II. Macro environmental factors potentially affecting financial system

2.1 International economic and financial conditions

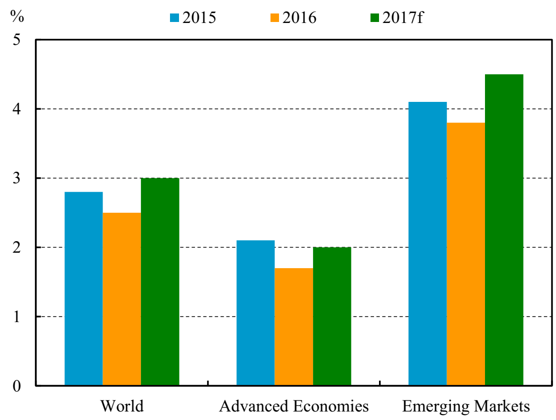
2.1.1 International economic conditions

Global economic growth waned in 2016 but momentum has been building

Affected by the lower-than-expected growth in advanced economies and the slowdown in emerging economies, the global economic growth rate was merely 2.5% in 2016, the lowest level since the 2008-09 financial crisis. Among advanced economies, economic growth in the US was below expectations owing to lackluster growth in inventory, energy sector investment, and exports. By contrast, euro area growth remained steady despite this region facing increasing political and financial risks. Japan continued with its accommodative monetary policy and fiscal stimulus, but sluggish consumption clouded its economic growth. Meanwhile, growth in emerging economies continued decelerating, reflecting the impacts of weaker growth in Mainland China and some Latin American countries.

Looking ahead to 2017, IHS Global Insight predicts[11] world real GDP growth to be 3.0%. Among them, economic growth in advanced economies is projected to increase to 2.0% driven by the recovery in the US. In the meantime, in spite of the economic slowdown in Mainland China, the average growth rate in emerging economies is forecast to increase to 4.5% thanks to a more stable economy in Brazil and Russia, buoyed by increasing commodity and oil prices (Chart 2.1). Although the global economy is gradually gaining momentum, uncertainties surrounding

Chart 2.1 Global economic growth rates

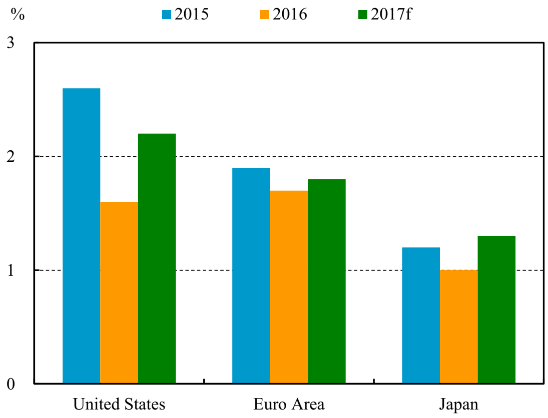


Note: Figures for 2017 are IHS Global Insight estimates.
Source: IHS Global Insight (2017/5/15).

[11] See Note 1.

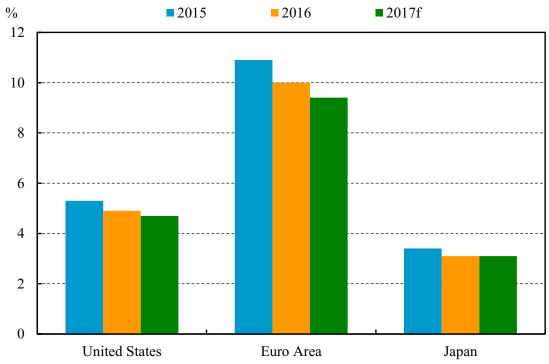
US policy actions, slower growth in Mainland China and the threat of deepening geopolitical tensions may cause higher global economic risks. In addition, despite the fact that rapid development of free trade has boosted global income, it has always been accompanied by increased income inequality and a shift toward trade protectionism. These factors could trigger uncertainties surrounding political and economic policies, which warrant close attention.

Chart 2.2 Economic growth rates in US, Euro area and Japan



Note: Figures for 2017 are IHS Global Insight estimates.
Sources: Official websites of the selected economies and IHS Global Insight (2017/5/15).

Chart 2.3 Unemployment rates in US, Euro area and Japan



Note: Figures for 2017 are IMF estimates.
Sources: Official websites of the selected economies, IHS Global Insight (2017/5/15) and IMF (2017/4).

Advanced economies experienced a growth slowdown

Economic activity rebounded strongly in the US following a slowdown

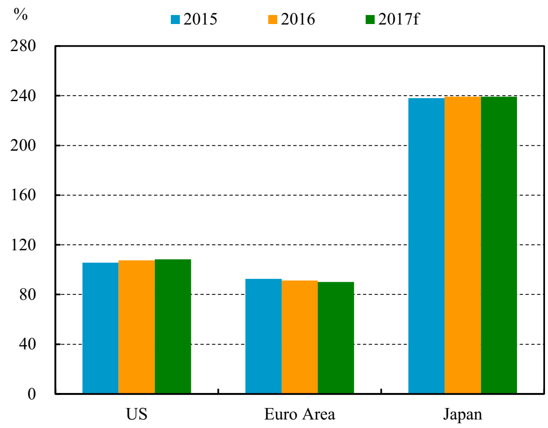
In the first half of 2016, although private consumption increased in the US, the growth rate was below expectations owing to the sluggish growth in inventory as well as investment in the energy sector. Recovery gained momentum in the second half of 2016 because of the increases in private consumption and investment. The annual economic growth rate was 1.6%, lower than the 2.6% registered in 2015. As the Trump administration is going to launch a fiscal stimulus package which will fuel the growth momentum, IHS Global Insight predicts the US economic growth rate to increase to 2.2% in 2017 (Chart 2.2).

The labor market in the US kept improving in 2016 with the unemployment rate dropping to a nine-year low of 4.9%. Since the labor market outlook remained bright, the IMF anticipates the unemployment rate to fall to an annual rate of 4.7%[12] in 2017 (Chart 2.3).

[12] Forecasts for unemployment rates in 2017 are IMF estimates. See IMF (2017), *World Economic Outlook*, April.

In fiscal year 2016, a dramatic increase in medical and social welfare expenditures raised the US deficit to US$587.4 billion. The ratio of gross fiscal deficit to annual GDP also elevated from the 2.4% recorded in 2015 to 3.2%, the first increase in 7 years. Since the Trump administration plans higher fiscal expenditure and lower tax rates, together with higher borrowing costs after lifting the policy rate, the IMF forecasts the ratio of outstanding government debt relative to annual GDP to continue rising to 108.3%[13] in 2017 (Chart 2.4).

Chart 2.4 Government debt-to-GDP ratios in US, Euro area and Japan



Note: Figures for 2017 are IMF estimates.
Source: IMF (2017), *Fiscal Monitor*, April.

The euro area economy slowed down

In 2016, the UK's referendum on exiting the European Union (Brexit) and Italian constitutional referendum resulted in heightened political and economic uncertainties in the euro area. Fortunately, the effect of the Brexit referendum was less than expected. The economic growth rate in the euro area slightly fell to 1.7% in 2016 and the unemployment rate decreased to 10%. From 2017 onwards, considering the diminishing political risk after the French election, IHS Global Insight expects the euro area economic growth rate to rise to 1.8%, and the IMF anticipates the unemployment rate to reduce further to 9.4 % (Chart 2.2, 2.3).

Regarding government finance, the euro area countries made an effort to shrink their fiscal deficits, causing the fiscal deficit to GDP ratio to drop to a nine-year low of 1.7% in 2016. Moreover, the outstanding government debt-to-GDP ratio continued declining to 91.3%. As economic activity in the euro area keeps gaining momentum and the interest rate remains low, the IMF forecasts the ratio to fall slightly to 90.1% in 2017 (Chart 2.4).

Limited economic growth in Japan

In order to revive economic growth and achieve the targeted inflation rate, the BOJ adopted a negative interest rate policy for the first time in February 2016. Additionally, the Japanese

[13] Forecasts for ratios of outstanding government debt relative to annual GDP in 2017 are IMF estimates. See IMF (2016), *Fiscal Monitor*, April.

government announced that corporate tax rates would be cut, effective from April 2016, as well as postponing the second sales-tax hike. The Japanese cabinet further approved a strong economic package aiming at carrying out investment for the future in August 2016. The 28.1 trillion yen stimulus package was targeted at backing infrastructure investment and shoring up small and medium-sized enterprises (SMEs). However, the annual growth rate decreased to 1% in 2016 owing to the sluggish growth in private consumption and inventory investment (Chart 2.2).

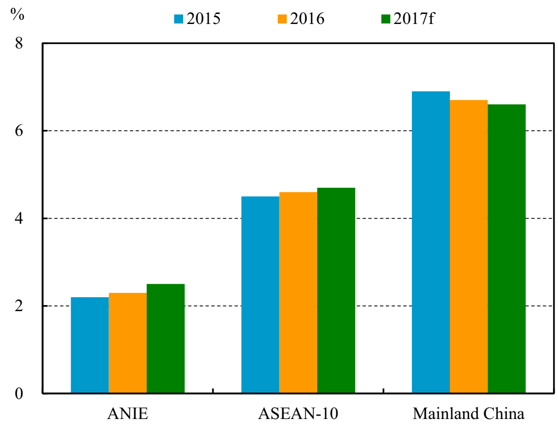
In consideration of the upcoming economic stimulus measures, IHS Global Insight estimates Japanese economic growth to increase slightly to 1.3% in 2017 and the IMF predicts the unemployment rate to stand at 3.1%, the same figure as in 2016 (Chart 2.2, 2.3). In regard to government finance, as a result of ballooning social welfare expenditures and limited economic growth offering little improvement to Japanese fiscal conditions, the IMF predicts the outstanding government debt-to-GDP ratio to remain at 239.2% in 2017 (Chart 2.4).

Asian emerging economies took divergent growth paths

In 2016, Mainland China's economic slowdown and stagnant world trade left economic growth of Asian emerging economies unchanged. GDP growth in export-oriented Asian newly industrialized economies (ANIEs) merely rose to 2.3%. Likewise, in the ASEAN-10 (Association of South East Asian Nations) countries, the economic growth rate increased slightly to 4.6% mainly because Indonesian's GDP (accounting for about 40% of ASEAN-10's GDP) grew steadily owing to expansionary fiscal policy and easy monetary policy. By contrast, economic activity in Malaysia weakened owing to the anemic global trade environment and a downturn in oil prices. In Mainland China, accumulating local government debt as well as supply-side structural reforms lowered economic growth further to 6.7% (Chart 2.5).

IHS Global Insight anticipates that the economic growth rates in the ANIEs and

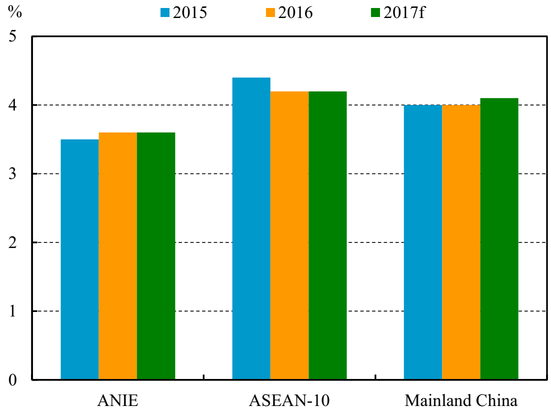
Chart 2.5 Economic growth rates in Asian emerging economies



Notes: 1. Figures for 2017 are IHS Global Insight estimates.
2. ANIE refers to Asian Newly Industrialized Economies, including Taiwan, Hong Kong, Singapore and South Korea.
3. ASEAN-10 refers to the 10 member countries of the Association of South East Asian Nations, including Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
Sources: Official websites of the selected economies and IHS Global Insight (2017/5/15).

ASEAN-10 will improve to 2.5% and 4.7%, respectively, in 2017 thanks to a more solid global economy and stronger external demand. Conversely, Mainland China's annual growth rate is projected to lower to 6.6% in 2017, reflecting a structural adjustment[14] together with the effect of new economic and trade policies in the US (Chart 2.5). Additionally, the unemployment rates in the ANIEs and the ASEAN-10 are expected to remain at 3.6% and 4.2% in 2017, while the unemployment rate in Mainland China is projected to rise slightly to 4.1% (Chart 2.6).

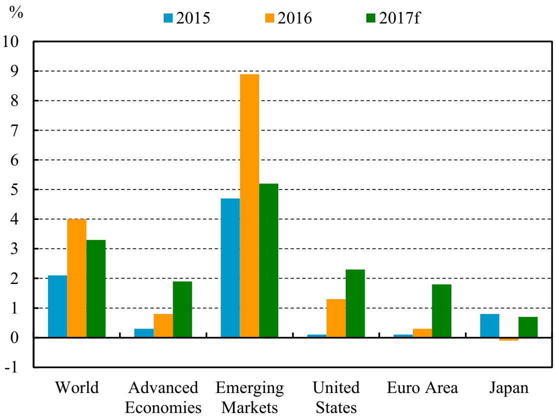
Chart 2.6 Unemployment rates in Asian emerging economies



Notes: 1. Figures for 2017 are IHS Global Insight estimates.
2. For ANIE and ASEAN-10, see Notes 2 & 3 in Chart 2.5.
Sources: Official websites of the selected economies and IHS Global Insight (2017/5/15).

Global inflation rose in 2016

Chart 2.7 Global headline inflation indices



Note: Figures for 2017 are IHS Global Insight estimates.
Sources: Official websites of the selected economies and IHS Global Insight (2017/5/15).

In 2016, the price of crude oil bounced back from a 13-year low. The upturn of oil prices was more significant after the Organization of the Petroleum Exporting Countries (OPEC) reached an agreement to freeze output on November 30. At the end of December, the price of Brent crude oil nudged above US$50 to US$54.56 per barrel. In the meantime, a rebound of metal prices in January was due to increasing demand for base metals in China as well as tightening supply and inventory. The international prices of cereals, vegetable oil, dairy, sugar and meat also grew steadily.[15] Reflecting more solid growth in commodity, oil and food prices, the global CPI inflation rate rose in 2016. Among them, the headline inflation rate in advanced economies picked up marginally to 0.8%. Moreover, the global headline inflation rate rose to 4.0% as the headline inflation rate in emerging economies accelerated significantly

[14] In order to avoid financial risks and achieve sustainable growth, Mainland China changed its growth pattern from industrial sector to service sector, from investment-driven market to demand-driven market, and from export-oriented economy to domestic demand-oriented economy.

[15] In 2016, the Food and Agriculture Organization of the United Nations (FAO) food price index increased from 149.3 at the end of January to 170.2 at the end of December. The index consists of the average of five commodity group (meat, dairy, cereal, vegetable oil and sugar) price indices.

to 8.9% as a result of Venezuela's crisis of mounting deficits and high inflation (Chart 2.7).[16]

In early 2017, the global price of crude oil continued its upward trend. Thereafter, oil prices reversed to drop in March because of a significant increase in US shale oil production, yet the price was still above the figure registered at the beginning of the year. With regard to international cereals, sufficient export supply led to a slight decline in cereal prices in March, though they were still higher than the same period of the previous year. In sum, IHS Global Insight predicts that the global headline inflation rate will decline, whereas the headline inflation rate in advanced economies will continue increasing to 1.9% owing to a recovery in inflation. On the other hand, the headline inflation rate in emerging economies is expected to moderate to 5.2% as inflationary pressure in Latin American countries and Russia will ease (Chart 2.7).[17]

The US raised interest rates gradually, while most economies continued to adopt easy monetary policy stances

From 2016 onwards, advanced economies continued to adopt different monetary policies. As US economic activity and the labor market grew steadily, the Fed hiked its target band for the federal funds rate twice (in December 2016 and March 2017) by a total of 50 basis points (bps) to 0.75-1%, showing the normalization of US monetary policy. Meanwhile, since most indicators of inflation in the euro area remained muted, in December 2016, the ECB decided to keep running the asset purchase program until the end of December 2017. However, from April 2017, the net asset purchases at the current monthly pace of €80 billion were intended to decrease to a monthly pace of €60 billion.

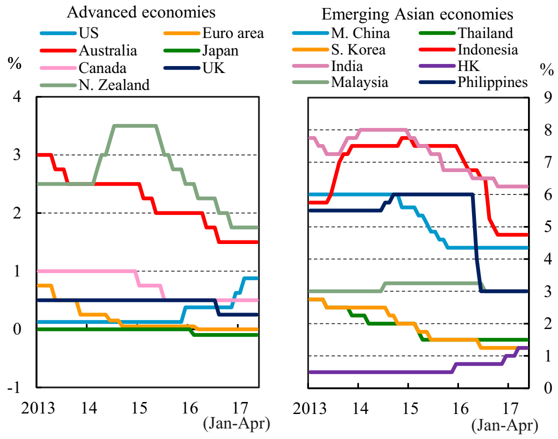
For stimulating the economy, the BOJ continued implementing its quantitative and qualitative monetary easing (QQE) policy and further cut interest rates into negative territory in February 2016. Moreover, in order to conduct QQE in a more flexible manner, the BOJ introduced QQE with yield curve control upon the original framework in September 2016. The UK cut its official bank rate and expanded QE in August 2016 to mitigate the impact of the Brexit referendum. Australia and New Zealand also lowered their policy rates to boost economic growth in 2016.

---

16 According to IHS Global Insight estimates (2017/5/15), the inflation rate in Venezuela accelerated to 558.1% in 2016.
17 See Note 2.

As for emerging Asian economies, in 2016, most of them kept easing monetary policies to enhance their domestic economies. Among these countries, the Bank Indonesia announced four Bank Indonesia rate (BI rate) cuts by a total of 100 bps and the BI 7-day reverse repurchase rate was trimmed twice by a total of 50 bps. The Reserve Bank of India cut its repurchase rate twice by a total of 50 bps. South Korea and Malaysia cut their policy rates by 25 bps, respectively. The Bangko Sentral ng Pilipinas (BSP) decided to modify the policy rate from overnight repurchase rate to overnight reverse repurchase rate and introduced an interest rate corridor system. The financial institution one-year lending base rate in Mainland China remained unchanged. Still, the People's Bank of China (PBC) cut its reserve requirement ratio in March 2016. To maintain the effective operation of the linked exchange rate system, the Hong Kong Monetary Authority (HKMA) raised the base rate charged through its overnight discount window in December 2016 and March 2017, respectively, by a total of 50 bps (Chart 2.8).

Chart 2.8 Policy rates in selected economies



Notes: 1. Advanced economies: figure for the US is based on the target federal funds rate; for the euro area, the main refinancing operations fixed rate; for Australia, cash rate target; for Japan, interest on excess reserves (before 2016/2/16, uncollateralized overnight call rate); for Canada, the target for the overnight rate; for the UK, official bank rate; for New Zealand, official cash rate.
2. Emerging Asia: figure for Mainland China is based on financial institution one-year lending base rate; for Thailand, 1-day repurchase rate; for South Korea, Bank of Korea base rate; for Indonesia, BI 7-day reverse repurchase rate (before 2016/8/19, Bank Indonesia rate); for India, repurchase rate; for Hong Kong, base rate; for Malaysia, overnight policy rate; for Philippines, overnight reverse repurchase rate (before 2016/6/3, overnight repurchase rate).
3. Figures are as of April 30, 2017.

Sources: Central banks' websites.

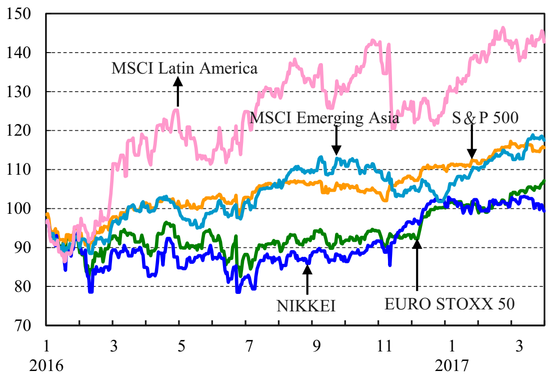
2.1.2 International financial conditions

Financial risks mitigated from 2016 onwards, yet low interest rates, political and policy uncertainties posed challenges

From 2016 onwards, commodity prices regained stability and some countries' economic conditions improved. Long-term interest rates gradually rebounded, which helped enhance interest rate spreads and long-term profitability of banks and insurance companies. Against this backdrop, the global financial stability risk reduced. However, US policy stances and a rise in protectionism brought about economic policy and political uncertainties. These, coupled with a prolonged period of low growth and low interest rates, had adverse impacts on bank profitability as well as the solvency of insurers and pension funds, and posed challenges to global financial markets.

Weak bank profitability in some advanced economies may raise risks in the future

Chart 2.9 Performance of key international equity indices



Notes: 1. January 1, 2016 = 100.
2. The Euro STOXX 50 refers to a stock index consisting of the largest 50 stocks in the 12 major economies of the euro area.
Source: Bloomberg.

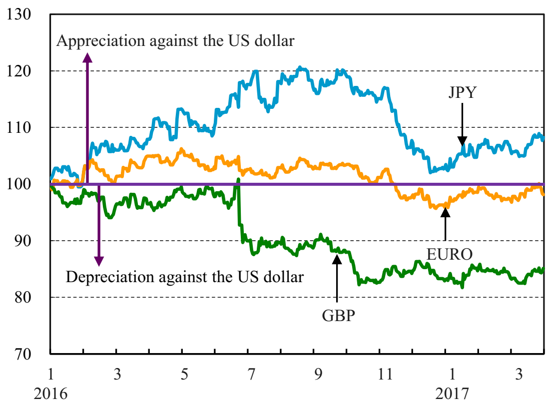
In 2016, financial conditions of banks in advanced economies improved compared to the global financial crisis, but weak bank profitability in some economies, particularly in Europe and Japan, may negatively affect their financial system stability. US banks recovered at a faster pace and had stronger profitability than European and Japanese banks, reflecting lower risks in the US. Nevertheless, the Trump administration advocated relaxing some financial regulations; as a result, the direction and magnitude of regulatory changes in the future will influence bank profitability and their risk-bearing capacity. On the other hand, profitability of European banks weakened owing to a large stock of problem assets. Among these countries, Italian banks' nonperforming loan problems led to a slump in stock and foreign exchange markets for a time. Moreover, uncertainty concerning the outlook of banks in the UK rose resulting from the outcome of the Brexit referendum.[18] Regarding Japanese banks, the erosion of profits accelerated by falling domestic net interest spreads reduced banks' ability to generate capital. The overseas expansion of Japanese banks in recent years increased their demand for short-term US dollar funding. Therefore, higher US rates would raise their funding cost, affect profitability, and increase external funding risk.

In the first quarter of 2016, the stock markets in advanced economies trended downward and fluctuated dramatically on account of unfavorable market sentiment. From the second quarter onwards, stock prices in the US rebounded and progressively hit record highs as the US grew steadily. Stock markets in Japan and the euro area stayed at low levels because of sluggish economic growth. Among them, stock markets in the euro area fluctuated significantly owing to unfavorable market sentiment such as rising bank risks and the Brexit referendum. In the fourth quarter, as the global economy recovered, stock markets in advanced economies generally trended upward and continued on their ascendant paths in the first quarter of 2017 (Chart 2.9).

[18] The IMF indicated that Brexit may lead to several uncertainties for the UK financial sector, including: (1) loss of passporting rights for UK banks may increase banks' operating costs; (2) as some 60 percent of the current financial services rulebook is estimated to be composed of EU rules, the revision would cover several aspects, such as legal, compliance, operational, and information technology changes; (3) protracted negotiations could not only postpone consumption and investment decisions, but also lower physical and human capital inflows and adversely affect economic development. See IMF (2016), *Global Financial Stability Report*, October.

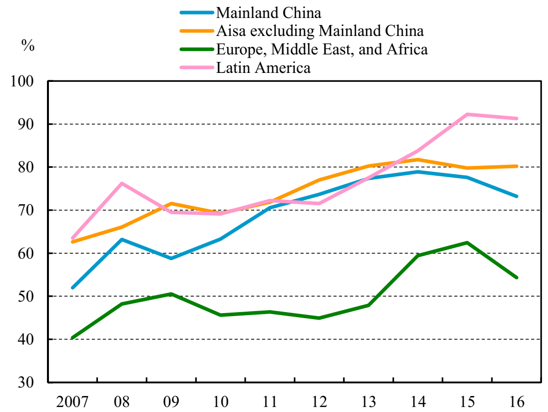
With regard to foreign exchange markets, the Japanese yen appreciated markedly because of investors' hedging demand and no further expansion of monetary easing policies by the BOJ. In addition, increased uncertainty over the economic outlook driven by the Brexit referendum in June has led to massive capital outflows from the UK, resulting in a sharp depreciation of the British pound against the US dollar.[19] Under the influence of Brexit, the euro depreciated as well. Following market expectations of the Trump administration's fiscal expansion and tax cuts in November and the Fed's interest rate hike in December, the US dollar became stronger, while the Japanese yen, the British pound and the euro turned notably weak before reversing to appreciate marginally in the first quarter of 2017 (Chart 2.10).

Chart 2.10 Movements of various currencies against the US dollar



Note: January 1, 2016 = 100.
Source: Bloomberg.

Chart 2.11 Corporate leverage ratios of emerging economies



Note: Leverage ratio = total liabilities/total equity.
Source: IMF (2017), *Global Financial Stability Report*, April.

Financial risks in emerging economies remained high owing to global policy uncertainty

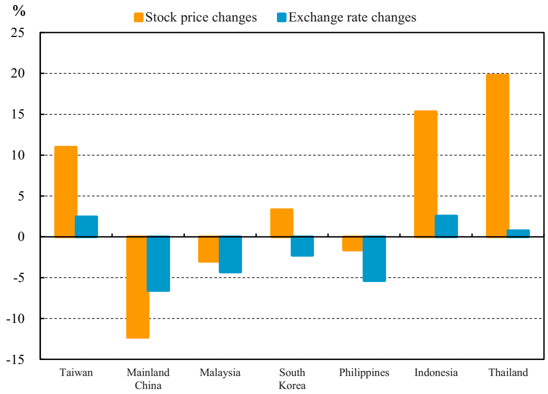
From 2016 onwards, benefiting from stability of commodity prices and improvement in some economies' economic conditions, corporate leverage declined and short-term financial risks receded. Notwithstanding, corporate leverage in some economies remained at high levels (Chart 2.11). Moreover, political and policy uncertainties in major advanced economies may open channels for negative spillovers to emerging economies. Overall, financial risk in emerging economies remained high.

In addition, there were considerable short-term international capital inflows into emerging economies during the second and third quarters of 2016. However, such capital flows were susceptible to shifts in investor sentiment and changes in policies of central banks in major

[19] The British pound exchange rate stood at 1.3679 against the US dollar on June 24, 2016, registering a decline of 8.1% compared to 1.4877 the day before.

economies. A sudden shift in policy or market sentiment could quickly reverse capital flows[20] and may trigger a disorderly deleveraging process. As a result, companies will have higher funding costs and lower corporate earnings, which will increase problem loans and undermine the soundness of the banking system, especially for the economies with insufficient bank loss provisions. In Mainland China, credit grew at a rapid pace and total assets of banks expanded continually.[21] Many financial institutions heavily relied on short-term wholesale financing with sizable asset-liability mismatches, meaning that they faced high credit and liquidity risks.

Chart 2.12 Changes in equity indices and exchange rates among Asian emerging economies



Notes: 1. The comparison is based on the difference between the figures at end-2015 and end-2016.
2. Taiwan uses TWSE Weighted Index; Mainland China uses SSE Composite Index; Malaysia uses Kuala Lumpur Composite Index; South Korea uses KOSPI Index; Philippines uses PSEI Index; Indonesia uses Jakarta Composite Index; Thailand uses SET Index.
Sources: Datastream and Bloomberg.

In 2016, because advanced economies continued their monetary easing policies, along with policy reforms and infrastructure projects launched by some emerging economies (such as Thailand, India and Indonesia, etc.), fundamentals improved gradually and international capital inflow continued, causing stock markets in emerging economies to rally (Chart 2.9). Among Asian emerging economies, stock indices of Thailand, Indonesia and Taiwan rose over 10% year on year (Chart 2.12).

In the first three quarters of 2016, international capital flowed into emerging economies to search for higher yields as the Fed delayed its rate-hike plan. Most Asian emerging economies' currencies appreciated against the US dollar, while those currencies reversed to depreciate after the Fed raised interest rates in the fourth quarter. Among Asian emerging economies, the Philippine peso depreciated considerably against the US dollar, registering a decline of 5.37%, as rising domestic political risks caused capital outflows. As for Mainland China, the depreciation of the renminbi against the US dollar reached 6.56% owing to foreign exchange reform and waning growth momentum (Chart 2.12).

IMF called on national authorities to take measures to promote global financial stability

Given that the effectiveness of a negative interest rate policy is limited and a prolonged

[20] In the third quarter of 2016, emerging economies' capital inflows (equity and debt investments) reached US$57.3 billion. However, this reversed to outflows of US$25.7 billion owing to the Fed's interest rate hike in the fourth quarter. See IMF (2017), *Global Financial Stability Report*, April.

[21] The ratio of total assets to GDP for banks in Mainland China at the end of 2016 was 307.34%, higher than the ratio of 286.02% at the end of 2015. See IMF (2017), *Global Financial Stability Report*, April.

low-interest-rate environment has an adverse influence on the development of financial institutions, the IMF has advocated[22] that national authorities should take measures, apart from macroeconomic and macroprudential policies, to promote a benign cycle between financial markets and the real economy as follows:

- National authorities should adjust regulatory requirements cautiously to avoid rising financial risks resulting from lower regulatory standards and opting out of mutually established regulations in a unilateral manner that may lead to reigniting a race to the bottom in regulatory standards.

- Banks in some advanced economies should reduce large stocks of problem loans as soon as possible and adjust dated business models to maintain financial stability in a low-rate and low-growth environment.

- Emerging economies should engage in a smooth deleveraging path and proactively monitor and address corporate vulnerabilities, arising from excess leverage and foreign exchange exposures, to preserve financial stability.

- Mainland China's corporate debt overhang and financial vulnerabilities of some institutions must be addressed promptly through a comprehensive approach. Furthermore, curbing excessive credit growth and adjusting interbank funding structures would reduce the stress on the financial system.

2.1.3 Mainland China's economic and financial conditions

Economic growth momentum successively waned

In 2016, suffering from the global economic slowdown, supply-side structural reforms, and mounting local government debts, Mainland China's economic growth rate fell to 6.7% from 6.9% in 2015, and recorded the lowest level since 1990 (Chart 2.13).

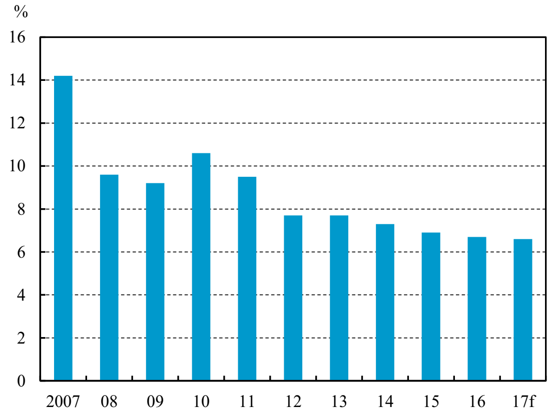
Taking a glance into 2017, owing to international political risks concerning policy uncertainty under the Trump administration and Brexit, Mainland China's National People's Congress (NPC) and Chinese People's Political Consultative Conference (CPPCC) in March targeted an economic growth rate of 6.5%, lower than its previous target range of 6.5% to 7% in 2016. IHS Global Insight projects the economic growth rate to continue falling to 6.6% in 2017 because of weakening property markets and new economic and trade policies of the US (Chart 2.13).

[22] IMF (2016), *Global Financial Stability Report*, October; IMF (2017), *Global Financial Stability Report*, April.

Prices remained stable and housing prices increased

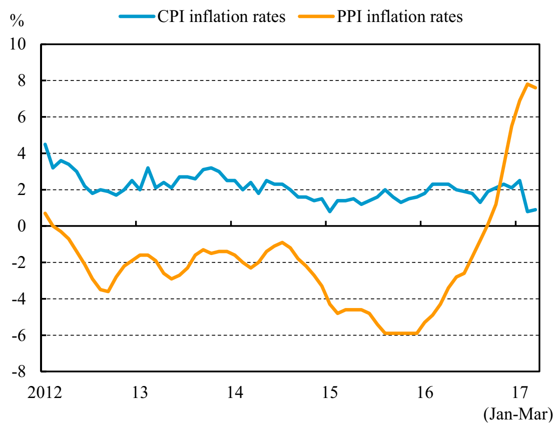
Because of stable food prices, the CPI inflation rate of Mainland China was 2.0% in 2016, lower than the official target of 3.0%. In the beginning of 2017, dragged by a significant decrease in food prices after the Lunar New Year, the CPI inflation rate declined to 0.9% in March. IHS Global Insight projects the annual CPI inflation rate of 2017 to increase to 2.1%. Moreover, the producer price index (PPI) showed negative growth over the longer run caused by destocking and restructuring. In September 2016, the PPI rebounded to 0.1% owing to higher prices for commodities such as coal and steel, thereby ending a 54-month decline. Additionally, affected by imported inflationary pressure arising from the pickup in crude oil prices and depreciation of the renminbi, the growth rate of the PPI has risen at a faster monthly pace since September. Therefore, the PPI inflation rate rose to 5.5% in December, and registered -1.4% for 2016 as a whole. Furthermore, the PPI rose to 7.6% in March 2017 (Chart 2.14).

Chart 2.13 Economic growth rates of Mainland China



Note: Figure for 2017 is an IHS Global Insight estimates.
Sources: National Bureau of Statistics of China and IHS Global Insight (2017/5/15).

Chart 2.14 Inflation rates of Mainland China



Source: National Bureau of Statistics of China.

Resulting from easy monetary policy and stock market index fluctuation at a low level and within a narrow range in 2016, massive capital flowed to housing markets leading to a marked rise in the first- and second-tier cities' housing prices while the third- and fourth-tier cities faced the pressure of stock clearance. Afterwards, Mainland China's government implemented targeted policies[23] that varied among different cities in September; therefore, the monthly growth rate of housing prices in 70 medium-large cities significantly fell to 0.3% at the end of the year from a high level of 2.1% in September, while the corresponding annual

[23] See note 3.

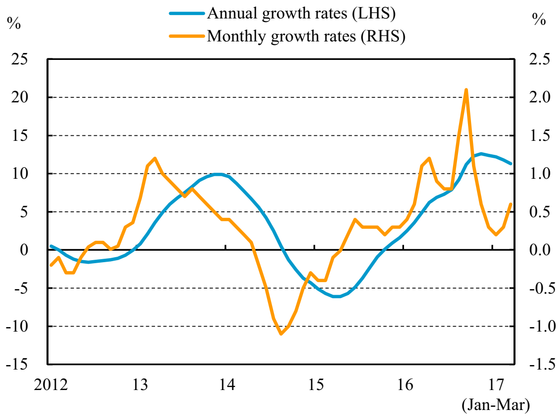
growth rate reached 12.4%. In the beginning of 2017, housing prices continued their upward trend, which was caused by a rise in specific third- and fourth-tier cities. Consequently, Mainland China further launched targeted policies aimed at specific third- and fourth-tier cities in March 2017 in order to stabilize housing prices. As a result, the annual growth rate was 0.6% in March, while the corresponding annual growth rate reached 11.3% (Chart 2.15).

PBC continued to implement prudential monetary policies

In an effort to reduce financing costs with the aim of sustaining economic growth, the People's Bank of China (PBC) lowered the reserve requirement ratio (RRR) for all banks by 50 bps in March. Subsequently, alternative targeted monetary easing measures were taken to inject funds into markets through different policy tools, including launching the medium-term lending facility (MLF) and pledged supplementary lending (PSL). In the beginning of 2017, against a backdrop of persistent depreciation of the renminbi, massive capital outflows and policy measures aimed at preventing housing bubbles, the PBC implemented prudential monetary policies, such as raising repurchase rates twice as well as hiking MLF rates and standing lending facility (SLF) rates resulting in stabilized interest rate spreads and exchange rate margins.

Furthermore, the Shanghai Interbank Offered Rate (SHIBOR) gradually rose from September 2016. Afterwards, the SHIBOR fluctuated dramatically because of prudential monetary policies, expanding inspection items of macro prudential assessment (MPA) and tighter liquidity conditions in the Chinese New Year holidays. Meanwhile, the PBC launched temporary liquidity facilities (TLF)

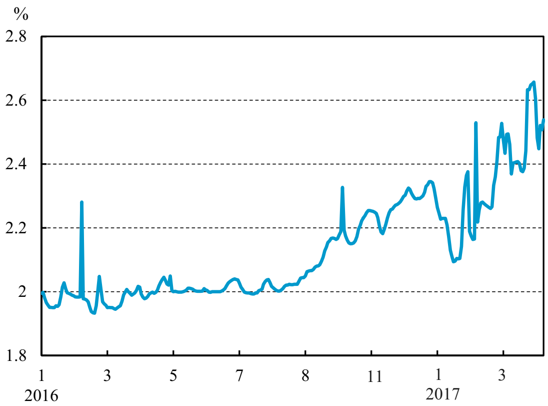
Chart 2.15 Average growth rates of building sales prices in 70 medium-large cities of Mainland China



Note: Figures are estimated by Thomson Reuters based on statistics published by the National Bureau of Statistics of China.

Sources: National Bureau of Statistics of China and Thomson Reuters.

Chart 2.16 Shanghai Interbank Offered Rates



Source: China Foreign Exchange Trading System & National Interbank Funding Center.

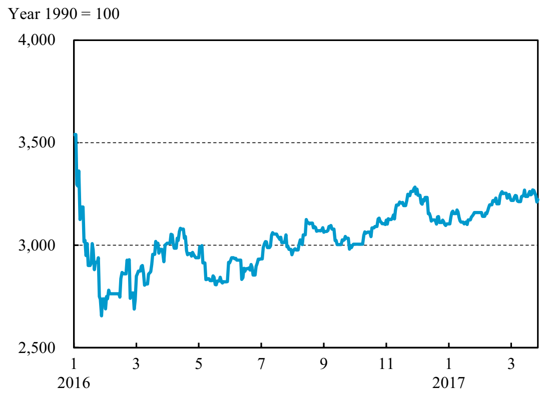
to temporarily inject liquidity into the financial system. However, the SHIBOR reached a yearly high, affected by the Fed raising interest rates, in March 2017 (Chart 2.16).

Stock markets fluctuated within a narrow range and at a low level whereas foreign exchange markets sharply fluctuated

In early 2016, owing to a circuit breaker mechanism and capital outflows driven by depreciation of the renminbi, the Shanghai Stock Exchange (SSE) Composite Index sharply declined. Afterwards, the SSE Composite Index gradually stabilized; however, the SSE fluctuated within a narrow range and at a low level because of Mainland China's slowing growth. Despite MSCI inclusion of Mainland China's shares as well as a Shenzhen-Hong Kong stock connect on December 5, 2016, market participants' concern over the slowing growth in Mainland China deepened and the SSE Composite Index reached 3,104 at the end of December, with an annual decrease of 12.3% (Chart 2.17).

Regarding the foreign exchange market, the PBC's intervention in the foreign exchange market to prevent speculative and arbitrage behavior, coupled with market expectations that the Fed would delay raising interest rates, brought the renminbi exchange rate against the US dollar to stabilize in 2016 Q1. However, the renminbi turned to depreciate against the US dollar following the Brexit vote in June. In the second half of 2016, the IMF included the renminbi in the special drawing right (SDR) currency basket, which became effective in October. Nevertheless, market participants' expectations that the momentum of renminbi exchange rate stabilization by the PBC had declined, along with the Fed signaling a faster pace of interest rate hikes, led to a further weakening of the renminbi exchange rate. Meanwhile, the renminbi exchange rate sharply depreciated because of the combined effect of capital outflows and expectations of renminbi depreciation. At the end of December, the renminbi exchange rate stood at 6.9495 against the US dollar, an annual depreciation of 6.56% (Chart 2.18).

Chart 2.17 Shanghai Stock Exchange Composite index



Source: Bloomberg.

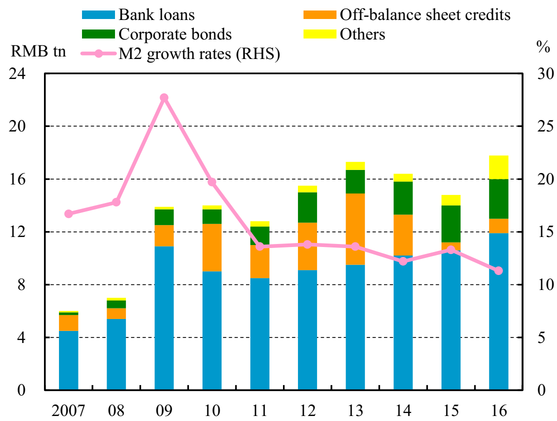
In early January 2017, the renminbi exchange rate dropped to 6.9557 against the US dollar. Afterwards, the PBC intervened to greatly drive up the Hong Kong Interbank Offered Rate (HIBOR) to boost the cost of shorting the renminbi offshore. In addition, capital outflow restrictions and accelerated sales of the US dollar by the PBC, as well as President Trump's belief that a strong US dollar contributed to the trade imbalance between the US and Mainland China, reversed the downward pressure on the renminbi. Following this, the renminbi exchange rate rebounded to 6.8342.[24] However, following Mainland China's trade deficit in February 2017 and the Fed gradually raising interest rates, the renminbi faced further depreciation pressure.

Chart 2.18 RMB/USD exchange rate

Source: CBC.

The increment in aggregate financing to the real economy increased, and NPL ratios of banks continually trended up

Chart 2.19 Aggregate financing to the real economy and annual growth rates of M2 in Mainland China



Source: PBC.

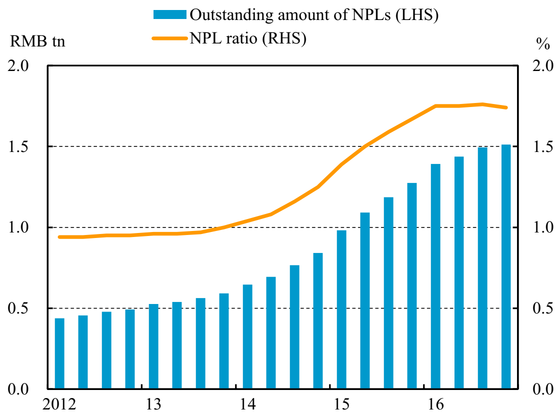
With a backdrop of the renminbi depreciation and capital outflows, the annual growth rate of broad money supply M2 decreased to 11.3% at the end of 2016, lower than the official annual target of 13%; thus, the PBC lowered the M2 growth target for 2017 to 12%. Meanwhile, aggregate financing to the real economy rose by RMB17.8 trillion in 2016 (Chart 2.19). However, slowing economic growth led to capital flowing to real estate, causing rapid mortgage growth as well as an increase in trust loans and entrusted loans. Accordingly, the annual growth rate increased to 12.8% from 12.4% a year earlier.

As a result of moderate economic growth, the NPL ratio of commercial banks edged up to 1.74% at the end of 2016 from the 1.67% recorded a year earlier (Chart 2.20). Because Mainland China's government continually cut excessive industrial capacity and cleaned up indebted corporates, the NPL ratio may continue to increase. However, Mainland China

[24] The renminbi exchange rate against the US dollar on January 18, 2017.

launched a debt-for-equity program in October 2016 in an effort to relieve the corporate debt burden and reduce banks' outstanding amount of NPLs.

Chart 2.20 NPL ratios of Mainland China's commercial banks



Source: China Banking Regulatory Commission.

With local government debts coming due, various measures were successively launched

Because of increasing pressure to service their debts[25] amid ongoing economic slowdown, Mainland China's government approved to launch a RMB3.2 trillion local government debt-swap program in 2015 to address the sources of financial stability pressure. Furthermore, Mainland China's government expanded the local government debt-swap program by RMB4.9 trillion in 2016 to enable local governments to tackle their debt due problems. Meanwhile, the State Council decided to adopt a local government debt ceiling in order to reduce default risk of local government debts.

2.2 Domestic macro environment

2.2.1 Domestic economic and fiscal conditions

In 2016, thanks to a gradual recovery in exports and modest growth in investment, domestic economic growth momentum strengthened and inflation remained stable. Short-term external debt servicing ability remained strong on the back of a sustained surplus in the balance of payments and ample foreign exchange reserves. Although the scale of external debt slightly increased, overall external debt servicing capacity stayed robust. Moreover, the government's fiscal deficits rebounded and the total government debt level slightly mounted; nevertheless, the government continued implementing the *Fiscal Health Plan* to enhance a sound fiscal system.

Export growth improved and the domestic economy rebounded progressively

With the moderate global economic recovery and increasing demand for semiconductors, Taiwan's export growth improved significantly in 2016. The decrease in the annual export growth rate sharply recovered to -1.76% from -10.86% a year earlier, in line with the drop in

[25] The National Audit Office of the People's Republic of China published the audit findings of public debts at all levels of government in December 2013. Based on the report, about RMB1.52 trillion of the total local government debts fell due in 2016, and about RMB1.08 trillion will fall due in 2017.