# II. Potential macro environmental risk factors

## 2.1 International economic and financial conditions

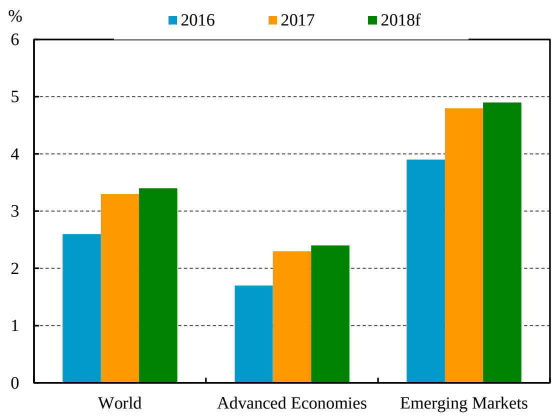
### 2.1.1 International economic conditions

#### *Global economic growth momentum strengthened further in 2017 and the upswing is expected to continue into 2018*

As the recovery in global investment and trade took hold in 2017, growth in advanced and emerging economies rose steadily. The global economic growth rate edged up to a five-year high of 3.3%. Among advanced economies, the acceleration of economic growth in the US has been spurred on by an improvement in personal consumption expenditures and fixed investment. Thanks to higher consumer and business confidence, together with stronger global growth and brighter labor market conditions, the growth rate for the euro area reached a 10-year high in 2017. Japan's economy expanded steadily, supported by a bounce in domestic demand and gross fixed capital formation. Meanwhile, with rising commodity prices and global demand, as well as economic growth in Mainland China picking up pace for the first time in seven years, emerging economies regained growth momentum.

Looking ahead to 2018, IHS Markit predicts[10] global GDP growth to expand to 3.4%. Among its components, economic growth in advanced economies is projected to rise to 2.4% driven by US tax reform. At the same time, in spite of the expected economic slowdown in Mainland China, Asian newly industrialized economies (ANIEs) and ASEAN-10 (Association of South East Asian Nations) economies,[11] the average growth

**Chart 2.1 Global economic growth rates**




Note: Figures for 2018 are IHS Markit estimates.
Source: IHS Markit (2018/5/15).

[10] See Note 1.

[11] IHS Markit anticipates that the economic growth rates for Mainland China, ANIEs, and ASEAN-10 will drop to 6.7%, 2.9%, and 5.1%, respectively, in 2018.

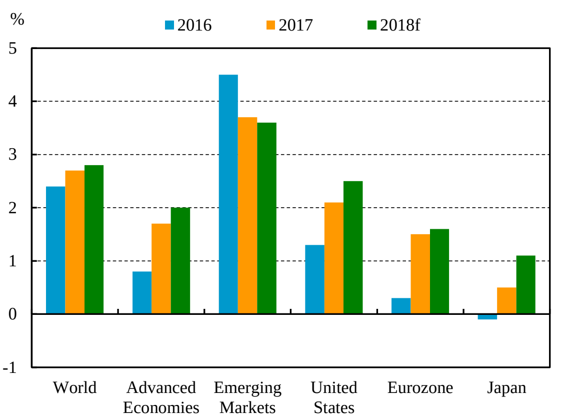
rate in emerging economies is forecast to increase to 4.9% on the back of an improving economic outlook in other emerging economies bolstered by a pickup in commodity prices (Chart 2.1).

Although the global economy is gradually gaining momentum, the International Monetary Fund (IMF) and IHS Markit[12] have warned that faster-than-expected monetary policy normalization by major central banks, protectionist policies, trade negotiations between the US and Mainland China, elevated debt levels in Mainland China,[13] and geopolitical tensions could threaten to choke off a broad-based recovery.

## *Global inflation rose steadily*

In the first half of 2017, the price of Brent crude oil fell below $50 per barrel. However, affected by the fact that the Organization of the Petroleum Exporting Countries (OPEC) extended their agreement of oil production cuts until the end of 2018 and deepening political instability in some member economies, oil prices rebounded from the second half of 2017 onwards. In the meantime, the international prices of cereals, vegetable oil, and dairy oscillated within a narrow range, while metal prices increased. With fluctuating food prices, as well as elevated commodity and oil prices, global inflation rose moderately and lifted the CPI inflation rate to 2.7% in 2017. Among them, the headline inflation rate in advanced economies picked up to 1.7%, reflecting the upward trend of US inflation. On the other hand, the headline inflation rate in emerging economies fell to 3.7% as a result of a more moderate inflation rate in Brazil (Chart 2.2).[14]

**Chart 2.2 Global headline inflation indices**




Note: Figures for 2018 are IHS Markit estimates.
Source: IHS Markit (2018/5/15).

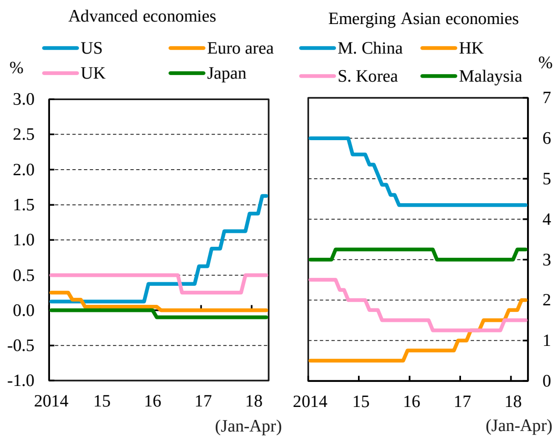
As the world's biggest oil producers have extended a deal to curb oil production throughout 2018, oil prices are expected to continue their upward trajectory. Meanwhile, commodity prices are projected to rise, owing to an increase in demand for commodities and oil resulting from a recovery in the global economy. Accordingly, IHS Markit predicts that the global headline inflation rate will

[12] IMF (2018), *World Economic Outlook*, January; IMF (2018), *World Economic Outlook*, April; IHS Markit (2018), *Global Executive Summary*, May.
[13] IMF (2017), *IMF Country Report*, No. 17/358, December.
[14] See Note 2.

continue rising to 2.8%. The headline inflation rate in advanced economies will increase to 2.0%, while the rate in emerging economies is expected to moderate to 3.6% (Chart 2.2).

### Advanced economies adopted monetary policy normalization, while emerging economies took divergent paths

**Chart 2.3 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 the UK, official bank rate; for Japan, interest on excess reserves (before 2016/2/16, uncollateralized overnight call rate).
2. Emerging Asia: figure for Mainland China is based on financial institution one-year lending base rate; for Hong Kong, base rate; for South Korea, Bank of Korea base rate; for Malaysia, overnight policy rate.
3. Figures are as of April 30, 2018.

Sources: Central banks and monetary authority websites.

From 2017 onwards, monetary policies in advanced and emerging economies remained divergent. Among them, in view of solid growth in the US labor market and economic activity, as well as accelerating core inflation close to the 2% target, the Fed hiked its target band for the federal funds rate four times (during March 2017 to March 2018) by a total of 100 basis points (bps) to 1.5-1.75%. Moreover, the Fed has gradually begun the task of unwinding its balance sheet since October 2017, showing its path toward balance sheet normalization (Chart 2.3).

Meanwhile, since most indicators of inflation in the euro area stayed below their targets, the ECB held interest rates steady in 2017. However, the ECB scaled down its net asset purchases by €20 billion and €30 billion in April 2017 and January 2018, respectively, resulting in asset purchases decreasing from €80 billion to €30 billion per month.[15] The BOJ also kept its interest rate target and yield curve control policy[16] unchanged as the inflation rate remained muted in Japan. In contrast, in response to inflation caused by increasing import costs owing to depreciation of the pound in the wake of the Brexit, the BoE hiked its official bank rate by 25 bps to 0.5% in November 2017 to relieve inflationary pressures. It was the first interest rate rise in a decade (Chart 2.3).

[15] Recently, the head of Germany's central bank, Jens Weidmann, together with Klaas Knot, the Dutch central bank president, commented that the ECB should end its asset purchases as soon as possible.

[16] The Bank of Japan (BOJ) Governor, Haruhiko Kuroda, said that the BOJ would start thinking about how to exit its massive monetary stimulus program in the 2019 fiscal year if inflation reaches its 2% target.

From 2017 onwards, emerging Asian economies adopted different monetary policies. Among these countries, the People's Bank of China (PBC) left interest rates unchanged but reduced required reserve ratios twice by a total of 150 bps to support the development of inclusive financial services for financial institutions. The reduction would also be used to repay the medium-term lending facilities (MLF) borrowed by banks. South Korea and Malaysia both raised their policy rates by 25 bps so as to mitigate the impact of capital outflow caused by US interest rate rises. The hike also underscored their confidence in the economic recovery. The Hong Kong Monetary Authority (HKMA) followed the Fed's rate hikes and raised the base rate charged through its overnight discount window four times (during March 2017 to March 2018) by 25 bps each to maintain the effective operation of the linked exchange rate system (Chart 2.3).

### *The US has recently adopted trade protectionist policies, which could pose a threat to the global economy*

In the face of a chronic trade deficit of commodities and a worsening trade deficit to GDP ratio that has not effectively improved, the US government consecutively resorted to protectionist measures to reduce trade imbalances following President Trump taking office. In response, the Ministry of Finance in Mainland China immediately unveiled that it would impose additional tariffs on a list of products imported from the US. The date of implementation will depend on when the US government imposes the additional tariffs on Mainland China's products.

While negotiations regarding measures of retaliatory tariffs between Mainland China and the US are in progress, there is a concern that when the US implements the new Section 301 action, it could trigger a domino effect. The IMF and WTO also warned that US trade protectionist policies would cause damage not only outside the US, but also to the US economy itself,[17] and result in potential trade disputes.[18]

## *2.1.2 International financial conditions*

### *The global banking industry regained its health, yet financial market risks elevated*

In 2017, thanks to the strengthening global economic recovery, the international banking industry regained its health. However, prolonged easy monetary policies have intensified the search for yield in markets, leading to risks shifting from the banking sector to financial markets, which have

[17] IMF (2018), *Statement by IMF Spokesperson on Announced U.S. Import Tariffs*, IMF Press Release, March; Meredith, Sam (2018), *IMF's Lagarde Says Nobody Wins in a Trade War, Reuters News*, March.

[18] Miles, Tom (2018), *WTO Chief Makes Rare Warning of Trade War over U.S. Tariff Plan*, Reuters News, March; WTO (2018), *Azevêdo Calls on Members to Avoid Triggering an Escalation in Trade Barriers*, Press Release, March.

experienced compressed risk premiums and volatility. Furthermore, private sector indebtedness significantly surged against the backdrop of a persistently low-interest-rate environment. As a result, the medium-term vulnerabilities rose. In addition, the gradual normalization of monetary policy in major economies and rising trade protectionism spurred financial market volatility, which might further increase financial vulnerability.

## Banks in advanced economies have strengthened their balance sheets

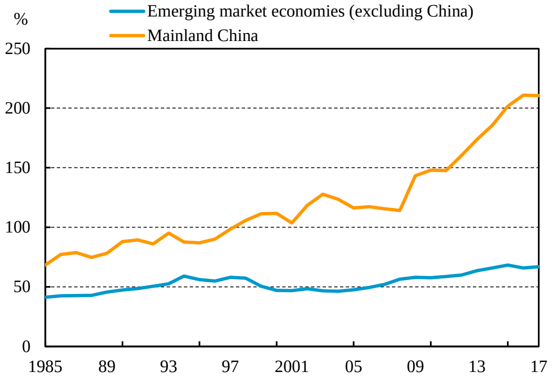
In 2017, ongoing improvement in banks' capital and liquidity levels has strengthened their balance sheets in most advanced economies. Among them, US banks' profits were higher in 2017 than their performance a year earlier. Nonetheless, the US passed the rollback of a number of financial regulations with the aim of relaxing crisis-era regulatory restrictions that had been placed on small and medium-sized banks. In this regard, further observation of the influence of the above regulatory rollback on banks' soundness and profitability is needed.

Profitability of European banks also slightly enhanced owing to an increase in non-interest income and a decrease in asset impairment. By contrast, Japanese banks' profits in 2017 didn't witness an upturn mainly because of the adverse impacts stemming from the negative interest rate policy, overbanking and cut-throat competition for granting new loans. Whether future profits improve will depend on Japan's economic prospects and the effectiveness of structural reform of the banking industry.

## Emerging economies continued to face the risks of capital outflows and debt overhang

In emerging economies, strengthening economic growth and decreasing economic risks attracted massive international capital inflows searching for high-yield assets, which has compressed government and corporate bond yields, as well as pushed up asset prices and external debt. Should the monetary policy normalization by major economies move at an unexpected pace, it might cause international capital inflows to reverse to outflows and, in turn, impact their financial system stability.

**Chart 2.4 Debt-to-GDP ratios of non-financial sectors in emerging economies and Mainland China**




Source: IMF (2018), Global Financial Stability Report, April.

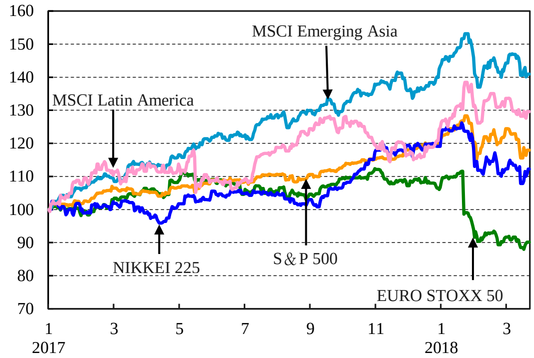
In addition, large capital inflows buoyed emerging economies with ample funds. This, coupled with rapid credit growth spurred by the low-interest-rate environment, led to a rise in nonfinancial sector debt, especially in Mainland China (Chart 2.4). For some emerging economies, excessive corporate and household debt growth could increase their debt burdens; thus, if the occurrence of unfavorable events triggers a tightening of financial conditions, the corporate and household sectors might face high debt servicing pressures, sparking off a rise in their default rates and, in turn, affect the stability of financial institutions and markets.

### Global financial market volatility fell in 2017, but elevated in early 2018

The US stock market kept hitting record highs in 2017, which boosted global stock markets to steadily trend upwards. In early February 2018, the acceleration of wage growth fueled market concerns that a rising inflation rate may lead to the Fed hiking interest rates at a faster pace. This, coupled with the concerns that US tax cuts could jeopardize its fiscal stability, led the US stock market to tumble and induced international stock markets to plunge nearly 10% over the same period. Thereafter, international stock markets rebounded gradually, while volatility dramatically increased. In regard to the performance of key international equity indices, most Asian stock markets trended upwards supported by continuous international capital inflows in 2017. Accordingly, MSCI emerging Asia index increased by 40% (Chart 2.5).

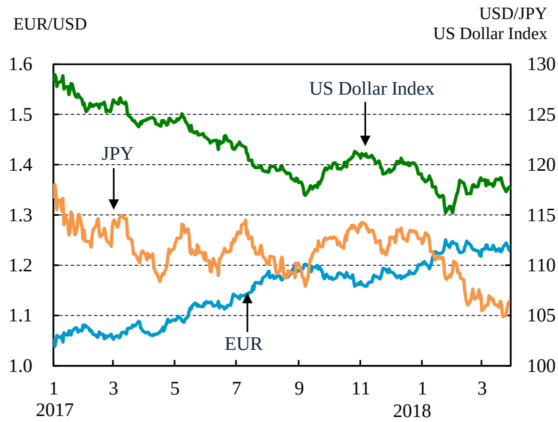
The US dollar displayed a depreciating trend in the first three quarters of 2017; by contrast, the euro continually appreciated against the US dollar. The Japanese yen fluctuated with the trend of the US dollar and the movement of hedging needs resulting from geopolitical risks. In the fourth quarter, the US dollar turned to a strengthening trend. Nonetheless, in 2018 Q1, affected by market concerns over fiscal stability

**Chart 2.5 Performance of key international equity indices**




Notes: 1. January 1, 2017 = 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.

**Chart 2.6 Movements of various currencies against the US dollar**

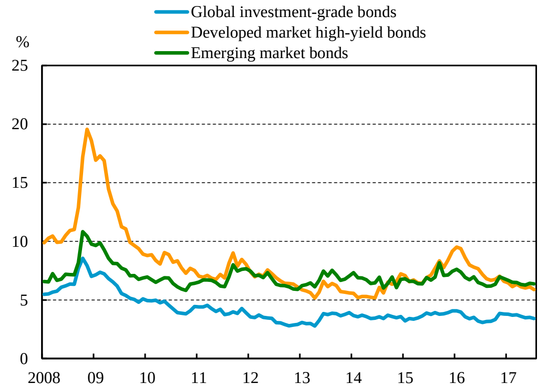



Note: US Dollar Index is introduced by the Fed, which is the weighted average of the FX value of the U.S. dollar against the currencies of 26 major U.S. trading partners (Jan 1997 = 100).
Sources: Fed and Thomson Reuters Datastream.

owing to US tax reform as well as the strengthening economic recovery attracting capital inflows to the euro area and emerging economies, the US dollar index declined again and the euro appreciated against the US dollar. The Japanese yen also saw an appreciating trend against the US dollar driven by hedging needs (Chart 2.6). With regard to major Asian currencies, in 2017, most of them displayed appreciating trends against the US dollar owing to the higher-than-expected economic growth rates among Asian economies attracting massive international capital inflows.

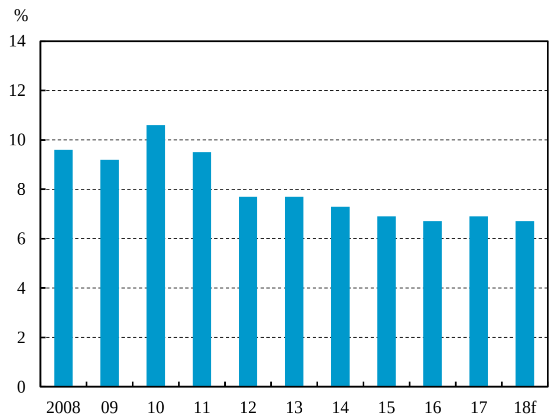
In addition, the low-interest-rate environment has facilitated investors' search for yield over recent years. As a result, compressed market spreads led to lower credit and market risk premiums and volatility in bond markets as well as a sharp decline in investment-grade and high-yield corporate bond yields (Chart2.7). Moreover, lower borrowing costs boosted an increase in the issuance of government and corporate bonds that escalated their financial leverage, and raised the sensitivity of the financial system to market risks.

**Chart 2.7 US dollar bond yield**




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

**Chart 2.8 Economic growth rate of Mainland China**




Note: Figure for 2018 is an IHS Markit estimate.
Sources: National Bureau of Statistics of China and IHS Markit (2018/5/15).

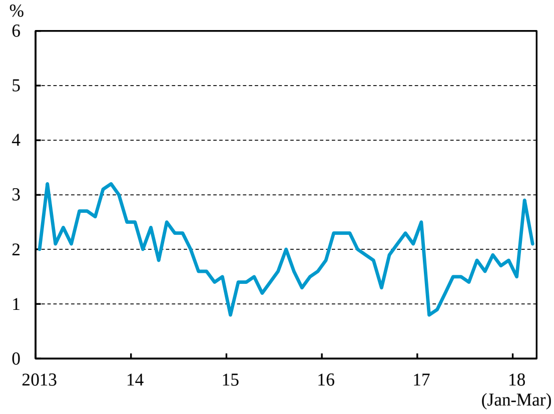
As a whole, volatility in major stock, bond and FX markets fell dramatically in 2017 but saw a considerable rise in early 2018. Tightening monetary policies by major central banks, coupled with mounting fears of a possible correction for rocketing asset prices as well as intensified trade tensions and geopolitical disputes, might induce dramatic fluctuations in asset prices, jeopardizing the stability of global financial markets.

## *2.1.3 Mainland China's economic and financial conditions*

### *Economic growth accelerated for the first time in seven years*

In 2017, thanks to the strong rebound in exports, Mainland China's economic growth rate rose to a higher-than-expected level of 6.9% from 6.7% in 2016, posting its first growth pick-up in seven years. However, in view of Mainland China's government taking more draconian measures on the domestic housing market and implementing stricter financial regulations, coupled with its mounting debt levels and US-China trade tensions, IHS Markit projects the economic growth rate to fall slightly to 6.7% in 2018 (Chart 2.8).

**Chart 2.9 CPI Inflation rate of Mainland China**

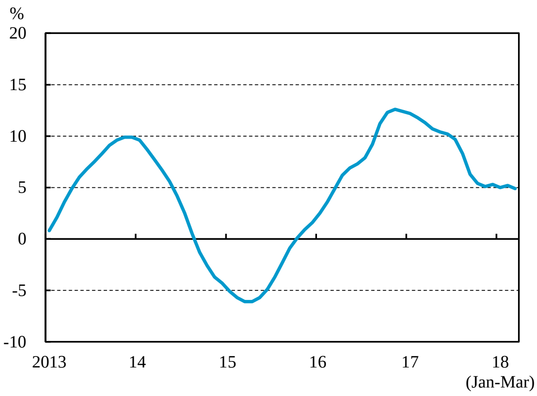



Source: National Bureau of Statistics of China.

### *Prices rose mildly and housing prices increased moderately*

Affected by a fall in food prices, the CPI inflation rate of Mainland China was 1.6% throughout 2017, reflecting the fact that consumer prices rose mildly. In the beginning of 2018, owing to an increase in food prices after the Lunar New Year, the CPI inflation rate rose to 2.1% in March. IHS Markit projects the annual CPI inflation rate of 2018 to increase slightly to 1.7% (Chart 2.9).

**Chart 2.10 Average annual growth rates of building sales price in 70 medium-large cities of Mainland China**




Source: Thomson Reuters Datastream.

In 2017, the average housing prices in 70 medium-large cities trended up uninterruptedly, though at a slower pace. The annual growth rate of housing prices declined significantly to 5.3% in December from 12.4% a year earlier. With Mainland China's government continuously reinforcing risk control of the housing market in the beginning of 2018, the annual growth rate further fell to 4.9% in March (Chart 2.10).

### *PBC continued to implement stable and neutral monetary policies*

In 2017, in an effort to control financial risks, the PBC continued to implement stable and neutral monetary policies, keeping its policy rate unchanged. Meanwhile, the PBC adopted different monetary policy tools[19] to keep market liquidity stable. In the beginning of 2018, the PBC cut its reserve requirement ratios twice by 50bps and 100bps, respectively, so as to

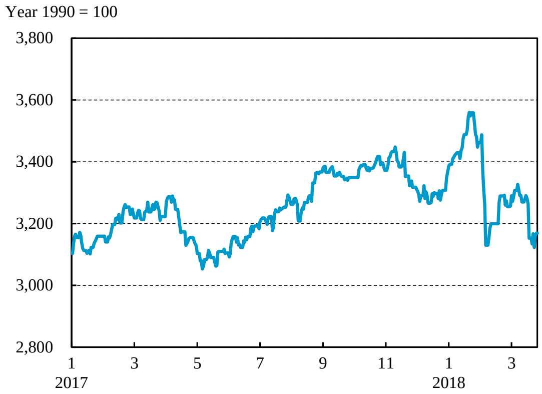
[19] The tools included pledged supplementary lending (PSL), temporary liquidity facility (TLF), repurchase agreements (repos), MLF and standing lending facility (SLF).

support financial institutions to develop financial inclusion and assist banks to repay their expired MLF loans borrowed from the PBC.

### *Stock markets saw a fall after experiencing a moderate increase, whereas the FX rate appreciated sharply*

In June 2017, affected by the fact that MSCI announced the inclusion of Mainland China's shares into its MSCI Emerging Markets Index from June 2018 onwards, along with bullish international stock markets, the SSE Composite Index fluctuated with an upward trend and reached 3,307 at the end of December, an annual increase of 6.56%. In the beginning of 2018, driven by a marked fall in US stocks indices, the SSE Composite Index plunged for four consecutive business days from February 6, totaling a drop of 10.26%. Afterwards, the SSE Composite Index gradually rebounded and reached 3,169 at the end of March (Chart 2.11).

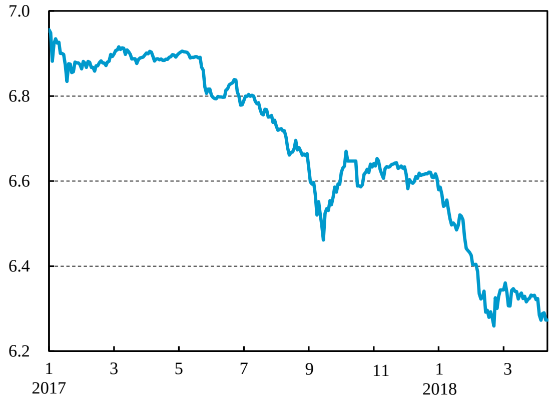
**Chart 2.11 Shanghai Stock Exchange Composite index**




Source: Bloomberg.

Regarding the FX market, the renminbi exchange rate against the US dollar remained stable in the first four months of 2017, while the renminbi turned to appreciate against the US dollar from May onwards. To mitigate the impact of overvaluation of the renminbi against the US dollar in the short term, the PBC announced it would lower the FX risk reserve ratio, which is required for financial institutions undertaking "forward FX sales" business on behalf of clients, from 20% to 0% in September. Although this measure initiated temporary depreciation of the renminbi against the US dollar, the renminbi exchange rate rebounded to 6.512 at the end of December, an annual appreciation of 6.72%. The main reason behind this was that Mainland China's stronger-than-expected trade figures promoted market participants to expect an ongoing appreciation of the

**Chart 2.12 RMB/USD exchange rate**




Source: CBC.

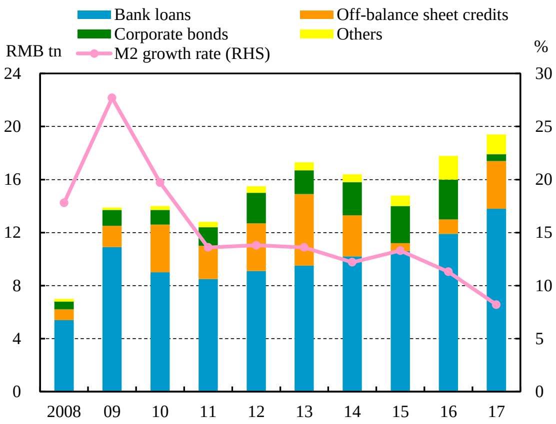
renminbi against the US dollar. In the beginning of 2018, the renminbi saw continuous appreciation against the US dollar and the exchange rate stood at 6.273 at the end of March (Chart 2.12).

## *The increment in aggregate financing to the real economy elevated, and NPLs of banks constantly trended up*

With a backdrop of Mainland China government's deleveraging measures and gradual enhancement of financial supervision, the annual growth rate of broad money supply M2 decreased to 8.2% at the end of 2017, lower than the official annual target of 12%. Meanwhile, aggregate financing to the real economy rose by RMB19.4 trillion in 2017 (Chart 2.13), while the annual growth rate of the outstanding amount slightly decreased to 12.0% from 12.8% a year earlier.

At the end of 2017, the NPLs of commercial banks continued to trend upwards and stood at RMB1.71 trillion, while the NPL ratio leveled off at a high level of 1.74% (Chart 2.14).

**Chart 2.13 Aggregate financing to the real economy and annual growth rate of M2 in Mainland China**

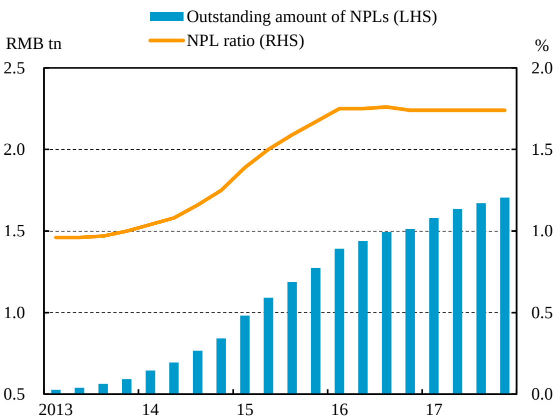



Source: PBC.

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

Mainland China's government expanded the local government debt-swap program by RMB2.77 trillion in 2017 to enable local governments to tackle their debt due problems. Meanwhile, the State Council decided to adopt a local government debt ceiling and impose permanent accountability for local debt surveillance in order to reduce the default risk of local government debts.

**Chart 2.14 NPL ratio of Mainland China's commercial banks**




Source: China Banking Regulatory Commission.