

Chapter 2 Rise of emerging and developing economies

Section 1 Changes in the roles of emerging and developing economies in the global economy

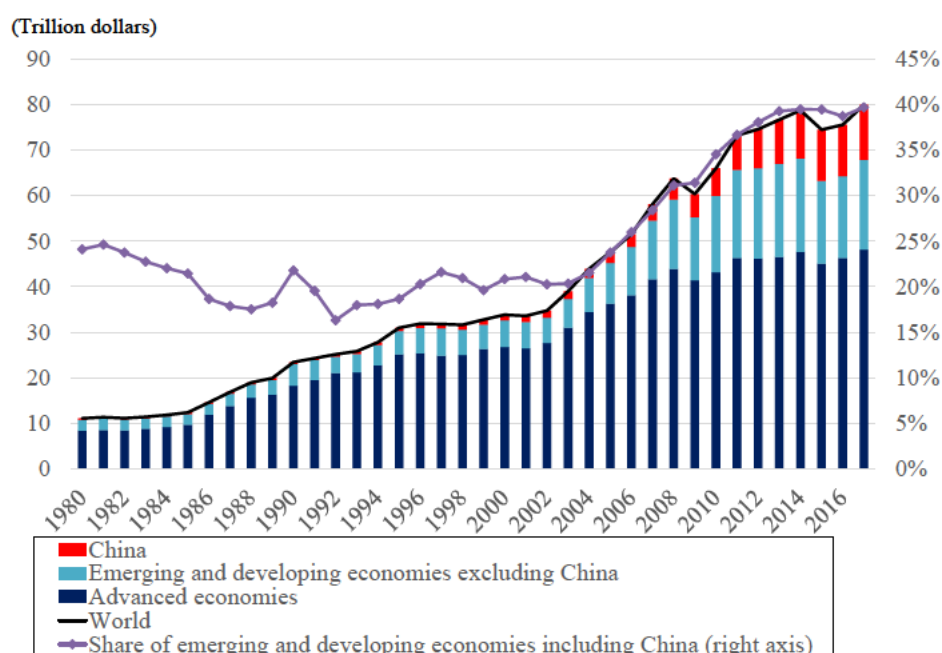
1. Growing role of emerging and developing economies in global economic growth

In Part I, Chapter 1, we looked at trends in the global economy. In this section, we will divide the global economy into advanced economies³⁸ and emerging and developing economies and look at how the role of emerging and developing economies has changed over the medium to long term from the macro viewpoint in terms of GDP, trade and direct investment in that order.

First, Figure II-2-1-1-1 shows changes in nominal global GDP and the share of emerging and developing economies from 1980 through 2017. The nominal global GDP has been steadily growing despite temporary drops due to the collapse of Lehman Brothers, etc., and the share of emerging and developing economies in nominal global GDP has been increasing significantly since the middle of the 2000s and has recently surpassed 40%.

Next, concerning contribution by country/region to the real growth rate of global GDP (Figure II-2-1-1-2), the contribution by advanced economies has been gradually declining since around 2000, while the contribution by emerging and developing economies, including China, has been increasing. Between 1981 and 2000, the share of advanced economies almost consistently remained at around 80%, but it has declined to around 60% since 2000.

Figure II-2-1-1-1 Changes in nominal global GDP and the share of emerging and developing economies

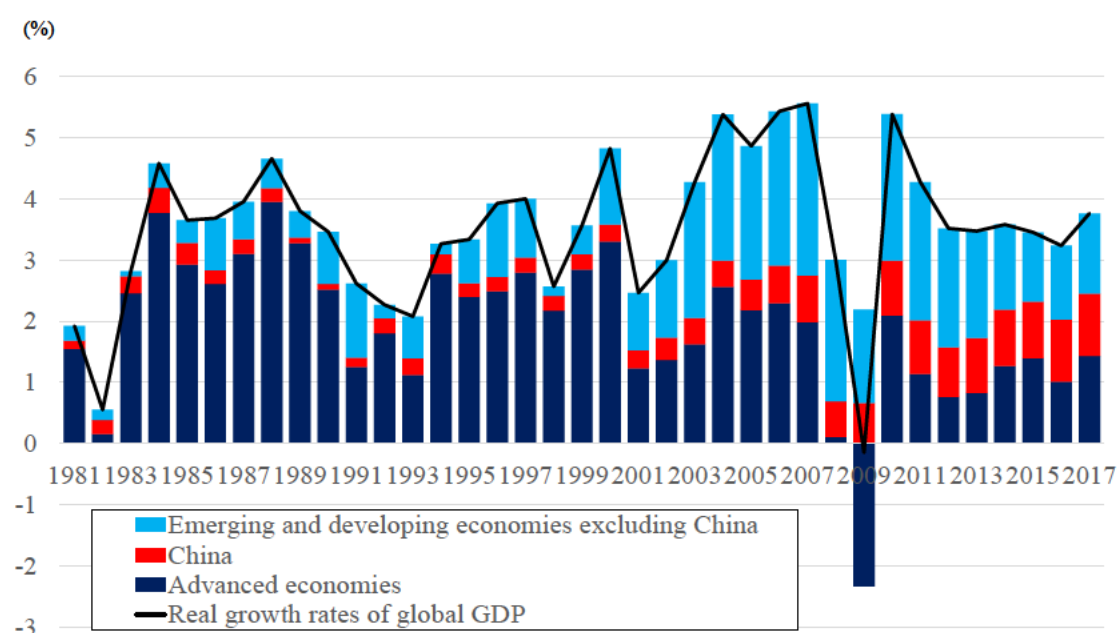


Notes: The nominal GDPs are US dollar-based value.

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

38 In this section, advanced economies are those as defined by the IMF.

Figure II-2-1-1-2 Changes in real growth rates of global GDP (contribution by country/region)

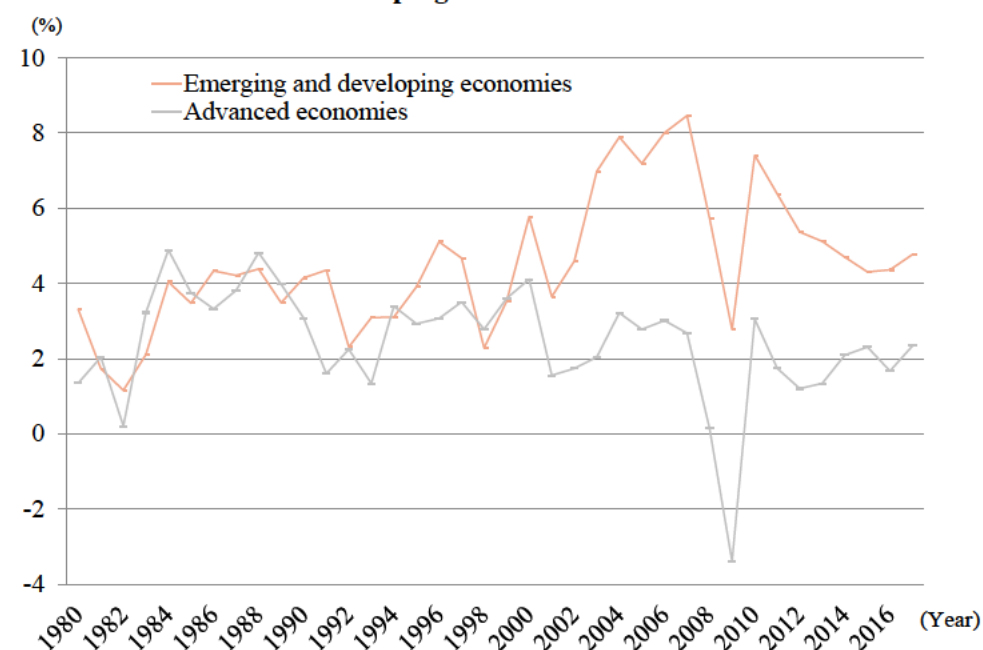


Notes: These figures for contribution by country/region are estimates calculated based on ratios of such contribution in the nominal GDPs in the previous year.

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

The growth rate of emerging and developing economies has continued to outpace that of advanced economies since 2000. In comparison, since the collapse of Lehman Brothers in 2008, the growth rate of advanced economies has remained lower than the rates achieved before 2008 (Figure II-2-1-1-3).

Figure II-2-1-1-3 Changes in real growth rates of GDP in advanced economies and emerging and developing economies



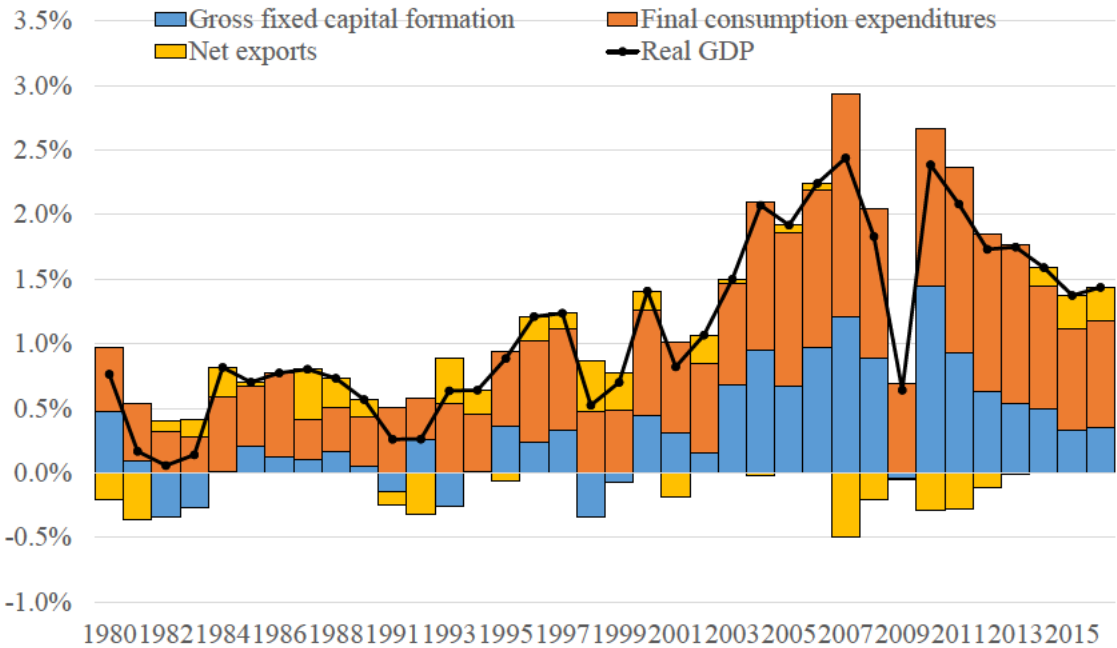
Source: World Economic Outlook Database, April 2018 Edition (IMF, 2018).

As described above, although the share of advanced economies in nominal global GDP is still larger, the role of emerging and developing economies in terms of contribution to global economic growth has continued to grow, particularly since the 2000s.

In order to look at factors of the economic growth of emerging and developing economies in more detail, we will focus attention on the relationship between gross capital formation (domestic investment), which is a demand component of economic growth, and domestic consumption.

According to the International Monetary Fund (IMF) and other international organizations, the average ratio of domestic investment to nominal GDP is around 20% in advanced economies and around 30% in emerging and developing economies. Looking at the value of domestic investments and the value of final domestic consumption in advanced economies and in emerging and developing economies (Figures II-2-1-1-4 and II-2-1-1-5), it is clear that the value of domestic investments in emerging and developing economies has been rising at a pace higher than the value of consumption since 2000 and that the value of domestic investments in emerging and developing economies was similar to the value of domestic investments in advanced economies in 2016. On the other hand, the value of consumption in emerging and developing economies, 9.5 trillion dollars, was only around 60% of the value of consumption in advanced economies (Figure II-2-1-1-6). As for contribution to the growth rate, the contribution by gross capital formation has been large, particularly since 2003. It may be said that the growth of the nominal GDP of emerging and developing economies during this period is attributable in large part to the increase in domestic investments, including inward foreign direct investments, which will be discussed later.

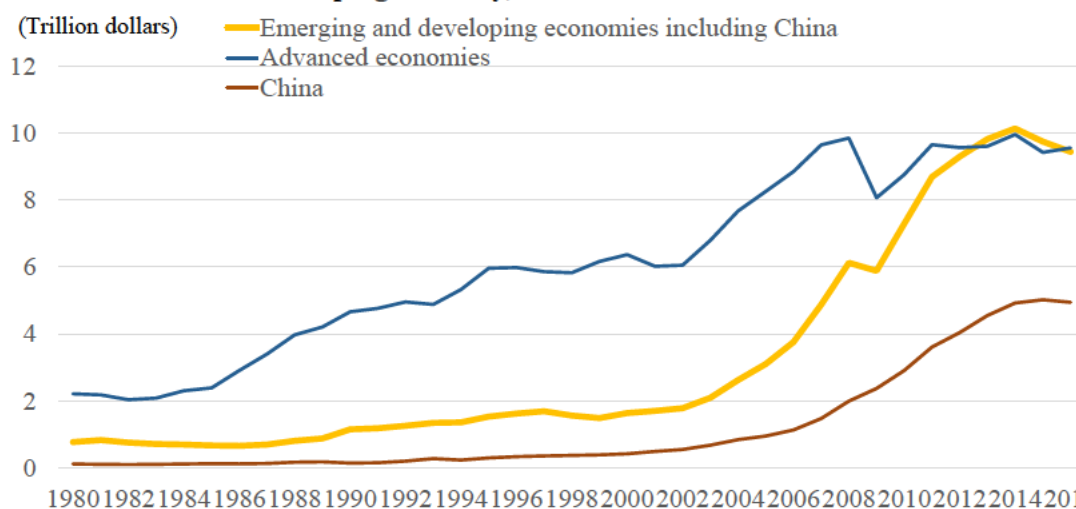
Figure II-2-1-1-4 Changes in contribution broken down by demand item involving real growth rates of global GDP in emerging and developing economies



Notes: Data on real GDPs in 1990 and the following years are excluded since the statistical data on the New Independent States are added and the growth rates seem to be high.

Source: National Accounts Main Aggregates Database (UN, December 2017).

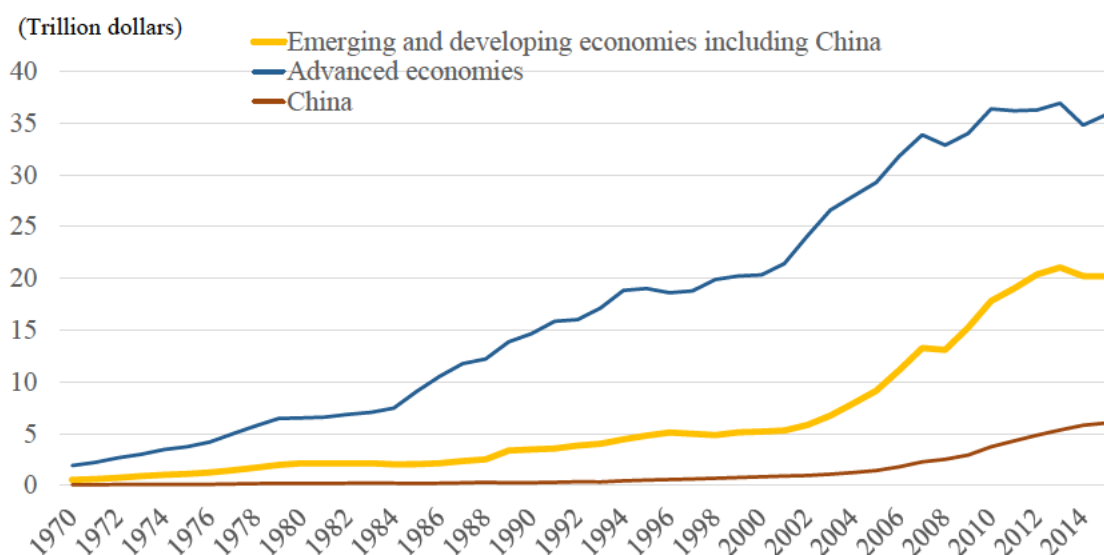
Figure II-2-1-1-5 Changes in domestic investment values (by advanced economy/emerging and developing economy)



Notes: Classification of advanced economies/emerging and developing economies is based on the IMF WEO definition. These figures are the total values concerning countries about which data on gross fixed capital formation in 2016 (domestic investment) are available from the UN National Accounts Main Aggregates Database (December 2017), excluding the former Soviet Union, the DPRK and Taiwan.

Source: National Accounts Main Aggregates Database (UN, December 2017).

Figure II-2-1-1-6 Changes in final domestic consumption values (by advanced economy/emerging and developing economy)



Notes: Classification of advanced economies/emerging and developing economies is based on the IMF WEO definition. These figures are the total values concerning countries about which data on final domestic consumption values in 2016 are available from the UN National Accounts Main Aggregates Database (December 2017), excluding the former Soviet Union, the DPRK and Taiwan.

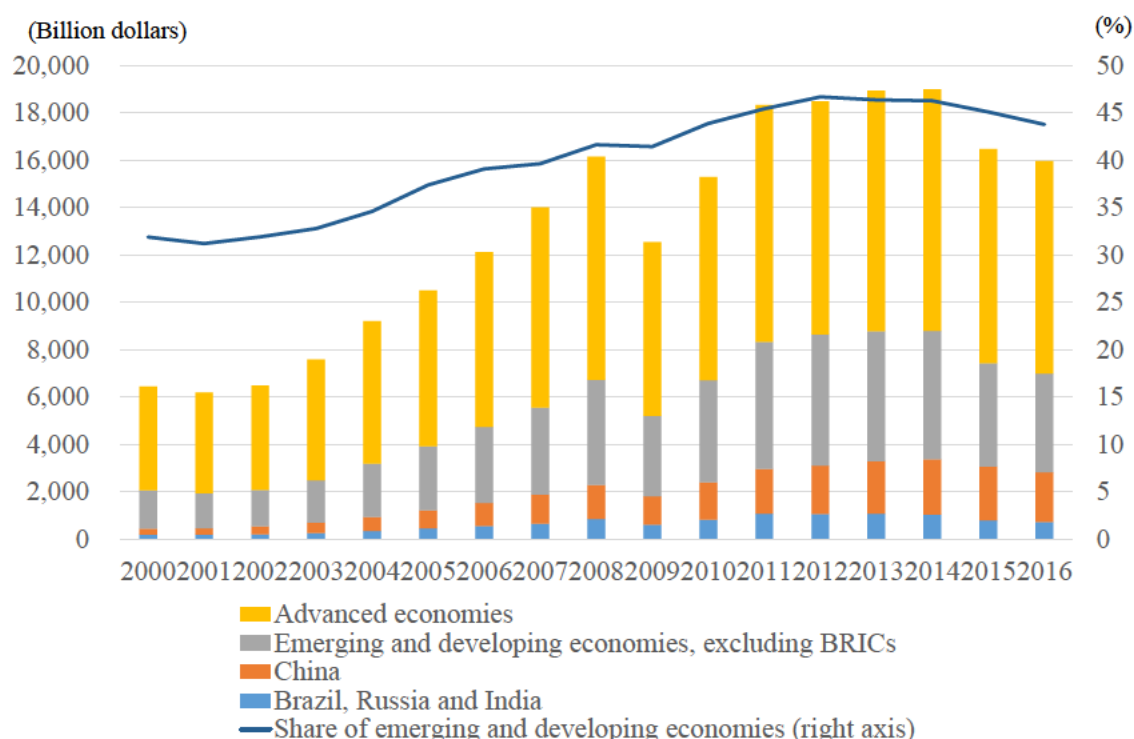
Source: National Accounts Main Aggregates Database (UN, December 2017).

2. Increase in the share of emerging and developing economies in global trade

Next, we will look at the trend in the share of emerging and developing economies in terms of goods trade based on the WTO's statistical data.

First, the overall value of global exports declined at the time of the collapse of Lehman Brothers after having steadily increased since 2000. It later resumed increasing and continued to do so until 2014, before falling again in 2015-2016 (Figure II-2-1-2-1).

Figure II-2-1-2-1 Changes in goods export values worldwide (by country/region)

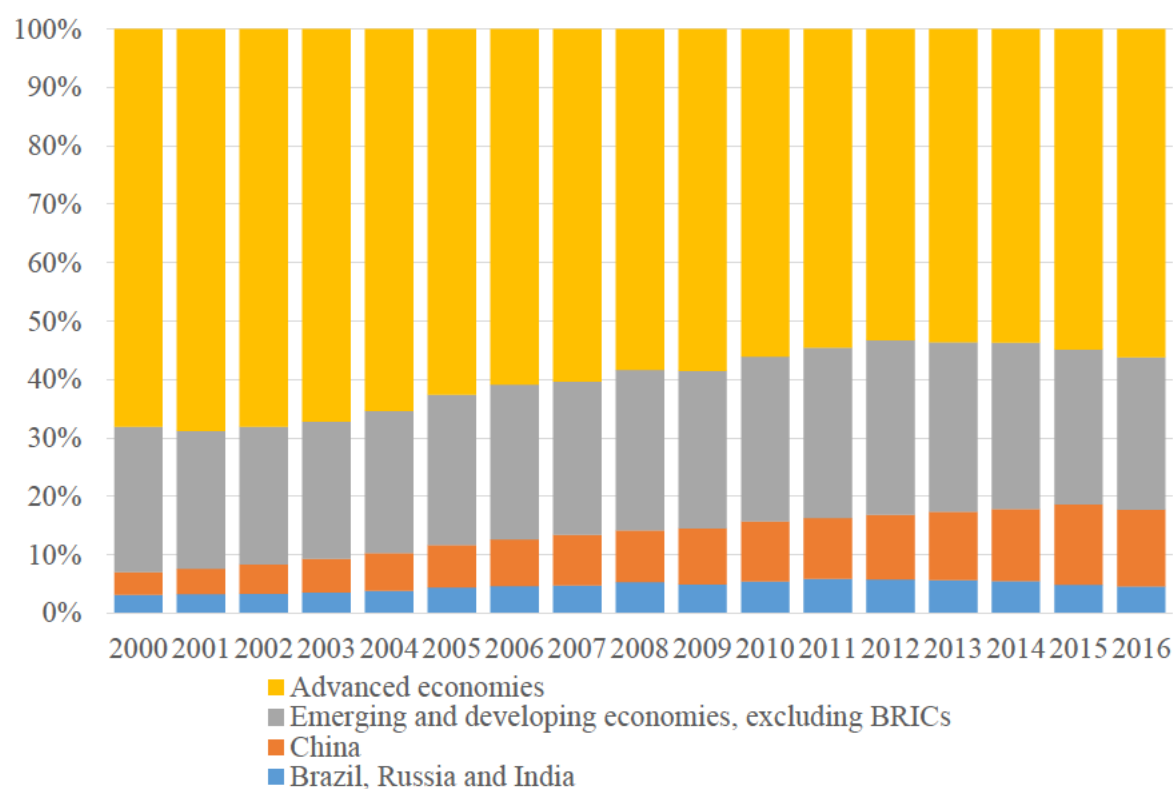


Source: WTO.

The share of emerging and developing economies in the overall value of global exports in the same period continued to increase slightly from the share of around 30% in the 2000s, and it has recently reached about 40%. In particular, it is clear that China's share has continuously increased. Compared with the increase in the share of emerging and developing economies in nominal global GDP, the increase in their share in exports has been moderate, but their role has been steadily growing (Figure II-2-1-2-2).

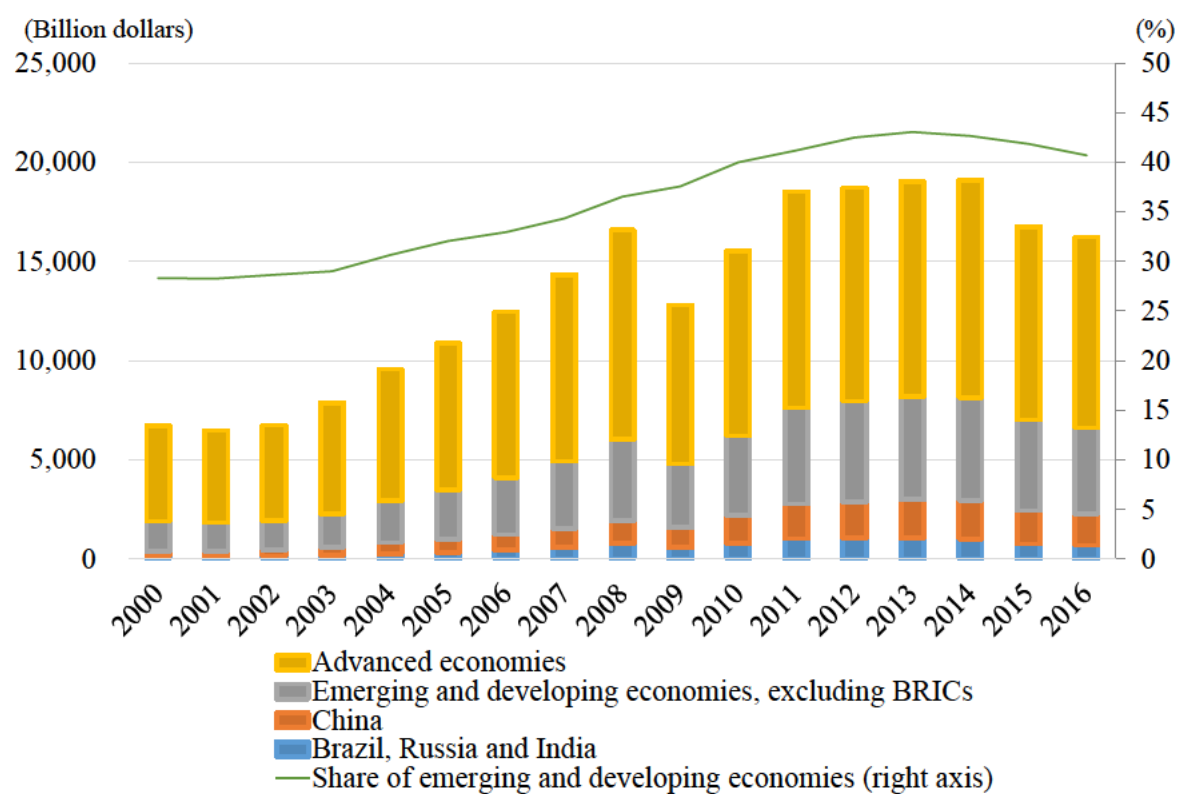
The share of emerging and developing economies in the overall value of global imports also shows a similar trend to the trend in the share in exports. It has continued to increase slightly from around 30% in the 2000s and has recently reached about 40% (Figures II-2-1-2-3 and II-2-1-2-4).

Figure II-2-1-2-2 Changes in shares of goods export values worldwide by country/region



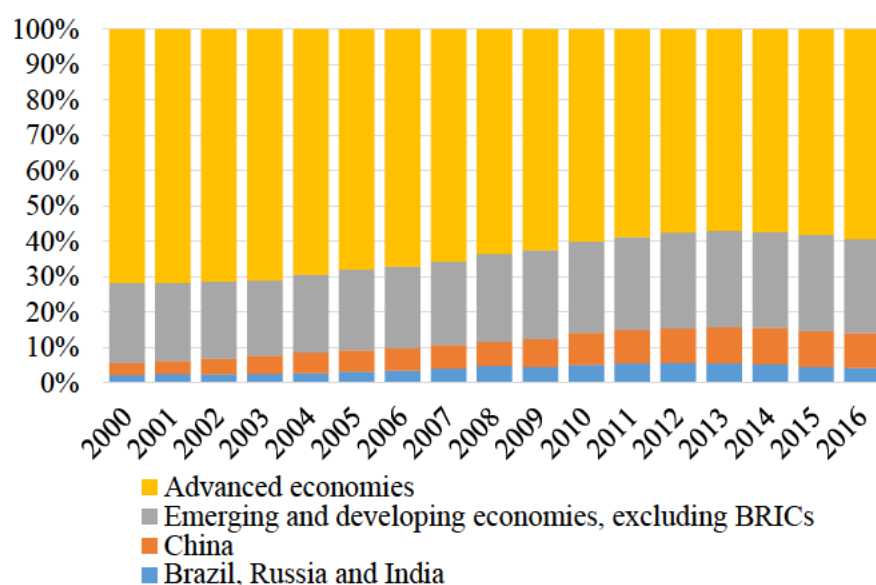
Source: WTO.

Figure II-2-1-2-3 Changes in goods export values worldwide (by country/region)



Source: WTO.

Figure II-2-1-2-4 Changes in shares of goods import values worldwide by country/region

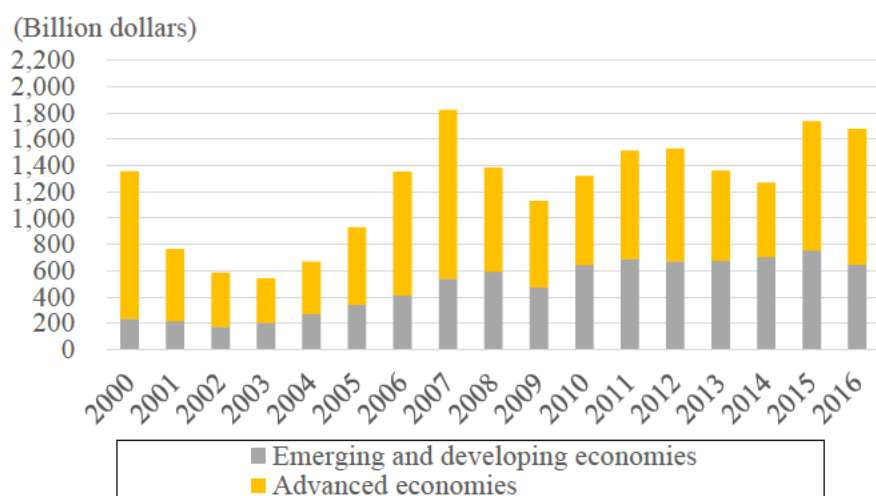


Source: WTO.

3. Increase in the share of emerging and developing economies in foreign direct investments

Next, we will look at the trend in the share of emerging and developing economies in direct investments based on UNCTAD's data. First, the share of emerging and developing economies as recipients of inward direct investments started to increase in 2003 from around 10-20% earlier in the 2000s and reached 51% in 2010, surpassing the share of advanced economies for the first time. After increasing to 57.4% in 2014, the share was 40.9% in 2016, which indicates that the presence of emerging and developing economies is growing (Figure II-2-1-3-1).

**Figure II-2-1-3-1 Changes in domestic direct investment values worldwide
(by advanced economy/emerging and developing economy)**



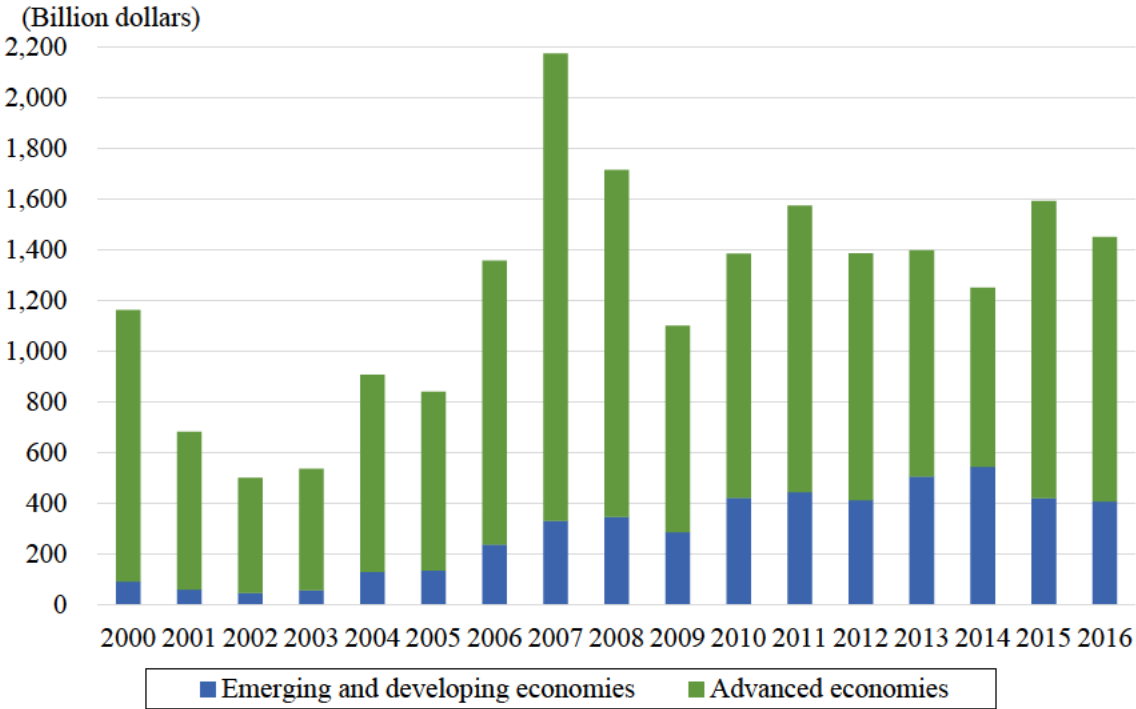
Notes: The figures for emerging and developing economies are the total values of transition economies and developing economies.

Source: UNCTAD.

This change has presumably arisen as a consequence of active business expansion by companies from advanced economies into emerging and developing economies due to factors such as: the progress in the international division of work (in the form of global value chains) concerning production processes that became advantageous with declines in transportation costs and various adjustment cost and the development and penetration of IT in addition to the growing presence of emerging and developing economies as consumer markets.

On the other hand, the share of emerging and developing economies in outward direct investments, namely their share as providers of direct investments, has increased from single-digit figures in the 2000s but was at around 20-30% in most years. From this, it may be said that the role of emerging and developing economies as providers of outward direct investments is still limited compared with their role as recipients of inward direct investments (Figure II-2-1-3-2).

**Figure II-2-1-3-2 Changes in outward direct investment values worldwide
(by advanced economy/emerging and developing economy)**



Notes: The figures for emerging and developing economies are the total values of transition economies and developing economies.

Source: UNCTAD.

4. Increase in the share of emerging and developing economies in production capacity of raw materials industry

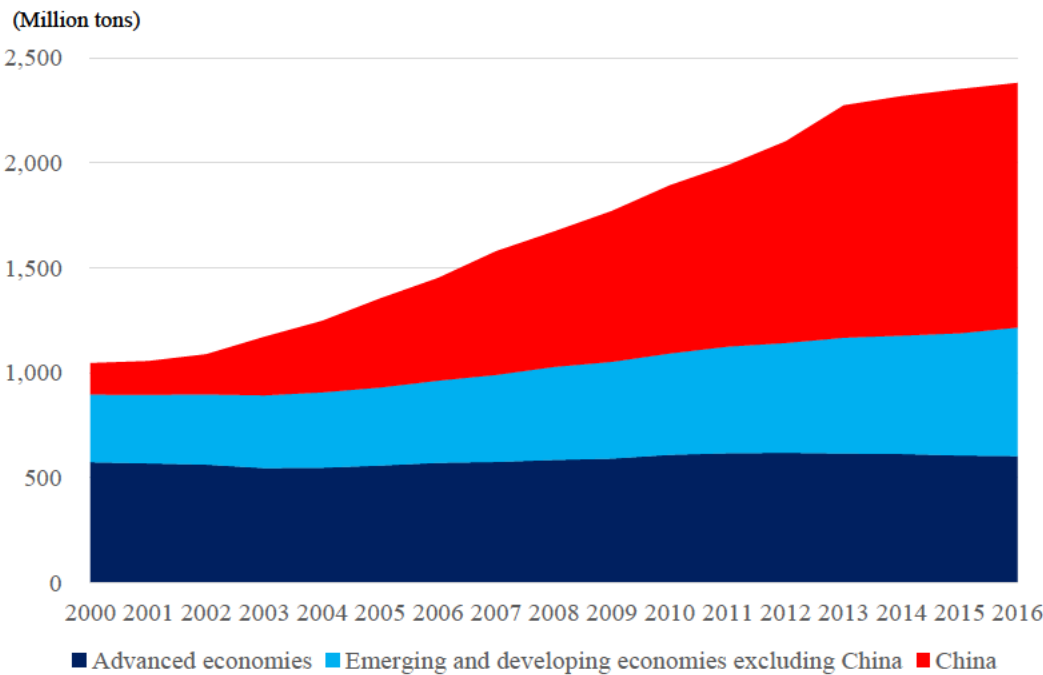
Above, we looked at the growth in the share of emerging and developing economies in terms of global economic growth, trade and foreign direct investments. Below, we will look at the growth in the presence of emerging and developing economies in raw materials industries from the semi-macro viewpoint.

In subsection 1. above, we pointed out that investments made significant contributions to the rise in the growth rate of emerging and developing economies in the 2000s. This means that in this period, many infrastructure development projects were implemented and capital investments were actively made by companies in emerging and developing economies. It is presumed that as these investments required raw materials items, such as metal and chemical products, demand for those items increased steeply in this period, and as a result, production capacity in emerging and developing economies expanded significantly. Generally speaking, the raw materials industry is regarded as a key industry for emerging and developing economies.

Therefore, we will look at the share of emerging and developing economies in global production of steel and aluminum as an example of their presence in the raw materials industry.

Figure II-2-1-4-1 shows changes in global steel production capacity divided into capacity in advanced economies, capacity in China, and capacity in emerging and developing economies excluding China. Steel production capacity in advanced economies has stayed at around 600 million tons for the past 17 years, while capacity in the whole of emerging and developing economies has continued to expand. As a result, global capacity in 2017 grew to 2.3 billion tons, around 2.3 times as large as the capacity in 2000. The expansion of production capacity is marked in China particularly among emerging and developing economies. Among the global top 10 countries in terms of steel production volume in 2016, four advanced economies had a combined share of 18.0% compared with 65.3% (50.8% in 2006) for six emerging and developing economies, including China (with the largest share of 49.6%). It is also clear that the share of the emerging and developing economies is growing as a trend (Table II-2-1-4-2).

Figure II-2-1-4-1 Changes in crude steel production capacity worldwide
(by advanced economy/emerging and developing economy)



Notes: The definition of Advanced economies is based on IMF.

Source: OECD Stat.

Table II-2-1-4-2 Global top 10 countries in production volume of crude steel (2016 and 2006)

	Production volume in 2006 (Million tons)	Share	Production volume in 2016 (Million tons)	Share
China	422.7	34.0%	808	49.6%
Japan	116.2	9.3%	105	6.4%
India	44	3.5%	96	5.9%
United States	98.6	7.9%	79	4.8%
Russia	70.8	5.7%	71	4.3%
ROK	48.5	3.9%	69	4.2%
Germany	47.2	3.8%	42	2.6%
Turkey	23.3	1.9%	33	2.0%
Brazil	30.9	2.5%	31	1.9%
Ukraine	40.9	3.3%	24	1.5%
World total	1244.2	100.0%	1,630	100.0%

Notes: This table shows the top 10 countries extracted based on production volume in 2016 and ranks them in the order of descending production. This table also shows production volume and shares regarding the countries in 2006.

Source: *World Steel in Figures 2017* and *World Steel in Figures 2007* (World Steel Association, 2017, 2007).

Next, we will look at the share of emerging and developing economies in aluminum production. Table II-2-1-4-3 shows the global top 10 countries in 2016 in terms of production volume of virgin aluminum ingots.³⁹ From the table, we can see that the share of emerging and developing economies is extremely large in aluminum production as well: among the top 10 producer countries, four advanced economies had a combined share of 12.0% compared with 72.1% for six emerging and developing economies, including China (with the largest share of 55.4%).

As described above, the share of emerging and developing economies has been expanding with respect to steel and aluminum.

It has been pointed out that during the process of continuing economic development to become advanced or semi-advanced economies, emerging and developing economies experience a gradual decline in their economic growth rates and their economic growth shifts from investment-led to consumption-led growth. On the other hand, it must be kept in mind that the global supply-demand balance will deteriorate if the emerging and developing economies ignore market principles in expanding their production capacity and those governments continue to subsidize companies which are naturally unable to maintain profitability, allowing them to maintain a market presence despite lack of

39 Virgin aluminum ingots, which are ingots refined from bauxite ore, are distinguished from ingots made of recycled aluminum.

demand.

Table II-2-1-4-3 Global top 10 countries in production volume of virgin aluminum ingots (2016)

	Production volume (Thousand tons)	Share
China	31,870	55.4%
Russia	3,454	6.0%
Canada	3,209	5.6%
UAE	2,471	4.3%
India	1,909	3.3%
Australia	1,635	2.8%
Norway	1,231	2.1%
Bahrain	971	1.7%
United States	818	1.4%
Brazil	793	1.4%
World total	57,546	100.0%

Source: *World Metal Statistics*.