hong Kong (53.7), U.S. (46.2), ROK (14.8)
Integrated circuits	67	2.9	Hong Kong (30.6), ROK (9.1), Taiwan (8.6)
Television sets, monitors	31	1.4	U.S. (10.4), Netherlands (2.8), Japan (1.8)
General machinery	383	16.8	U.S. (91.4), Hong Kong (43.6), Japan (22.4)
Automated data processing machinery	142	6.2	U.S. (44.5), Hong Kong (25.1), Netherlands (11.8)
Office equipment components	33	1.4	Hong Kong (9.9), U.S. (9.3), Mexico (1.6)
Printers	18	0.8	U.S. (4.0), Netherlands (2.4), Hong Kong (2.3)
Furniture	91	4.0	U.S. (29.7), Japan (4.7), U.K. (4.4)
Clothing (except knitted clothing)	74	3.2	U.S. (14.1), Japan (7.3), U.K. (4.1)
Clothing (knitted clothing)	72	3.2	U.S. (16.0), Japan (8.0), U.K. (4.0)
Plastics	71	3.1	U.S. (15.8), Hong Kong (4.4), Japan (4.3)
Precision instruments	71	3.1	Hong Kong (14.5), U.S. (9.7), Japan (4.6)
Liquid crystal devices	29	1.3	Hong Kong (8.1), Mexico (3.2), ROK (2.1)
Medical equipment	6	0.3	U.S. (1.4), Japan (0.5), Germany (0.4)
Automated alignment equipment	4	0.2	U.S. (1.0), Hong Kong (0.7), Japan (0.5)
Motor vehicles	67	3.0	U.S. (15.1), Japan (4.2), Iran (3.0)
Parts of motor vehicles	31	1.4	U.S. (10.1), Japan (3.0), Germany (1.6)
Passenger cars	7	0.3	Iran (2.0), U.S. (1.7), Mexico (0.6)
Motorcycles	7	0.3	U.S. (0.5), Mexico (0.4), Philippines (0.4)
Iron and steel products	58	2.5	U.S. (10.5), Japan (3.1), ROK (2.6)
Toys	56	2.4	U.S. (19.0), Netherlands (3.6), Japan (3.4)

Notes: This table shows the top 10 items with a two-digit HS code that are extracted in terms of export value. The categories of machinery are shown with a subdivisional, four-digit HS code.

Source: Global Trade Atlas.

Looking at changes in the value of exports by item on an four-digit HS code basis, the value of exports remained flat for light industry products and home electrical appliances, including television sets, while the value of exports of high technology products, including mobile phones and personal computers, rose steeply. This, coupled with China's growing share in global exports, which will be discussed later, indicates that China has grown as a global production base of high technology products (Figure II-3-3-1-16).

Figure II-3-3-1-16 Changes in top export items of China



Notes: This table shows 15 export items with a four-digit HS code under the Trade Statistics of Japan that have been ranked in the top 5 in annual average between 2000 and 2017, in which overlapping values are deducted.

Source: Global Trade Atlas.

On the other hand, China's main items of import are machinery products, including electrical equipment (integrated circuits), general machinery (automated data processing equipment, semiconductor manufacturing equipment and office equipment components) and precision machinery (liquid crystal devices), resources, such as mineral fuels and ores, and foods, such as soybeans (Figure II-3-3-1-17).

Looking at changes in the value of imports by item on a four-digit HS basis, the value of imports of integrated circuits grew at a faster pace than the value of imports of crude oil. Among other items, semiconductor devices, such as liquid crystal devices and diodes, were ranked among the top items of imports, together with iron ore, indicating that China is importing a large amount of components from abroad in order to manufacture high technology products (Figure II-3-3-1-18).

Next, we will examine how much presence China's major export items have in global exports by looking at changes in the country's share in overall global exports.

First, regarding light industry products, such as leather goods, footwear and clothing, China's global share has been rising since the beginning of the 2000s. Although the share has recently remained flat,

exports from China still account for around 40% of global exports. On the other hand, regarding general machinery and electrical equipment, for which China's share was low at the beginning of the 2000s, the share has risen since then. In 2016, China's share was around 20% for general machinery and around 30% for electrical equipment, indicating that China's export competitiveness increased significantly over a period of around 15 years after its accession to the WTO (Figure II-3-3-1-19).

Table II-3-3-1-17 Value of China's imports of main items and major source economies (2017)

(Unit: Billion dollars; %)

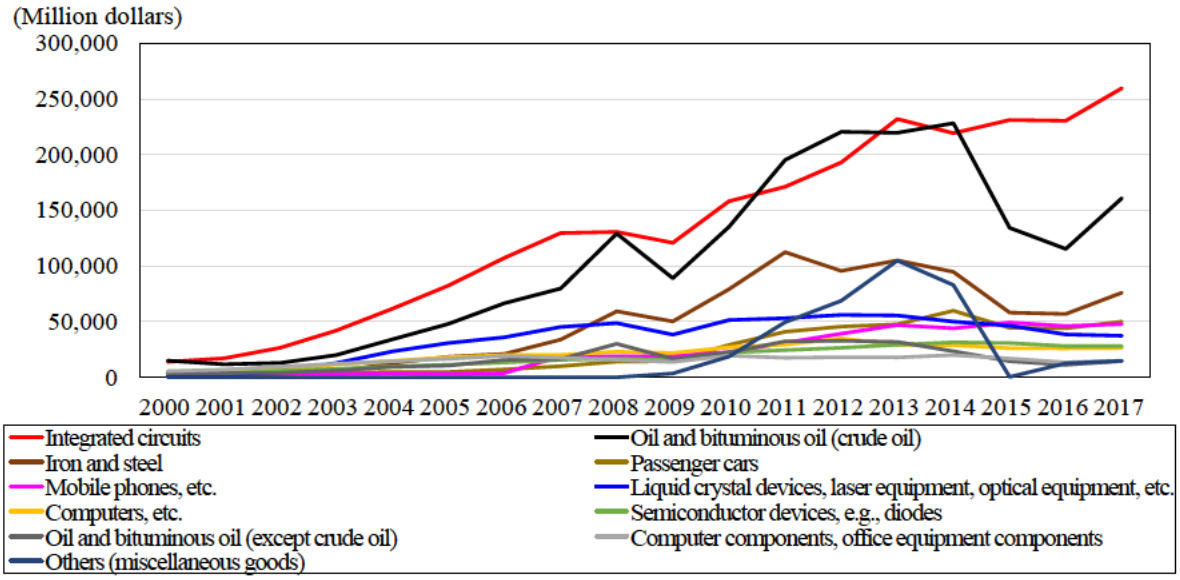
	Import value	Composition ratios	Major source economies (import value: billion dollars)
All product items	1,790	100.0	ROK. (177.3), Japan (165.0), Taiwan (155.2)
Electric appliances	457	25.5	Taiwan (96.7), China (89.0), ROK (87.0)
Integrated circuits	260	14.5	Taiwan (80.7), ROK (65.6), China (31.8)
Telephones (wireless, wired)	48	2.7	China (20.6), Viet Nam (9.6), ROK (6.0)
Semiconductor devices	28	1.6	China (8.1), Taiwan (4.8), Japan (4.2)
Mineral fuels	246	13.7	Russia (27.0), Saudi Arabia (21.4), Angola (19.9)
General machinery	170	9.5	Japan (34.5), Germany (21.1), China (21.1)
Automated data processing machinery	26	1.5	China (9.4), Thailand (4.5), Taiwan (2.3)
Semiconductor-manufacturing apparatus	20	1.1	Japan (6.9), ROK (3.7), U.S. (2.6)
Office equipment components	15	0.8	China (7.0), ROK (2.5), Taiwan (1.5)
Mineral ore	125	7.0	Australia (51.3), Brazil (18.1), Peru (10.0)
Precision instruments	97	5.4	Japan (15.8), Taiwan (15.1), ROK (15.0)
Liquid crystal devices	37	2.1	Taiwan (10.9), ROK (10.1), China (6.1)
Measurement and inspection equipment	11	0.6	Germany (1.9), Japan (1.8), U.S. (1.6)
Analytical equipment	8	0.4	U.S. (2.1), Japan (1.4), Germany (1.4)
Motor vehicles	79	4.4	Germany (21.7), Japan (16.5), U.S. (15.1)
Passenger cars	50	2.8	U.S. (12.8), Germany (12.7), Japan (9.1)
Parts of motor vehicles	27	1.5	Germany (8.7), Japan (7.2), ROK (2.8)
Parts of Motorcycle	1	0.0	Taiwan (0.2), Japan (0.1), Indonesia (0.1)
Plastics	69	3.9	ROK. (11.1), Japan (9.7), Taiwan (8.9)
Organic chemical products	56	3.1	ROK. (13.0), Japan (6.9), Taiwan (5.7)

Oil seed	45	2.5	Brazil (21.0), U.S. (14.6), Canada (3.1)
Soybeans	40	2.2	Brazil (21.0), U.S. (14.0), Argentina (2.7)
Copper	41	2.3	Chile (8.4), Japan (3.0), Zambia (2.8)

Notes: This table shows the top 10 items with a two-digit HS code that are extracted in terms of export value. The categories of machinery are shown with a subdivisional, four-digit HS code.
A case where the source country is China refers to re-import of the goods originating in China that have been exported to a third country.

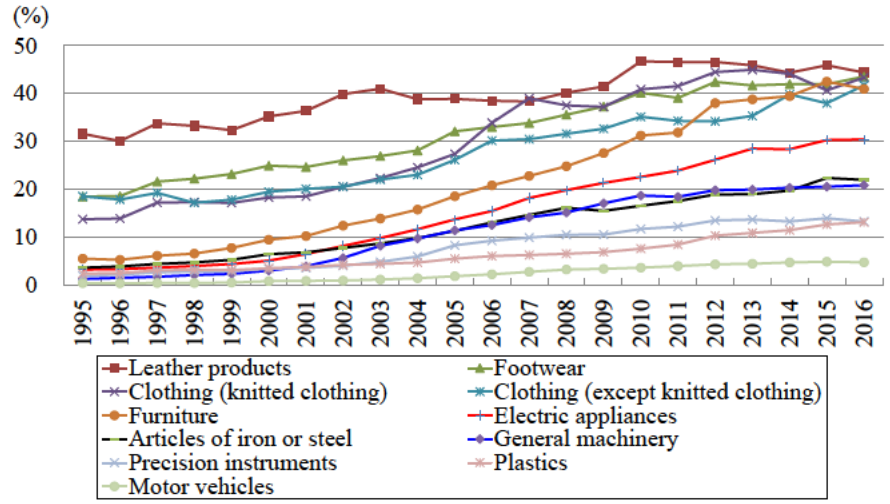
Source: Global Trade Atlas.

Figure II-3-3-1-18 Changes in top import items of China



Source: Global Trade Atlas.

Figure II-3-3-1-19 Share of China's major export items in global exports



Notes: This figure shows the top 10 items in 2016 in terms of export values retroactively.

Source: World Integrated Trade Solution (WITS) (World Bank), UN Comtrade Database (UN).

Looking at the competitiveness of China's main items of exports in terms of trade specialization coefficient[136], it is clear that the trade specialization coefficient has until now remained high for light industry products such as clothing and footwear since the beginning of the 2000s. However, these items' shares in the value of overall exports from China gradually declined. In exchange, the trade specialization coefficients for electrical equipment and general machinery, which were negative at the beginning of the 2000s, turned positive, and these items' shares in the value of overall exports value increased, an indication of increased competitiveness.

Over the same period, Japan's trade specialization coefficients for electrical equipment and general machinery and these items' shares in the value of overall exports gradually declined. In exchange, automobiles became the largest item of export for Japan (Figure II-3-3-1-20).

Next, we will look at changes in the trend of exports of items regarding which other countries view the excess production capacity in China as a problem (steel, aluminum,[137] solar battery cells,[138] chemicals, and ceramics[139]).

According to a comparison between China's and other major exporting countries' shares regarding these items in the global total value of exports, China's shares regarding steel, aluminum and solar battery cells were smaller than other major exporting countries' shares in 2000. But China's shares expanded rapidly, and the country has been mostly the largest exporting country since 2010. In particular, with respect to steel and aluminum, while the global total value of exports grew only moderately or declined, China's shares in the global total value of exports increased markedly (Figure II-3-3-1-21).

Regarding ceramics, while the global total value of exports grew, China's share has significantly expanded, indicating that Chinese products have swept through the market in this sector. With respect to barium carbonate, a chemical product subjected to the antidumping measures taken by the EU and the United States, China's share in the global total value of exports rose even between 2000 and 2005, when the global total value declined. In addition, in the case of polyethylene terephthalate with a high degree of polymerization, regarding which excess production in China has been pointed out, China's share in the global total value of exports increased significantly while the global total value declined slightly (Figure II-3-3-1-22).

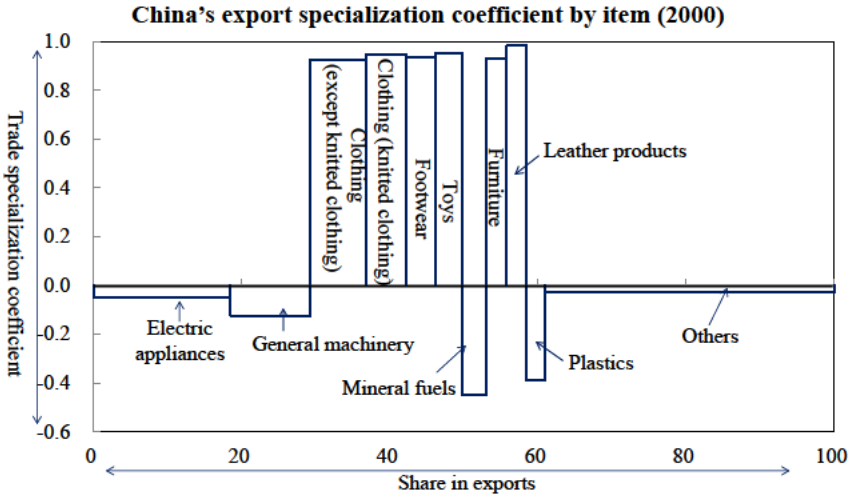
136 The trade specialization coefficient, which is an indicator of how much each industry is specialized in export, is expressed by the following equation: Trade specialization coefficient = value of trade surplus / total value of trade = (exports - imports) / (exports + imports).

137 The tabulation was made for products specified in the presidential proclamations (9704 and 9705) based on Section 232 of the Trade Expansion Act of 1962.

138 Safeguards based on Section 201 of the U.S. Trade Act.

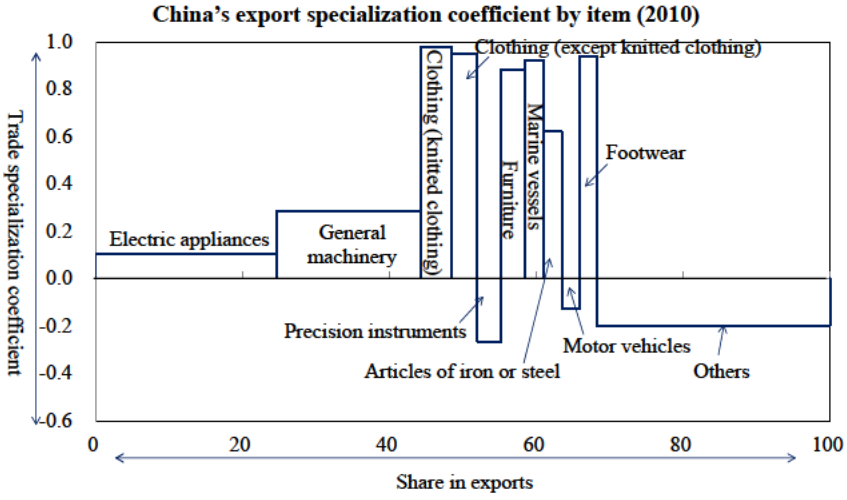
139 In a report titled "Commission Staff Working Document On Significant Distortions in the Economy of the People's Republic of China for the Purposes of Trade Defense Investigations," published in 2017, the European Commission also expressed concerns over excessive supply of chemicals and ceramics in addition to steel and aluminum.

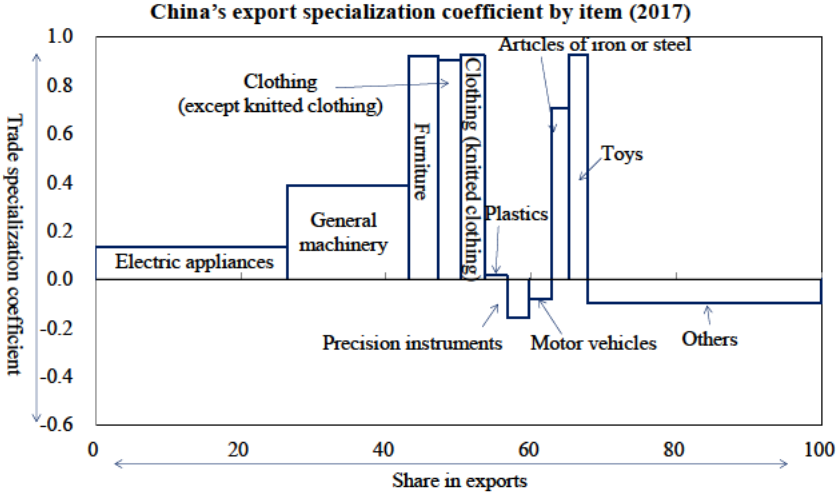
Figure II-3-3-1-20 Competitiveness of China's main export items (trade specialization coefficient)

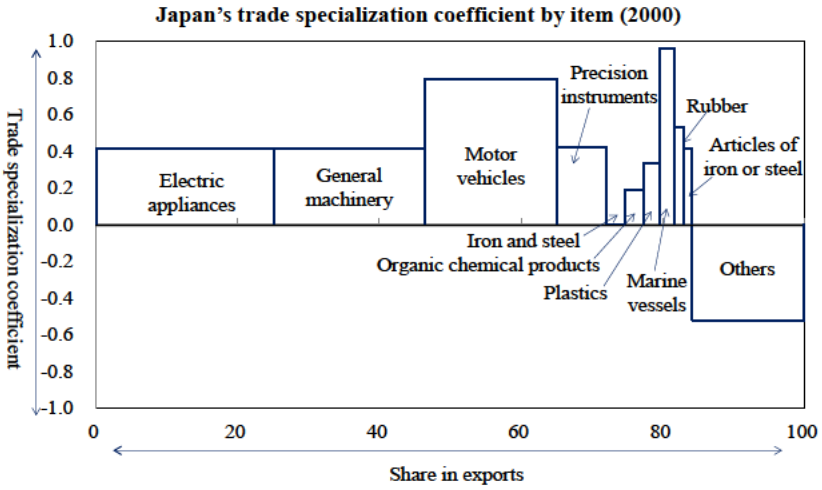


Notes: This figure shows the top 10 items with a two-digit HS code by category in terms of export values. The term "Others" refers to the total of miscellaneous items.

Source: Global Trade Atlas. (same as follows.)

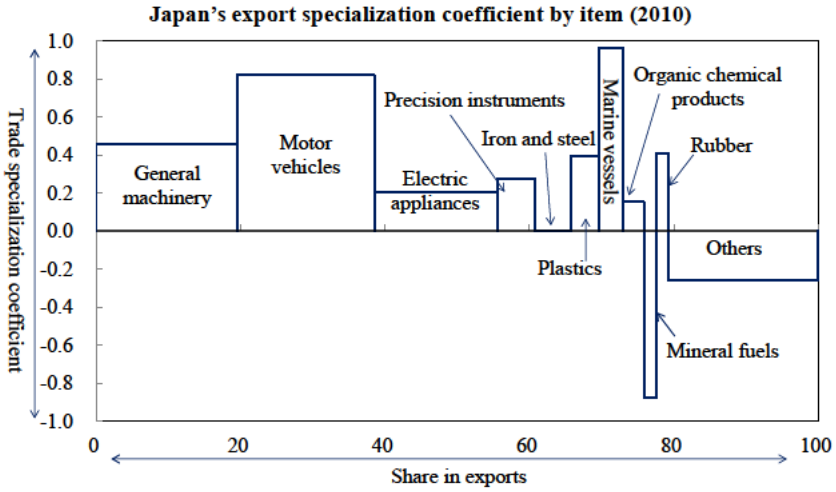






Notes: This figure shows the top 10 items with a two-digit HS code by category in terms of export values.
The term "Others" refers to the total of miscellaneous items.

Source: Global Trade Atlas. (same as follows.)



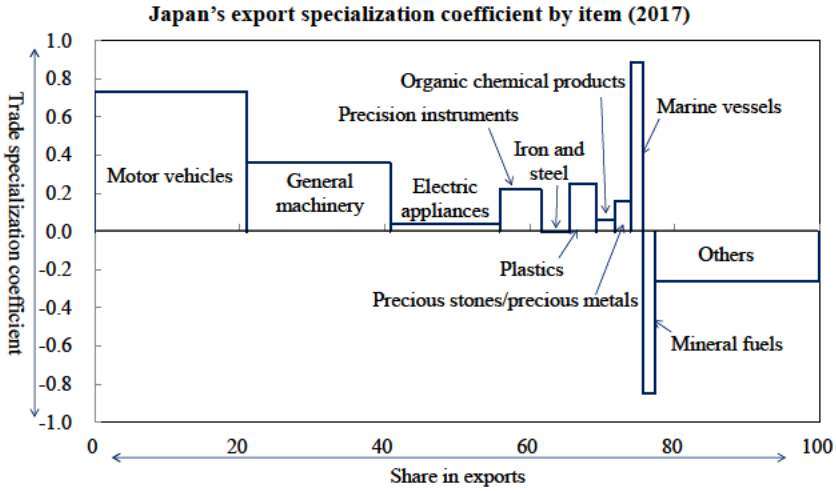
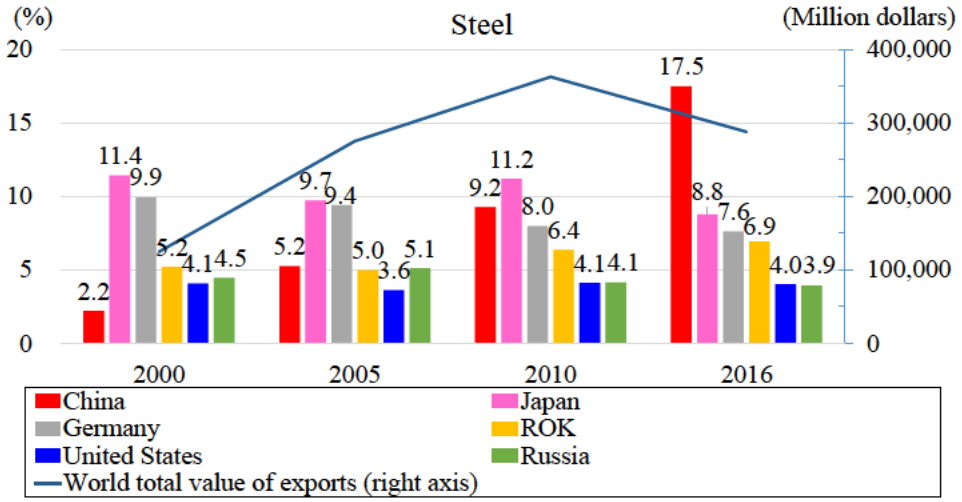
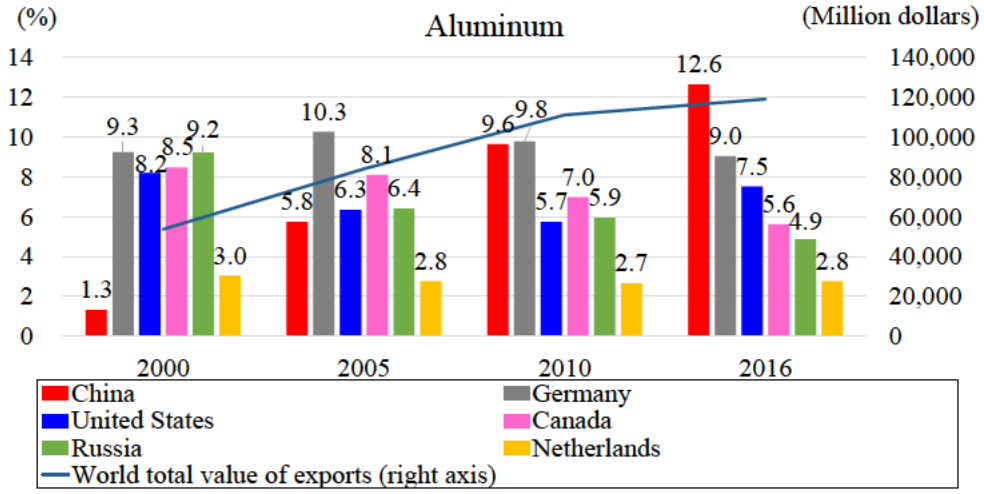
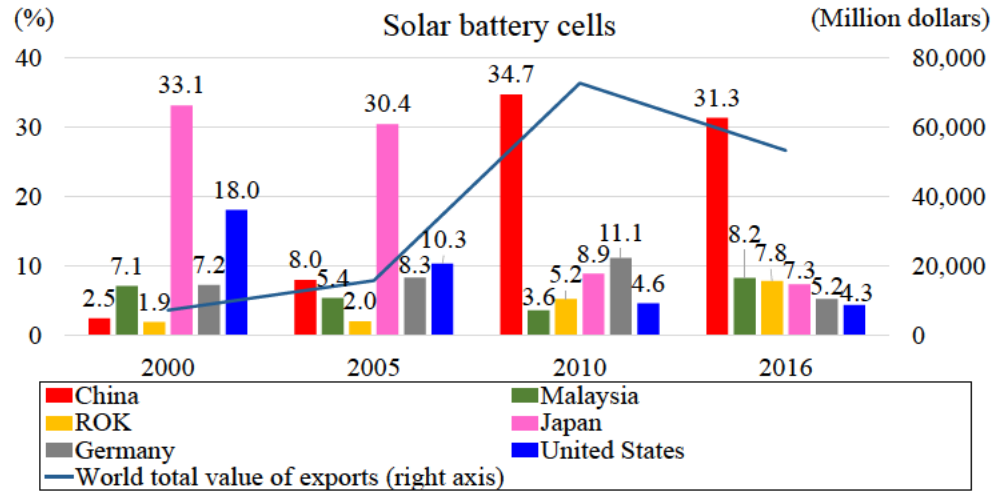


Figure II-3-3-1-21 Shares of major countries in exports of steel, aluminum and solar battery cells







Notes: These figures show the export value of China and the shares of the top five countries in the world total value of exports as of 2016 (excluding Hong Kong and Singapore).

Source: UN Comtrade Database (UN).

(2) China's trade from the viewpoint of value added

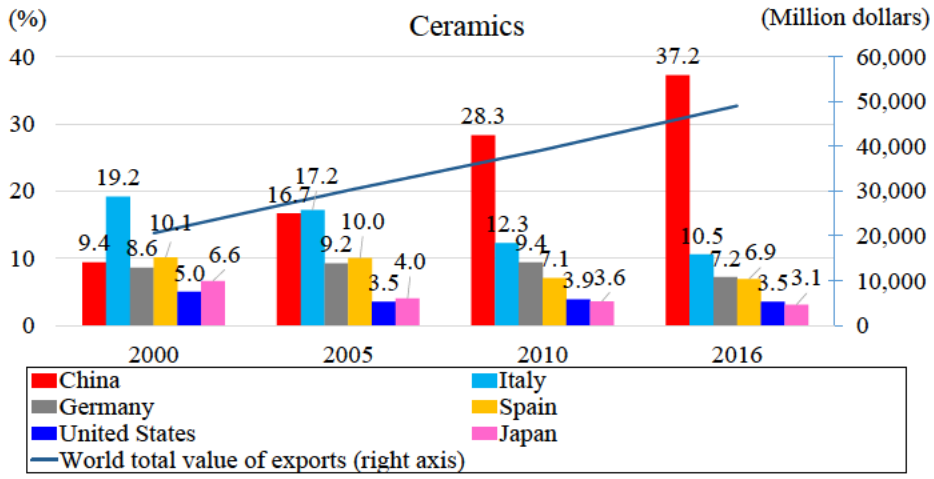
In the past, China procured machine tools, components and raw materials from around the world, assembled products with low-cost labor, and exported them, and it was said that foreign value added content accounted for a large share of China's exports. We will look at changes in the domestic value added content of China's exports based on data concerning trade in value added (OECD TiVA) calculated by the OECD on the basis of the international input-output table. While conventional trade statistics cover manufactured products (goods), trade in value added statistics represent an estimate of how much of the value added is created in which country during the processes leading to the completion of products and services.[140] Trade in value added statistics cover both goods and services, so in this white paper, figures covering both goods and services are used except in the portions in which analysis is conducted on an industry-by-industry basis.

China's trade in value added is growing rapidly compared with other countries' trade. China's exports of value added, which were equivalent to only 19.4% of U.S. exports of value added in 2000, increased to a level equivalent to 87.9% of U.S. exports in 2014, making China one of the two largest exporters of value added along with the United States (Figure II-3-3-1-23).

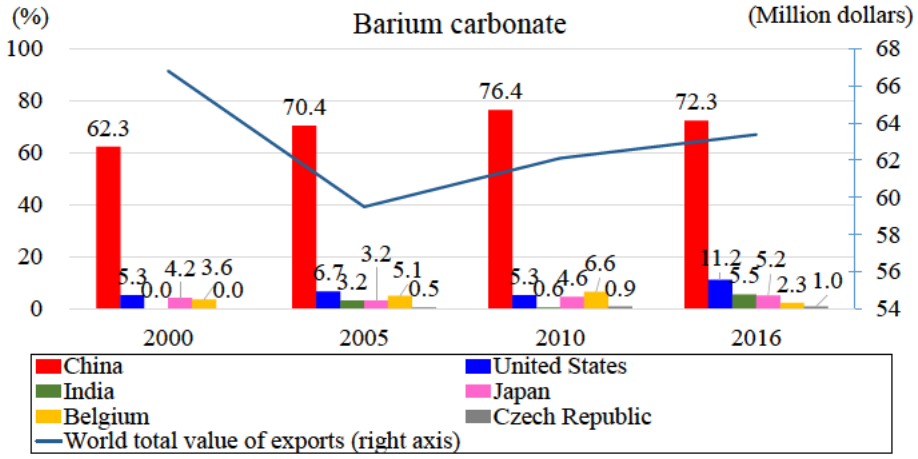
China has the second largest share in global exports of value added, after the United States, indicating that while major advanced economies' shares are gradually declining, China is increasing its trade in value added rapidly compared with those countries (Figure II-3-3-1-24).

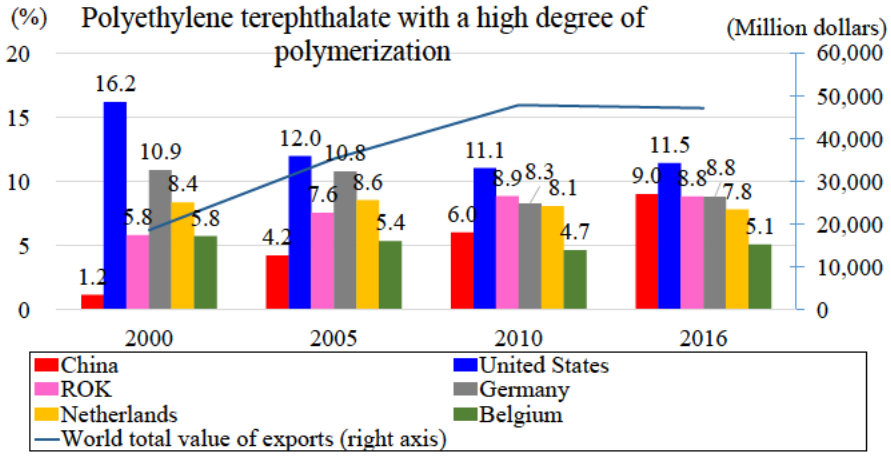
Next, looking at industry-by industry share in China's overall exports on a value added basis and a customs clearance basis, we can see that the textile industry has been replaced as the driver of China's exports by the electrical and optical equipment industries. In addition, exports by the Chinese electrical and optical equipment industries on a value added basis grew at a higher pace than on a customs clearance basis. The share of the domestic value added content also increased, indicating a shift to local procurement of parts and to products with higher value added (Figure II-3-3-1-25).

Figure II-3-3-1-22 Shares of major countries in exports of ceramics and chemicals



140 Inomata (2014) and Hirota (2017).

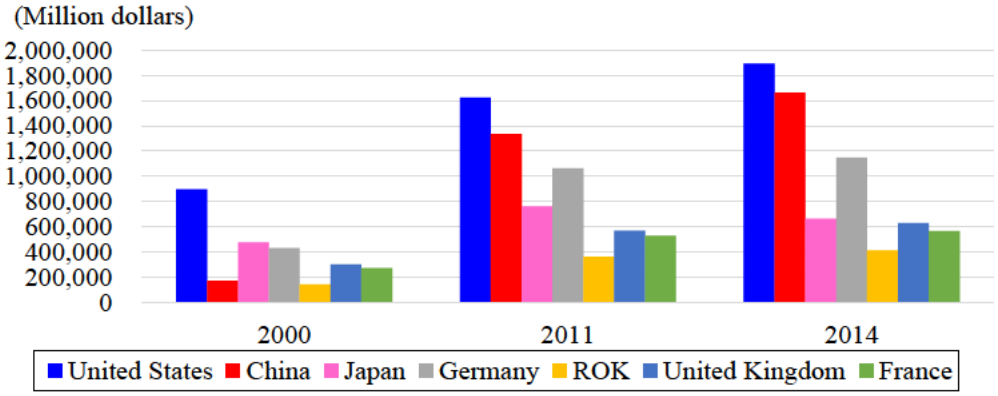




Notes: These figures show the export value of China and the shares of the top five countries in the world total value of exports as of 2016.

Source: UN Comtrade Database (UN).

Figure II-3-3-1-23 Changes in exports of value added in major countries[141]

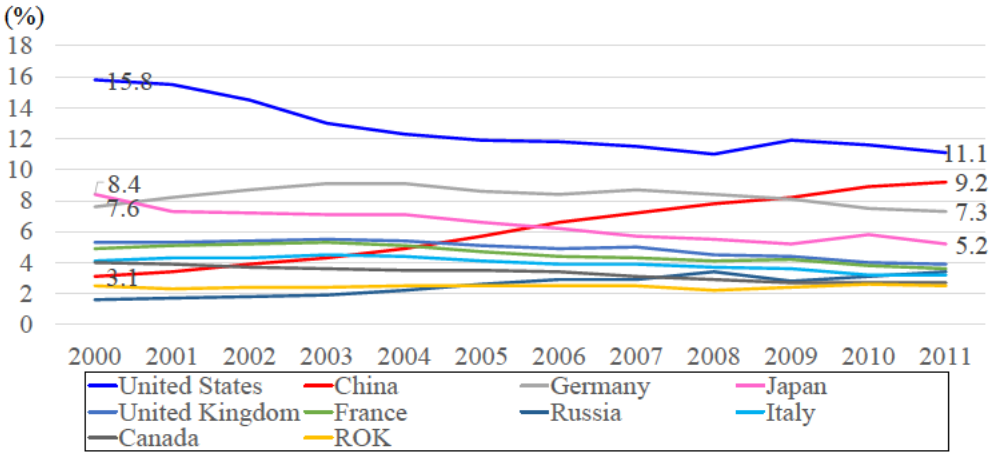


Notes: The data in 2014 are the provisional value released by OECD.

Source: Trade in Value Added (TiVA) (OECD).

141 In this white paper, figures cited from "Domestic value added content of gross exports" (OECD TiVA) were used (https://stats.oecd.org/index.aspx?queryid=75537).

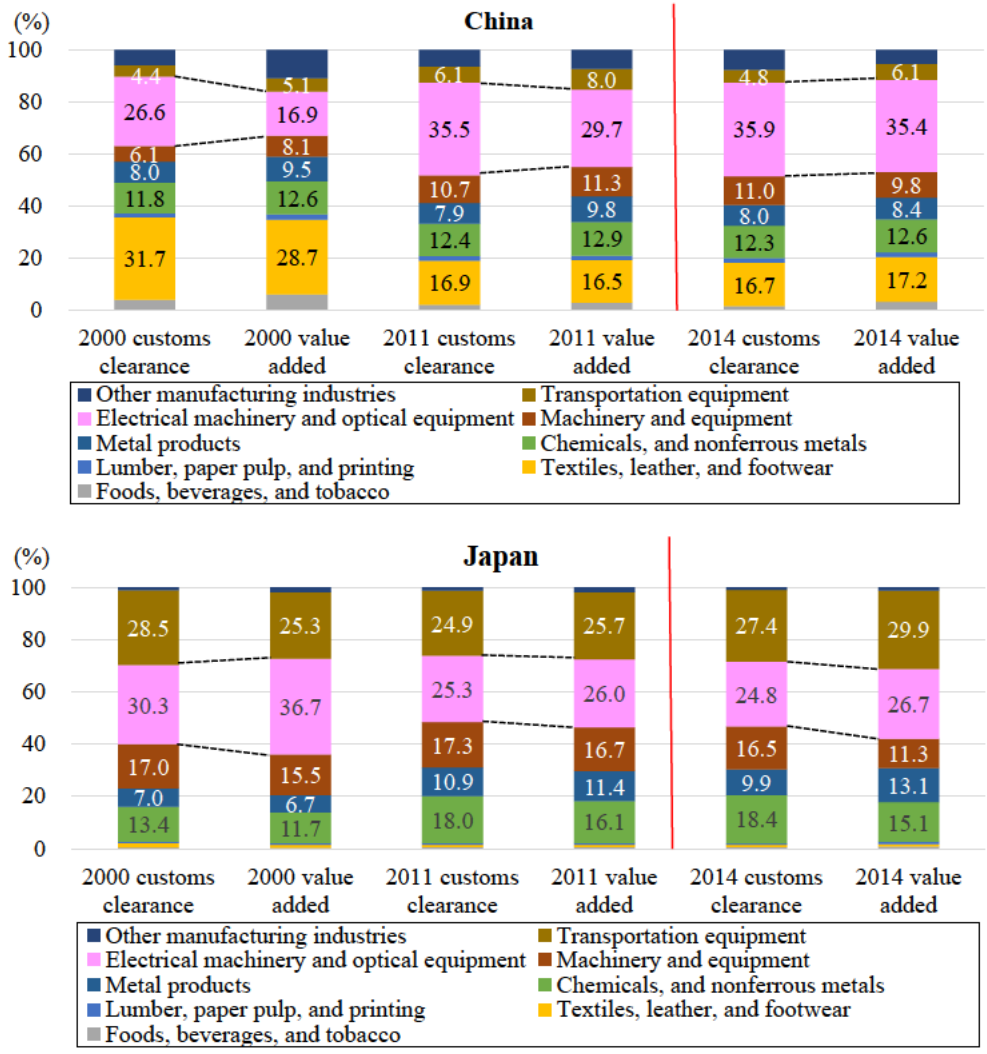
Figure II-3-3-1-24　Shares of exports of value added in major countries



Notes: This figure shows the data between 2000 and 2011 as OECD released them.

Source: TiVA (OECD).

Figure II-3-3-1-25　Changes in China's and Japan's exports to world by industry

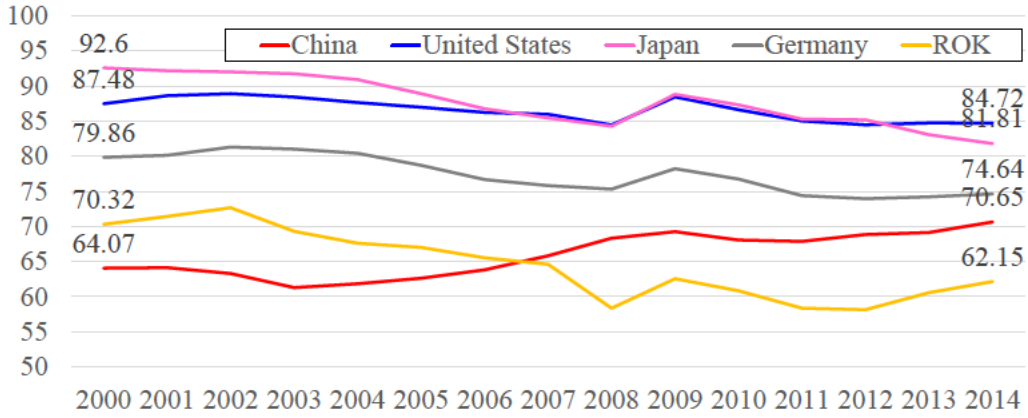


Source: Value added in 2000 and 2011 was as OECD TiVA. Value added in 2014 was estimated based on the World Input-Output Database (WIOD) by Mitsubishi Research Institute, Inc. (2018).

The share of domestic value added in gross exports is on a downtrend for the United States, Japan, the ROK and Germany but is on an uptrend for China. This means that China has improved the capability to create value added domestically with smaller use of foreign value added. Specifically, it suggests that the situation has changed in such a way that China can now domestically manufacture components for the supply of that which it previously depended on imports and can domestically provide services for the provision of that which it previously depended on other countries for. Conversely, countries such as Japan and the United States now make use of more foreign value added than before as a result of the development of global supply chains (Figure II-3-3-1-26).

Looking at the industry-by-industry share of the domestic value added in exports by major countries, what is distinctive is that the share of domestic value added in the Chinese electrical and optical equipment industries is low. This is presumably because, as was shown by the analysis of trade items, China imports a large amount of semiconductors and liquid crystal panels from other countries, which means that these industries are actively using global value chains for production. Although the share of domestic value added in electrical and optical equipment is now relatively low, it has been trending upward. Therefore, it is possible that the share will rise further if industrial policy measures planned under Made in China 2025 are implemented or if research and development by Chinese private companies and their cooperation with foreign companies are promoted (Figure II-3-3-1-27).

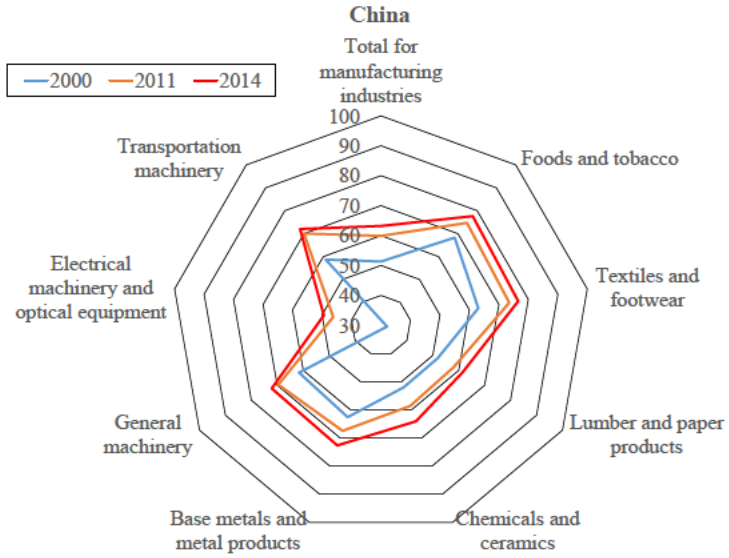
Figure II-3-3-1-26 Shares of the domestic value added in exports by countries

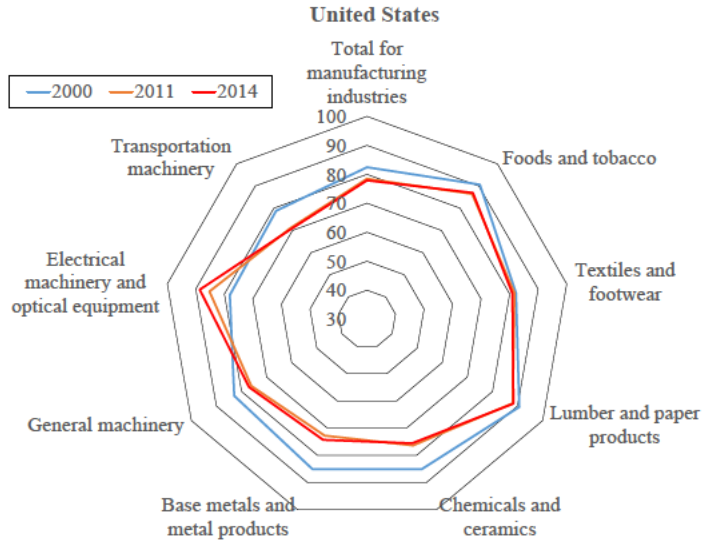


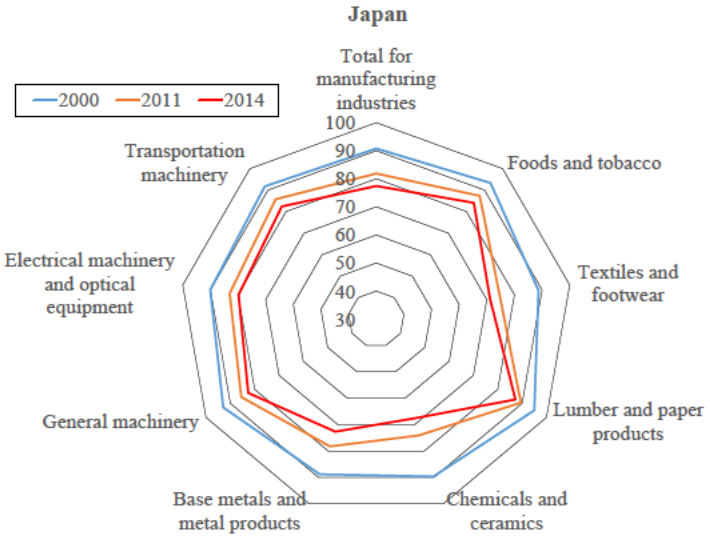
Notes: The data in 2014 are the provisional values released by OECD.

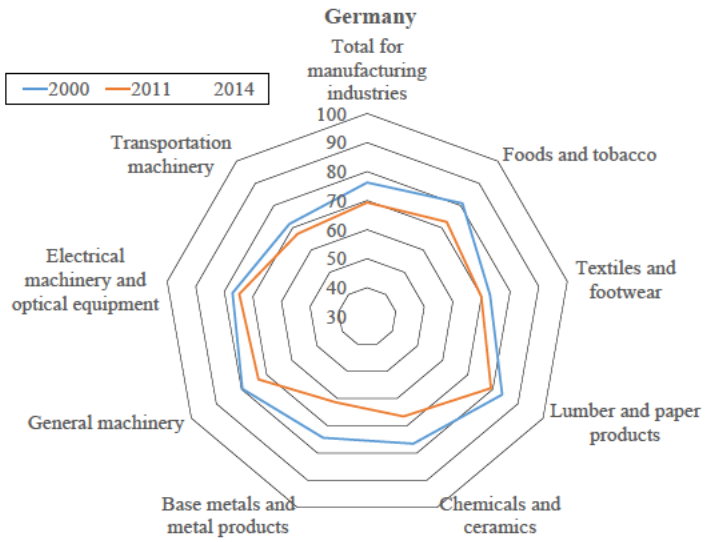
Source: TiVA (OECD).

Figure II-3-3-1-27 Changes in industry-by-industry share of the domestic value added ratio in exports by major countries









Notes: The data in 2014 are the provisional values released by OECD.
Source: TiVA (OECD).

(3) Changes in and characteristics of China's trade as viewed through comparison of statistics on a value added basis and a customs clearance basis

When analyzing trade, it is essential, from both policy and academic viewpoints, to pay attention to comparative advantage. In this paragraph, we will analyze changes in China's comparative advantage structure in terms of the Revealed Comparative Advantage (RCA) index,[142] which is calculated on the basis of trade statistics and trade in value added statistics (Table II-3-1-3-28).[143]

Table II-3-1-3 -28 Specifications of calculating RCA indices

Period	2000, 2011, 2014 (data on a value added basis only) and 2015 (data on a customs clearance basis only)
Country and region	Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, ROK, Latvia, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States, Argentina, Brazil, Bulgaria, Cambodia, China, Colombia, Costa Rica, Croatia, Cyprus, Hong Kong, India, Indonesia, Lithuania, Malaysia, Malta, Morocco, Peru, Philippines, Romania, Russia, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand, Tunisia and Viet Nam * Because of the accessible data, the data on a value added basis in 2014 are the results of calculating RCA indices targeting six countries and regions: China, Japan, the United States, Germany, ROK and other countries and regions.

142 Balassa (1965).
143 The RCA index calculated based on trade statistics is referred to the RCA index on a customs clearance (CC) basis, while the RCA index calculated based on value added trade statistics is referred to as the RCA index on a value added (VA) basis.

Trade sector	Agriculture, hunting, forestry and fishing, Mining and quarrying, Food products, beverages and tobacco, Textiles, textile products, leather and footwear, Wood, paper, paper products, printing and publishing, Chemicals and non-metallic mineral products, Basic metals and fabricated metal products, Machinery and equipment, nec, Electrical and optical equipment, Transport equipment, Manufacturing nec; recycling * In this table, related data are compared by concordance between the six-digit HS codes and the OECD TiVA indicators (the trade sector above).
Statistics and database	(Customs clearance basis) Comtrade Database (UN) (https://comtrade.un.org/) (Value added basis) TiVA (OECD, December 2016) (https://stats.oecd.org/index.aspx?queryid=75537) WIOD (EU) (http://www.wiod.org/home)

Source: METI.

The RCA index was developed in order to quantitatively analyze comparative advantage, and it is also called the Balassa index, introduced by Béla Balassa. The index is calculated by dividing an exporting sector's share in overall exports from the home country by the sector's share in global exports.[144] That a sector's share in the value of exports from the home country is higher than its share in the value of global exports means that the sector has a relative advantage in terms of production and export capacity. In this case, the RCA takes a value higher than 1. Conversely, when the sector's comparative advantage is relatively low in terms of production and export capacity (when the sector is at a disadvantage), the RCA takes a value lower than 1.

We will reveal the characteristics of China's export structure through a comparison of the value of the RCA index calculated on a customs clearance basis and a value added basis at three points in time, namely in 2000, 2011 and 2015.

In 2000, the textile, leather and footwear industry category recorded the highest RCA of all industry categories both on a customs clearance (CC) basis, at 3.82, and on a value added (VA) basis, at 4.38. On a customs clearance basis, this category was followed in terms of the RCA by the manufacturing n.e.c. industry category (including recycling) (CC: 2.40; VA: 3.13) and the electrical and optical equipment industry category (CC: 1.05; VA: 0.79).

In this respect, attention should be paid to the RCA of the electrical and optical equipment industry category, which was ranked third. On a customs clearance basis, the RCA is higher than 1, which means the presence of a comparative advantage, but on a value added basis, it is lower than 1, which means the absence of a comparative advantage. However, this category is ranked second in terms of the value of exports both on a customs clearance basis and a value added basis (CC: 53,848 million dollars; VA: 16,375 million dollars). The only two industries in which the presence or absence of comparative advantage is inconsistent between a customs clearance basis and a value added basis are this industry

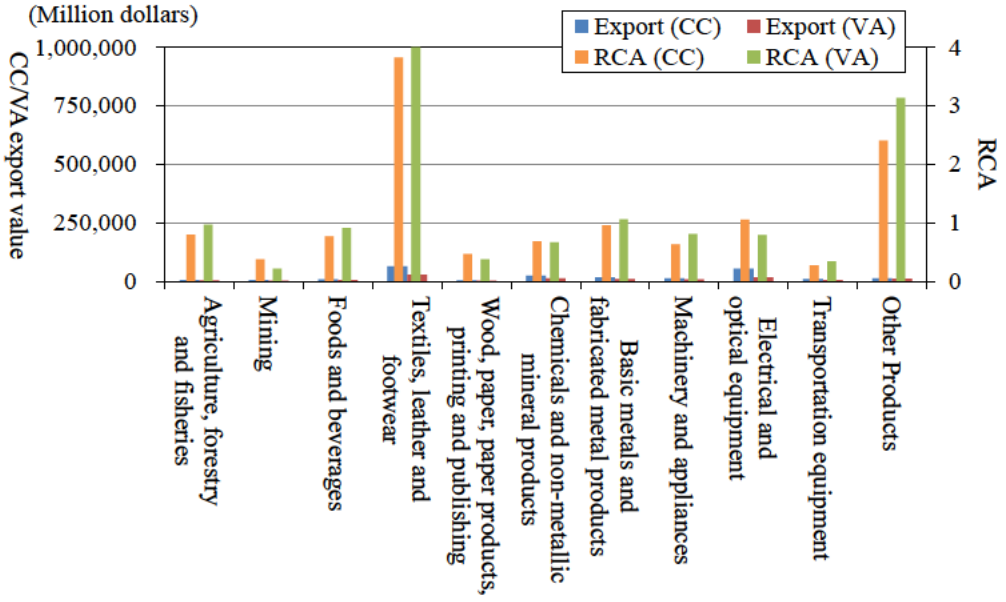
144 RCA index for a country = (value of exports in a sector of the country / total value of exports from the country) / (the global value of exports in the sector / global total value of exports).

and the basic metals and fabricated metal products industry (CC:0.96; VA:1.06). In contrast to the electrical and optical equipment industry, the basic metals and fabricated metal products industry are at a comparative advantage on a value added basis but is at a disadvantage on a customs clearance basis.

In 2000, in terms of the export structure, there were more industries with a comparative disadvantage (CC: eight sectors; VA: eight sectors) than industries with a comparative advantage (CC: three sectors; VA: three sectors). In addition, the presence of advantage was disproportionately concentrated in light industry-related sectors.

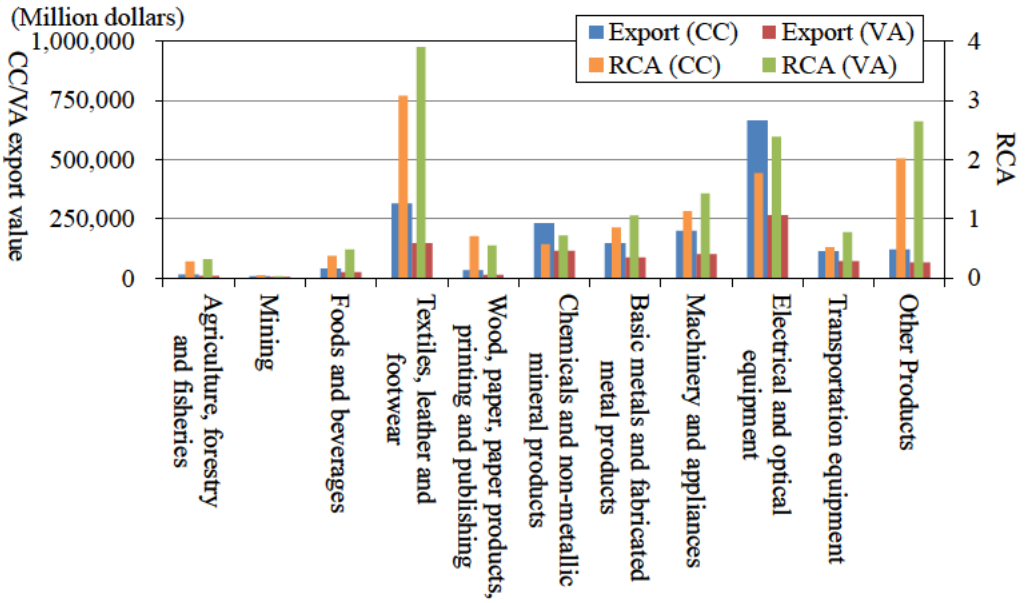
In 2011, as was the case in 2000, the textiles, leather and footwear industry category recorded the highest RCA of all industries both on a customs clearance basis, and on a value added basis (CC: 3.08; VA: 3.89). It was followed by the manufacturing n.e.c. industry (including recycling) (CC: 2.02; VA: 2.64) and the electrical and optical equipment industry (CC: 1.77; VA: 2.38), also as was the case in 2000.

Figure II-3-1-3-29 Comparison of China's RCA indices based on a customs clearance and a value added basis (2000)



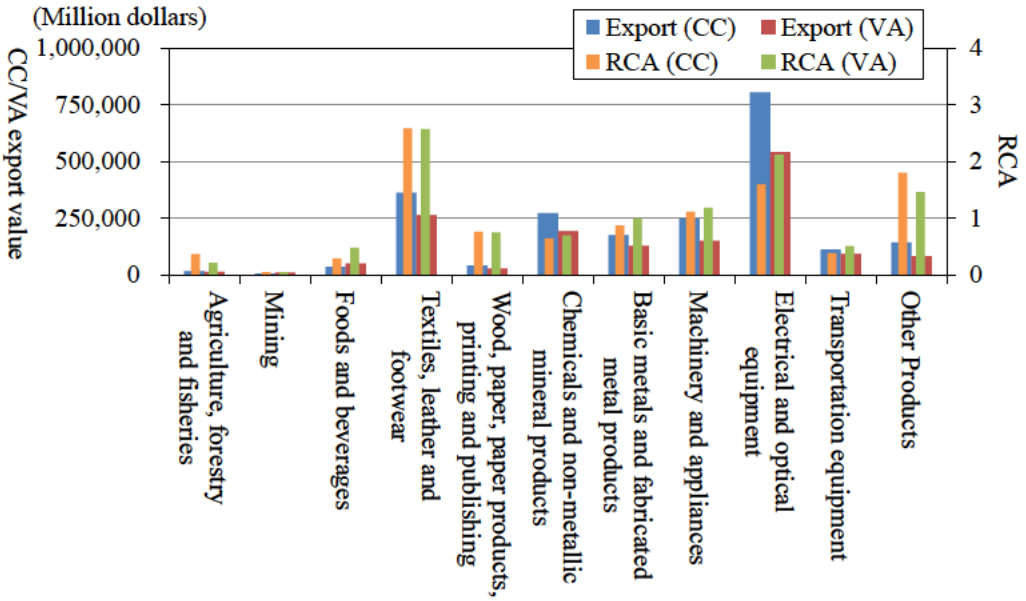
Source: UN Comtrade Database (UN), TiVA (OECD).

Figure II-3-1-3-30 Comparison of China's RCA indices based on a customs clearance and a value added basis (2011)



Source: UN Comtrade Database (UN), TiVA (OECD).

Figure II-3-1-3-31 Comparison of China's RCA indices based on a customs clearance and a value added basis (2015)



Notes: Because of the accessible statistics, the values on a value added basis are those in 2014.
Source: UN Comtrade Database (UN), WIOD (EU).

Reflecting the steep growth in the value of overall exports compared with 2000, China's comparative advantage structure also changed considerably in 2001. In particular, the RCA for the electrical and optical equipment industry, which was at around 1, the borderline level between the presence and absence of comparative advantage in 2000, rose on a customs clearance basis. On a value added basis, the RCA surpassed 1. The RCA in 2011 was sufficiently high to clearly indicate the presence of

comparative advantage.

Among other categories, the machinery and appliances industry, whose RCA was not sufficiently high to indicate the presence of comparative advantage in 2000 (CC: 0.63; VA: 0.81), acquired a comparative advantage in 2011 (CC: 1.80; VA: 1.76). Moreover, the RCA rose both on a customs clearance basis and a value added basis for the wood, paper, paper products, printing and publishing industry (CC: 0.71; VA: 0.55) and the transportation equipment industry (CC: 0.52; VA: 0.78) and on a value added basis alone for the chemicals and non-metallic mineral products industry (CC: 0.57; VA: 0.72), although the level of the RCA fell short of the comparative advantage zone.

As for the comparative advantage structure, there were four industries with a comparative advantage on a customs clearance basis, up from three in 2000, and five industries with a comparative advantage on a value added basis, up from three. Compared with 2000, the RCA for the electrical and optical equipment industry rose, while the RCA for the textiles, leather and footwear industry declined. This suggests a shift in the comparative advantage structure from categories related to the light industry to categories related to electrical machinery.

While China's export and comparative advantage structures changed considerably between 2000 and 2011 as was already described, we will also mention the situation in the most recent year for which relevant statistical data are available (2015 on a customs clearance basis and 2014 on a value added basis).

In 2015, the textiles, leather and footwear industry recorded the highest RCA (CC: 2.58; VA: 2.57). It was followed by the manufacturing n.e.c. industry (including recycling) (CC: 1.80; VA: 1.46) and the electrical and optical equipment industry (CC: 1.60; VA: 2.12). Four industries each had a comparative advantage on a customs clearance basis and on a value added basis, while one industry (basic metals and fabricated metal products) shifted from the position of comparative advantage in 2011 to comparative disadvantage on value added basis.

One distinctive point about the RCA in 2015 is that even though the RCA for the textiles, leather and footwear industry and the manufacturing n.e.c. industry (including recycling), both of which continued to be ranked high in terms of comparative advantage from 2000 onwards, remained higher on a value added basis than on a customs clearance basis until 2011, it was now higher on a customs clearance basis. The change in the RCA suggests that the comparative advantage in terms of export value surpassed the comparative advantage in value added terms in these categories. This provides a contrast to the case of the electrical and optical equipment industry, in which the comparative advantage has increased in recent years. In the case of the electrical and optical equipment industry, the RCA on a value added basis, which was lower than the RCA on a customs clearance basis in 2000, was higher in 2015.

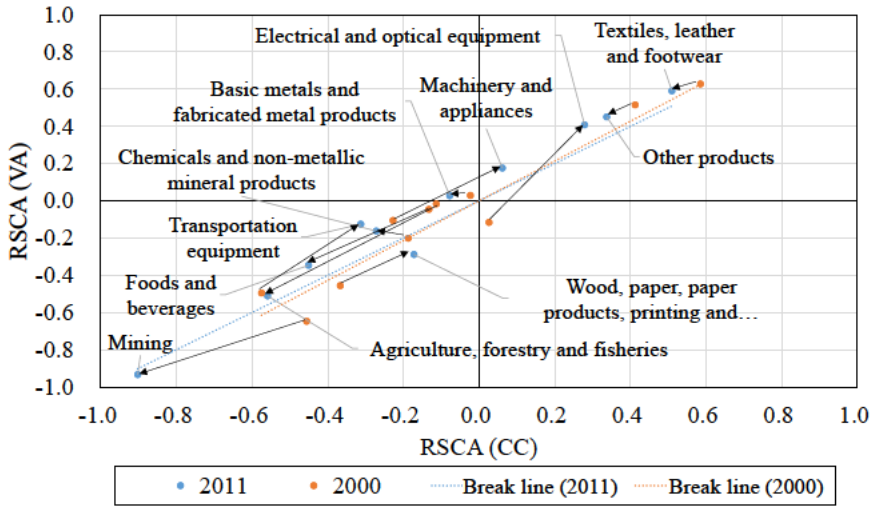
Compared with 2011, a significant change cannot be observed, but it is clear that a shift in comparative advantage from categories related to the light industry to categories related to electrical machinery is gradually proceeding. In addition, the difference between the RCA for comparative advantage industries and comparative disadvantage industries had been narrowed. While this phenomenon is often observed when the RCA is calculated with a small number of categories, it is also characteristic of countries whose share in the global total value of exports is large, such as Japan and the United States. In light of these factors, it is clear that China is becoming a major global player not only

in terms of the value of trade but also in terms of the comparative advantage structure.

Figure II-3-1-3-32 shows changes in the comparative advantage on a customs clearance basis and on a value added basis between 2000 and 2011 in terms of the Revealed Symmetric Comparative Advantage (RSCA),[145] which is a symmetrically transformed version of the RCA index, in China's export sectors. When the point representing an export sector is located in the upper right area in the figure, the sector is at a comparable advantage both on a customs clearance basis and a value added basis. When the point is located in the upper left area, the sector is at a comparative disadvantage on a customs clearance basis and at a comparative advantage on a value added basis. When the point is located in the lower left area, the sector is at a comparative disadvantage both on a customs clearance basis and a value added basis. When the point is located in the lower right area, the sector is at a comparative advantage on a customs clearance basis and at a comparative disadvantage on a value added basis.

Attention should be paid to the distinctive changes that occurred in the electric and optical equipment industry category and the appliances industry. The electric and optical equipment industry continued to be at a comparative advantage on a customs clearance basis, while it shifted from comparative disadvantage to comparative advantage on a value added basis. The machinery and appliances industry, which was at a comparative disadvantage both on a customs clearance basis and on a value added basis, shifted to comparative advantage on both bases. The basic metals and fabricated metal products industry continued to be at a comparative disadvantage on a customs clearance basis despite being at a comparative advantage on a value added basis.

Figure II-3-1-3-32 Changes in China's RSCA indices based on a customs clearance and a value added basis



Notes: This figure shows the data in 2000 and 2011 to avoid statistical inconsistency.

Source: UN Comtrade Database (UN), TiVA (OECD).

145 RSCA index = (RCA index – 1) / (RCA index + 1). When the RCA index is symmetrically transformed, the index takes a value ranging from -1 to +1, making it easier to compare between countries/regions or between sectors. Cf. Laursen (1998).

There was no category which shifted from comparative advantage to comparative disadvantage. However, even among categories at a comparative advantage, the textiles, leather and footwear industry category and the manufacturing n.e.c. industry category (including recycling) recorded a lower RCA than before. The margin of decline in the RCA is larger for categories with a comparative disadvantage. The mining industry category, the agriculture, forestry and fishing industry category and the food and beverage industry category are the bottom three categories among China's export sectors in terms of the margin of change in the RCA.

What is interesting about the structural change is that the RCA tended to rise, rather than fall, even for industries with a comparative disadvantage in 2011. In 2011, there were still more industries with a comparative disadvantage than industries with a comparative advantage. However, if the direction of the change in the RCA index is taken into consideration, it is not hard to imagine that in the not so distant future, there will be more categories with a comparative advantage.

(4) Promotion of imports by the government of China

As was already mentioned, the expansion of exports by China is conspicuous. However, in 2017 and 2018, initiatives to promote imports have started. At the annual conference of the Boao Forum for Asia in April 2018, President Xi Jinping said that the government will take measures to expand imports, in addition to significantly relaxing restrictions on market entry, creating an attractive investment environment and enhancing the protection of intellectual property rights.

As specific measures to expand imports, the government lowered import tariffs on 187 items, including foods (e.g., powdered milk for infants), home electronics appliances (e.g., electric shavers, electric toothbrushes, and shower toilet seats), and daily goods (e.g., paper diapers, thermoses, clothing and cosmetics), starting on December 1, 2017, in order to bring back consumption from abroad and increase domestic demand by making it possible to import at low prices products for which domestic products alone cannot meet consumers' needs.

In addition, since the end of last year, the government has actively taken measures to promote the structural reform of Chinese industries and increase domestic demand. For example, in January 2018, the government cut tariffs on 948 items, including advanced equipment, key components, energy and raw materials, to provisional rates lower than those applied to most favored nations under the WTO Agreement, in order to promote imports of items for which there is strong demand for the purpose of assisting the development of innovation and supply-side structural reforms. The government also cut tariffs for countries with which China has concluded free trade agreements (FTAs).

Moreover, with a view to promoting trade liberalization and economic globalization and actively opening the market to the world, thereby advancing the development of an open global economy, China announced that it will hold the first China International Import Expo in Shanghai in November 2018.

Column 7　One Belt, One Road and China Railway Express

Riding on the tailwind of the One Belt, One Road plan, which was proposed in 2013 under the government of President Xi Jinping, freight railway transportation between China and Europe has achieved remarkable growth.

In particular, China Railway Express, a container cargo railway service operated by the China Railway Container Transport under the National Railway Administration of China, has dramatically changed.[146] As of April 2018, China Railway Express had 65 lines and three major routes--western, central and eastern routes[147] (Column Table 7-1). Of the three routes, the western route accounts for the largest number of lines. According to the train timetable as of April 2018, 36 of the total of 65 lines were using the western route, compared with 16 routes using the eastern route and 12 lines using the central route.[148]

Of the total volume of container transportation between China and Europe, the western route, which passes through Kazakhstan, accounted for around 70% in 2016, indicating that this country's presence as a logistical transit point is growing (Column Figure 7-2).

Column Table 7-1　Major routes of China Railway Express

	Border station	Country of arrival	Country of transit
Western route	Alataw Pass Khorgas	Germany, Poland, Netherlands, Czech Republic, Spain, Turkey and Belarus	Kazakhstan, Russia, Belarus, Poland, Germany, Netherlands, Czech Republic, France, Spain, Azerbaijan, Armenia, Georgia, Turkey and Afghanistan
Central route	Erenhot	Germany, Poland and Russia	Mongolia, Russia, Belarus, Poland and Germany
Eastern route	Manzhouli	Russia, Belarus, Poland and Germany	Russia, Belarus, Poland and Germany

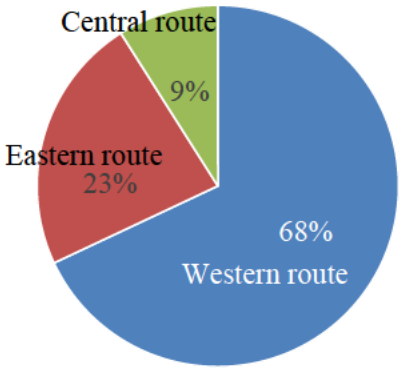
Notes: The categories of the routes are based on *Daily CARGO* (Kaiji Press Co., Ltd., May 7, 2018).
Source: China Railway Container Transport (CRCT) (as of April 2018).

146 China-Asia Railway (中亚班列), a container cargo train service connecting China and Central Asia, is also in operation. Under a new timetable that took effect in April 2018, there are 33 lines, including a line to Viet Nam.

147 Regarding the China-Europe train services, all of the eastern, western and central routes go through Russia and uses the Trans-Siberian Railway.

148 Many of the terminal station cities in China along the China Railway Express lines are inland cities, including Chongqing, Chengdu, Wuhan and Zhengzhou. Shanghai, where many cargoes arrive and depart, is not included among the terminal station cities.

Column Figure 7-2 Volume of container transportation between China and Europe (by major route)



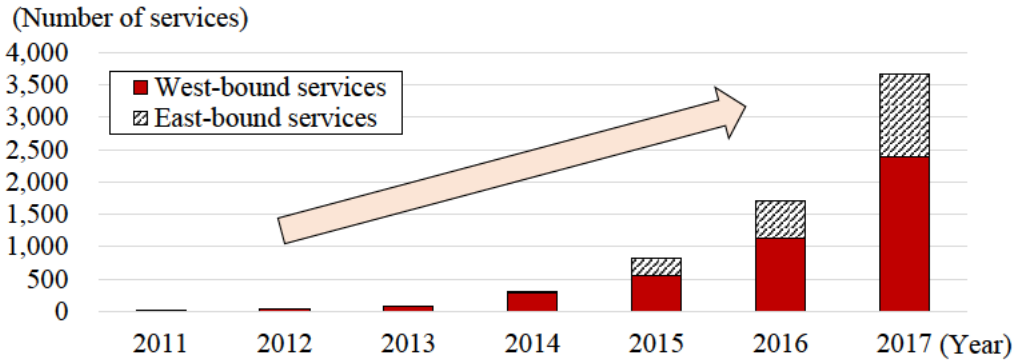
Notes: This figure shows the category-based volume of railway cargoes transported by the Trans-Siberian Railway.

Notes: The volume of railway cargo transported by the eastern route includes cargoes sent from the Far East region.

Source: Coordinating Council on Trans-Siberian Transportation, TransContainer.

Next, regarding the number of container trains that run between China and Europe, the annual number of trains, which was less than 20 in 2011, increased rapidly, totaling 80 in 2013, 815 in 2015, and 3,673 in 2017, and the government of China's goal of increasing the number to 5,000 by 2020 is expected to be achieved (Column Figure 7-3). The volume of transportation, which was only 1,404 TEU in 2011, increased markedly, totaling 6,960 TEU in 2013, 68,902 TEU in 2015 and 317,930 TEU in 2017[149] (Column Figure 7-4).

Column Figure 7-3 Changes in the number of railway services operated between China and Europe

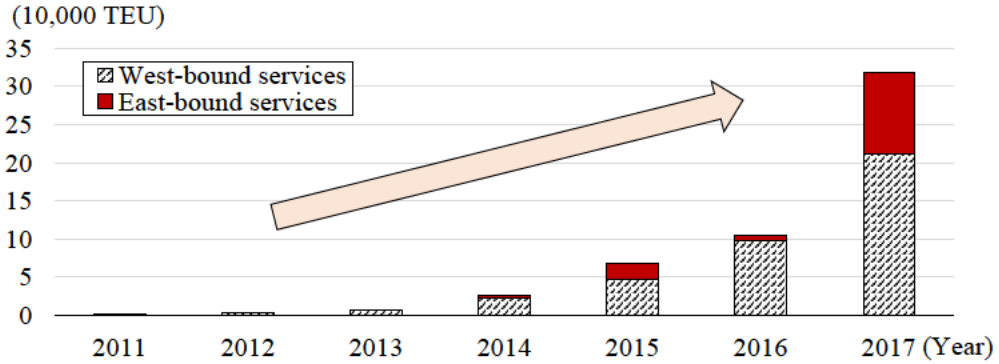


Notes: The data are based on *Daily CARGO* (Kaiji Press Co., Ltd., Jan. 2018).

Source: CRCT (as of April 2018).

149 1 TEU is equivalent to the volume of one 20-feet container.

Column Figure 7-4 Changes in volume of container transportation between China and Europe



Notes: The data are based on *Daily CARGO* (Kaiji Press Co., Ltd., Jan. 2018).
Source: CRCT (as of April 2018).

As shown in the figure, both the number of trains and the volume of transportation were much larger for the West-bound services (from China to Europe) than for the East-bound services (from Europe to China), so the one-sided traffic of cargoes has emerged as a problem. However, in 2018, the one-sided traffic has been gradually corrected.

Next, we will pay attention to the product items transported between China and Europe.

The main freight items transported from China are electrical and precision equipment, automobiles, auto parts, clothing and chemical products, while the main freight items transported from Europe are auto parts, electrical and precision equipment parts, chemical textile materials, luxury cars, cosmetics, and foods (e.g., wine and powdered milk). The presence of Chongqing, which is a hub of the personal computer and automobile industries, as a railway logistical base for cargoes transported between China and Europe, is also growing.

In addition, among Japanese companies as well, there are moves to provide logistical services using the railway services between China and Europe.[150]

The cost of railway transportation is usually around a fifth to half of the cost of air transportation and around twice to thrice as high as the cost of marine transportation. The number of days transported for railway transportation is smaller than the number for marine transportation but is larger than the number for air transportation.[151] Currently, marine transportation is the main means of container transportation between China and Europe. However, railway transportation may provide an alternative option for companies which cannot afford to pay the cost of air transportation but which prefer higher speed than marine transportation.[152]

However, there are some problems related to the railway transportation services between China and Europe. First, there are concerns over how long the provision of subsidies for railway transportation by

150 It is assumed that cargoes arriving at and departing from Japan are transported through combined transport service using maritime transportation between Japan and China and railway transportation between inland China and Europe.
151 The case of transportation from Wuhan in China to Hamburg in Germany was cited as an example. The transportation cost and the number of days transported vary depending on the forwarder and the terminal city used.
152 Railway transportation between China and Europe has an advantage over maritime transportation with respect to transportation of cargoes arriving at and departing from inland China.

local governments in China will continue. Next, cargos must be transferred at national borders because of differences between railway gauges.[153] At locations of transfer, cargoes pile up, causing delays in transportation, and as a result, there is a growing need to develop transfer bases. Furthermore, as was mentioned earlier, there is the problem of one-sided traffic of cargoes. Although these problems are being corrected, a careful watch should be kept in the future.

153 Transfer is required at least twice due to differences in railway gauge between China and the former Soviet states and between the former Soviet states and European countries.

2. Outward foreign direct investment

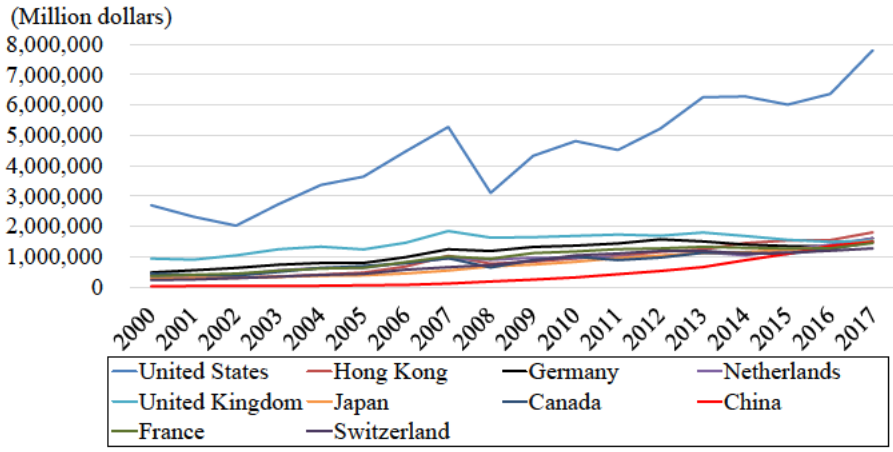
(1) Changes in outward foreign direct investment by China

In this paragraph, we will look at changes in and the characteristics of outward foreign direct investments by China.

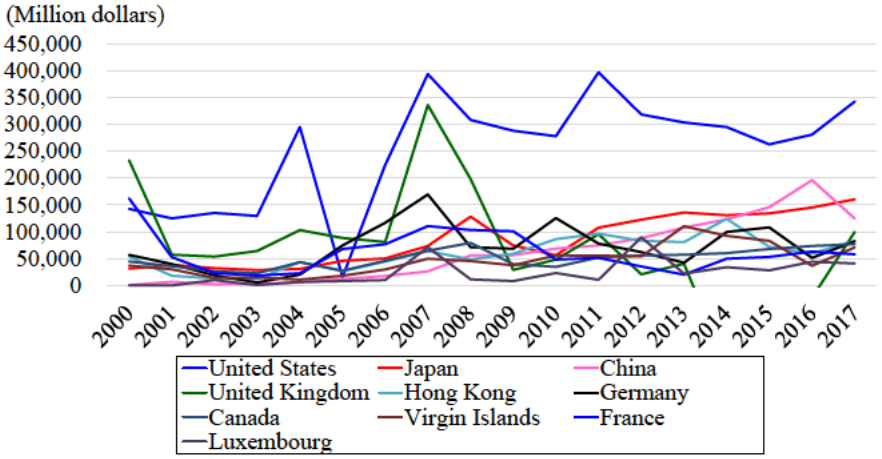
Since 2000, China has promoted outward foreign direct investments under the "Go Out" policy (policy of promoting overseas expansion) in order to acquire foreign resources and to strengthen Chinese companies' international competitiveness.[154] As the implementation of a series of measures to improve legal systems and ease regulations regarding foreign investments produced positive effects, outward foreign direct investments by China have continued to increase. In 2014, the value of investments increased further because of a shift from a licensing system regarding foreign investments to a registration system.[155]

On a stock basis, the value of outward foreign direct investments by China has continuously increased since 2000, and in 2017, it was at a similar level to the value of outward foreign direct investments by advanced economies other than the United States (approximately 1,482 billion dollars). On a flow basis, the value of outward foreign direct investments by China also continuously increased between 2000 and 2016. In 2015, China overtook Japan to become the world's second largest investor country, after the United States (Figure II-3-3-2-1). In addition, the value of outward foreign direct investments by China surpassed the value of inward foreign direct investments in the country for the first time in the same year. However, because of worries over the recent capital flight to other countries due to excessive investments in real estate, the Chinese authorities started to restrict the scope of investment fields and strengthen prior examination and control systems in November 2016. Consequently, in 2017, the value of outward foreign direct investments by China declined 36.5% from the previous year to 124.6 billion dollars (Figure II-3-3-2-2).

Figure II-3-3-2-1 Changes in stocks and flows of foreign direct investment in major countries/regions



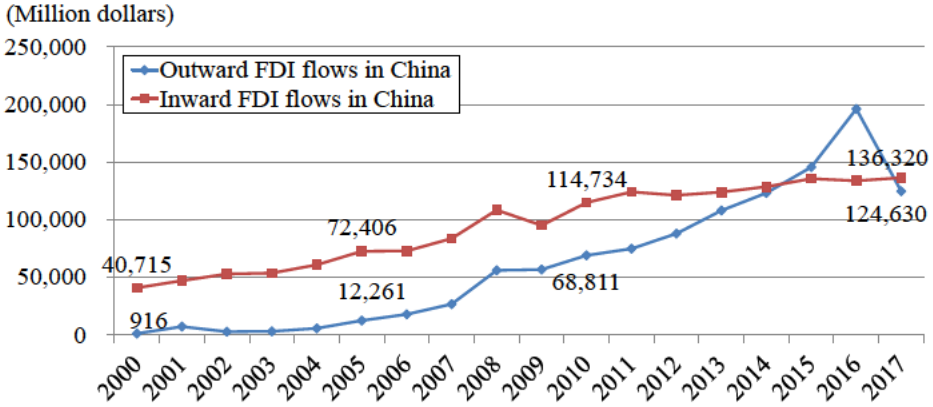
154 Institute for International Trade and Investment (2015).
155 Li (2016).



Notes: The major countries/regions are top-ranking countries/regions in terms of the investment value in 2017.

Source: *World Investment Report* (UNCTAD, 2018).

Figure II-3-3-2-2 Changes in China's foreign/domestic direct investment (flows)

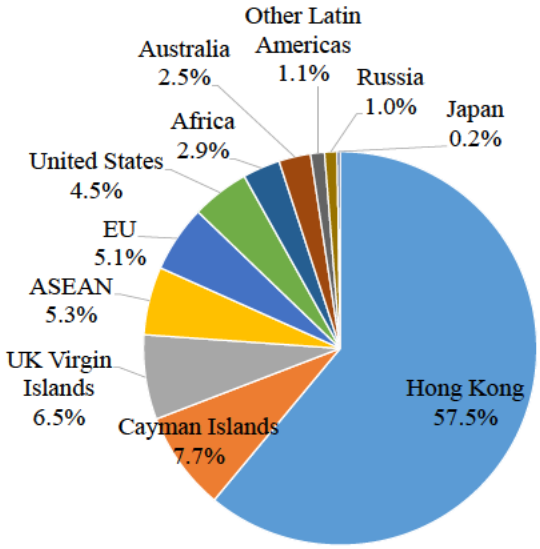


Source: *World Investment Report* (UNCTAD, 2018).

We will provide an overview of the characteristics of outward foreign direct investments by China by recipient country/region and by industry.

In 2016, Hong Kong was the largest investment recipient of outward foreign direct investments by China, accounting for 57.5% of the total. Other major investment recipients included ASEAN with a share of 5.3%, the EU with 5.1%, the United States with 4.5%, Africa with 2.9%, Australia with 2.5%, Latin America (excluding the Cayman Islands and the Virgin Islands) with 1.1% and Russia with 1.0%, while the share of investments in Japan was very small, 0.2% (Figure II-3-3-2-3).

Figure II-3-3-2-3 Shares of China's outward foreign direct investment (stock) by country/regions (2016)

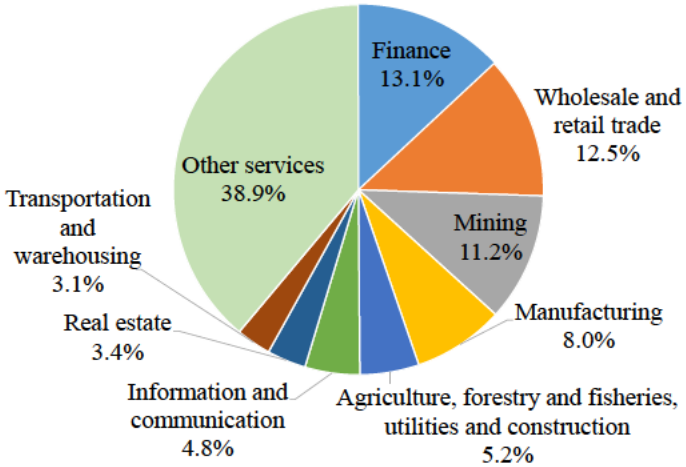


Notes: The data on the EU in 2005 are the results of deducting the value of "Russia" from that of "Europe in total." The data on ASEAN are the results of totaling the values of 10 economies.

Source: *FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2017).

By industry, "other services" (leasing and business services account for 90%) was by far the largest recipient of outward foreign direct investments by China in 2016, followed by finance, wholesale and retail trade, mining, and manufacturing (Figure II-3-3-2-4).

Figure II-3-3-2-4 Shares of China's outward foreign direct investment (stock) by industry (2016)



Source: *FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2017).

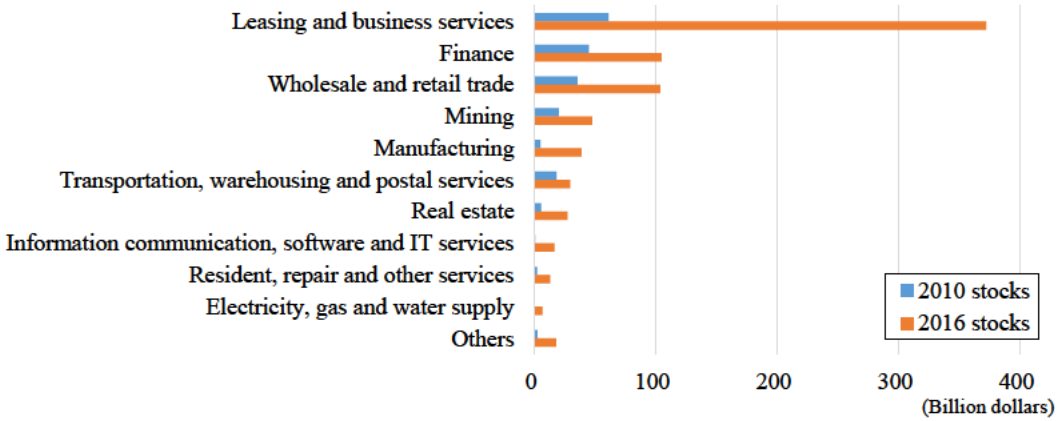
Next, we will look at the trend in China's outward foreign direct investments by major recipient country/region and by industry between 2010 and 2016.

China's outward foreign direct investment stocks in Hong Kong increased 3.9-fold between 2010

and 2016. Investments in the information and communication/software/IT services industry recorded a particularly steep growth by 20-fold (the share increased from 0.4% in 2010 to 2.2% in 2016). The leasing and business services industry has traditionally been the largest recipient of foreign direct investments in Hong Kong, and its share in 2016 was close to 50%. Behind the large share of this category is the presence of business activities by Chinese companies, including fund procurement from abroad taking advantage of the "one country, two systems" principle (Figure II-3-3-2-5).

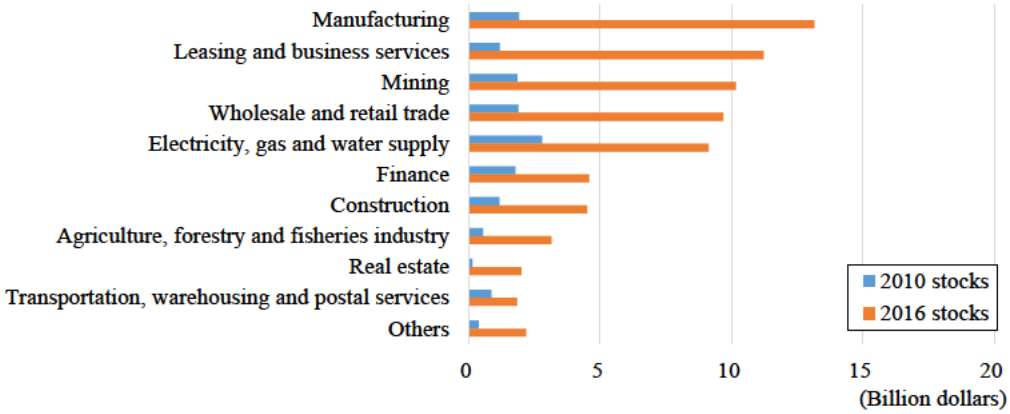
China's outward foreign direct investment stocks in ASEAN grew 5.0-fold between 2010 and 2016. In 2010, the electricity, gas and water industry accounted for the largest share (19.3%) of foreign direct investments in ASEAN, but in 2016, it was replaced by the manufacturing industry (18.4%) as the largest recipient of investments. This indicates that China has developed global supply chains with ASEAN in the manufacturing industry (Figure II-3-3-2-6).

Figure II-3-3-2-5 China's Foreign direct investments in Hong Kong



Source: *FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2017). (This source will be the same as those in the following figures until Figure II-3-3-2-10.)

Figure II-3-3-2-6 China's Foreign direct investment in ASEAN economies



China's outward foreign direct investment stocks in the United States increased 12.4-fold between 2010 and 2016, a much larger increase than the increase in investments in other countries/regions. Investments in the real estate industry recorded a particularly large increase of 71.2-fold (the share increased from 1.6% in 2010 to 9.4% in 2016), followed by investments in the information and

communication/software/IT services industry with a 36.8-fold increase (from 3.0% to 9.0%). In addition, investments increased 20.0-fold in the financial industry (from 10.8% to 17.3%), 16.5-fold in the academic research, professional and technical services industry (from 5.6% to 5.0%), 12.1-fold in the leasing and business services industry (from 11.8% to 11.5%), and 11.5-fold in the manufacturing industry (from 27.0% to 25.1%). This indicates that China has made active investments in order to acquire advanced technologies in the U.S. manufacturing and IT industries. In each of 2010 and 2016, the manufacturing industry had the largest share in Chinese direct investments in the United States (Figure II-3-3-2-7).

China's outward foreign direct investment stocks in the EU increased 5.6-fold between 2010 and 2016. Investments in the mining industry (from 2.9% to 22.0%) recorded a particularly large increase. In 2010, the leasing and business services industry (from 47.0% to 8.0%) accounted for the largest share, but in 2016, it was replaced by the manufacturing industry (from 24.6% to 23.0%) (Figure II-3-3-2-8) as the largest recipient of investments.

China's outward foreign direct investment stocks in Australia increased 4.2-fold between 2010 and 2016. Investments in agriculture, forestry and fishing industry (from 0.3% to 2.1%) recorded a particularly large increase by 31.6-fold, followed by investments in the real estate industry (from 3.3% to 12.34%) with a 16.0-fold increase. The share of the mining industry, which accounted for the largest share in the total value of investments, declined over this period from around 82% to around 57% (Figure II-3-3-2-9).

China's outward foreign direct investment stocks in Russia increased 4.5-fold between 2010 and 2016. The mining industry (from 9.9% to 47.6%) recorded a particularly large increase of 22.5-fold, and replaced the agriculture, forestry and fishing industry (from 26.8% to 23.3%) as the largest recipient of investments (Figure II-3-3-2-10).

Figure II-3-3-2-7 China's Foreign direct investment in the United States

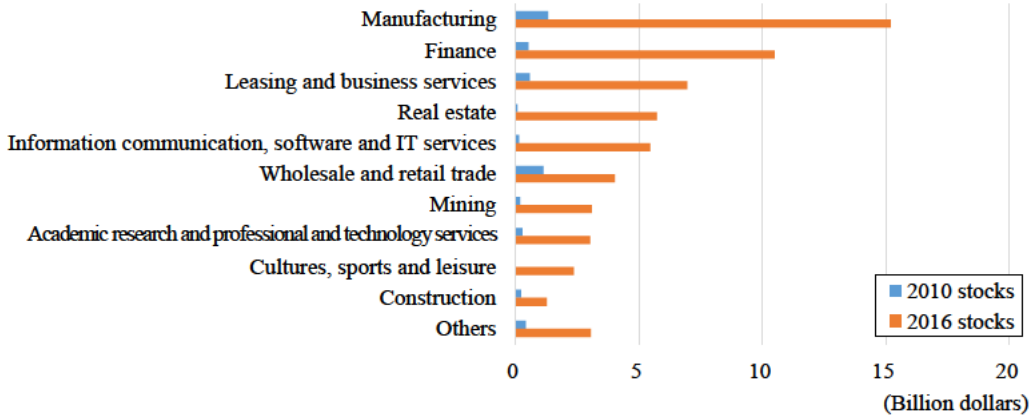


Figure II-3-3-2-8 China's Foreign direct investment in the EU

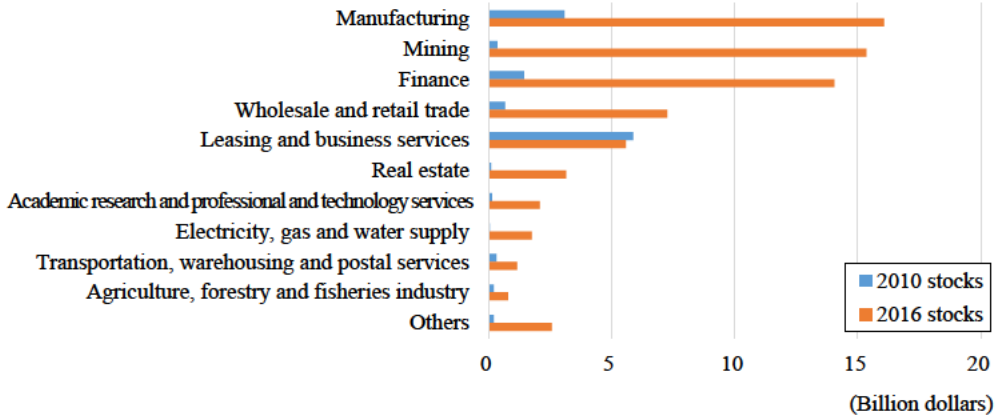


Figure II-3-3-2-9 China's Foreign direct investment in Australia

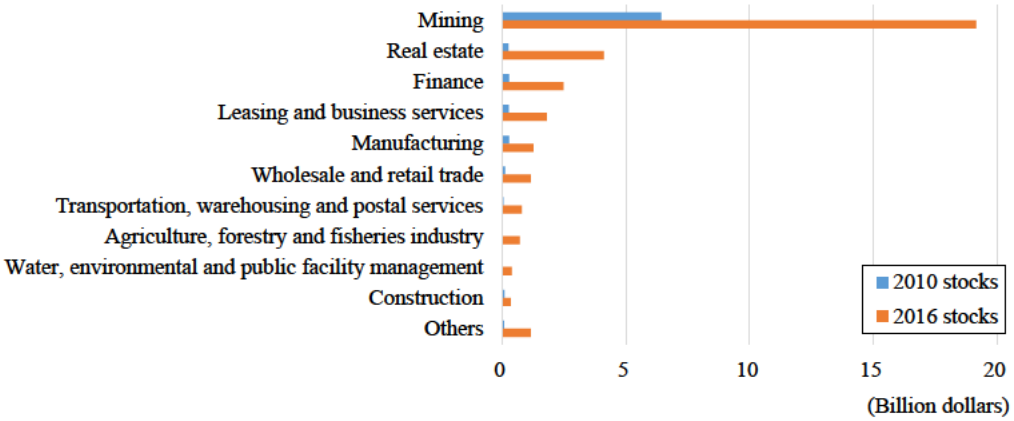
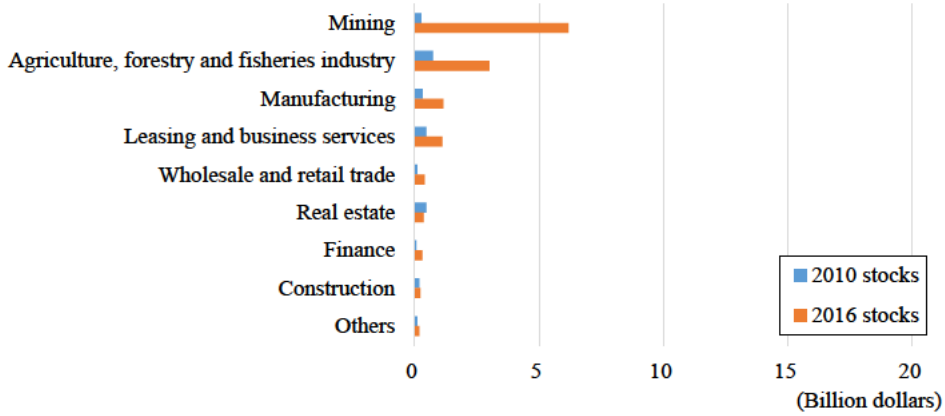


Figure II-3-3-2-10 China's Foreign direct investment in Russia



Next, we will look at the trends in foreign direct investments in the One Belt, One Road countries[156]. In 2016, China's outward foreign direct investment stocks in those countries were 129,414 million dollars, accounting for 10.1% of the total global balance of direct investments by China, which was 1,280,975 million dollars. This is a larger share than the share of investments in each of ASEAN, the

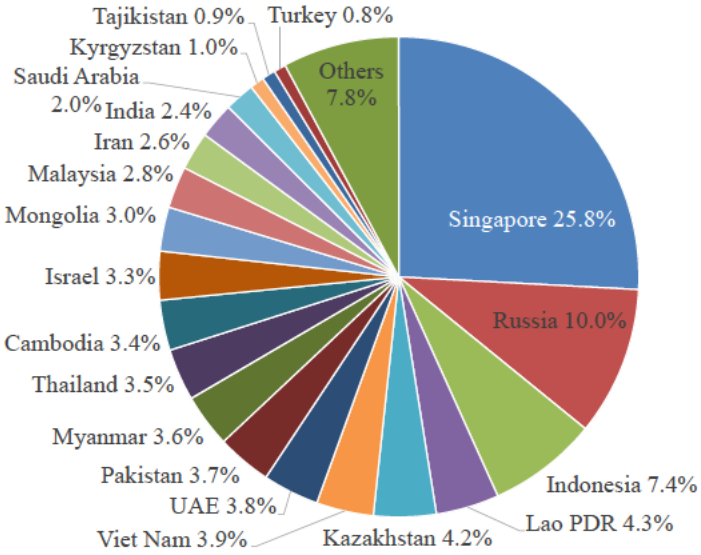
156 The countries/regions involved are 62 of the 63 countries/regions in Appendix Table 11 of the FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment for which trade data exist.

EU and United States, which is around 5%.

Among the One Belt, One Road countries, Singapore was the largest recipient of investments with a share of 25.8%, followed by Russia with 10.0% and Indonesia with 7.4%. By region, ASEAN accounted for 55.3% of China's outward foreign direct investment stocks in the One Belt, One Road countries. The top 20 recipients of investments accounted for 92.2% of the total balance of direct investments in the One Belt, One Road countries (II-3-3-2-11).

Currently, the share of investments in the One Belt, One Road countries in the total of China's outward foreign direct investment stocks is not large, but it may increase in the future in line with progress in infrastructure projects.

Figure II-3-3-2-11 Value of China's Foreign direct investment in the One Belt, One Road countries (2016)



Ranking	Country and region	Foreign direct investment stock (million dollars)	China's share in the total balance
1	Singapore	33,446	25.8%
2	Russia	12,980	10.0%
3	Indonesia	9,546	7.4%
4	Lao PDR	5,500	4.3%
5	Kazakhstan	5,432	4.2%
6	Viet Nam	4,984	3.9%
7	UAE	4,888	3.8%
8	Pakistan	4,759	3.7%
9	Myanmar	4,620	3.6%

10	Thailand	4,533	3.5%
11	Cambodia	4,369	3.4%
12	Israel	4,230	3.3%
13	Mongolia	3,839	3.0%
14	Malaysia	3,634	2.8%
15	Iran	3,331	2.6%
16	India	3,108	2.4%
17	Saudi Arabia	2,607	2.0%
18	Kyrgyzstan	1,238	1.0%
19	Tajikistan	1,167	0.9%
20	Turkey	1,061	0.8%
	Others	10,143	7.8%
	Total	129,414	100.0%

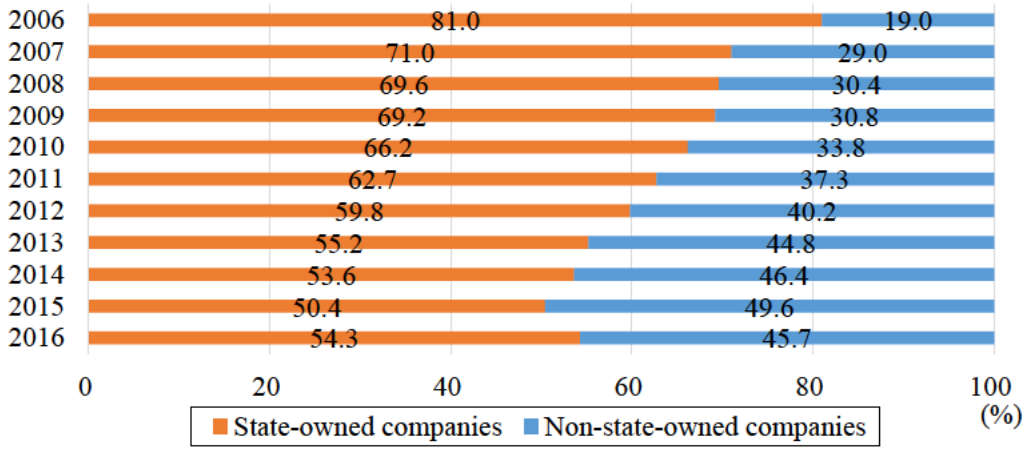
Source: *FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment (Annex 11; pp.61-62)* (Ministry of Commerce of the P.R. China, 2017).

(2) Changes in the share in foreign direct investments by investor type

Next, we will look at changes in the share of investing companies classified into state-owned and non-state-owned companies in foreign direct investments by China.

Initially, state-owned companies accounted for a much larger share in China's outward foreign direct investment stocks than non-state-owned companies. However, the share of non-state-owned companies in that gradually increased (Figure II-3-3-2-12).

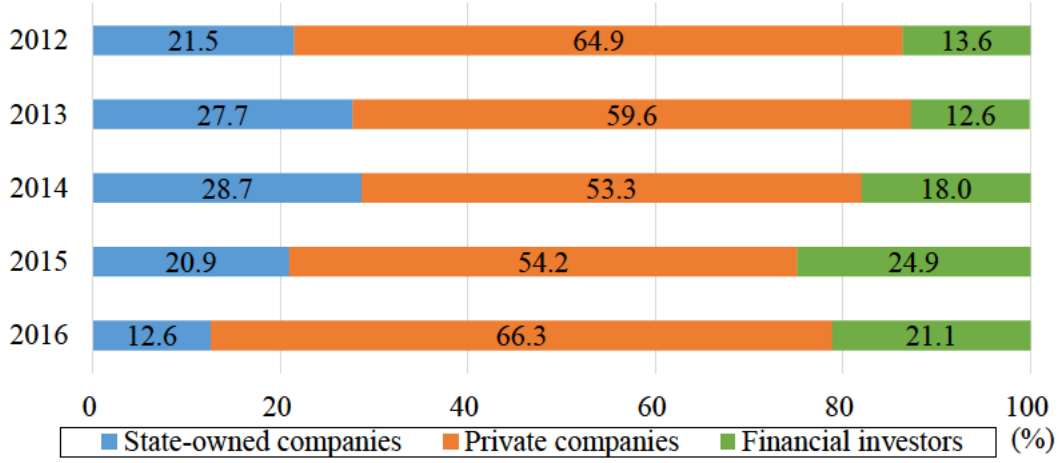
Figure II-3-3-2-12 Shares of investing companies classified into state-owned and non-state-owned companies in China's foreign direct investments



Source: *FY2016 Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2017).

Looking at the number of M&As by investor type, the share of state-owned companies generally declined, while the shares of private companies and financial investors (e.g., venture capital and investment funds) trended upward (Figure II-3-3-2-13).

Figure II-3-3-2-13 Shares of the number of China's external M&As by investor type



Source: Data compiled by Mitsubishi Research Institute, Inc. based on *Hurun Report 2017*.

However, among companies, state-owned companies related to resources, energy and infrastructure dominated the top positions in terms of share in China's outward foreign direct investment stocks. Many of them are large companies included among the Fortune 500 companies (top 500 companies in terms of global revenues). Among private companies, Huawei (15th) and Midea Group (23rd) were ranked among the top 30 companies with a large amount of the outward foreign direct investment stocks in China (Table II-3-3-2-14).

Table II-3-3-2-14 Top 10 Chinese companies in terms of the value of outward foreign direct investments

Ranking in 2015	Company	Type of industry	Type of company	Notes	Foreign companies acquired and invested in by the Chinese Company (based on released data)
1	China Mobile Communications Corporation	Mobile phone services	State-owned companies	The company is the world's largest mobile communication company in terms of the number of contractors. As a company split from China Telecom Corporation in 2000, the company was listed on the Hong Kong Stock Exchange and the New York Stock Exchange in 1997. It marked 47th place in Revenues (107.1 billion dollars) among the Fortune 500 firms in December 2017.	Paktel, a mobile communication company in Pakistan * Some press stated the company's acquisition of other companies in Thailand and Malaysia, but the company seems to have not started it yet.
2	China National Petroleum Corporation	Oil and gas	State-owned companies	The company is one of the three largest state-owned oil companies in China. It marked 3rd place in revenues (267.5 billion dollars) among the Fortune 500 firms in December 2017.	PetroKazakhstans, a Canadian company, producing crude oil and gas in Kazakhstan.

3	China National Offshore Oil Corporation	Oil and natural gas	State-owned companies	The company is one of the three largest state-owned oil companies in China. It is the 3rd largest company in the industry in China after CNPC and Sinopec. It marked 115th place in revenues (65.8 billion dollars) among the Fortune 500 firms in December 2017.	It acquired five mining sites offshore Indonesia from Repsol in Spain. * The company competed with Texaco Company under the Chevron Corporation, U.S., for acquisition of Unocal Corporation in the United States and lost.
4	China Petrochemical Corporation (Sinopec Group)	Oil and gas	State-owned companies	The company is one of the three largest state-owned oil companies in China. It marked 4th place in revenues (262.5 billion dollars) among the Fortune 500 firms in December 2017.	Addax, Switzerland (oil), YPF Brazil of Repsol, Spain (resource), and Daylight Energy, Canada (oil)
5	China Resources (Holdings) Co., Ltd.	Electricity, real estate, consumer goods, medical products, finance, cement, gas, etc.	State-owned companies	China's leading conglomerate (electricity, real estate, consumer goods, medical products, medical care, finance, cement, gas, etc.) It marked 86th place in revenues (75.7 billion dollars) among the Fortune 500 firms in December 2017.	

6	China Ocean Shipping (Group) Company	Shipping, logistics, leasing and shipbuilding	State-owned companies	The company is the largest company in the marine transportation industry in China. It marked 366th place in revenues (29.7 billion dollars) among the Fortune 500 firms in December 2017.	OOCL Hong Kong (marine transportation), Port of Piraeus, Greece (port)
7	China Merchants Group	Shipping, shipbuilding, management and operation of ports, highways, logistics facilities, real estate development, and finance	State-owned companies	The company is a conglomerate operating services of China's second largest fleet.	
8	China State Construction Engineering Corporation	Designing and construction of buildings and infrastructure facilities, investment in infrastructures, investment in and development of real estate, etc.	State-owned companies	The company marked 11th place in the world in the construction engineering sector in terms of total revenues, a result of deducting domestic revenues from overseas revenues, in 2017. It marked 24th place in revenues (14.45 billion dollars) among the Fortune 500 firms in December 2017.	Plaza Construction, the United States (construction)

9	China National Chemical Corporation	Petrochemistry	State-owned companies	It is a major petrochemical company. It marked 211st place in revenues (45.1 billion dollars) among the Fortune 500 firms in December 2017.	Pirelli, Italy (tiers), Krauss-Maffei, Germany (heavy electric machinery), Syngenta, Switzerland (pesticides, seeds), Adama, Israel (generic pesticides), etc.
10	China Minmetals Corporation	Mining site development, imports and exports of iron (black metal) products, nonferrous metals, finance, etc.	State-owned companies	It marked 120th place in revenues (64.5 billion dollars) among the Fortune 500 firms in December 2017.	Las Bambas copper mine, Peru

Source: *FY2015 Statistical Bulletin of China's Outward Foreign Direct Investment* (Ministry of Commerce of the P.R. China, 2016), and other data released online.

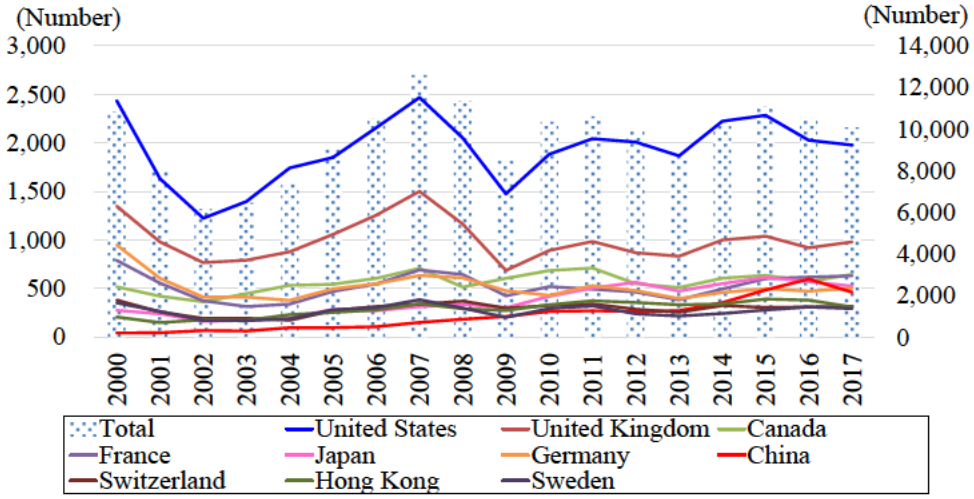
(3) Active corporate acquisitions by Chinese companies in the United States and Europe

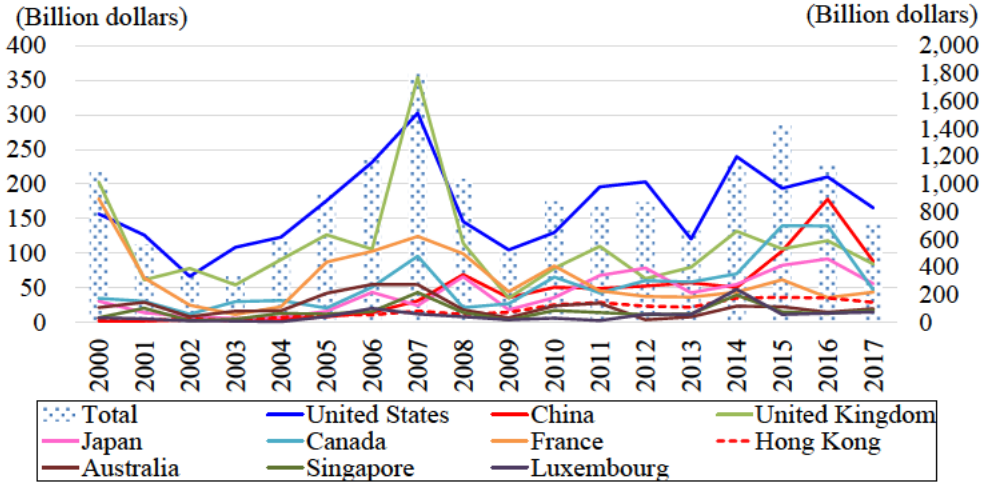
In recent years, Chinese companies have actively been implementing cross-border M&As in order to enhance their international competitiveness by acquiring advanced technologies. Therefore, in this paragraph, we will look at the trends in cross border M&As around the world and in China. As M&A-related data do not always provide information on the acquisition value and whether or not the deal has been completed, they are used as no more than a reference for the trend.

Looking at the global number of cross-border M&As by nationality of the acquiring company, the number of M&As by Chinese companies, which was 44 in 2000, started to increase steeply in 2006 and came to 598 in 2016, representing a 14-fold increase. However, the number declined to 463 in 2017 because of efforts by the government of China to curb capital outflow. The share of M&As by Chinese companies in the global number in 2017 was 4.6%, the seventh largest by nationality in the world.

The value of M&As by Chinese companies increased 54-fold between 2000 and 2017, while the share in the global value of M&As rose to 12.5%, the second largest in 2017 after the share of U.S. companies, 23.5% (Figure II-3-3-2-15).

Figure II-3-3-2-15 Number and values of global M&As in major countries/regions

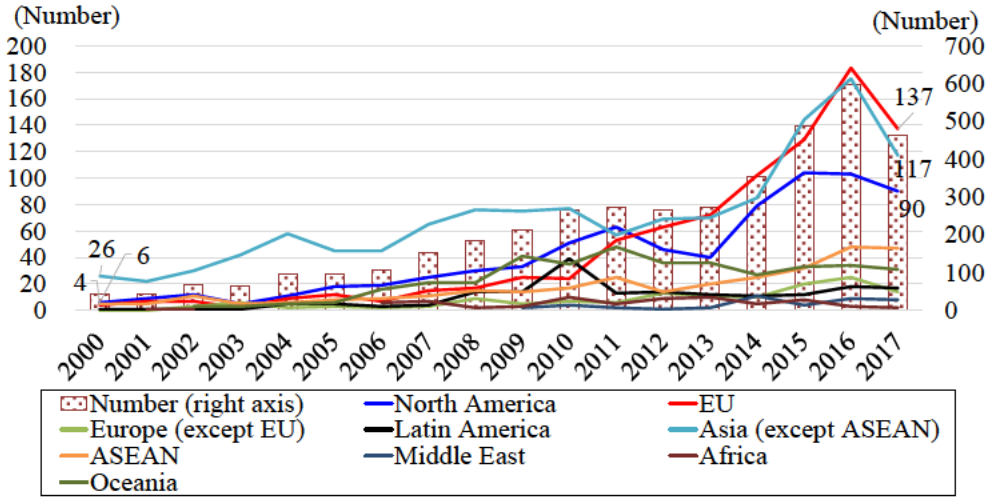




Notes: The data shows the top 10 countries or regions in the number of M&As and the values in 2017.
Source: Thomson One (Thomson Reuters, as of March 2018).

Next, looking at the number of Chinese cross-border M&As by region, the number of M&As in the EU increased from four in 2000 to 137 in 2017, representing the largest increase of all regions. In the first half of the 2000s, the annual number of M&As was higher than 20 only in Asia. However, the annual number has been higher than 20 in the United States since 2007 and in the EU since 2009. The share of M&As in the EU started to rise steeply in 2011 and was around 30% in 2017. The combined share of M&As in the EU and North America has been higher than 30% since 2011, and it reached around 50% in 2017 (Figure II-3-3-2-16).

Figure II-3-3-2-16 Changes in the number of China's cross-border M&As by region



Notes: The numbers are complete M&A cases and the results of calculation based on the announcement data on M&As. Reuters confirmed the M&A completion based on the press releases, etc. and does not cover all M&A cases that have completed.

Source: Thomson One (Thomson Reuters, as of March 2018).

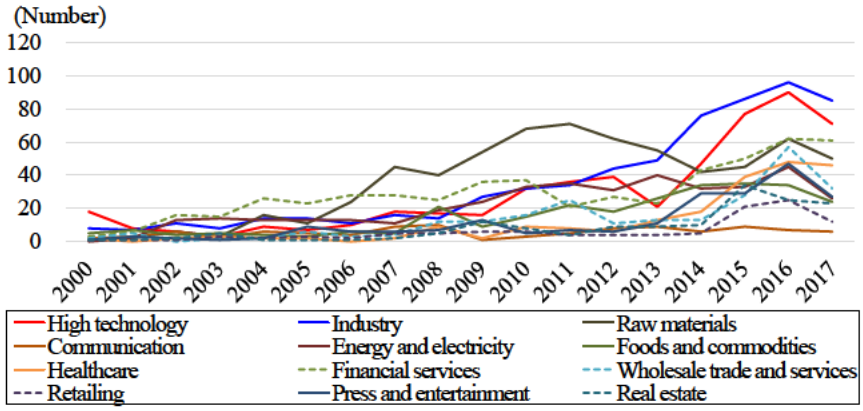
The share of M&As in the Pacific region increased from around 15% in 2006 to nearly 20% in 2013. The share of M&As in Central and South America stayed in a relatively high range, from 7% to 15%, between 2008 and 2010. This reflected the effects of an increase of acquiring mining companies in Australia and Central and South American countries, including Brazil.

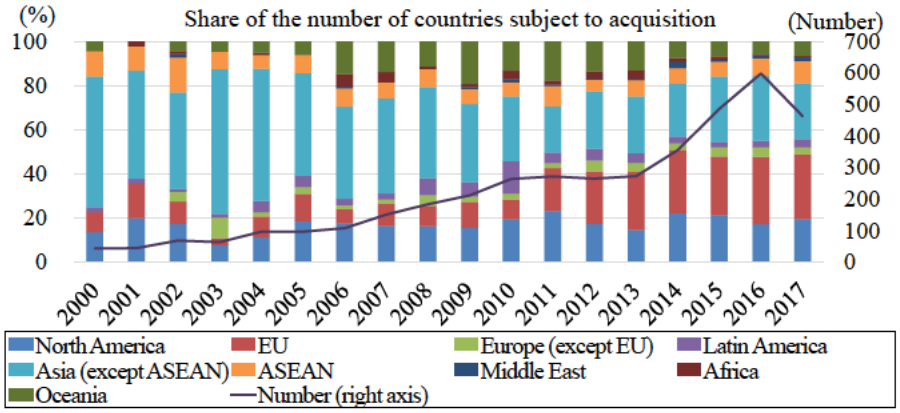
Looking at the share of M&As by industry,[157] the share of M&As in the materials sector has increased rapidly since 2004. Of the total of 657 M&As related to materials between 2000 and 2017, metals and mining accounted for 492, or around 75%. Australia had a share of 47.2% and Canada had a share of 14.2%, together accounting for around 57%. In addition, between 2008 and around 2015, China's activities to acquire mineral resources also intensified in Central and South America, including Brazil, and Africa. Since 2013, the number of M&As in the industrials and high technology industries increased rapidly. In particular, the increase was steep for semiconductors, electronics, and software.

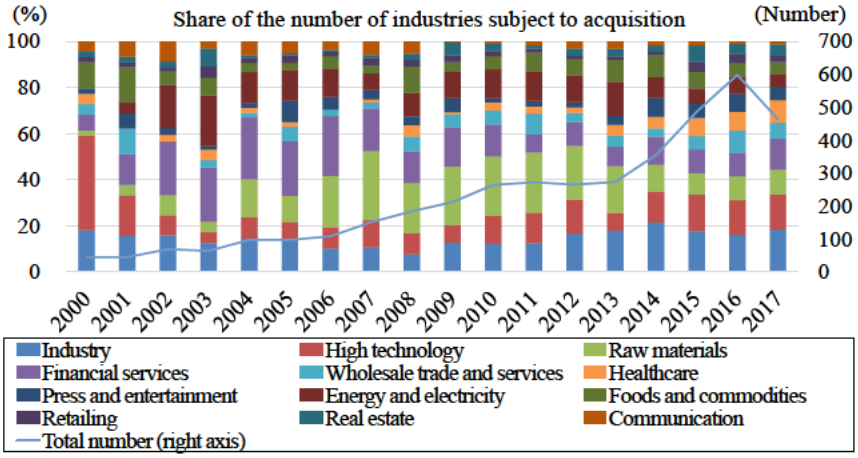
By industry, materials accounted for the largest share, 16.2% in the total number of M&As between 2000 and 2017, followed by industrials with 15.6%, financials with 13.1% and high technology with 13.0% (Figure II-3-3-2-17).

157 Major industries are high technology (semiconductors, electronics, software, computers and peripherals, e-commerce, etc.), industrials (machinery, automobiles & components, transportation & infrastructure, aerospace & defense, etc.) and materials (metals & mining, chemicals, construction materials, etc.).

Figure II-3-3-2-17 Changes in the number of China's cross-border M&As by industry







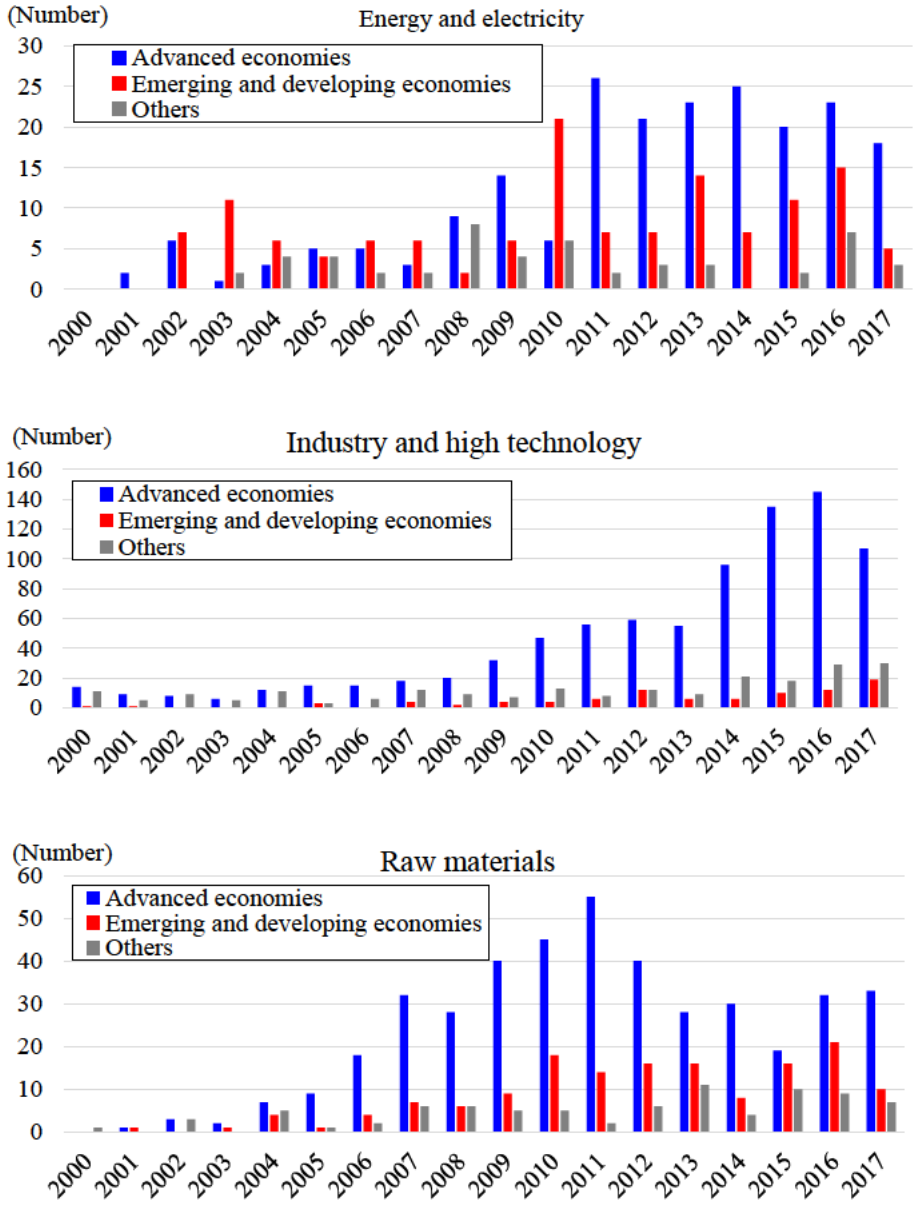
Notes: The numbers are complete M&A cases. Reuters confirmed the M&A completion based on the press releases, etc. and does not cover all M&A cases that have completed.

Source: Thomson One (Thomson Reuters, as of March 2018).

Regarding the top three industries in terms of the number of Chinese M&As, let us look at whether China invested more in advanced economies or in emerging and developing economies. In the energy and power industry, Chinese M&As were previously almost evenly divided between advanced economies and emerging and developing economies, but since 2011, Chinese M&As have mainly involved oil and gas companies in advanced economies such as Canada, the United States and Australia.

In the industrials and high technology industries, Chinese M&As have mainly involved companies in the United States and the EU, while in the materials industry, they have mainly involved metals and mining companies in advanced economies such as Australia and Canada (Figure II-3-3-2-18).

Figure II-3-3-2-18 Changes in the number of Chinese companies' cross-border M&As (involving advanced economies and emerging and developing economies)



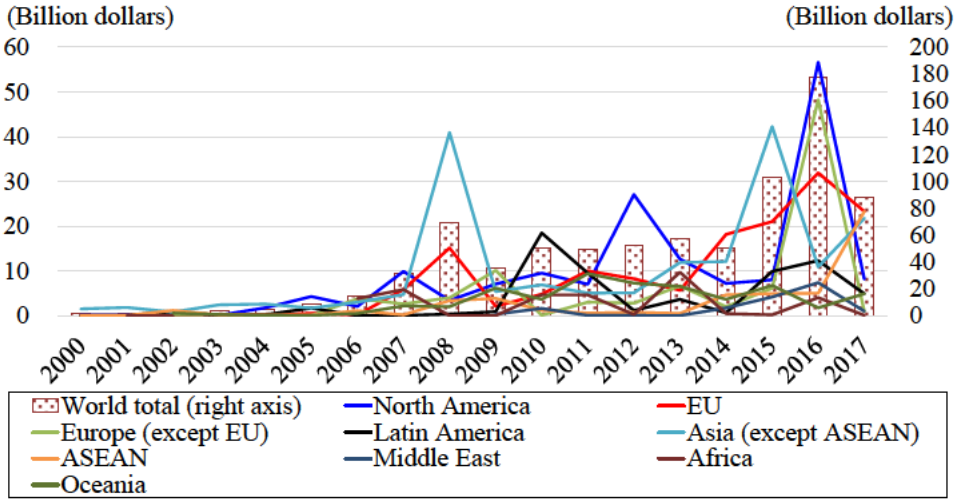
Notes:

1. Acquired companies were classified by nationality into advanced economies, emerging and developing economies, and others. The "advanced economies" are those in the IMF's advanced economy category excluding Hong Kong and Macau. "Others" are Hong Kong, Macau, the British Virgin Islands, the Cayman Islands, and Bermuda.
2. The industrial and high-tech sectors include software, semiconductors, electrical equipment, machinery, and automobiles and auto parts.

Source: Thomson One (Thomson Reuters, as of March 2018).

Next, we will look at the trend in Chinese M&As in terms of value. M&A-related data are often lacking in information on the transaction value, so analysis from this viewpoint does not necessarily describe the true picture of China's M&A activities. However, the analysis makes it possible to identify the general trend concerning regions and industries in which Chinese companies are interested. Between 2000 and 2017, Hong Kong, the United States and the EU had large shares in the total value of cross-border Chinese M&As. The share of the United States in terms of the value of M&As was larger than its share in terms of the number of M&As. The steep increase in terms of the total value since 2014 reflects an increase in M&As in the United States, the EU and Hong Kong. In recent years, the United States has tended to have the largest share (Figure II-3-3-2-19).

Figure II-3-3-2-19 Changes in values of China's cross-border M&As by region

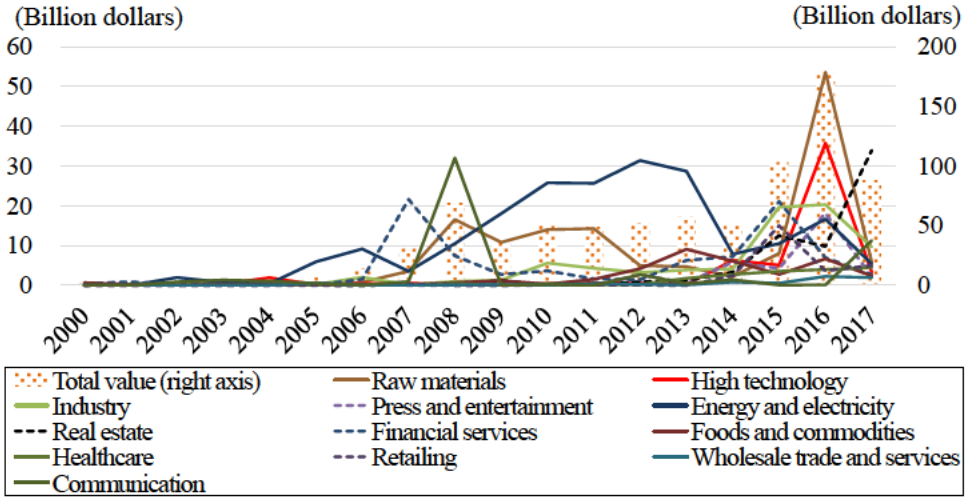


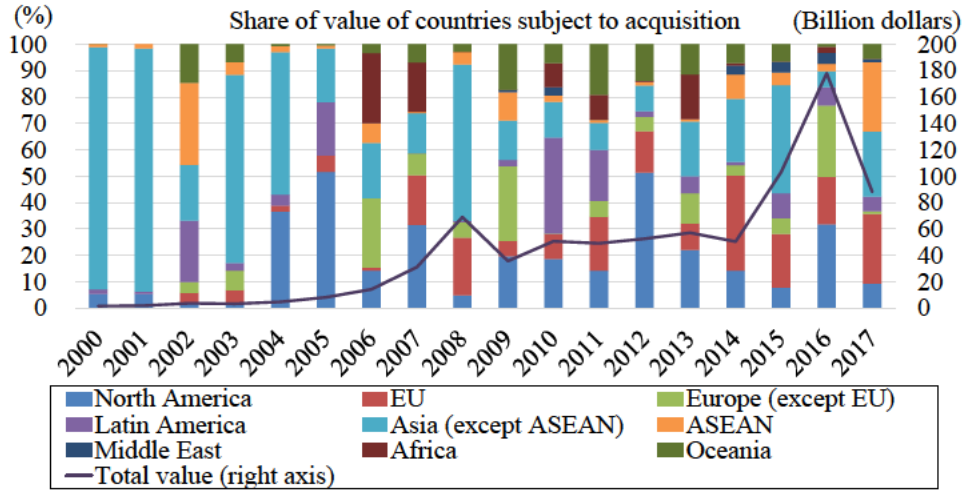
Notes: The numbers are complete M&A cases. Reuters confirmed the M&A completion based on the press releases, etc. and does not cover all M&A cases that have completed. The data about which no value is released was calculated as zero yen.

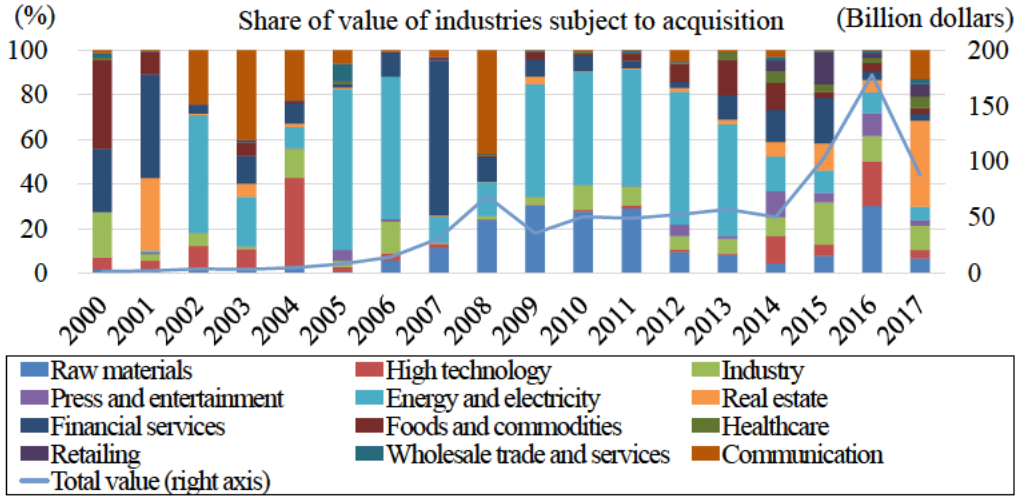
Source: Thomson One (Thomson Reuters, as of March 2018).

Looking at the share by industry in terms of the value of M&As, energy and power had the largest share, 25.2%, in the total value of M&As between 2000 and 2017, followed by materials with 17.4%, financials with 10.8% and industrials with 9.6%, suggesting that China has until now implemented many large-scale M&As in order to acquire resources. Among the industries other than energy and power, materials had a relatively large share. In 2016, when the total value of Chinese M&A rose to the highest level, materials had the largest share, 30.1%, followed by high technology with 20.1% and industrials with 11.4% (Figure II-3-3-2-20).

Figure II-3-3-2-20 Changes in values of China's cross-border M&As by industry







Notes: The numbers are complete M&A cases. Reuters confirmed the M&A completion based on the press releases, etc. and does not cover all M&A cases that have completed. The data about which no value is released was calculated as zero yen.

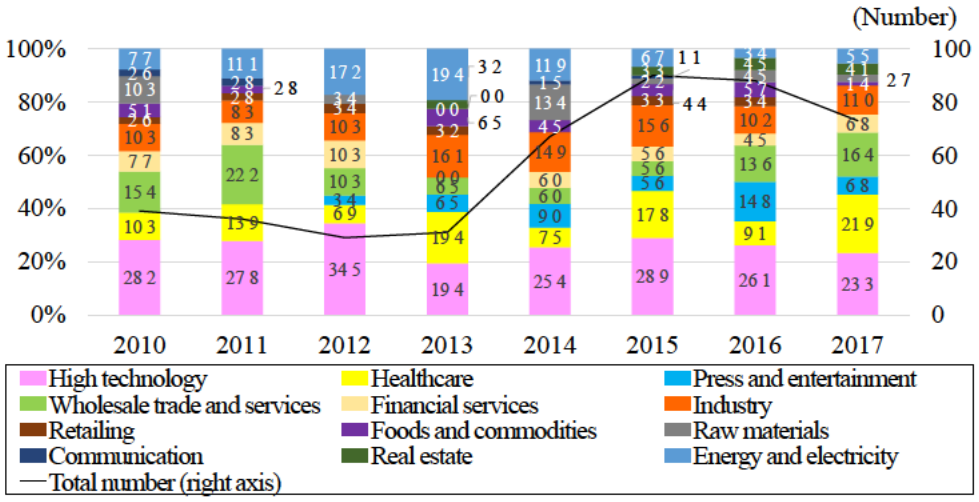
Source: Thomson One (Thomson Reuters, as of March 2018).

Next, we will look at the trends concerning M&As in the United States and the EU, where Chinese M&As have increased in recent years in particular.

First, regarding Chinese M&As involving U.S. companies, the annual number of M&As increased steeply from 2013 onwards but declined in 2017. By industry, high technology continued to have the largest share throughout this period. During the three years from 2015, when the government of China announced Made in China 2025, to 2017, of the total number of M&As in the high technology industry, which was 66 deals, semiconductors accounted for the largest number, 19 deals (28.8%), followed by software with 12 deals (18.2%), computers and peripherals with 10 deals (15.2%), and internet software and services with 10 deals (15.2%). Among other industries, healthcare, wholesaling and services, and industrials also had relatively large shares (Figure II-3-3-2-21).

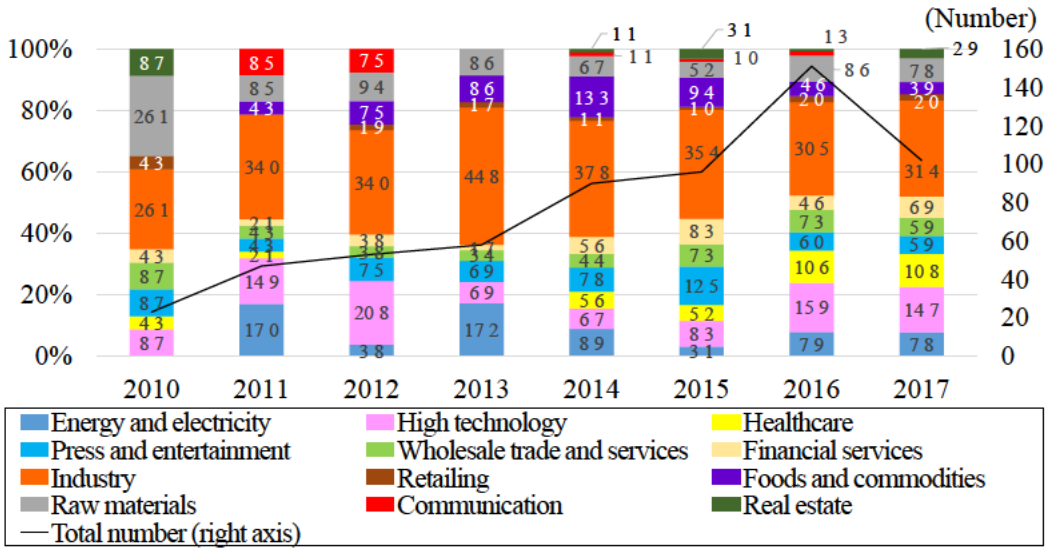
Next, regarding Chinese M&As involving companies in the EU, the annual number of M&As remained on an uptrend until 2016 but declined in 2017. By industry, industrials continued to have the largest share through the whole period. During the three years from 2015 to 2017, the machinery industry accounted for the largest number, 52 deals (32.9%), of the total, followed by automobiles and components with 41 deals (25.9%), building/construction and engineering with 28 deals (17.7%). During the same period, the high technology industry also had a relatively large share, with semiconductors and software accounting for more than half of the total in this industry (Figure II-3-3-2-22).

Figure II-3-3-2-21 Number of M&As in the United States by a Chinese company as a final parent company



Source: Thomson One (Thomson Reuters, as of March 2018).

Figure II-3-3-2-22 Number of M&As in the EU by a Chinese company as a final parent company



Source: Thomson One (Thomson Reuters, as of March 2018).

The government of China is actively promoting M&As under a national policy as a means to enhance priority technologies and the innovation capability of its priority industries.[158]

For example, under Made in China 2025 (May 2015), the government should support activities to achieve overseas expansion through such means as M&As and venture investments. Under the 13th Five-year Plan on National Scientific and Technological Innovation (August 2016), the government should encourage international technological partnerships, establishment of research centers abroad by companies, participation in the establishment of international standards and cross-border M&As, among other matters, in order to raise the level of internationalization among Chinese companies (Table II-3-3-2-23).

158 Mizuho Research Institute (2016).

Table II-3-3-2-23 Priority industries and technical fields in the policies upheld by the government of China

Priority sectors under Made in China 2025 (May 2015)

Ten priority industrial sectors under Made in China 2025
▪ Next-generation information technology
▪ High-end numerical control machinery and robotics
▪ Aerospace and aviation equipment
▪ Maritime engineering equipment and high-tech maritime vessel manufacturing
▪ Advanced rail equipment (high-speed railways, etc.)
▪ Energy-saving and new energy vehicles
▪ Electrical equipment
▪ Agricultural machinery and equipment
▪ New materials
▪ Biopharmaceuticals and high-performance medical devices

Source: Mitsubishi Research Institute, Inc. (2018).

The 13th Five-Year Plan on Scientific and Technological Innovation (Aug. 2016)

Priority projects for national science and technology
▪ Innovative electronic devices, high-end chips, etc.
▪ Facilities and technologies for manufacturing large-scale integrated circuits
▪ Next-generation broadband wireless mobile networks
▪ Highly-accurate machine tools and manufacturing technologies therefor
▪ Development of large-scale gas fields and coal-bed gas
▪ Large-scale, advanced pressurized-water nuclear power generation, and high-temperature gas-cooled reactors
▪ Water pollution control and flood control
▪ Development of new varieties of genetic modification
▪ Drug development targeting serious diseases
▪ Prevention and curing of serious infections, e.g., AIDS and viral hepatitis
▪ Large aircraft
▪ Highly-accurate earth observation systems
▪ Plans of manned space flight and lunar exploration

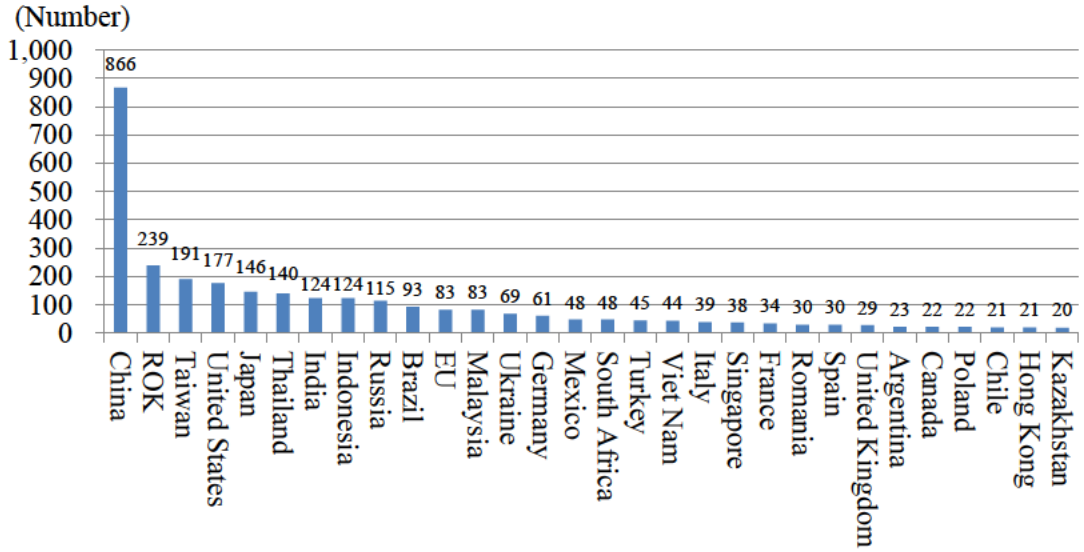
Source: *The 13th Five-Year Plan on Scientific and Technological Innovation* (State Council of China, 2016).

3. Major countries' responses

Above, we looked at the trends in trade and foreign direct investments by China. China has transformed itself into a presence with significant influence over the global economy by increasing its global share in terms of both trade and foreign direct investments. Here, we will provide a brief summary of the trend in major countries' responses to China's increased presence. For the details of the responses by the United States and Europe, please refer to Part I, Chapter 2 "Economic trends and external economic policies in major countries/regions."

First, we will look at the implementation of trade remedy measures against China by other countries. Since the establishment of the WTO, China has been the most frequent target of antidumping (AD) measures, with AD measures implemented against it in far more cases (866 cases) between 1995 and 2016 than against other frequent targets: China was followed by the ROK (239 cases), Taiwan (191 cases), the United States (177 cases) and Japan (146 cases) in that order (Figure II-3-3-3-1). In recent years, the number of cases of implementation of AD measures against China has increased across the world: the number was 61 cases in 2015 and 44 cases in 2016, increasing steeply from 27 cases in 1995 (Figure II-3-3-3-2). Emerging and developing economies have implemented AD measures in more cases than advanced economies. Among advanced economies/regions, the United States implemented AD measures in the largest number of cases, followed by the EU[159,160] (Figure II-3-3-3-3).

Figure II-3-3-3-1 Number of cases of implementation of AD measures by country/region

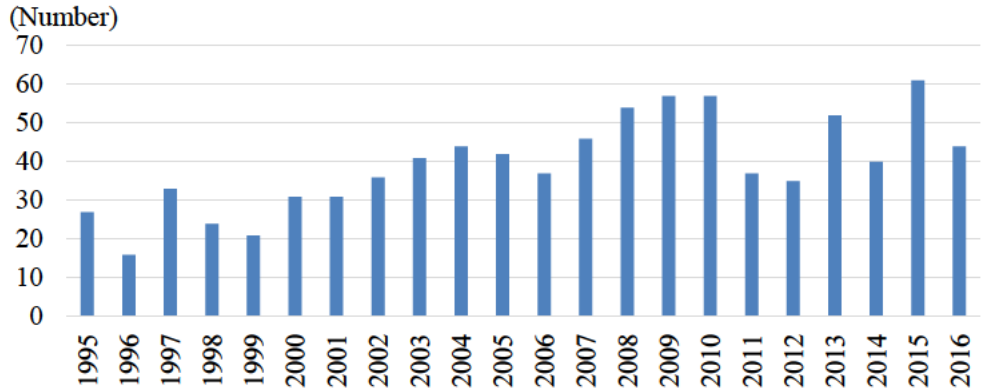


Source: WTO.

159 Of all countries around the world, India implemented AD measures in the largest number of cases (152 cases), followed by the United States (111 cases) and the EU (91 cases).

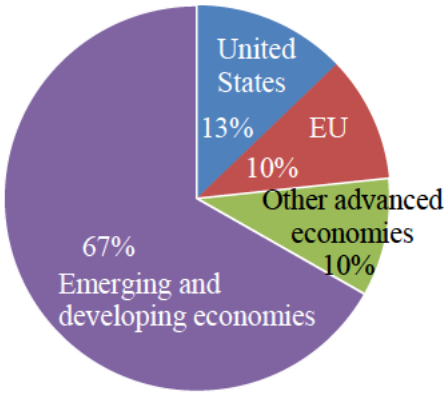
160 Japan implemented AD measures against China with respect to Chinese-made polyethylene terephthalate with a high degree of polymerization in December 2017 and with respect to carbon steel butt welding fittings in March 2018.

Figure II-3-3-3-2 Change in the number of cases of implementation of AD measures against China



Source: WTO.

Figure II-3-3-3-3 Number of cases of implementation of AD measures against China (by region) (cumulative total between 1995 and 2016)



Source: WTO.

Next, we will look at the status of consideration and implementation by the United States of measures related to trade with and direct investments by China. Based on the recognition that imports from China are causing damage to U.S. domestic industries, the United States has been increasing the implementation of AD measures against China as a trend. While the number of cases of implementation of AD measures varies from year to year, AD measures were implemented in eight cases in the first half of 2017 alone. In addition to implementing AD measures, on March 23, 2018, the United States started to apply additional tariffs to imports of steel and aluminum from China and most other countries around the world for national security reasons based on Section 232 of the U.S. Trade Expansion Act. On March 22, 2018, the U.S. president signed a presidential memorandum ordering the implementation of sanctions, including 25% additional tariffs on specified products, against China based on Section 301 of the Trade Act on the grounds that the government of China was conducting unreasonable interventions in order to force U.S. companies to transfer intellectual property rights and technology to Chinese companies.

With respect to inward foreign direct investments, M&As by Chinese companies have been

subjected to review by the Committee on Foreign Investment in the United States (CFIUS) in an increasing number of cases. In some cases, the president issued an order suspending the acquisition. Meanwhile, in the U.S. Congress, a bipartisan group of lawmakers submitted legislation to strengthen the control of inward foreign direct investments by enhancing the CFIUS's functions in November 2017.

Next, we will look at the consideration and implementation by the EU of measures related to trade with and direct investments by China. The overall number of cases of implementation of AD measures by the EU has been trending downward since the middle of the 2000s, but the number of cases of implementation of AD measures against China has recently increased. In December 2017, the EU directive that prescribes the EU framework of AD measures was revised. As a result, it has become possible to use a substitute price in a third country, rather than a price or cost in the exporting country, in the calculation of a "normal price" used to judge the presence or absence of dumping when the market price or cost is being distorted by intervention by the government of the exporting country. In March this year, an AD measure was implemented against China under the new system.

With respect to inward foreign direct investments, in September 2017, the European Commission proposed to member countries a draft directive for the establishment of a framework for screening of foreign direct investment in the EU. At the member country level, the cabinet of Germany, for example, approved a draft of the regulation on the enforcement of foreign trade law (AWV), which is intended to strengthen screening of foreign direct investments, in July 2017.[161]

161 Japan also strengthened the control of inward foreign direct investments through the revision of the Foreign Exchange Act in 2017 (the revision was put into force on January 1, 2017). Specifically, Japan strengthened corrective measures that may be taken after investment, such as ordering share sales, added trading in unlisted shares between foreign investors to the scope of transactions subject to regulation and added some industries to the scope of industries subject to regulation.