II. Macro environmental factors potentially affecting financial sector

2.1 International economic and financial conditions

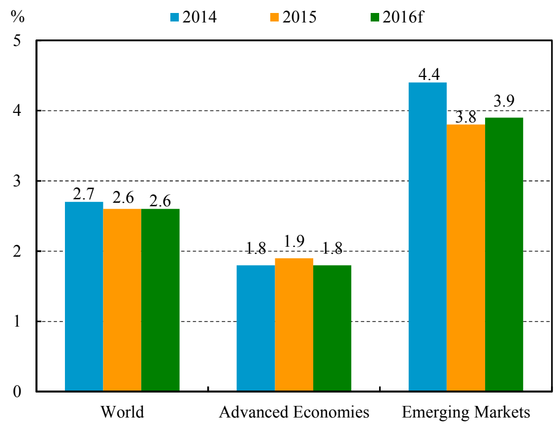
2.1.1 International economic conditions

Global economic growth softened and prospects remained uncertain

In 2015, global economic recovery was less sustained than expected. The International Monetary Fund (IMF) and IHS Global Insight both downgraded their forecasts for economic growth several times as economic performance across the world's major economies was uneven. The US economy grew steadily because of improved employment, strong domestic demand and increased disposable income. However, euro area growth remained weak even though Greece temporarily averted a default crisis. Meanwhile, despite sticking to an easier monetary policy stance, growth was worse than expected in Japan because of feeble consumption and stagnant wages. For the emerging economies, although they were still responsible for more than around 70% of global economic growth, the growth rate has decreased continuously over the last five years due to weaker domestic currencies, low commodity and oil prices, higher US interest rates and slowing Mainland China's growth, showing that their recovery momentum has waned.

From 2016 onwards, despite signs of an improving labor market, growth in the US may be weaker than expected owing to a strong dollar, which has caused a drop in exports. In the euro area and Japan, although they have continued applying monetary easing policies, growth momentum has still not gained traction. Among the emerging economies, Mainland China is undergoing structural reforms, which have further lowered its growth and could affect other emerging economies. Furthermore, Brazil is

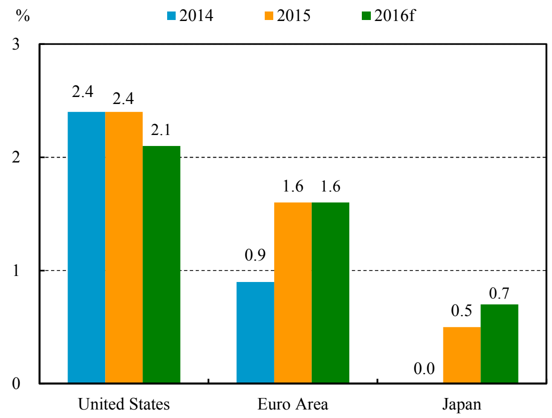
Chart 2.1 Global economic growth rates



Note: Figures for 2016 are IHS Global Insight estimates.
Source: IHS Global Insight (2016/4/15).

confronting a serious fiscal crisis. In sum, economic growth in emerging economies appears less favorable than anticipated. IHS Global Insight predicts[10] world real GDP growth to be 2.6% in 2016, the same figure as in 2015. Real GDP in advanced economies is projected to slightly decrease to 1.8%. The average growth rate in emerging economies is forecast to increase modestly to 3.9% (Chart 2.1).

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

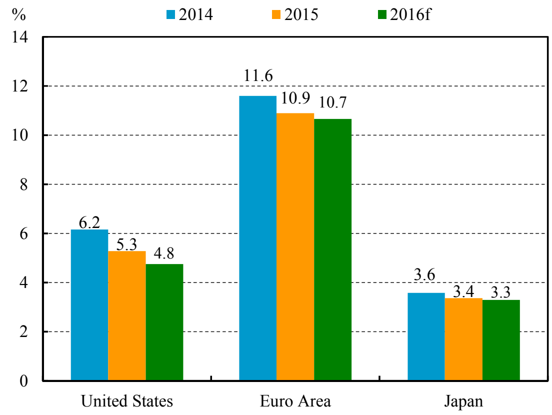


Note: Figures for 2016 are IHS Global Insight estimates.
Sources: Official websites of the selected economies and IHS Global Insight (2016/4/15).

Advanced economies took divergent growth paths

The US economy grew steadily, its labor and housing markets improved continuously

Chart 2.3 Unemployment rates in US, Euro area and Japan



Note: Figures for 2016 are IHS Global Insight estimates.
Sources: Official websites of the selected economies and IHS Global Insight (2016/4/15).

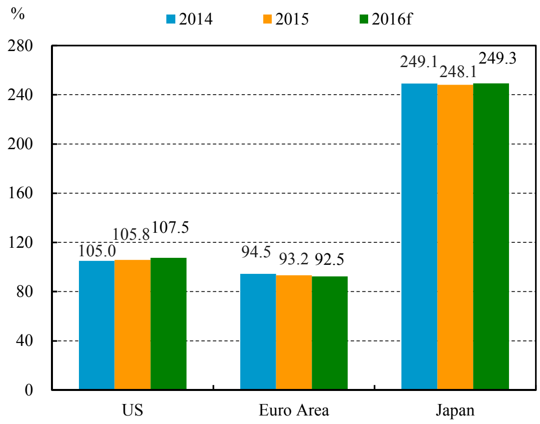
In 2015 Q1, the growth rate in the US was below expectations owing to abnormal weather conditions and a strong dollar. Recovery gained momentum later because of the increase in private consumption when the severe effect of weather conditions faded, along with improvements in employment, consumer expenditure and the property market. The annual economic growth rate was 2.4%, the same as in 2014. Although the Fed raised interest rates in December 2015, showing its confidence in the recovery in the job market and the economy, IHS Global Insight predicts US economic growth to slow to 2.1% in 2016 because of the cloudy prospects of investments in the energy sector and exports (Chart 2.2).

The labor market in the US kept improving in 2015 with the unemployment rate dropping to an eight-year low of 5.3% from 6.2% in 2014. Robust gains in employment increased private consumption, which supported economic growth. Since the labor market outlook remained

[10] See Note 1.

bright, IHS Global Insight anticipates the unemployment rate will fall to an annual rate of 4.8% in 2016 (Chart 2.3).

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



Note: Figures for 2016 are IMF projections.
Source: IMF (2016), *Fiscal Monitor*, April.

In fiscal year 2015, the pickup in wage growth boosted individual income taxes, reducing the US deficit to US$438.9 billion. Although the fiscal condition stayed positive, the IMF forecasts the US government debt burden to worsen further because of higher borrowing costs after the lifting of the interest rate as well as increasing medical and social expenditures. The ratio of outstanding government debt relative to annual GDP will continue elevating to an estimated 107.5%[11] in 2016 (Chart 2.4).

The euro area economy has gradually gained momentum

Thanks to the ECB's expansion of QE, and the diminishing of the threat of Greece exiting the euro area (Grexit), resulting from Greece's debt crisis, the economic growth rate in the euro area rose to 1.6% in 2015. Nonetheless, the high unemployment rate of 10.9% and soft oil prices challenged efforts to achieve their inflation target. In 2016, despite the prolonged refugee problem and the UK's possible withdrawal from the European Union, IHS Global Insight expects the euro area economic growth rate to stay at the same level of 1.6%, and the unemployment rate to decrease further to 10.7%, owing to the ECB's expansion of monetary easing measures and negative interest rate policy (NIRP) (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 an eight-year low of 2% in 2015. Moreover, the outstanding government debt-to-GDP ratio continued declining to 93.2%. As economic activity in the euro area gradually gains momentum, the IMF forecasts the ratio to fall slightly to 92.5% in 2016 (Chart 2.4).

[11] IMF (2016), *Fiscal Monitor*, April.

Economic growth in Japan was lower than expected, the inflation target hard-to-achieve, leading to the BoJ introducing an NIRP

In 2015 Q1, Japanese economic growth increased steadily as exports accelerated. However, the global economy remained sluggish and the effect of Japan's monetary stimulus was below expectations, leading to a mere 0.5% annual growth rate. In order to revive economic growth and achieve the targeted 2% inflation rate, the BoJ adopted an NIRP for the first time in February 2016, introducing a rate of -0.1% on the incremental increase in financial institutions' excess reserves. Additionally, the Japanese government announced that the corporate tax rate would be cut to 29.97%, effective from April 2016, as well as postponing the second sales tax hike until 2017, to underpin corporate profitability and investment. IHS Global Insight estimates Japanese economic growth to increase slightly to 0.7% in 2016, and the unemployment rate to decrease marginally to 3.3% (Chart 2.2, 2.3), while the IMF predicts the outstanding government debt-to-GDP ratio to increase to 249.3% in 2016 because of ballooning social welfare costs of a fast-aging population (Chart 2.4).

Economic growth of Asian emerging economies slowed down

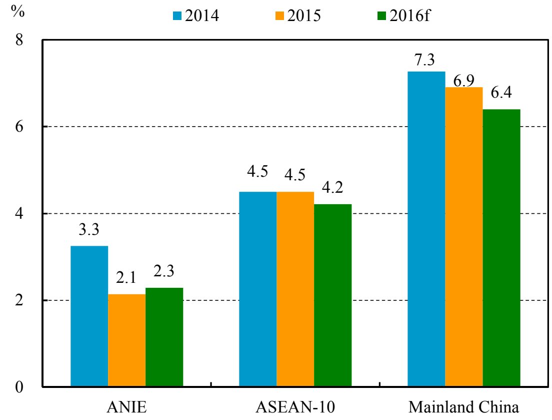
In 2015, Mainland China's economic slowdown resulted in lower commodity imports, leading to a significant decline in economic growth of Asian emerging economies. GDP growth in most Asian newly industrialized economies (ANIEs) experienced substantial downturns. With regard to the sharp drop in global trade, economic growth in export-oriented ANIEs contracted from 3.2% in 2014 to 2.1%. Among member countries in the Association of South East Asian Nations (ASEAN-10), the economic growth rate in Indonesia decreased owing to weak export performance and plunging international commodity prices. In contrast, Thailand benefited from a relatively stable political environment, and economic activity in Vietnam, buoyed by the expanding manufacturing sector and low wages, sustained its upward trajectory. As a result, the overall growth rate of the ASEAN-10 was 4.5%, the same as in 2014. In Mainland China, structural reforms, excess manufacturing capacity, weakening property markets and soft global demand lowered economic growth further to 6.9% in 2015, the lowest level in 25 years.

IHS Global Insight anticipates that the economic growth rate in the ANIEs will improve moderately to 2.3% in 2016, while the growth rate in the ASEAN-10 countries, affected by declining economic growth in Mainland China and low commodity prices, will fall to 4.2%. Meanwhile, the continued digestion of excess capacity in the industrial sector, a glut of housing inventory, and a government debt bubble will further pressure Mainland China's economy, lowering the annual growth rate to 6.4% in 2016 (Chart 2.5). In addition, the unemployment rate in the ANIEs and the ASEAN-10 is expected to decline slightly to 3.4% and 4.3%. In contrast, the unemployment rate in Mainland China is projected to rise slightly to 4.2% from 4.1% in 2015 (Chart 2.6).

Global inflation remained subdued

In 2015, the price of crude oil fell substantially as emerging economies, such as Mainland China, underwent sluggish growth, resulting in a sharp deceleration in oil demand growth. Moreover, the technique for mining oil shale made progress in the US, allowing production to reach a historically high level, and the US government abolished 40-year-old constraints on crude oil exports, further pressuring oil prices.[12] In the meantime, the international price of cereal continued its downward trend in 2015 as a result of slowing global export demand, excess food supply and the strengthening of the US dollar. Prices of vegetable oil, dairy and meat also fell. Since commodity and oil prices plunged dramatically, the oil-exporting nations (such as Saudi Arabia, Venezuela and Russia, etc.) experienced fiscal difficulties and economic slowdown. In addition, low commodity and oil prices led inflation to drop well below the targets of many developed nations (such as the US and Japan, etc.) and affected their monetary policies. Under the influence of low oil and food prices, the global headline inflation rate declined from the 2.9% registered in 2014

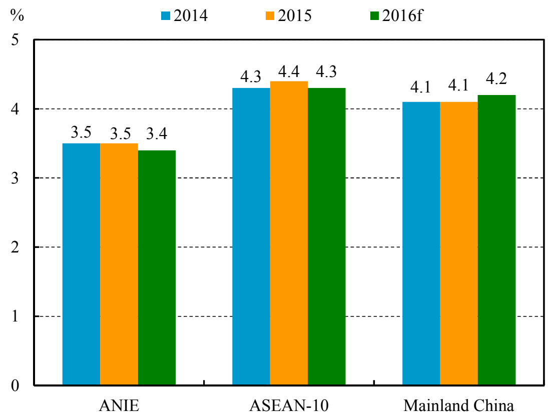
Chart 2.5 Economic growth rates in Asian emerging economies



Notes: 1. Figures for 2016 are IHS Global Insight projections.
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 (2016/4/15).

Chart 2.6 Unemployment rates in Asian emerging economies



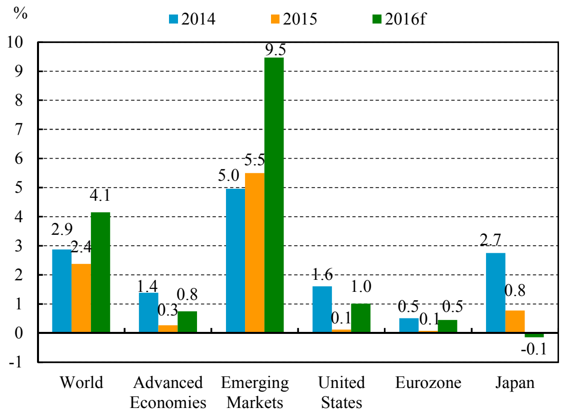
Notes: 1. Figures for 2016 are IHS Global Insight projections.
2. For ANIE and ASEAN-10, see Notes 2 & 3 in Chart 2.5.

Sources: Official websites of the selected economies and IHS Global Insight (2016/4/15).

[12] Brent crude oil plunged from a high of US$110.95 per barrel in June 2014 to a low of US$36.43 at the end of 2015.

to 2.4%. Headline inflation rates in advanced economies also fell markedly from 1.4% to 0.3%, and core inflation rates remained at 1.6%, which were lower than their targets.[13] Still, headline inflation rates increased from 5% to 5.5% in emerging economies as Brazil experienced its crisis of mounting deficits and high inflation (Chart 2.7).

Chart 2.7 Global headline inflation indices



Note: Figures for 2016 are IHS Global Insight estimates.
Sources: Official websites of the selected economies and IHS Global Insight (2016/4/15).

From 2016 onwards, the members of the Organization of the Petroleum Exporting Countries (OPEC) eventually failed to reach an agreement to freeze output. However, global prices of crude oil fluctuated with an upward trend on account of a slump in the US oil rig count and geopolitical conflicts in Iraq and Nigeria. With regard to international cereals, since projected global supply is sufficient and world stocks are higher than the figures registered last year, cereal prices are expected to drop steadily. IHS Global Insight predicts that the headline inflation rate in advanced economies will merely increase to 0.8% and the global headline inflation rate will rise to 4.1%[14] (Chart 2.7).

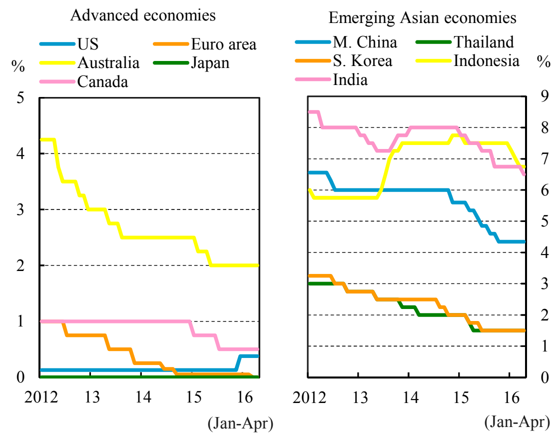
The US started raising interest rates, while most economies continued to adopt easy monetary policy stances

In 2015, advanced economies adopted divergent monetary policies. In December 2015, the Fed raised its target band for the federal funds rate by 25 basis points, to 0.25-0.5%, since US economic activity and labor market indicators continued to strengthen. Nonetheless, the Fed did not hike the rate further in March 2016 as it flagged risks from global financial and economic developments. Meanwhile, although the euro area economy has recovered mildly, most indicators of inflation remained muted. Therefore, the ECB announced an expanded asset purchase program in January 2015. In December of the same year, the ECB pledged to extend easing and lowered its overnight deposit rate. In March 2016, the ECB cut the rate further. Likewise, apart from implementing a quantitative easing policy, Japan cut interest rates into negative territory in February 2016 to stimulate the economy. Canada and Australia also lowered policy rates to boost economic growth. As for emerging Asian economies, to

[13] IMF (2016), *World Economic Outlook*, April.
[14] See Note 2.

mitigate the impact of weak global demand on their domestic economies, most of them kept easing monetary policies. Among these countries, Mainland China has cut the reserve requirement ratio as well as the interest rate on deposits and loans several times (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, uncollateralized overnight call rate; for Canada, the target for the overnight 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, base rate; for Indonesia, Bank Indonesia rate; for India, repurchase rate.
3. Figures are as of 15 April 2016.

Sources: Central banks' websites.

From 2015 onwards, the US hiked interest rates, while the euro area, Japan and Mainland China continued adopting accommodative monetary policies. The divergence of monetary policies could trigger a surge in both global financial market disruption and international capital flow volatility. In addition, the divergence could pressure the debt servicing ability of those emerging economies, affecting global financial stability. Furthermore, as quantitative easing in Japan and the euro area has gradually become less effective, the BOJ and ECB anticipated boosting economic growth and inflation expectations by introducing NIRPs. However, unexpected effects of the NIRPs, coupled with market concerns about adverse impacts caused by the NIRPs, have increased global financial market uncertainty and risks.

2.1.2 International financial conditions

Global financial stability risks elevated

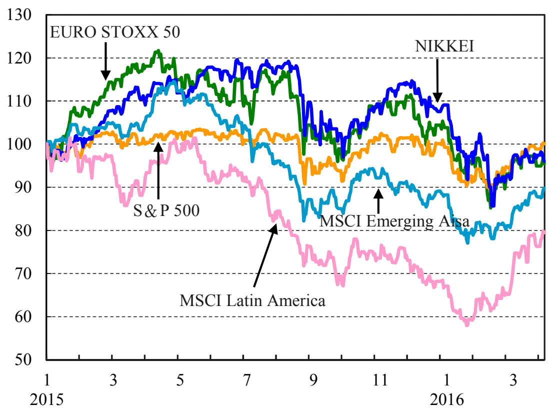
In the first half of 2015, global financial stability broadly improved as economic conditions recovered across advanced economies. However, from the second half of 2015 onwards, uncertainties concerning the global economic outlook and Mainland China's economic transition rose. These, coupled with a fall in crude oil and commodity prices as well as a drop of investor confidence regarding government policy actions, triggered turmoil in global financial markets and elevated financial stability risks.

Financial risks in some advanced economies have yet to fully recede

In recent years, the capital and liquidity levels of the banking industry have risen as advanced economies launched several financial regulatory reforms. However, the NPL ratios of banks in numerous economies ascended dramatically during the global financial crisis and are yet to recede fully. Moreover, sluggish adjustment of banks' business models[15] has continuously affected banks' profitability and loss-bearing capacity. Among different countries, US banks recovered at a faster pace and their exposure to emerging markets and the energy industry remained low. In addition, the overall risk of US banks was manageable on account of their high profitability and low NPL ratios. On the other hand, European banks failed to reduce non-performing assets generated during the financial crisis; at the same time, business model transformation as well as a large amount of litigation compensation affected their profitability and capability to raise capital. Furthermore, many European banks failed to increase their capital levels to meet new regulatory requirements and they remained at challenging levels. In the meantime, in response to declining domestic bond yields, Japanese banks reduced their holdings of yen bonds at the same times as increasing their foreign investments to improve investment returns. Nevertheless, such operations, along with a rising concern that NIRPs would further affect banks' profits, increased credit risks and led to tumbling stock prices.

In 2015, the stock and foreign exchange markets in advanced economies fluctuated dramatically. Among them, stock markets in advanced economies trended upward in the first half of 2015 thanks to economic recovery. The stock indices of Japan and the euro area particularly outperformed others. In the third quarter, stock prices in the US, the euro area and Japan tumbled simultaneously owing to unfavorable market sentiment such as slowing economic growth in Mainland China and rising expectation of a Fed interest rate hike. Although stock prices slightly rebounded in the fourth quarter, the volatility in stock markets amplified again in the first quarter of

Chart 2.9 Performance of key international equity indices



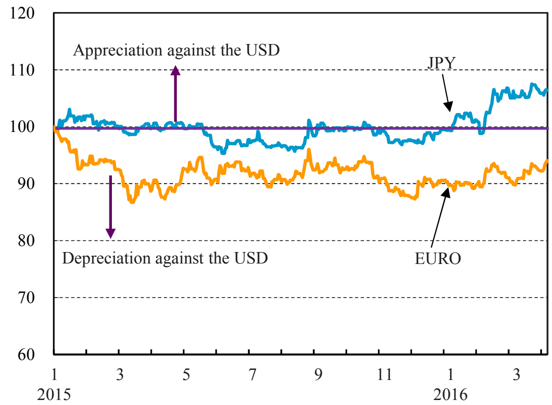
Notes: 1. 1 January 2015 = 100.
2. The Euro STOXX 50 refers to a stock index of the euro area consisting of the largest 50 stocks in the 12 major economies.

Source: Bloomberg.

[15] Before the global financial crisis, the banking industry undertook securitization and various innovations through complex, high-risk financial derivatives operations to earn high profits. After the crisis, regulations turned stricter and imposed restrictions on the scope and type of bank businesses. For example, the Volcker Rule in the US prohibited commercial banks from engaging in proprietary trading and the ring-fencing rule in the UK was designed to separate retail banks from wholesale banks.

2016 (Chart 2.9). With regard to foreign exchange markets, expectations of a Fed interest rate hike led to a stronger US dollar, while the euro depreciated against the US dollar owing to quantitative easing and the NIRP of the ECB. The Japanese yen against the US dollar continuously stayed at a low level in the face of qualitative and quantitative monetary easing policies by the BOJ. The Japanese yen temporarily depreciated against the US dollar as the BOJ announced its NIRP in January 2016; afterwards, the Japanese yen appreciated markedly because of massive hedging capital inflows caused by international financial market fluctuations (Chart 2.10).

Chart 2.10 Movements of various currencies against the US dollar



Note: 1 January 2015 = 100.
Source: Bloomberg.

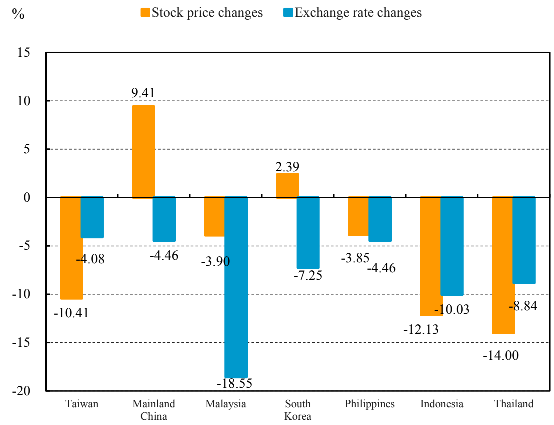
Financial risks in some emerging markets mounted

Financial systems in emerging economies faced challenges owing to several adverse impacts such as a slack global economy, the plunging prices of crude oil and raw materials, as well as substantial adjustment of assets prices. In recent years, the measures of financial leverage for corporate sectors in many emerging economies surged owing to over-indebtedness. The weakening profitability and debt servicing ability, caused by a slowdown in economic growth, had an adverse impact on their refinancing ability. Added to this, the strengthening US dollar lifted dollar-denominated debt burdens of such corporates and pushed up the default risks. In addition, oil-producing and raw material-exporting countries, such as Russia, Brazil and Venezuela, faced high fiscal deficits and foreign debt triggered by tumbling oil and raw material prices. The default risks of energy corporates in those countries ascended as well. Although banking industries in most emerging economies remained profitable and adequately capitalized, rapid credit growth and increasing borrower default may cast a shadow over credit markets, as well as eroding banks' profits and capital levels.

In the first half of 2015, benefiting from QE policies in the euro area and Japan, stock prices of Asian emerging economies trended upward. Nevertheless, in the second half of 2015, the economic slowdown in Mainland China jeopardized exports. This, coupled with capital outflows driven by market expectations of rising interest rates in the US, led to a drop in most Asian stock markets. In 2015, Asian emerging economies' currencies mostly depreciated.

Among them, the Malaysian ringgit against US dollar depreciated considerably, registering a decline of 18.55% as falling international crude oil prices adversely affected its exports (Chart 2.11).

Chart 2.11 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-2014 and end-2015.
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.

The IMF indicated that rising downside risks of the global economy posed several challenges for emerging economies,[16] including: (1) the increasing debt burden and default risks of big companies in Mainland China and other emerging economies[17] may have negative spillover effects on other economies and thus adversely affect the global financial system; (2) the default rate on foreign currency-denominated corporate debts ascended because of currency depreciation, and corporate cash flow deteriorated, affected by declining raw material prices; (3) some banks' balance sheets have yet to reflect late-cycle asset quality deterioration and NPL ratios in some economies' banking sectors are set to rise as corporate earnings and asset quality deteriorate; (4) rapid credit growth underlies a significant increase in banks' loan-to-deposit ratios and funding positions in some economies' banking sectors are now approaching statutory ceilings, which could potentially become a further constraint on banks' ability to underwrite credit.

International organizations called on national authorities to take measures to promote global financial stability

According to the IMF's assessment,[18] further bouts of market turmoil or disorderly balance sheet deleveraging could erode global economic output by 3.9% compared to baseline level without proper policy frameworks. In order to lessen the risks from global financial instability, international organizations such as the IMF[19] and the OECD[20] provided the policy

[16] IMF (2015), *Global Financial Stability Report*, October; IMF (2016), *Global Financial Stability Report*, April.
[17] According to the IMF's estimation, loans potentially at risk in Mainland China's corporate sector reached US$1.3 trillion, or 15.5% of total commercial bank loans. Considering estimates of bank loans potentially at risk and assuming a 60 percent loss ratio suggests that potential bank losses on these loans could amount to US$756 billion, or 7% of GDP. Alternatively, assuming a lower loss ratio of 45 percent yields potential bank losses of US$567 billion, or 5% of GDP. See IMF (2016), *Global Financial Stability Report*, April.
[18] IMF (2016), Global Financial Stability Report, April.
[19] See Note 16.
[20] OECD (2015), *Economic Outlook*, NO. 98 November.

suggestions as follows:

- With the divergence in the monetary policies of advanced economies, national authorities should make concerted policy efforts to reduce the possibility that episodes of financial market volatility could disrupt the current economic expansion. In addition, national authorities should reevaluate trading restrictions on derivatives to address problems when liquidity is tightening.
- In the euro area, the authority should strengthen bank supervision and reform the insolvency framework. Injections of public money to recapitalize banks or an orderly wind-down of insolvent institutions is needed when necessary to speed up the recognition of bank losses and lower NPLs.
- Emerging economies should enhance supervision on banks' credit risks, including higher capital requirements for foreign currency exposures as well as caps on the share of such exposures. Furthermore, structural reforms are also required, such as relaxing regulations and raising the proportion of foreign direct investment to replace volatile short-term capital by providing tax incentives.
- Emerging and developing economies should adopt flexible foreign exchange policies to abate the impacts arising from deteriorating terms of trade. Implementation of expansionary fiscal policies is another measure to respond to negative impacts if necessary.
- The corporate sector in Mainland China should be appropriately deleveraged to smooth credit channels. Supervisory authorities should promote interest rate liberalization, reinforce market discipline, increase banks' loss-absorbing buffers and strengthen regulations to avoid the risk of excessive competition.

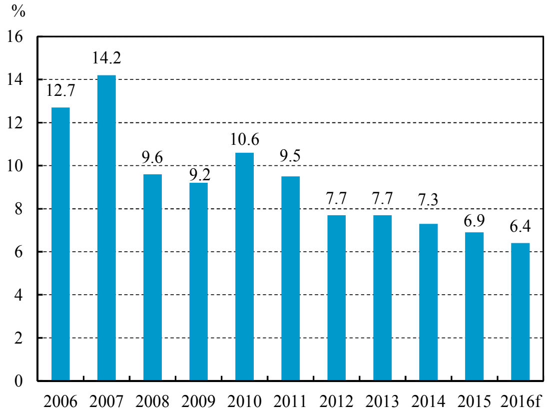
2.1.3 Mainland China's economic and financial conditions

Economic growth momentum continuously waned

In 2015, under increasing pressure stemming from the slow pace of the global economic recovery, excess capacity, and mounting local government debts, Mainland China's economic growth rate fell to 6.9% from 7.3% in 2014, lower than its official growth target of 7% and the lowest level of GDP growth recorded since 1990 (Chart 2.12).

Taking a glance into 2016, in an effort to promote supply-side structural reforms,[21] 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% to 7% for 2016, the first time that the goal was reported as a range rather than a specific number, giving greater flexibility in policy making. However, IHS Global Insight projects the economic growth rate to continue falling to 6.4% in 2016 on account of weakening property markets and excess capacity in manufacturing (Chart 2.12).

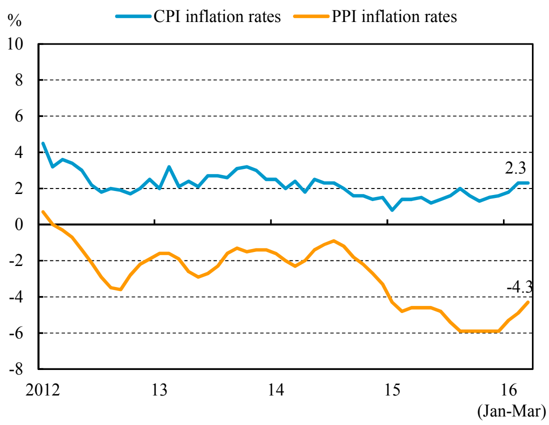
Chart 2.12 Economic growth rates of Mainland China



Note: Figure for 2016 is an IHS Global Insight projection.
Sources: National Bureau of Statistics of China and IHS Global Insight (2016/4/15).

Prices remained stable and housing prices turned to increase

Chart 2.13 Inflation rates of Mainland China



Source: National Bureau of Statistics of China.

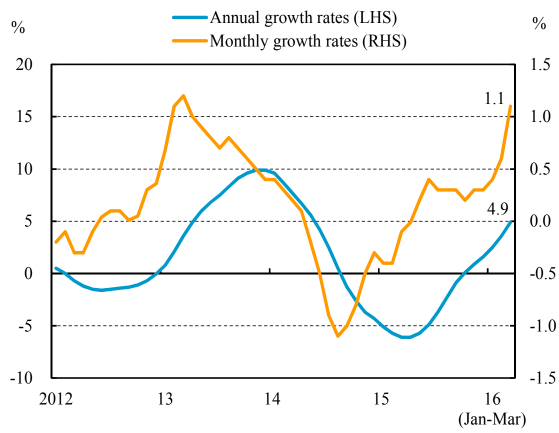
Owing to sluggish domestic demand and falling international oil prices, the CPI inflation rate of Mainland China was 1.4% in 2015, lower than the official goal of 3.0%. In the beginning of 2016, affected by cold weather and the seasonal factor of the Lunar New Year holidays, food prices surged and the CPI inflation rate rebounded to 2.3% in March. IHS Global Insight projects the annual CPI inflation rate of 2016 to increase to 2.3%. In contrast, the producer price index (PPI) inflation rate registered -5.2% in 2015 owing to industrial overcapacity and falling raw material prices. Moreover, the PPI inflation rate contracted to -4.3% in March 2016 (Chart 2.13).

The annual growth rate of housing sales prices in 70 medium-large cities continued to decline in 2015 Q1. However, owing to a series of deregulation measures[22] in the housing market

[21] The term "supply-side structural reforms" aims at readjusting the economic structure to optimize the allocation of supply-side elements, thus improving economic growth.
[22] The measures include cutting the down payment ratio for second house buyers and shortening the owning period to exempt sellers from business taxes when individuals sell an ordinary house in March 2015, and cutting the down payment ratio for first house buyers from 30% to 25% in September.

from May, housing prices turned to rise after declining, and the annual growth rate reached a yearly high of 1.6% at the end of the year (Chart 2.14). Furthermore, in early 2016, massive cash inflows into the housing market led to a marked rise in the first- and specific second-tier cities' housing prices while the third- and fourth-tier cities faced the challenge of stock clearance. Therefore, the divergence in the property market has induced two separate sets of housing policies from Mainland China's government, including strengthening supervision on first- and second-tier cities to stabilize housing prices as well as continually implementing easing monetary policies with respect to third- and fourth-tier cities in an effort to accelerate destocking.

Chart 2.14 Average growth rates of building sales prices in 70 medium-large cities of Mainland China



Source: Thomson Reuters.

The PBC continued to implement an easing monetary policy to maintain balance between stabilizing growth and restructuring the economy

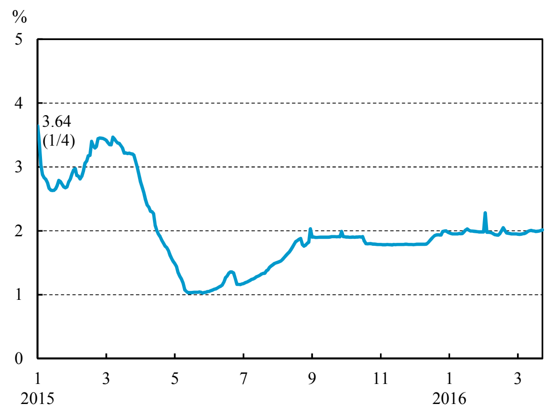
In an effort to reduce financing costs with the aim of sustaining economic growth, the People's Bank of China (PBC) continued to take a series of monetary easing measures in 2015, such as successively cutting the reserve requirement rate (RRR) for targeted agricultural and micro enterprises. Subsequently, the PBC took alternative targeted monetary easing measures that injected funds into markets through different policy tools, including cutting repurchase rates several times, and launching the medium-term lending facility (MLF), pledged supplementary lending (PSL) and short-term liquidity operations (SLOs). Besides these, the PBC lowered the benchmark deposit and lending rates to 1.5% and 4.35%, respectively, which was the fifth interest rate cut since July 2012. Furthermore, the PBC removed the deposit interest rate ceiling in October 2015 to achieve its interest rate liberalization target.[23]

Later, owing to the slowdown in economic growth and massive capital outflows from Mainland China, the PBC cut the RRRs for all banks by 50bps in March 2016 to maintain

[23] The PBC expanded the ceiling on deposit interest rates from 1.2 times the benchmark rate to 1.3 and 1.5 times, respectively, in March and May 2015. In August, the PBC removed the ceiling on long-term (excluding within one year) banks' certificate of deposit interest rates. In October, the PBC removed the ceiling on all banks' deposit interest rates.

ample liquidity in the financial system. In the face of easy monetary policy, the Shanghai Interbank Offered Rate (SHIBOR) fluctuated mildly except for a temporary rise during the Chinese New Year holidays because of seasonal demand (Chart 2.15).

Chart 2.15 Shanghai Interbank Offered Rates



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

The stock and foreign exchange markets sharply fluctuated

In early 2015, thanks to interest rate and RRR cuts by the PBC, the One Belt One Road and MSCI inclusion of Mainland China's shares, the Shanghai stock exchange composite (SSE) index sharply rose and registered 5,166 in mid-June, increasing by 60% from the end of 2014 (Chart 2.16). However, detachment from fundamentals, strengthened deleveraging by the government and negative international factors all led to a panic sell-off and dramatic fall in the market. Afterwards, the SSE composite index gradually stabilized in Q4, and reached 3,539 at the end of December, with an annual rise of 9.4%. In the beginning of 2016, a circuit breaker mechanism was triggered resulting in a panic sell-off again and the SSE composite index plummeted to 2,655. At the end of March, the SSE composite index slightly rebounded to 3,004.

Chart 2.16 Shanghai stock exchange composite index

Source: Bloomberg.

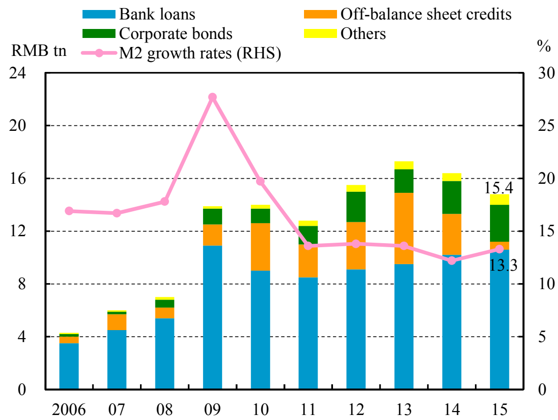
Regarding the foreign exchange market, the renminbi exchange rate turned to stabilize after depreciating against the US dollar in 2015 Q1. However, the renminbi sharply dropped to 6.3231, driven by the implementation of reform of the mid-price of the renminbi against the US dollar on 11 August. Later, the IMF included the renminbi into the special drawing right (SDR) currency basket in November. Therefore, market participants expected that the momentum of stabilization of the renminbi exchange rate by the PBC would decline and that depreciation of the renminbi would follow. At the end of December, the renminbi exchange rate stood at 6.4936 against the US dollar, an annual depreciation of 4.5%. In the beginning of 2016, the renminbi exchange rate has rapidly depreciated through the combined effect of capital outflows and expected depreciation of the renminbi. Afterwards, the PBC intervened to greatly drive up the Hong Kong Interbank Offered Rate (HIBOR) to boost the cost of shorting the renminbi offshore, resulting in the stabilization of the renminbi (Chart 2.17).

Furthermore, Mainland China's government gradually opened the capital account and took a series of measures for the onshore foreign exchange market from 2015 onwards to promote the internationalization of the renminbi, including: (1) implementing reform of the mid-price of the renminbi against the US dollar; (2) opening its interbank foreign exchange market to foreign central banks and similar institutions; (3) allowing qualified foreign institutional investors to participate in the foreign exchange market; (4) publishing the renminbi exchange rate composite index provided by the China Foreign Exchange Trade System (CFETS). As a result, the effects of these measures on Mainland China's economy and the global financial market should be cautiously monitored in the future.

Chart 2.17 RMB/USD exchange rate

Source: CBC.

Chart 2.18 Aggregate financing to the real economy and annual growth rates of M2 in Mainland China



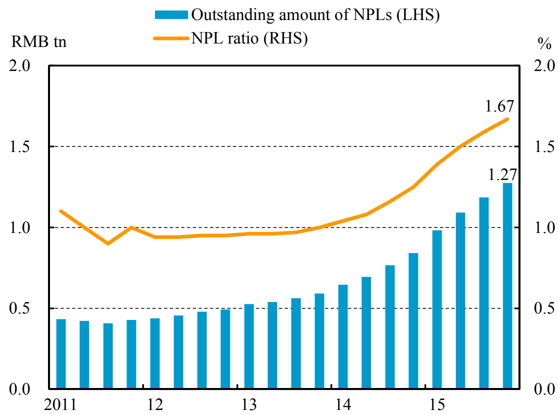
Source: PBC.

The increment in aggregate financing to the real economy slightly decreased, but NPL ratios of banks continually trended up

With a view to the PBC's reinforcement of the financial sector to support the real economy, the annual growth rate of broad money supply M2 increased to 13.3% at the end of 2015, higher than the official annual target of 12%. Meanwhile, aggregate financing to the real economy rose by RMB15.4 trillion at the end of 2015; however, the annual growth rate decreased to 12.4% from 14.3% a year earlier, mainly resulting from a decline in off-balance sheet financing as Mainland China strengthened financial institution deleveraging and supervision on shadow banking (Chart 2.18).

Despite a sustained rise in bank loans in the most recent four years, the NPL ratio edged up to 1.67% at the end of 2015 from the 1.25% recorded a year earlier as a result of moderate economic growth (Chart 2.19). Because Mainland China's government continually cut excessive industrial capacity and cleaned up indebted corporates, the NPL ratio may continue to increase.

Chart 2.19 NPL ratios of Mainland China's commercial banks



Source: China Banking Regulatory Commission.

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

On account of local governments facing enormous debts due from 2015 onwards,[24] alongside increasing pressure to service their debts owing to ongoing economic slowdown and address the sources of financial stability pressure, Mainland China's government consented to launch a RMB3.2 trillion local government debt-swap program so as to enable local governments to tackle their debt due problems. Furthermore, the State Council determined to raise the limit the National Social Security Fund is allowed to invest in local government bonds and adopted a local government debt ceiling in order to reduce default risk of local government debts.

2.2 Domestic economic conditions

In 2015, because of a substantial decline in exports and sluggish momentum in investment, the domestic economy grew slowly along with stable inflation. 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. Meanwhile, the scale of external debt shrank and external debt servicing capacity improved. Although the government's fiscal deficits fell, the total government debt level slightly mounted; furthermore, the government kept implementing the *Fiscal Health Plan* to enhance a sound fiscal system.

[24] 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 RMB2.78 trillion of the total local government debts fell due in 2015, and about RMB1.52 trillion will fall due in 2016.