Part 1 Global economy

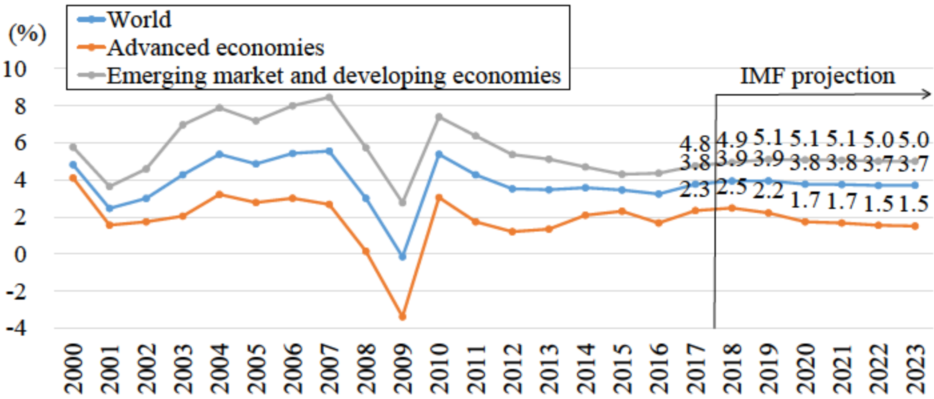
Chapter 1 Trends in the global economy and Japan's external trade and investment

Section 1 Global economic trends

1. Trends in Global GDP

According to the International Monetary Fund (IMF), global real GDP grew at 3.8% in 2017, the highest since 2011, with a notable rebound in global trade. Advanced and emerging and developing economies accelerated growth to 2.3% in 2017 from 1.7% in 2016 and to 4.8% from 4.4%, respectively (Figure I-1-1-1). In advanced economies, investment spending remained weak since the global financial crisis in 2008 and was particularly subdued in 2016. In 2017, however, significant growth in fixed capital formation and inventories accelerated growth. In emerging and developing economies, private consumption was a primary contributor to growth but growth factors differ by region and country. Notably, China's and India's growth were supported by increases in net exports and private consumption, respectively, while investment activity slowed down.

Figure I-1-1-1 Changes in global real GDP growth rates



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

The global GDP growth rate is expected to pick up further to 3.9% in 2018, but over the medium term, it is projected to decline and stay around 3.7%. Growth of advanced economies in 2018 is expected to accelerate to 2.5% from 2017, but over the medium term, to slow down to 1.5%. Continuingly solid Japanese and European economies, as well as the effects of the expansionary fiscal policy and tax system reform in the United States, will boost the GDP growth of advanced economies in the short term. As the tax system reform in the United States is a provisional measure, the pace of growth is expected to be moderate over the medium term. Growth of emerging and developing economies is expected to be 4.9% in 2018, and to remain high at 5.0% over the medium term. This is due to the growth of metal and crude oil exporting countries that are expected to recover moderately against the backdrop of the recent rise in commodity prices. Also, the Chinese economy is expected to grow higher than the average growth of emerging and developing economies despite its gradual slowdown.

Concerning future risks to the global economy, the IMF pointed out that surprises may happen. The global economy may grow at a higher pace than expected. There is also concern about the negative effects on trade and investment activities by a shift of some countries toward inward-looking policies, which could harm international economic relations. The recent imposition of additional tariffs on steel and aluminum by the United States and subsequent retaliatory measures by China are a case in point.[1]

Table I-1-1-2 Real GDP growth rates (by region)

(%)

	2017	2018 (projection)	2019 (projection)
World	3.8	3.9	3.9
Advanced economies	2.3	2.5	2.2
United States	2.3	2.9	2.7
Euro area	2.3	2.4	2.0
Germany	2.5	2.5	2.0
France	1.8	2.1	2.0
Italy	1.5	1.5	1.1
Spain	3.1	2.8	2.2
Japan	1.7	1.2	0.9
United Kingdom	1.8	1.6	1.5
Canada	3.0	2.1	2.0
Emerging market and developing economies	4.8	4.9	5.1
Russia	1.5	1.7	1.5
China	6.9	6.6	6.4
India	6.7	7.4	7.8
ASEAN 5	5.3	5.3	5.4
Brazil	1.0	2.3	2.5
Mexico	2.0	2.3	3.0
Saudi Arabia	-0.7	1.7	1.9
Nigeria	0.8	2.1	1.9
South Africa	1.3	1.5	1.7

Source: *WEO* (IMF, April 2018).

2. Trends in the merchandise trade

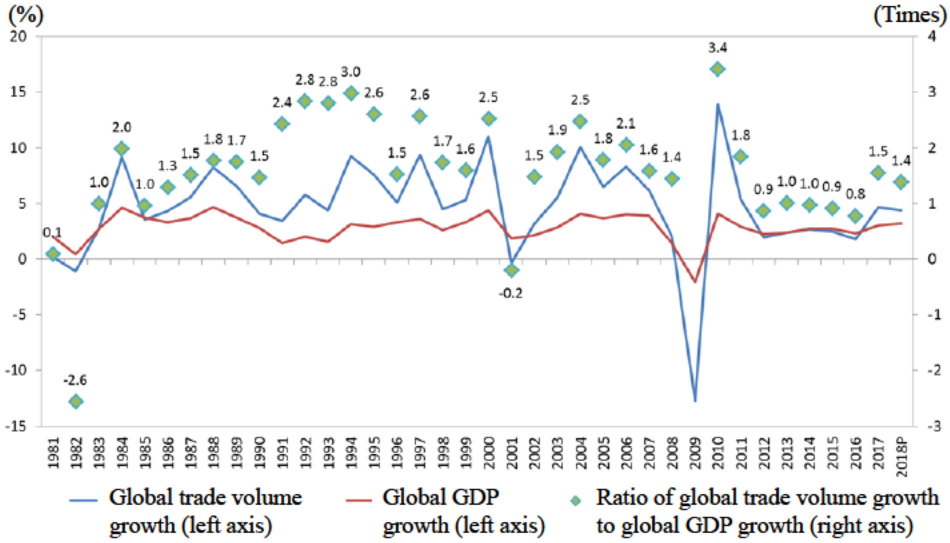
According to the World Trade Organization (WTO)[2], global merchandise trade volume has historically grown more than 1.5 times higher than global real GDP growth. The ratio of global trade growth to global GDP growth rose above 2.0 in the 1990s but fell back to below 1.0 between 2011 and 2016 following the global financial crisis, in a situation known as 'slow trade.' The ratio, however, rebounded to 1.5 in 2017 and trade growth is expected to exceed GDP growth in 2018 as well. (Figure I-1-1-3).

In 2017, global merchandise trade volume grew significantly at 4.7% from 1.8% in 2016. This strong

1 WTO Press Release (April 12, 2018) (https://www.wto.org/english/news_e/pres18_e/pr820_e.htm).
2 The same as footnote 1.

performance was mainly driven by increased investment in some advanced economies including the United States, Japan and the United Kingdom, income rises in resource-based countries led by increases in commodity prices, and the expansion of investments in the energy sector such as shale oil in the United States. By region, Asian economies were the main contributors to the recovery, accounting for 51% of the increase in exports and 60% of the increase in imports in 2017 (Table I-1-1-4).

Figure I-1-1-3 Comparison in growth rates of global trade volume and real GDP



Source: WTO.

Table I-1-1-4 Growth rates of global merchandise trade volumes

(Year on Year: %)

	2014	2015	2016	2017	2018 (projection)	2019 (projection)
Global merchandise trade volume	2.7	2.5	1.8	4.7	4.4	4
Export						
Advanced economies	2.1	2.3	1.1	3.5	3.8	3.1
Emerging market and developing economies	2.7	2.4	2.3	5.7	5.4	5.1
North America	4.6	0.8	0.6	4.2	4.5	4.5
Latin America and the Caribbean	-2.1	1.8	1.9	2.9	2.8	2.6
Europe	1.6	2.9	1.1	3.5	3.6	2.9
Asia	4.5	1.5	2.3	6.7	5.7	5
Other regions	-1	5.5	2.6	2.3	4.7	4.4
Import						
Advanced economies	3.4	4.3	2	3.1	4.1	3.3
Emerging market and developing economies	2.4	0.6	1.9	7.2	4.8	4.4
North America	4.3	5.4	0.1	4	5.7	5
Latin America and the Caribbean	-2.7	-6.4	-6.8	4	3.9	5.7
Europe	3	3.7	3.1	2.5	3.5	2.8
Asia	3.7	4	3.5	9.6	5.9	4.7
Other regions	0.5	-5.6	0.2	0.9	0.4	1.8

Global real GDP growth rates	2.7	2.7	2.3	3	3.2	3.1
Advanced economies	2	2.3	1.6	2.3	2.4	2.2
Emerging market and developing economies	4.3	3.7	3.6	4.3	4.6	4.6
North America	2.6	2.7	1.5	2.4	2.8	2.7
Latin America and the Caribbean	0.9	-0.9	-2.1	1	2.3	2.8
Europe	2	2.3	1.9	2.6	2.4	2.1
Asia	4.1	4.2	4.1	4.5	4.5	4.4
Other regions	2.5	1.1	2.2	2	2.8	2.9

Notes: Figures for the global trade volume are the average of imports and export. The category "Other regions" consists of Africa, the Middle East and CIS. The global real GDP growth rates are based on the market exchange rates.

Source: WTO.

Concerning future trends in world trade, the WTO is concerned over the recent global anti-trade sentiment and increased willingness of some governments to employ trade-restrictive measures that may lower trade growth. The WTO also pointed out the possibility of a slowdown of the economy caused by tightening financial conditions followed by unanticipated hikes in inflation in some countries. Since the United States and Europe have already shifted policy toward monetary normalization, the WTO will closely monitor those impacts on global trade development.

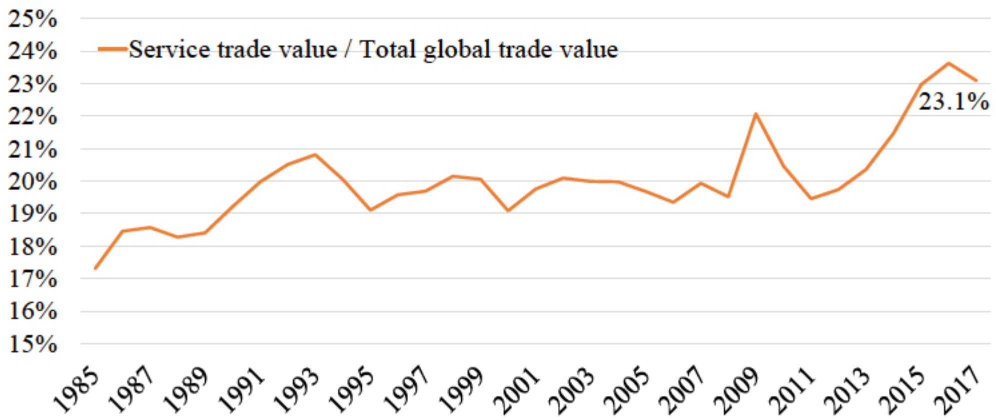
3. Trends in the services trade

According to UNCTAD and the WTO, from 2016 to 2017, the world services trade (export-value basis) grew 7.4% to 5,252 billion dollars. This represented the first substantial improvement in three years after years of consecutive weak growth in 2015 (negative growth of 5%) and 2016 (positive growth of 0.7%). By item, transportation services recorded a remarkably high growth rate of 8%. This was higher than the growth rate for overall trade services. Even goods-related services, whose growth rate was the lowest of all items, was high at 5%.

The share of the services trade in total global trade, including the merchandise trade, started to grow after hitting bottom in 2011 and rose to a record high of 23.5% in 2016. In 2017, the share declined slightly to 23.1% as growth in the merchandise trade was higher than that of the services trade, but it remained at a high level[3] (Figure I-1-1-5). The services trade grew at a higher rate than the merchandise trade between 2012 and 2016 (Figure I-1-1-6), and the importance of the services trade is expected to increase further, as the provision of services over long distances becomes easier due to factors such as a continued decrease in the costs of communication and transportation, technological improvements and diversification of transaction arrangements.

3 In international balance of payments statistics, on which the value of trade in services is based, only transactions corresponding to Mode 1 of the four modes of services trade (Mode 1: Cross-border transactions; Mode 2: Consumption abroad; Mode 3: Commercial presence; and Mode 4: Movement of natural persons) can be recorded. Therefore, the actual value of trade in services is presumed to be larger than is indicated by international balance of payments statistics.

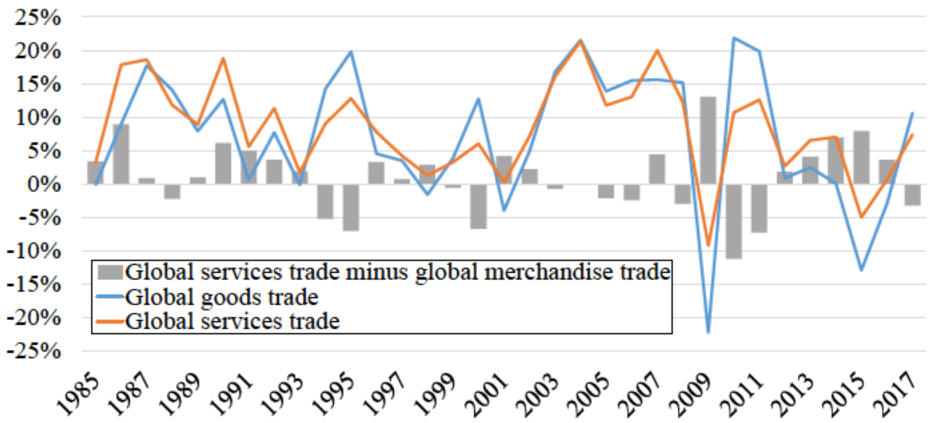
Figure I-1-1-5 Changes in shares of services trade in total global trade



Notes: The data between 1985 and 2009 are based on the Balance of Payments, 5th Edition (BPM5), while the data in and after 2010 are based on BPM6.

Source: UNCTAD.

Figure I-1-1-6 Year-on-year growth rates of global goods trade and services trade



Notes: The data between 1985 and 2009 are based on BPM5, while the data in and after 2010 are based on BPM6.

Source: UNCTAD.

Table I-1-1-7 Values of global services trade and year-on-year change rates

	Exports					Imports				
	Billion dollars	Rate of change (%)				Billion dollars	Rate of change (%)			
	2017	2010-17	2015	2016	2017	2017	2010-17	2015	2016	2017
World	5,252	4.5	-5.0	0.7	7.4	5,072	4.4	-5.4	0.9	6.5
North America	876	4.7	0.6	0.5	4.2	659	4.0	0.4	2.0	6.9
United States	762	4.9	1.5	0.2	3.8	516	4.6	3.0	2.8	6.8
Latin America and the Caribbean	155	4.2	-4.1	1.0	6.8	180	3.3	-11.5	-6.6	8.5
Brazil	34	2.0	-15.5	-1.3	3.4	66	2.0	-19.8	-10.8	7.9

Europe	2,499	3.9	-8.4	0.5	8.5	2,139	3.6	-6.2	2.0	5.9
EU28	2,226	4.1	-8.5	1.6	8.5	1,915	3.5	-7.1	3.4	5.4
Germany	296	4.1	-8.3	3.2	7.0	319	2.9	-11.5	3.9	5.2
United Kingdom	354	4.1	-4.4	-2.2	4.9	218	2.9	-1.2	-2.0	4.2
France	249	3.1	-12.1	-2.1	5.5	244	4.3	-8.0	1.7	3.4
Netherlands	216	3.7	-5.2	-6.0	15.6	211	3.6	4.5	-10.8	14.7
Ireland	182	10.3	0.2	9.0	19.6	196	8.6	14.8	19.5	-3.4
Asia	1,321	5.2	-2.7	1.3	7.1	1,514	6.3	-2.7	2.3	5.5
China	226	-	-0.2	-4.3	8.7	464	-	0.5	3.7	3.3
Japan	180	4.5	-0.6	6.6	6.7	189	2.1	-7.3	3.4	3.5
Singapore	165	7.3	-0.4	1.8	4.3	171	7.8	-0.9	-2.6	5.2
India	179	6.3	-0.6	3.5	11.0	150	4.0	-3.7	8.3	13.1
ROK	86	0.7	-12.9	-2.8	-8.0	120	3.2	-3.0	0.0	8.1
Hong Kong	104	3.7	-2.2	-5.3	5.3	77	1.3	0.1	0.6	3.7
Australia	65	5.0	-6.9	5.7	13.5	66	3.9	-10.5	-2.1	8.5
Other regions	401	5.3	-3.6	0.5	9.8	580	4.0	-12.5	-5.1	10.3
Russia	58	2.5	-21.5	-2.3	15.9	87	2.4	-26.8	-16.3	18.8
Egypt	19	-2.8	-10.7	-22.6	38.2	16	3.3	-0.8	-2.9	1.3
South Africa	15	-0.4	-10.9	-4.7	9.3	16	-2.9	-9.1	-3.7	7.5
Morocco	15	1.1	-10.8	4.1	5.4	8	5.8	-11.6	5.3	14.3
UAE	70	-	4.2	8.0	7.5	84	-	-3.5	2.5	1.9
Israel	44	8.5	2.8	8.6	11.1	29	6.5	0.8	6.1	11.9

Source: WTO.

4. Trends in foreign direct investments

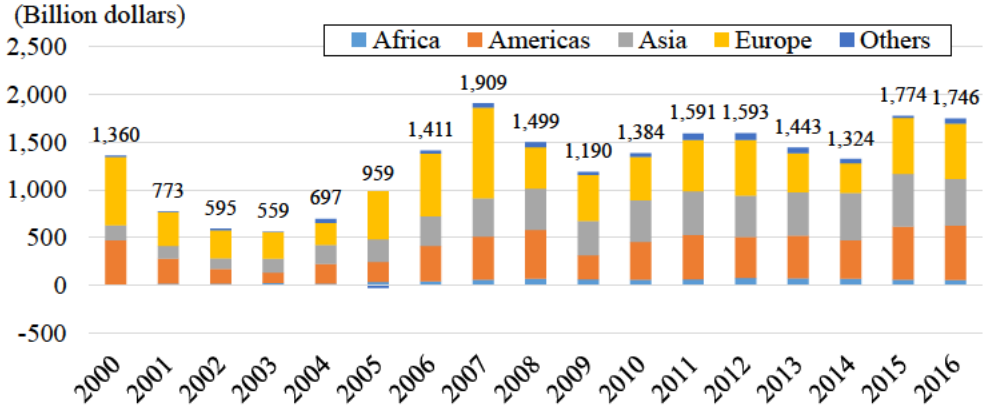
According to the United Nations Conference on Trade and Development (UNCTAD), global inward foreign direct investments (international balance of payments basis, net, and flow) from 2016 to 2017 declined by 1.6% to 1,746.4 billion dollars, and became flat after a steep increase in 2015. While investments in developing economies and some European countries were sluggish, UNCTAD pointed out that investments equivalent to more than 5% of GDP were made in Central America, Central Africa, Central Asia, Southeast Asia and Northwestern Europe. The largest recipient of outward foreign direct investments was the United States, which received investments totaling around 400 billion dollars.[4] By region, the share of investments in Europe declined steeply when compared to those of 2000 with a

4 In 2016, the top three recipients of direct investments were the United States (391.1 billion dollars), the United Kingdom (253.8 billion dollars) and China (133.7 billion dollars) in that order.

decline from 52.4% in 2000 to 33.2% in 2016. While shares in Asia increased considerably from 11.8% in 2000 to 27.9% in 2016, in Africa this was from 0.8% in 2000 to 3.4% in 2016. The share of the Americas remained flat at around 30% (Figure I-1-1-8).

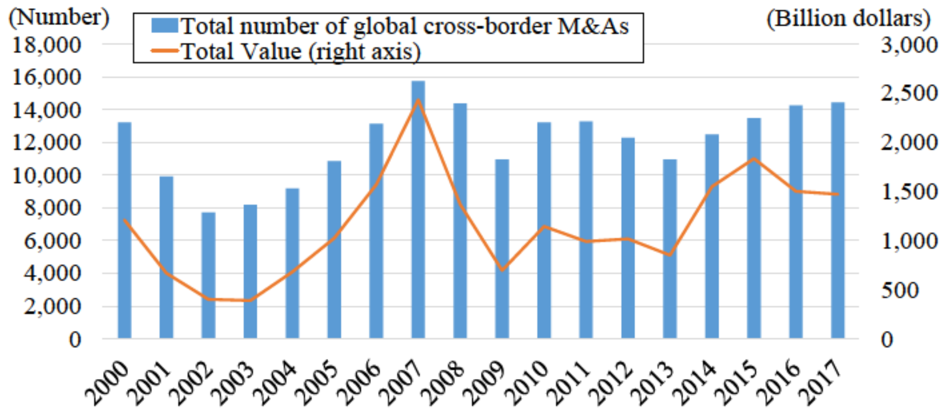
According to data prepared by Thomson Reuters, the total value of global cross-border M&As announced from 2016 to 2017 decreased by 2.0% to 1,471.4 billion dollars. The total number of global cross-border M&As also remained almost flat at 14,431 (Figure I-1-1-9). Although the growth in total value remained weak after bottoming out in 2009 following the global financial crisis, it has been recovering since around 2014. Looking at the data for 2017, by nationality of the acquiring company, acquisitions by U.S. companies increased around 50% from 2016 in terms of value, followed by companies in Europe, including France (up 136%) and Switzerland (up 36%), and ASEAN member countries (up 3.9%). By nationality of the acquired company, acquisitions of companies in the EU increased 50%, followed by companies in Australia (up 133%), East Asia (up 59%), India (up 87%) and Mexico (up 37%), and also increased considerably in terms of value (Table I-1-1-10).

Figure I-1-1-8 Changes in the global total values of inward foreign direct investment (on a flow basis)



Source: UNCTAD.

Figure I-1-1-9 Changes in the global total number and values of cross-border M&As



Notes: This figure is based on the released cases.

Source: Thomson Reuters.

Table I-1-1-10 Global cross-border M&As by economy and region (2017)

		Value			Number of cross-border M&As
		Million dollars	Growth rate	Composition ratio	
	World total	1,471,492	-2.0%	100.0%	14,431
Acquiring company	United States	448,453	54.0%	30.5%	2,537
	EU	439,340	1.9%	29.9%	5,205
	France	127,313	135.8%	8.7%	805
	United Kingdom	114,228	-9.2%	7.8%	1,271
	Germany	43,103	-64.4%	2.9%	670
	Switzerland	42,182	36.4%	2.9%	423
	Australia	27,257	26.5%	1.9%	359
	East Asia	299,177	-29.8%	20.3%	3,117
	Japan	69,209	-28.5%	4.7%	802
	China	140,046	-42.1%	9.5%	929
	Hong Kong	58,133	2.4%	4.0%	718
	ASEAN	31,789	3.9%	2.2%	668
	Singapore	24,255	19.0%	1.6%	405
	India	2,586	-73.8%	.2%	158
	Russia	278	-92.0%	0.0%	40
	Mexico	7,123	-12.0%	.5%	52
	Brazil	2,694	50.6%	.2%	30
Acquired company	United States	290,914	-48.0%	100.0%	2,250
	EU	671,398	49.2%	230.8%	5,749
	United Kingdom	278,473	95.7%	95.7%	1,155
	Spain	74,830	219.1%	25.7%	472
	Germany	74,253	-19.6%	25.5%	764
	Switzerland	4,461	-95.0%	1.5%	174
	Australia	74,179	132.5%	25.5%	592
	East Asia	184,555	59.0%	63.4%	2,047
	Japan	30,275	98.3%	10.4%	154
	China	48,447	10.2%	16.7%	730
	Hong Kong	48,453	145.2%	16.7%	369
	ASEAN	57,379	54.6%	19.7%	794

Singapore	40,593	109.1%	14.0%	286
India	31,888	87.3%	11.0%	390
Russia	14,824	-26.2%	5.1%	311
Mexico	6,307	36.6%	2.2%	106
Brazil	29,313	-18.4%	10.1%	294

Notes: This table is based on the released cases. The data on the East Asia region show the total values of Japan, China, Hong Kong and ASEAN.

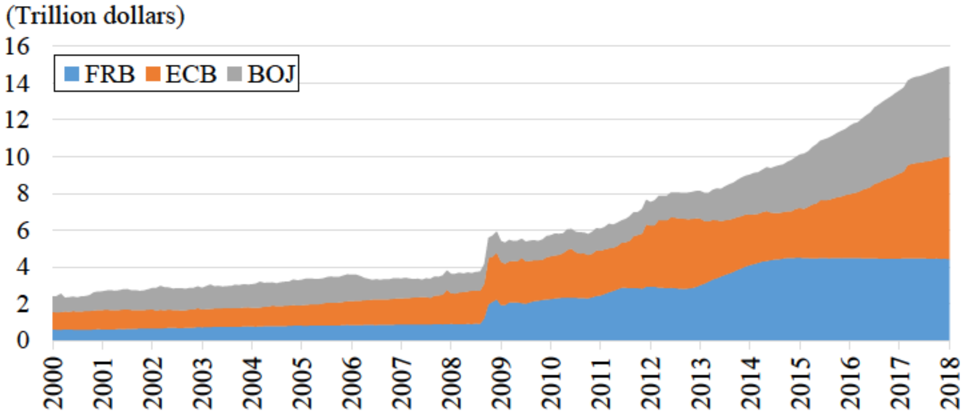
Source: Thomson Reuters.

5. Impact of the normalization of U.S. and European monetary policies

(1) Normalization of the U.S. and European monetary policies

Since the global financial crisis was triggered by the subprime loan crisis that surfaced in the summer of 2007, central banks in countries around the world have implemented bold monetary easing policy measures in order to stabilize the financial system and keep prices stable. In particular, as short-term interest rates, which represent a traditional policy variable, have in effect been lowered infinitely close to zero, it has become impossible to implement monetary policy measures through the control of interest rates, so central banks have adopted non-traditional monetary policy measures to control the size and composition of the balance sheet (Figure I-1-1-11). In Japan, too, the "bold monetary policy," which the second Abe administration is advocating as one of the "three arrows" of policy in order to achieve economic growth, has been implemented since April 2013. However, in the United States and Europe, there are emerging moves to gradually normalize the monetary policy by scaling back those monetary easing policy measures.

Figure I-1-1-11 Changes in the balance sheet of central banks in Japan, the United States and the EU



Source: Bloomberg.

In the United States, the Federal Reserve Board (hereinafter referred to as the "FRB") started to implement interest rate reduction in September 2007, and the target for the policy interest rate fell to 0.0-0.25% in December 2008 following the collapse of Lehman Brothers. Although the United States in effect got into a zero interest rate situation, the outlook for prices and the labor market was bearish, so the FRB started to implement quantitative easing through massive asset purchases in November 2008. Subsequently, the FRB promoted communication with the market by providing forward guidance to indicate its intention to maintain the monetary easing policy. Around 2013, the FRB started to explore the timing of reducing the value of asset purchases (tapering) while examining the status of economic recovery, and in January 2014, it started tapering. Later, the FRB also removed the zero interest rate policy in December 2015 and raised the target for the policy interest rate to 1.50-1.75%. in March 2018. In October last year, the FRB started to reduce its asset holdings by decreasing the value of reinvestments. Over the next three to four years, the size of the balance sheet is expected to shrink from 4.5 trillion dollars to 2-3 trillion dollars.[5] [6]

In Europe, in order to deal with the global financial crisis, purchases of covered bonds and government bonds started in 2009. In addition, in order to ease the increased stress in the financial market amid the European debt crisis and support the economic recovery, the provision of long-term funds to banks has been implemented several times since 2011. Moreover, in March 2015, purchases of assets including government bonds started in earnest, and until this year, 2018, the balance sheets of the European Central Bank (ECB) and central banks of euro-area countries have continued to expand as a trend. However, as the European economy is regaining strength, the value of asset purchases has been reduced twice since December 2016, and attention is focusing on the timing of the termination of the asset purchase operation itself (on the possibility of not extending the asset purchase operation beyond September 2018, when the last scheduled round of asset purchases is planned to be implemented).

As described above, while major advanced economies have until now been implementing bold monetary policy measures, the United States has taken the lead in shifting to the normalization of the monetary policy, followed by Europe. In Japan, the economy has recently been recovering moderately, but measures have not yet been taken to move toward an exit from the non-traditional monetary policy for reasons such as that the inflation rate is still somewhat short of the target of 2%.

(2) Spillover effects on the global economy

(A) Global accumulation of debts

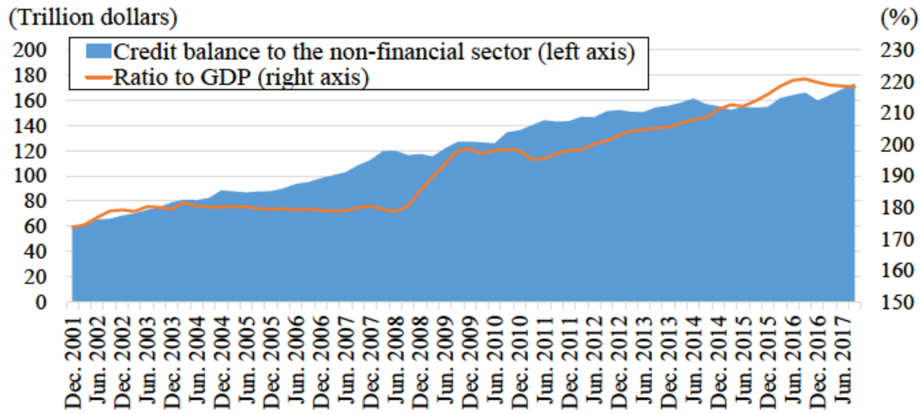
Against the backdrop of monetary easing policy measures implemented in various countries, debts are being accumulated worldwide. The global balance of debts as of the end of June 2017 was 169 trillion dollars, more than twice the size of global GDP (Figure I-1-1-12). The pace of debt expansion varies from country to country. According to the Bank for International Settlements (hereinafter referred to as "BIS"), from the experience of analyzing past financial crises, the risk of facing a financial crisis is high for countries in which private-sector debts have expanded at a higher rate than the GDP growth rate. More specifically, when the deviation of the ratio of private-sector debts to GDP from the long-term trend is higher than 10%, there is a two out of three chance that a financial crisis or severe recession

5 FRB Chairman Jerome Powell stated at a public hearing at the Senate Banking Committee on November 28, 2017, before taking office, that the appropriate size of the balance sheet is 2.5 trillion to 3 trillion dollars.

6 For the relationship between the U.S. policy interest rate and long-term interest rate in the United States, refer to Column 2 "Relationship between the U.S. policy interest rate and long-term interest rate."

will subsequently occur.[7] The ratio was invariably higher than 10% just before past major crises: for example, it was 23.7% in Japan before the bursting of the economic bubble, 35.7% in Thailand before the Asian currency crisis, 12.4% in the United States before the collapse of Lehman Brothers, and 24% in Greece before the European debt crisis (Figure I-1-1-13). As of September 2017, the ratio was higher than 10% in some countries/regions (Figure I-1-1-14).

Figure I-1-1-12 Global credit balance to the non-financial sector

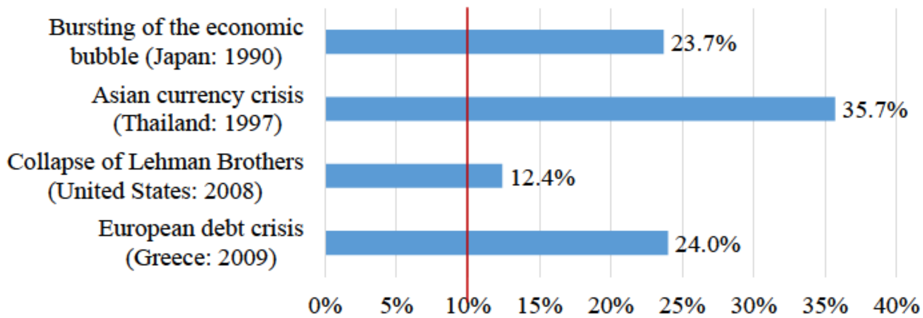


Notes:

1. The data on global credit balance to the non-financial sector are the total of the government, household and business sectors.
2. As for the data on the ratio to GDP, the exchange rates on the basis of purchasing power parity (PPP) are adopted.

Source: Bank for International Settlements (BIS).

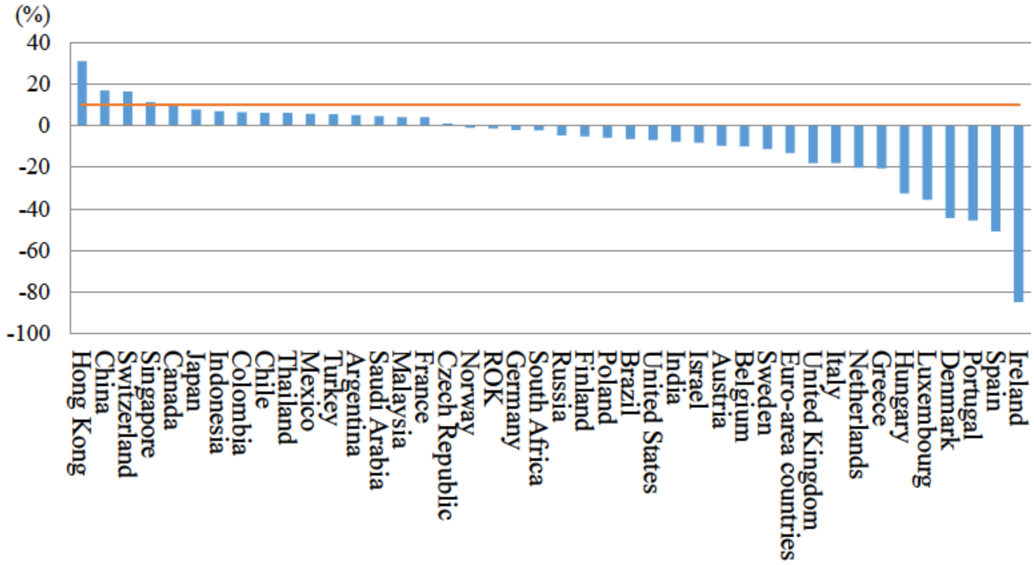
Figure I-1-1-13 Ratio of non-financial private sector debts to nominal GDP during the past financial crises (deviation from the trend)



Source: BIS.

7 BIS (2018).

Figure I-1-1-14 Ratios of non-financial private sector debts to nominal GDP by economy (deviation from the trend)



Notes:

1. As of the end of September 2017.
2. According to BIS, if one country marks 10% or more of the ratio, it may face a financial crisis within three years with a probability of two-thirds.

Source: BIS.

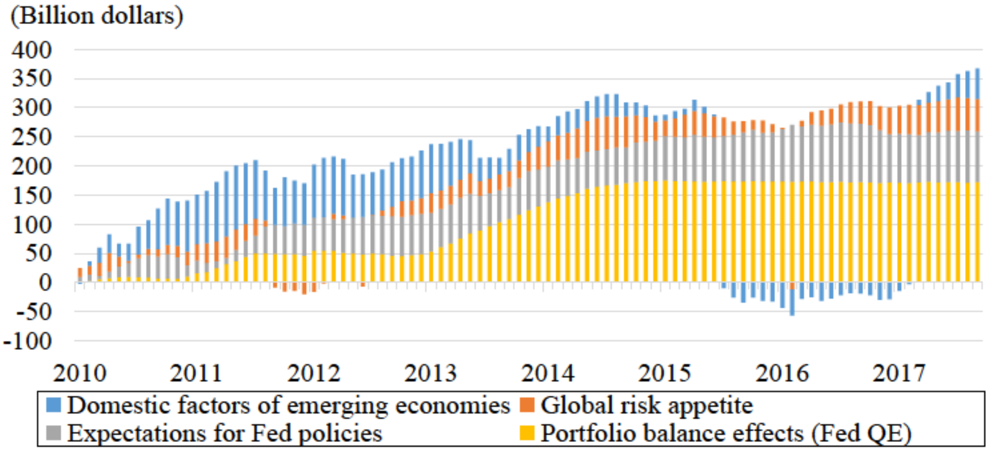
(B) Fund inflow to and outflow from emerging economies

Vast amounts of funds flew into emerging economies as a result of the monetary easing policy measures implemented by the United States and other advanced economies. According to an analysis conducted by the IMF based on a factor-by-factor breakdown of the fund inflow into emerging economies since 2010, the monetary easing policy measures implemented by the United States generated an inflow of funds totaling around 260 billion dollars (Figure I-1-1-15).[8] The IMF forecasts that as a result of the normalization of the U.S. monetary policy over the next two years,[9] the annual fund inflow into emerging economies (Figure I-1-1-16) will decline by 35 billion dollars. Here, we will discuss the recent trend in the fund inflow to and outflow from emerging economies based on past experiences while paying attention to economic indicators and financial market trends in those countries.

8 This figure represents the total sum of cumulative fund inflows (as of September 2017) due to the effects of the FRB's monetary policy (portfolio balance effect) and expectations for the FRB's policy. The portfolio balance effect (rebalancing) refers to the effect of encouraging mainly private-sector financial institutions to shift their portfolios to investments in risk assets, such as stocks and loans with relatively high expected returns, by significantly lowering government bond yields through bond purchase operation by the central bank and reducing the government bonds' investment attractiveness (Yonezawa, 2016).

9 The two years from the compilation of the IMF report (October 2017).

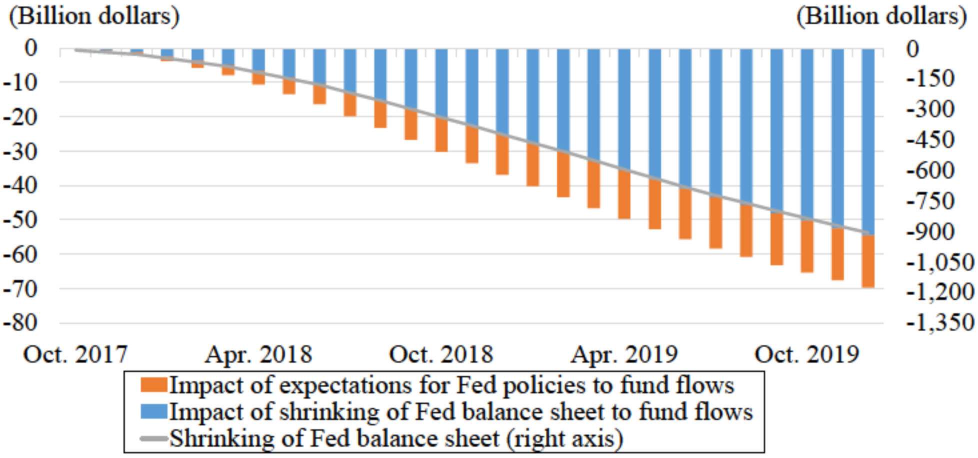
Figure I-1-1-15 Cumulative contributions of securities investment flown into emerging economies (model estimates)



Notes: Portfolio balance effects: Ripple effects that are brought about if a central bank changes a policy interest rate or money basis to achieve a policy goal and requests the private sector to change investment portfolios; Expectations for Fed policies: Impacts that are brought about if markets change their expectations for future financial policies (see the term "30 Day Federal Funds Futures"); Global risk appetite: Investment tends to flow into emerging economies if investors are more likely to take higher risk (Koepke, 2014).

Source: *Global Financial Stability Report* (IMF, Oct. 2017).

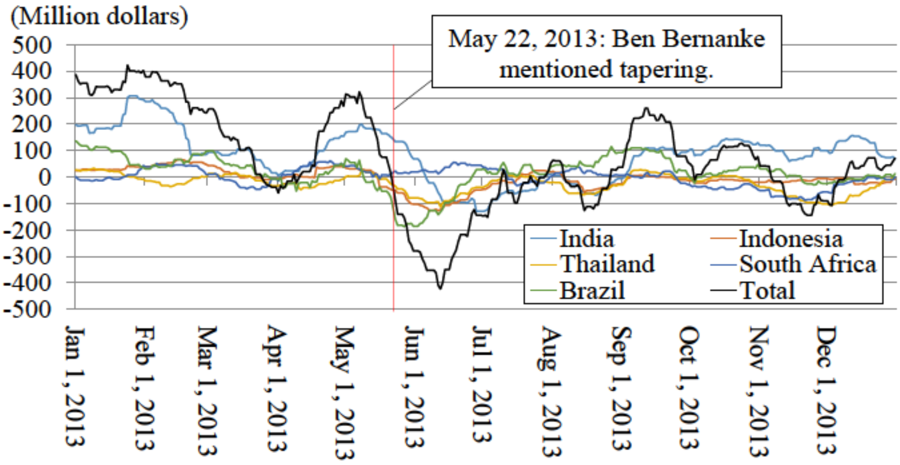
Figure I-1-1-16 Cumulative contributions of securities investment flown into emerging economies per month (2017-2019)



Source: *Global Financial Stability Report* (IMF, Oct. 2017).

One example case in which a change in the U.S. monetary policy significantly affected the fund flow into emerging economies is the "taper tantrum" in 2013. The taper tantrum occurred when Ben Bernanke, who was chairman of the FRB at that time, referred to the possible reduction of the value of asset purchases (which is known as "tapering") by the FRB at the Joint Economic Committee of the U.S. Congress on May 22, 2013. His comment triggered rapid withdrawals of foreign funds invested in stocks and bonds in emerging economies (Figures I-1-1-17 and I-1-1-18), sending shockwaves through financial markets. In particular, countries which were heavily dependent on borrowings from abroad and were recording a current account deficit (Brazil, India, Indonesia, Turkey and South Africa) experienced upsurges in bond yields (the average rise was approximately 2.5%) and plunges in stock prices (the average decline was approximately 13.75%) and in the foreign exchange rates of their currencies (the average decline was approximately 13.5%) over a period of around three months since the tapering comment.[10] On the other hand, in countries meeting such conditions as a current account surplus, a robust budget balance, a low inflation rate and an abundant amount of foreign currency reserves, the impact on financial markets is considered to have been small.

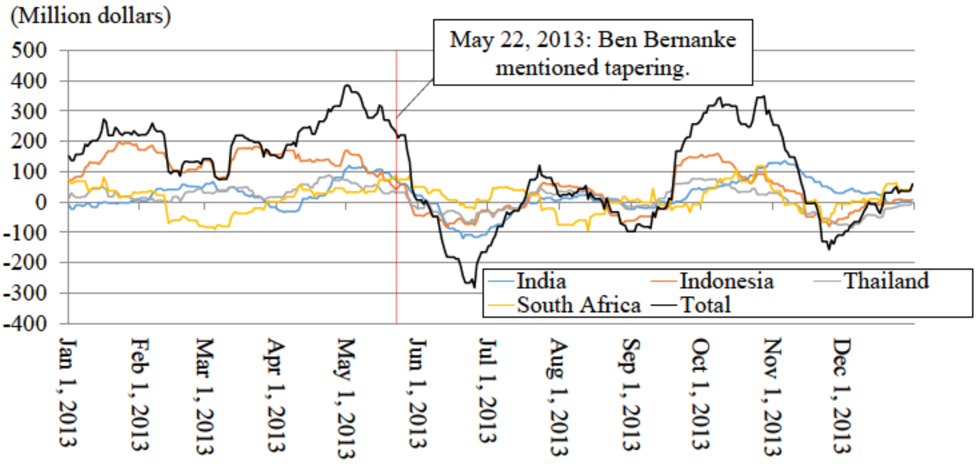
Figure I-1-1-17 Flows of stock investment in emerging economies (2013)



Notes: This figure shows data per date and time released by stock exchanges worldwide (the graphs show 28-day moving averages).

Source: Bloomberg.

Figure I-1-1-18 Flows of bond investment in emerging economies (2013)



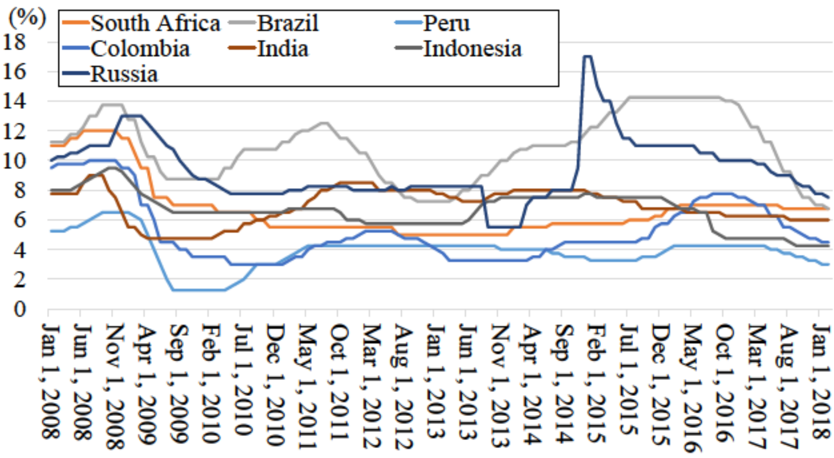
Notes: This figure shows data per date and time released by stock exchanges worldwide (the graphs show 28-day moving averages).

Source: Bloomberg.

10 IMF (2014).

An analysis of the current process of monetary policy normalization shows that while the United States is in the interest rate hike phase, several emerging economies are going in the other direction (Figure I-1-1-19), resulting in the shrinkage of the spread between U.S. interest rates and emerging economies' interest rates. The shrinkage of the interest rate spread may accelerate the fund outflow from emerging economies by weakening the attractiveness of investments in these economies. The worst-case scenario is: an accelerated fund outflow will cause emerging economies' currencies to depreciate, pushing up import prices and increasing inflationary pressures in the economies, and the increased inflationary pressures will prompt the economies' central banks to tighten their monetary policy quickly, among other measures, thereby causing their economies to slow down. However, in the current normalization process, no rapid change has occurred in financial markets. A look at the actual fund flows into emerging economies shows that, for example, immediately after a change in the U.S. monetary policy toward shrinking the balance sheet of the Federal Reserve (Fed), which was announced in October 2017, funds started to flow out of bonds as a trend but that funds continued to flow into stocks until the end of the same month. In short, a massive fund outflow of the kind that occurred at the time of the taper tantrum has not been observed in the current normalization process (Figures I-1-1-20 and I-1-1-21).

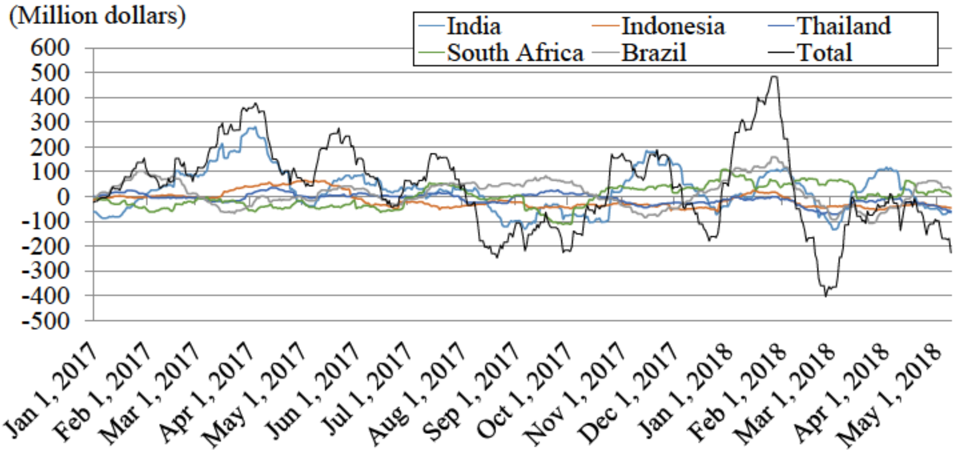
Figure I-1-1-19 Changes in policy interest rates in emerging economies



Notes: This figure shows emerging economies whose declining tendency of policy interest rates is remarkable.

Source: BIS.

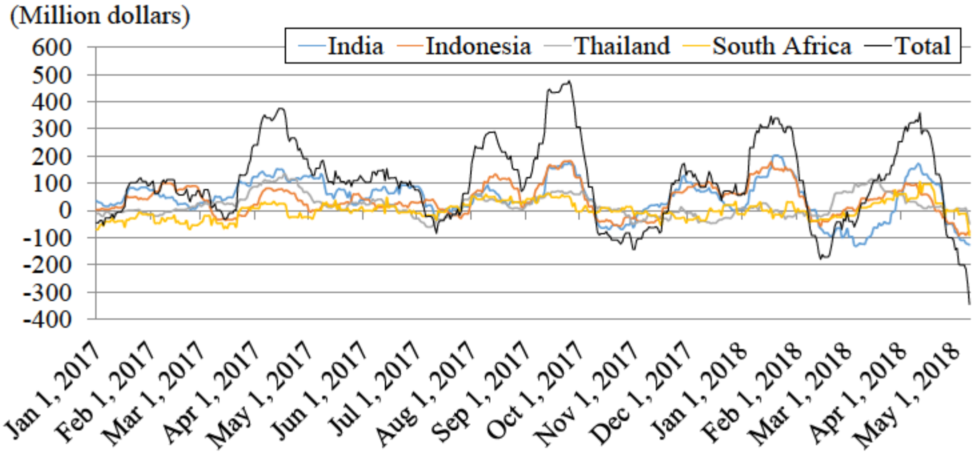
Figure I-1-1-20 Flows of stock investment in emerging economies (2017)



Notes: This figure shows data per date and time released by stock exchanges worldwide (the graphs show 28-day moving averages).

Source: Bloomberg.

Figure I-1-1-21 Flows of bond investment in emerging economies (2017)



Notes: This figure shows data per date and time released by stock exchanges worldwide (the graphs show 28-day moving averages).

Source: Bloomberg.

The market's reaction has been moderate presumably for the following reasons. First, based on the lesson of the taper tantrum, the FRB is carefully implementing the monetary policy while communicating sufficiently with the market through forward guidance and other means.[11] Due to the increased predictability of the monetary policy, the risk of financial market disruption is considered to have become smaller than before. Second, emerging economies' fundamentals[12] have stayed stable.

11 At Federal Open Market Committee (FOMC) meetings in the first half of 2017, discussions were held repeatedly (at meetings in January, March and May) on the timing of the revision of the exit strategy centering on the revision of the reinvestment policy that had been announced in September 2014, and a reference was made to the importance of exploring the timing of implementing the exit while placing emphasis on communication with the market (from the minutes of FOMC meetings).

12 In a speech, Chairman Powell indicated that the improvement in economic fundamentals in emerging

Table 1-1-1-22 shows a comparison of the GDP growth rates, current account balance, primary balance, the total balance of government debts and the value of foreign currency reserves of major emerging economies in 2013 and 2017. Although the average GDP growth rate for emerging economies in 2017 declined slightly compared with the average in 2013, it still remained relatively high at 4.3%. Meanwhile, the average ratio of the current account balance to GDP improved significantly, from 0.5% in 2013 to 1.9% in 2017. As the average ratio of foreign currency reserves to GDP has stayed at around 30%, we may say that emerging economies have an abundant amount of reserves, considering that the ratio was around between 10% and 20% at the beginning of the 2000s. Moreover, the inflation rate in emerging economies tended to be lower in 2017 than in 2013. Let us compare the situations in 2013 and 2017 in terms of the exchange rate and the inflation rate (Figure I-1-1-23): in 2013, there were many economies that recorded a steep decline in the exchange rate and a high inflation rate (e.g., India, Turkey, South Africa, Brazil and Russia), whereas in 2017, such countries were few, with many economies recording a rise in the exchange rate and a low inflation rate. On the other hand, it has been pointed out that as the situation of emerging economies in terms of the primary balance and the balance of total government debts has deteriorated slightly as a trend, the room for fiscal measures has shrunken, making it difficult to support the economy. However, FRB Chairman Jerome Powell commented that the challenges posed to emerging economies by the normalization will be "manageable."[13] This suggests that during the current process of monetary policy normalization, FRB officials have paid attention to the favorable performance of emerging economies.[14] It may be said that the United States has been able to smoothly move toward an exit in its monetary policy management because of the favorable performance of emerging economies.

The current monetary policy normalization has not surprised the market very much, but the U.S. and European monetary policies could change in the future depending on the economic conditions, so even though predictability has increased, this is no time to let the guard down. Market participants have pointed to the possibility that if the U.S. and European economies improve more than expected by the authorities, the U.S. and European central banks may revise the existing policy stance and shift to tightening and have raised concerns over the risk of a rapid rise in interest rates being induced by such a policy change. Meanwhile, the Institute of International Finance (IIF) has warned that since the latter half of April, when the U.S. long-term interest rate surpassed 3% for the first time in four years and three months, there has been a conspicuous fund outflow from emerging economies.[15] It is necessary

economies may be a factor that explains the fund flows to these economies. On the other hand, he also commented that it was necessary to keep a close watch on the level of external debts ('Prospects for Emerging Market Economies in a Normalizing Global Economy' (October 12, 2017) (https://www.federalreserve.gov/newsevents/speech/powell20171012a.htm)).

13 A comment made in the speech (October) mentioned in the above footnote.

14 For example, in a speech on March 3, 2017, then Chair Janet Yellen said that "risks emanating from abroad appear to have receded somewhat" (https://www.federalreserve.gov/newsevents/speech/yellen20170303a.htm).

15 The IIF noted that during the period between April 16 and May 4, fund outflows from emerging economies were conspicuous in the bond market in particular, with funds totaling 6.1 billion dollars estimated to have been withdrawn during the same period. This is a faster fund outflow than the outflow at the time of the taper tantrum in 2013, indicating that the market has become more sensitive to interest rate changes in the United States than before. During the same period, funds totaling 3.1 billion dollars flowed

to keep a close watch over future developments.

Table I-1-1-22 GDP growth rates, current account balance, primary balance, total balance of government debts and foreign currency reserves of emerging economies

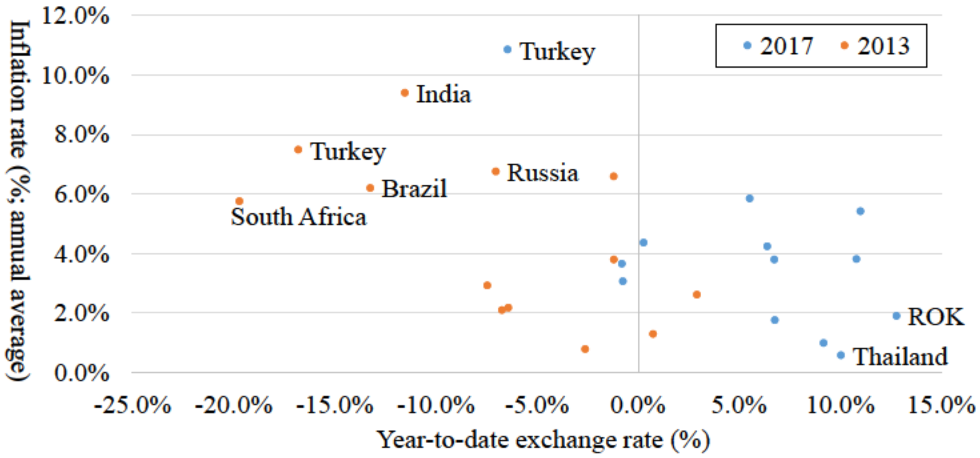
Economy	Real GDP growth rates		Current account balance Ratio to GDP (%)		Primary balance Ratio to GDP (%)		Total balance of government debts Ratio to GDP		Foreign currency reserves Ratio to GDP (%)	
	2013	2017	2013	2017	2013	2017	2013	2017	2013	2017
India	6.4	6.7	-1.7	-2.0	-2.4	-2.1	68.5	70.2	15.8	15.7
Indonesia	5.6	5.1	-3.2	-1.7	-1.0	-0.9	24.8	28.9	10.8	12.8
ROK	2.9	3.1	6.2	5.1	-0.2	0.9	35.4	39.8	26.5	25.3
Thailand	2.7	3.9	-1.2	10.8	1.3	-0.1	42.2	41.9	39.8	44.5
Taiwan	2.2	2.8	10.0	13.8	0.0	0.0	39.0	35.2	81.5	77.9
China	7.8	6.9	1.5	1.4	-0.3	-3.0	37.0	47.8	39.7	26.1
Turkey	8.5	7.0	-6.7	-5.5	0.8	-0.9	31.4	28.5	13.8	12.7
Philippines	7.1	6.7	4.2	-0.4	2.7	1.4	45.7	37.8	30.6	26.0
Brazil	3.0	1.0	-3.0	-0.5	1.7	-1.7	60.2	84.0	14.5	18.2
Viet Nam	5.4	6.8	4.5	4.1	-5.9	-2.7	51.8	58.2	15.4	22.5
Malaysia	4.7	5.9	3.5	3.0	-2.2	-1.1	56.4	54.2	41.7	32.6
South Africa	2.5	1.3	-5.9	-2.3	-1.4	-1.0	44.1	52.7	13.5	14.5
Mexico	1.4	2.0	-2.4	-1.6	-0.7	3.0	45.9	54.2	14.1	15.3
Russia	1.8	1.5	1.5	2.6	-0.8	-0.9	12.7	17.4	22.2	28.3
Average	4.4	4.3	0.5	1.9	-0.6	-0.7	42.5	46.5	27.1	26.6

Notes: The data on current account balance, primary balance and GDP are estimates in 2017. The data on foreign currency reserves are as of December 2017.

Source: *WEO* (IMF), CEIC Database.

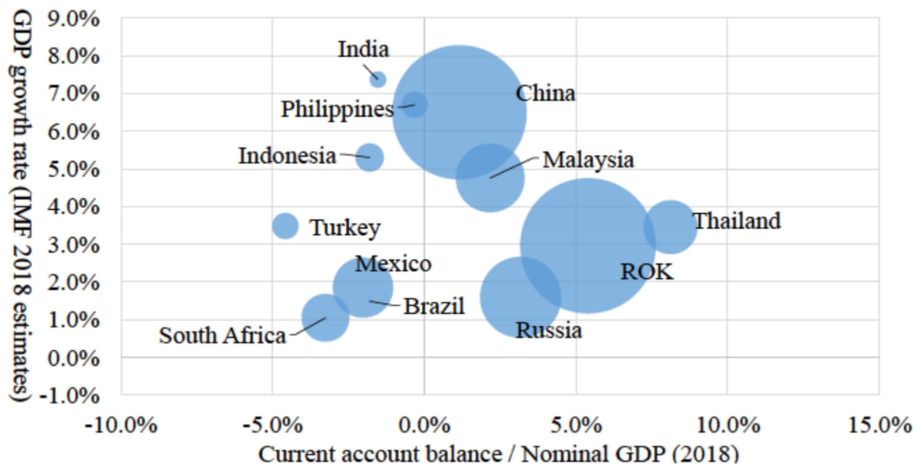
out of the stock market, according to the IIF.

Figure I-1-1-23 Relationships between exchange rates and inflation rates



Source: Eikon (Thomson Reuters), *WEO* (IMF).

Figure I-1-1-24 Cumulative scales of GDP growth rates, current account balance and capital inflows



Notes:

1. The data on the cumulative scale of capital inflows are cumulative values of such flows between 2008 and the first half of 2017, which are represented by the scale of respective bubbles.
2. The data on capital inflows are excerpts from the IMF statistics data on net acquisition of financial assets (i.e., financial account, portfolio investment, net acquisition of financial assets and US dollars). However, these data are not always equal to the actual total values of capital flows due to the difference in statistical methods among target countries.

Source: *International Financial Statistics* (*IFS*) (IMF), *WEO* (IMF).