China's banking sector: Performance of listed banks and hot topics

2016 Quarter 2

October 2016

INTRODUCTION

China's Banking Sector: Hot Topics and Performance of Listed Banks is a KPMG publication that examines the important topics and performance of China's A-share listed banks. It provides an in-depth analysis of the topical issues to help readers understand their impact and the future direction of the banking sector. The report also reviews data to analyse the financial position of China's listed banks.

This issue (second quarter 2016) focuses on current hot topics, including front, middle and back-office integration of the financial market business, the securitisation of non-performing assets, interpretations of the Guidelines on the Internal Audit of Commercial Banks, the opening up of the bank card clearing services market in China, among others. Our research and discussion on these hot topics, as well as the financial position for the second quarter of 2016 and the business performance of the first half of 2016, should help readers gain a better understanding of the current situation.

For more information, please do not hesitate to contact one of the KPMG professionals in the Contact Us section.

Index

1 The Economy and Finance in Q2 2016

Q2 Data Analysis

In the second quarter of 2016, China's gross domestic product (GDP) grew by 6.7% year-on-year (YoY), the same as the first quarter of the year, which was within an appropriate range. The performance of China's economy was stable in the first half of 2016.

Overall, the economy showed signs of stabilisation and recovery in the first half of 2016, though there were still some uncertainties. The Consumer Price Index (CPI) remained above 2% and the growth rate of industrial added value increased compared to the first quarter of 2016. Real estate investment made a comeback beyond expectations, while imports and exports ~~still~~ remained sluggish.

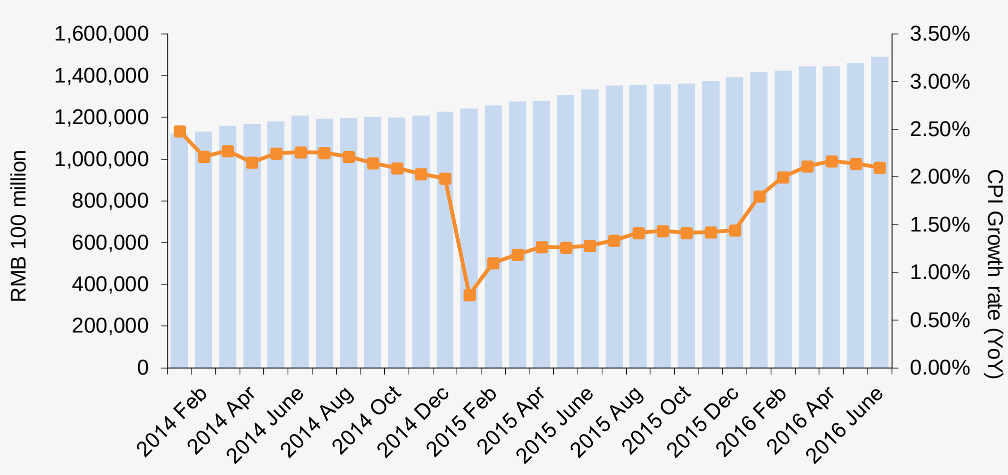
- **GDP growth rate was within an appropriate range:** In the first half of 2016, China's GDP reached RMB 33.8656 trillion. In terms of economic sectors, the added value of the primary secondary and tertiary sector was RMB 2.0881 trillion, RMB 13.7372 trillion and RMB 18.0403 trillion, respectively. This amounts to a YoY increase of 3.1%, 6.1% and 7.5%, respectively. The tertiary sector was a major driver of the economy.
- **Consumption continued to grow steadily:** In the first half of 2016, the total retail sales of consumer goods reached RMB 15.6138 trillion, a YoY increase of 10.3%. The retail sales of consumer goods above limit reached RMB 7.1075 trillion, up 7.5%.
- **Foreign trade continued to decline:** In the first half of 2016, the total volume of import and export trade amounted to USD 1.7113 trillion, a YoY decrease of 8.8%. The trade balance was USD 257.1 billion in the first half of 2016, a YoY decrease of 2%.

Overview of key macroeconomic indicators	Unit	2014Q1	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2
GDP	YoY (%)	7.4	7.5	7.3	7.3	7.0	7.0	7.0	6.8	6.7	6.7
CPI	YoY (%)	2.3	2.3	2.2	2.0	1.2	1.3	1.4	1.4	2.1	2.1
PPI	YoY (%)	-2.3	-1.1	-1.8	-3.3	-4.6	-4.8	-6.0	-5.9	-4.3	-2.6
Industrial added value	YoY (%)	8.7	8.8	8.5	8.3	6.4	6.3	6.2	6.1	5.8	6.2
Total retail sales of consumer goods	YoY (%)	12.0	12.1	12.0	12.0	10.6	10.4	10.5	10.7	10.3	10.3
Fixed asset investment	YoY (%)	17.6	17.3	16.1	15.7	13.5	11.4	10.3	10.0	10.7	9.0
Exports	YoY (%)	-3.5	0.9	5.1	6.0	4.6	0.9	-1.9	-2.8	-9.6	-7.7
Imports	YoY (%)	1.5	1.4	1.3	0.5	-17.7	-15.6	-15.3	-14.1	-13.5	-10.2
Trade surplus	$100 million	174.4	868.0	1,284.4	1,503.8	1,238.2	1,394.3	1,636.0	1,758.4	1,257.4	1,436.5
M2	YoY (%)	12.1	14.7	12.9	12.2	11.6	11.8	13.1	13.3	13.4	11.8
RMB loan growth	YoY (%)	13.9	14.0	13.2	13.6	14.0	13.4	15.7	15.3	14.9	14.4

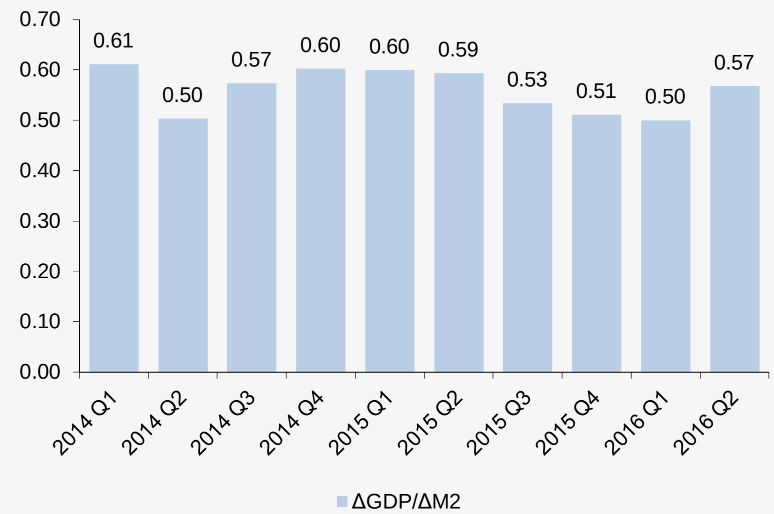
Source: National Bureau of Statistics of the People's Republic of China, Wind Info,

Monetary Expansion and National Economic Output

Money Supply and Inflation Rate



Velocity of Money

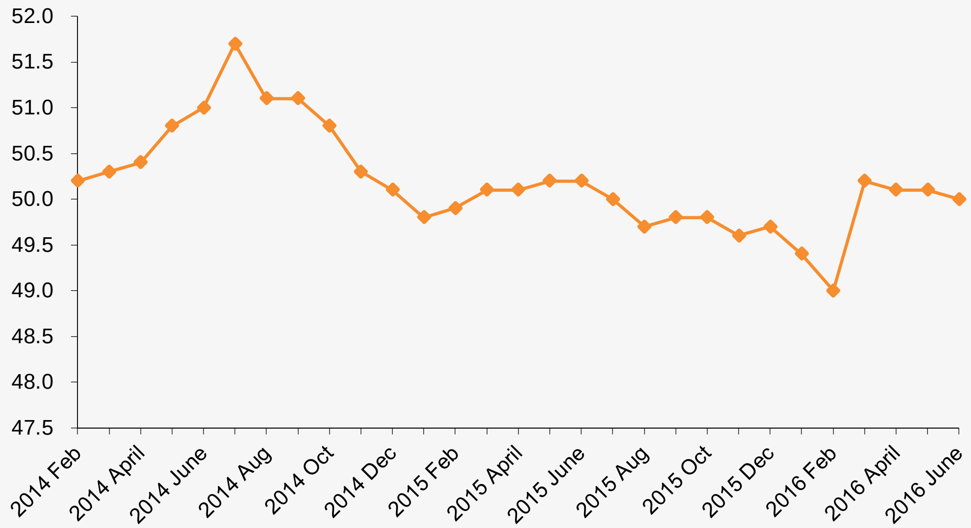


- The CPI growth rate was 2.1% YoY in the second quarter of 2016, in both urban and rural areas.
- Specifically, food prices increased by 5% YoY; prices for tobacco, liquor and articles by 5%, clothing prices by 1.6%, prices for household equipment and maintenance services by 0.5%, prices for medical and personal care products by 3.2%, prices for entertainment and educational products and services by 1.3% and house prices by 1.4%. Meanwhile, prices for transportation and communication dropped by 2.1%.
- At the end of June 2016, the broad money (M2) balance was RMB 149.05 trillion, a YoY increase of 11.78%. The RMB loan balance was RMB 101.49 trillion, a YoY increase of 14.4% and the RMB deposit balance was RMB 146.24 trillion, a YoY increase of 10.9%. In the first half of 2016, the RMB loan increment amounted to RMB 7.53 trillion, representing a YoY increase of RMB 970 billion, while the RMB deposit increment was RMB 10.53 trillion, representing a YoY decrease of RMB 570 billion.
- At the end of June 2016, the narrow money (M1) balance was RMB 44.36 trillion, a YoY increase of 24.6%. The balance of money in circulation was RMB 6.28 trillion, a YoY increase of 7.2%. In the first half of 2016, the overall financing scale reached RMB 9.75 trillion, a YoY increase of RMB 961.8 billion. It increased by about RMB 1.63 trillion in June 2016, a YoY increase of RMB 945.7 billion compared to the previous month, and a YoY decrease of RMB 209.1 billion compared to the previous year.
- GDP grew steadily and showed signs of periodic stabilisation. Due to fluctuations in oil and food prices, the CPI slightly increased compared to the previous year. The increase in M2 remained steady but M1 continued to grow. The difference between the speeds at which M1 and M2 increased was not expected to drop in the short term. Due to a loose monetary policy, there was abundant liquidity in the banking sector, and credit increased at a moderate rate.

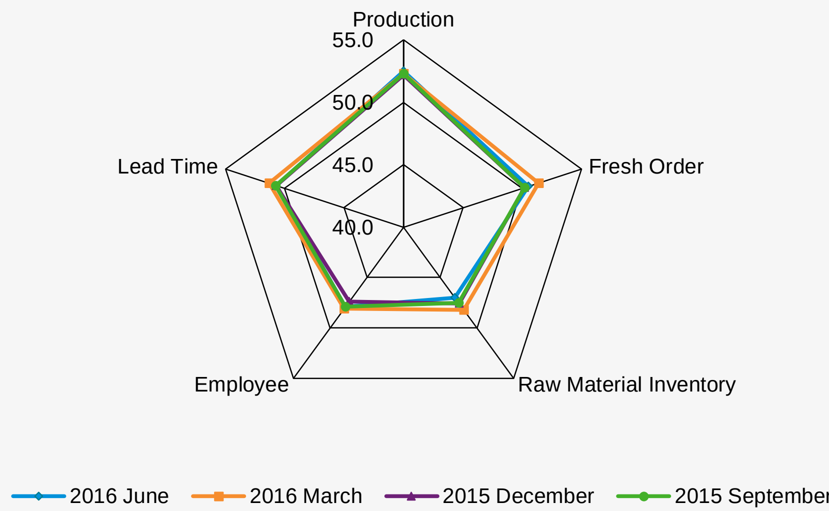
Source: National Bureau of Statistics of the People's Republic of China

Operating Performance

China Manufacturing PMI



China Manufacturing PMI Sub-index

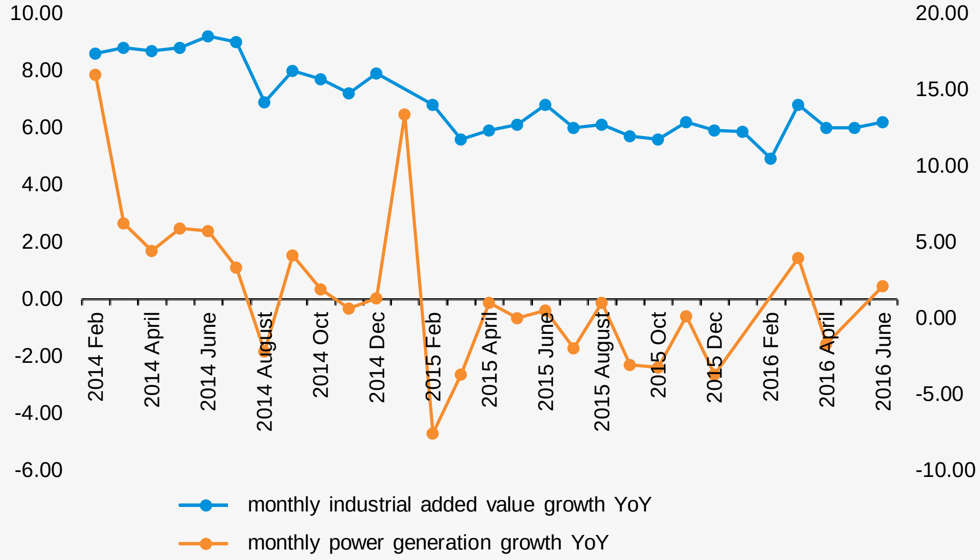


- Overall, China's economy showed signs of stabilisation while continuing to slow down, due to a loose monetary policy, proactive fiscal policy and the new measures introduced to regulate the real estate market in Q2 2016. While the economy continues to grow as a whole, substantial progress has also been achieved through supply-side structural reform.
- In June 2016, China's manufacturing Purchasing Manager Index (PMI) was 50%, down 0.1 percentage points from the previous month, and still at the break-even mark. In terms of company scales, the PMI of large enterprises was 51%, an increase of 0.7 percentage points compared to the previous month. The PMI of medium-sized enterprises was 49.1%, down 1.4 percentage points from the previous month, and below the break-even mark. The PMI of small-sized enterprises dropped by 1.2 percentage points compared to the previous month to 47.4%, still below the break-even mark.
- In June 2016, the Fresh Order Index average was 50.5%, a drop of 0.2 percentage points compared to the previous month. However, the average remained above the break-even mark for four consecutive months. It indicates that the demand for the manufacturing industry continued to increase, though at a slightly slower pace. The Production Index average was 52.5%, a increase of 0.2 percentage points compared to the previous month, which was above the break-even mark. It indicates that production increased steadily. The Lead Time Index average was 50.7%, an increase of 0.3 percentage points compared to the previous month, which was above the break-even mark. The Employee Index average dropped by 0.3 percentage points to 47.9%, which was below the break-even mark. It indicates that the manufacturing industry employed fewer staff. The Raw Materials Index dropped by 0.6% to 47.0% and was still below the break-even mark. The manufacturing industry's raw materials inventory decreased at an accelerated pace.

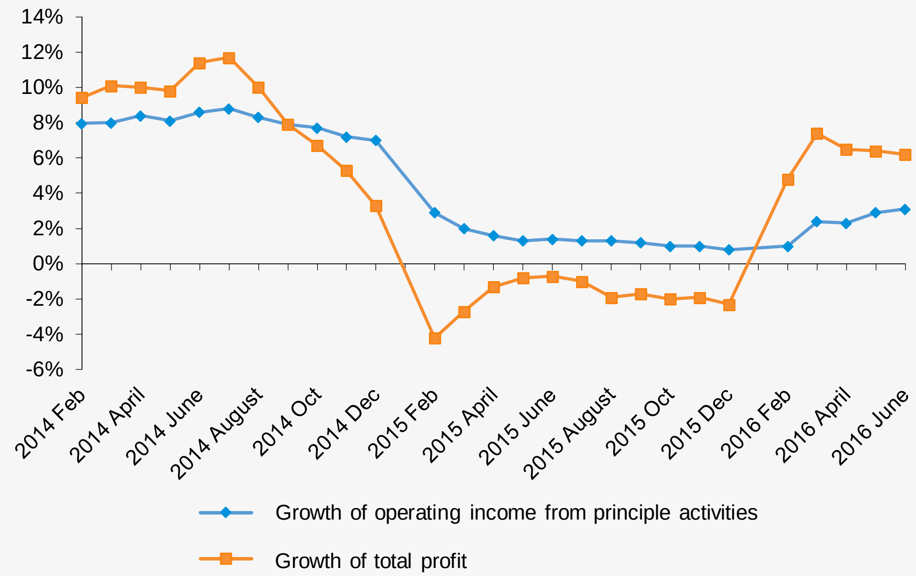
Source: National Bureau of Statistics of the People's Republic of China

Operating Performance (continued)

Industrial Production



YoY Growth of Accumulative Operating Income from Principal Activities and Total Profit



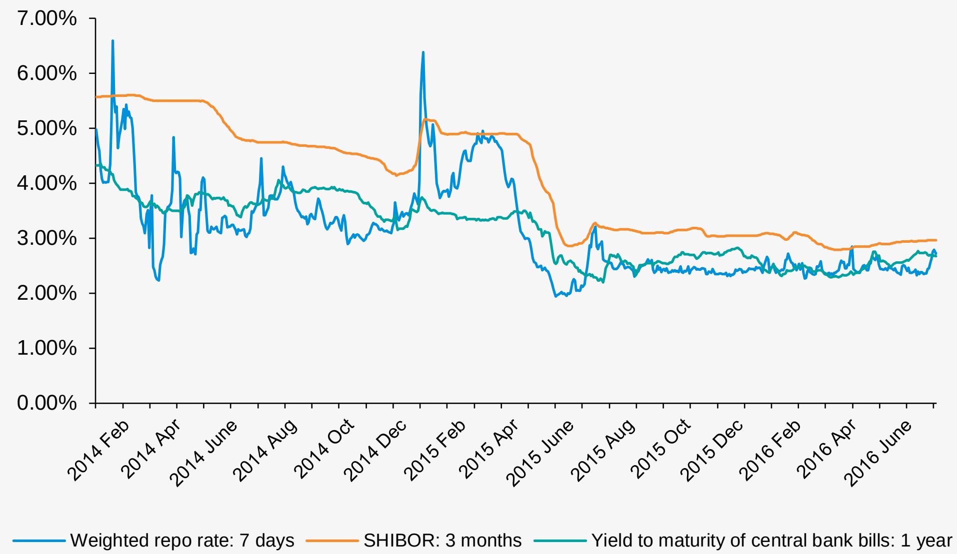
- In June 2016, the added value of the above-scale industry, calculated at comparable prices, increased by 6.2% YoY, which was 60 bps lower compared to June 2015. In terms of economic types, the collective enterprises, joint-stock enterprises, and foreign-invested, and Hong Kong, Macau and Taiwan invested enterprises grew by 3.6%, 7.4% and 3.6% YoY, respectively, while the state-owned and state-held enterprises declined by 0.1%.
- In June 2016, for specific industries, the value added by the manufacturing industry and the electricity, heating power, gas and water production and supply industries grew by 7.2% and 4% YoY, respectively, while the value added by the mining industry declined by 2.4% YoY. For specific regions, the value added by the eastern, central and western regions increased by 6.7%, 7.7% and 7.3% YoY, respectively, while the northeastern region dropped by 1.1% YoY. In June 2016, the sales-output ratio of above-scale industrial enterprises reached 97.2%, a slight increase of 0.2% YoY.

- As at June 2016, the operating income from principal activities of above-scale industrial enterprises was RMB 52.84 trillion, a YoY increase of 3.1%. The cost of operating income from principal activities was RMB 45.33trillion, a YoY increase of 3.0%, indicating that costs grew slightly slower than operating income. Above-scale industrial enterprises realised total profit of RMB 2.99 trillion, a YoY increase of 6.2%. The growth rate was 0.2% lower than that in the first five months of 2016.
- In terms of industries, as at June 2016, the mining industry realised total profit of RMB 22.08 billion, a decrease of 83.6%; the manufacturing industry realised total profit of RMB 2.72 trillion, a YoY increase of 12.1%; and the electricity, heating power, gas and water production and supply industry realised total profit of RMB 257.70 billion, a YoY decrease of 2.3%.

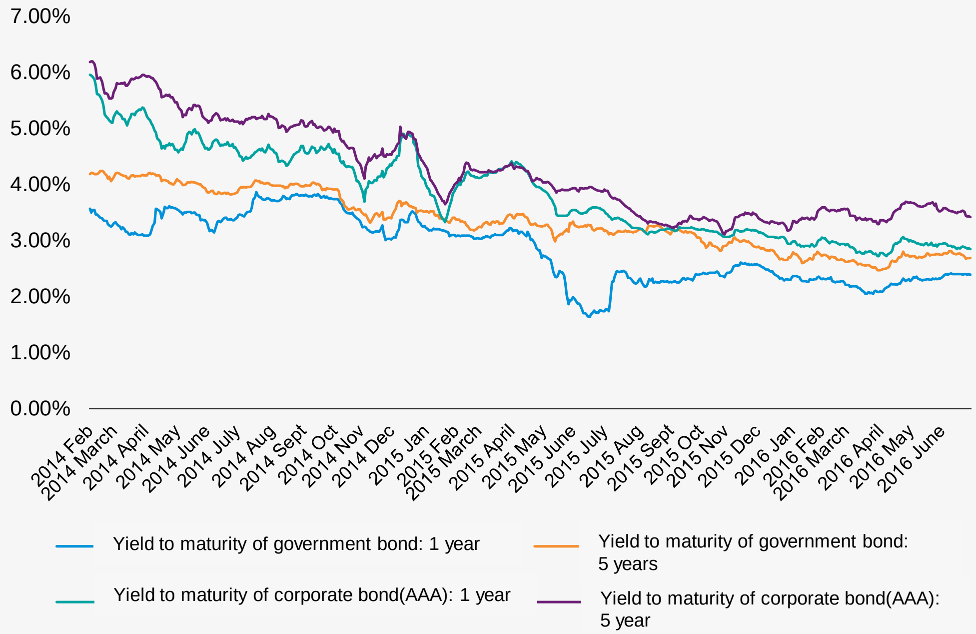
Source: National Bureau of Statistics of the People's Republic of China, Wind Info,

Dynamics of Money and Bond Market Interest Rates

Money market rate



Bond yields



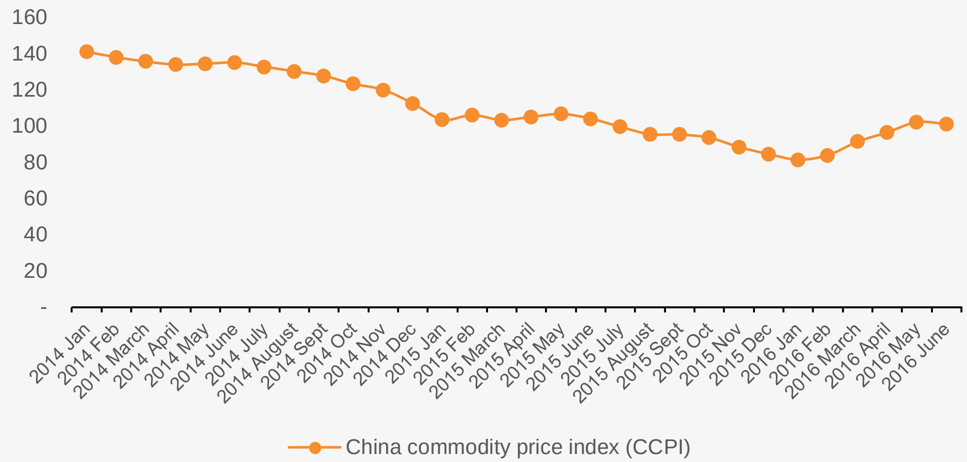
- In the first half of 2016, the People's Bank of China continued to adopt a prudent monetary policy. A series of measures were taken to maintain reasonably abundant liquidity and reduce financing costs for enterprises. While unleashing a large amount of liquidity through reverse repos in the open market, it cut the deposit reserve ratio by 0.5% to ensure that there was abundant liquidity in the interbank market and that the money market runs smoothly.
- In the second quarter of 2016, the yield to maturity of one-year central bank bills fell slightly compared to the same period in the previous year, falling on average by about 24 bps. At the end of June 2016, it was 2.68%, an increase of 44 bps compared to the end of June 2015.
- Compared to early 2016, the overnight Shibor rose by 5 bps and closed at 2.04% at the end of June 2016. The seven-day Shibor rose by 3 bps and closed at 2.39%, while the one-month Shibor fell by 11 bps and closed at 2.89%.

- The treasury bond market has been fluctuating in 2016 due to a number of factors. At the end of June 2016, the yield rates of one-year and five-year treasury bonds in the inter-bank market were 2.39% and 2.69%, respectively, a 4 bps rise and 6 bps drop respectively, compared to the beginning of the year. The expectation that the central bank will reverse its loose monetary policy and that the economy will take some time to stabilise has limited the yield to maturity of short-term fixed interest rate treasury bonds. VAT reform has resulted in more fluctuations in the yield rate. The policies introduced to reduce production capacity and leverage and the frequent occurrences of default are other causes of the weak market.
- In the second quarter of 2016, the yield rates of high-level credit bonds continued to decline due to the impact of frequent credit events and VAT reform. Rigid repayment was no longer the case after April this year. As a result of significantly reduced demands and the increase in interest rates at issuance, corporate bond issuances dropped considerably. As the impact of the VAT reform proved to be better than expected, coupled with a steady flow of capital in May, the yield rates of high-level credit bonds began to take a smoother path in June. Rigid repayment is bound to be discarded in the future. In addition, the market will attach more importance to risk control. If regulation continues to be enhanced, interest bearing bonds and high-level credit bonds will be favoured in the market.

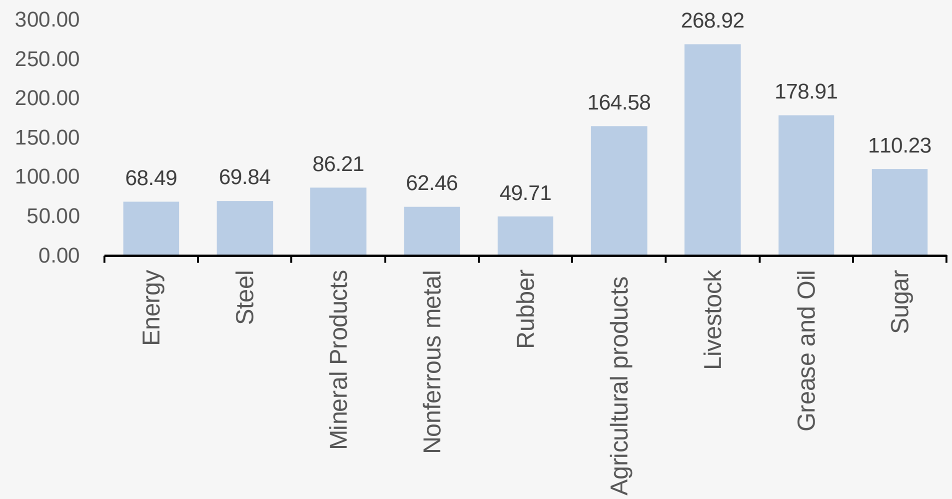
Source: Wind Info, People's Bank of China

Analysis of the Commodity Price Index

China Commodity Price Index (general index)



China Commodity Price Index (by type)

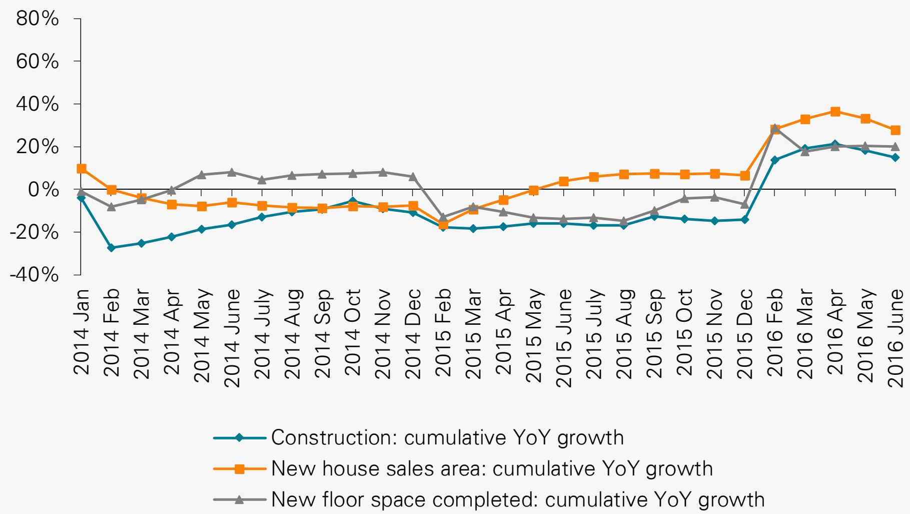


- In the second quarter of 2016, the China Commodity Price Index (CCPI) recorded a noticeable increase, but still remained low compared with the same period in the previous year.
- In June 2016, the CCPI continued to rise. Statistics show that the CCPI average in June was 101.19 points, close to the level of 102.20 points in the previous month. The CCPI was 3 points, or 2.8%, lower than it was during the same period of the previous year, and 19.7 points, or 24.2%, higher than at the beginning of the year.
- In terms of CCPI by type, compared with the same period of the previous year, price indexes of steel, oil and grease, and sugar increased by 4.7%, 17.3% and 6.7% in June, respectively. The livestock price index recorded the biggest increase of 20.3%. The price indexes of mineral products, nonferrous metal and agricultural products fell by 13.6%, 6.3% and 4.4%, respectively, with rubber price index recording the biggest drop of 19.4%.
- Compared with the beginning of the year, the price indexes of agricultural products decreased by 0.2% in June, while those of the other eight commodities all increased. The price indexes of energy, oil and grease, mineral products, steel, nonferrous metal, rubber, sugar and livestock increased by 35.5%, 21.2%, 19.5%, 18.5%, 10.0%, 7.9%, 7.2% and 5.7%, respectively.

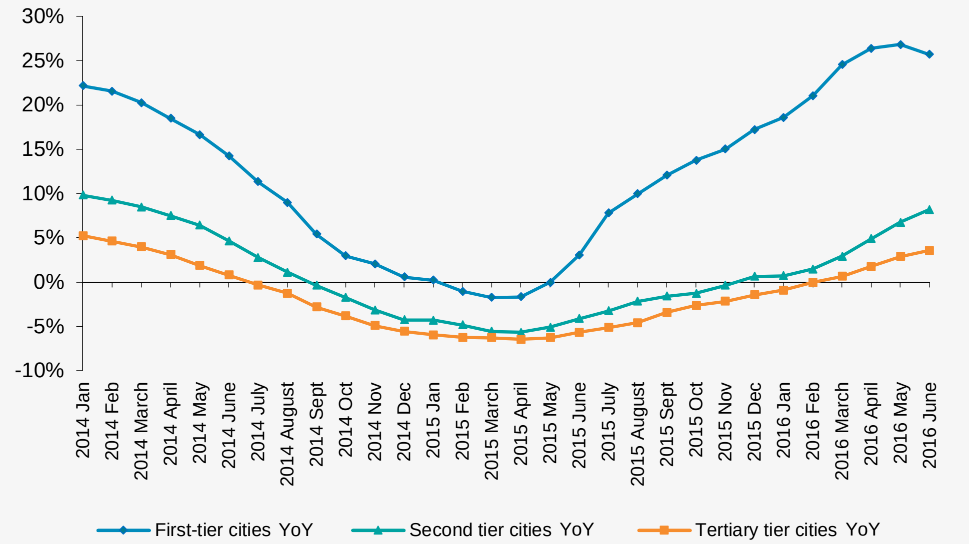
Source: cif.mofcom.gov.cn

Residential Housing

Growth of saleable area, completed floor space and new floor space under construction



Housing Price Indexes of 100 cities

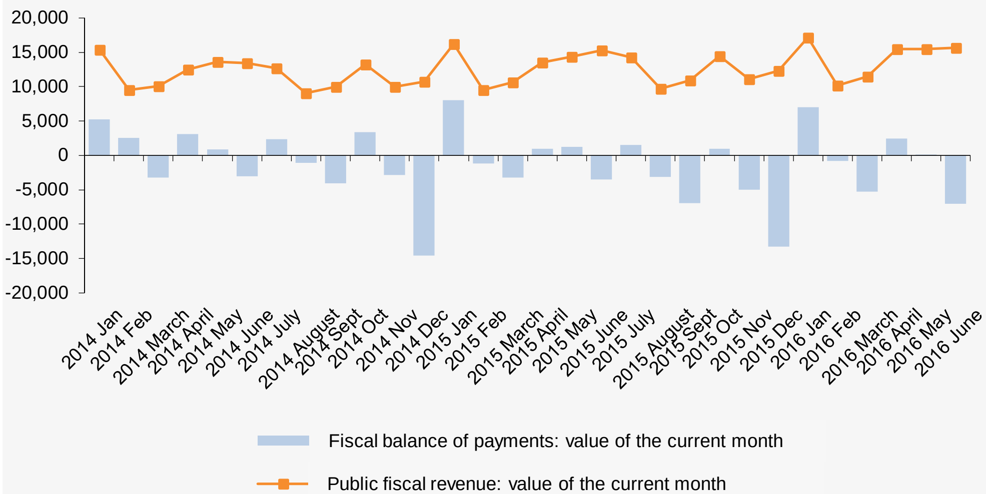


- As at the second quarter of 2016, real estate investment amounted to RMB 4.66 trillion, a YoY increase of 6.1%, with residential housing investment increasing by 5.6%. New floor space under construction in the second quarter was 7.75 trillion square metres, a YoY increase of 14.9%, with new floor space under construction for residential housing increasing by 14%.
- The saleable area of commodity housing amounted to 6.43 trillion square metres, a YoY increase of 27.9%, with the saleable area of residential housing increasing by 28.6%. The sales of commodity housing was RMB 4.87 trillion, an increase of 42.1%, while the sales of residential housing increased by 44.4%. The area of land acquired by real estate developers was 95.02 million square metres, a YoY decrease of 3.0%. As at the end of June 2016, the saleable area of commodity housing was 7.14 trillion square meters, a YoY increase of 8.64%.
- Real estate sales have been recovering since Q2 2015. In the second quarter of 2016, driven by the destocking policy and loose monetary policy, the market flourished. Sales in first-tier cities reached a peak in February and March 2016. Since April, the local governments have raised the proportion of initial payment to control real estate prices, resulting in a sharp fall in sales. This March saw real estate sales peak in tertiary tier cities. However, this dropped gradually in April and May. Sales in second tier cities have maintained their momentum.
- Overall, there is little possibility of a sudden reversal of the loose monetary policy. Real estate developers have started to build up their stock, while the stock cycle in the industry is being reversed. In terms of land supply, the governments of first tier cities have tightened supply, with real estate developers acquiring land at unprecedented prices. However, land supply in second and tertiary cities has been expanded. Due to different circumstances regarding real estate stock, the real estate market in tertiary and fourth tier cities is quite different to the first and second tier cities. Some enterprises can release a large amount of capital to improve performance. As the destocking policy is being pushed forward, more capital will be unleashed. Real estate developers will see an opportunity for improved business performance.

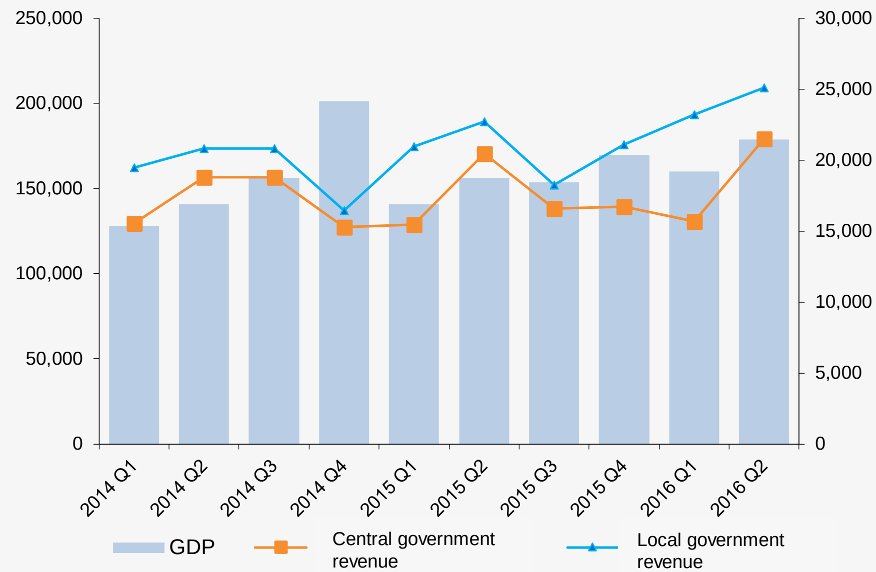
Source: National Bureau of Statistics of the People's Republic of China, Wind Info,

Government Finance

Monthly Fiscal Balance (RMB 100 million)



Fiscal Revenue and GDP (RMB 100 million)



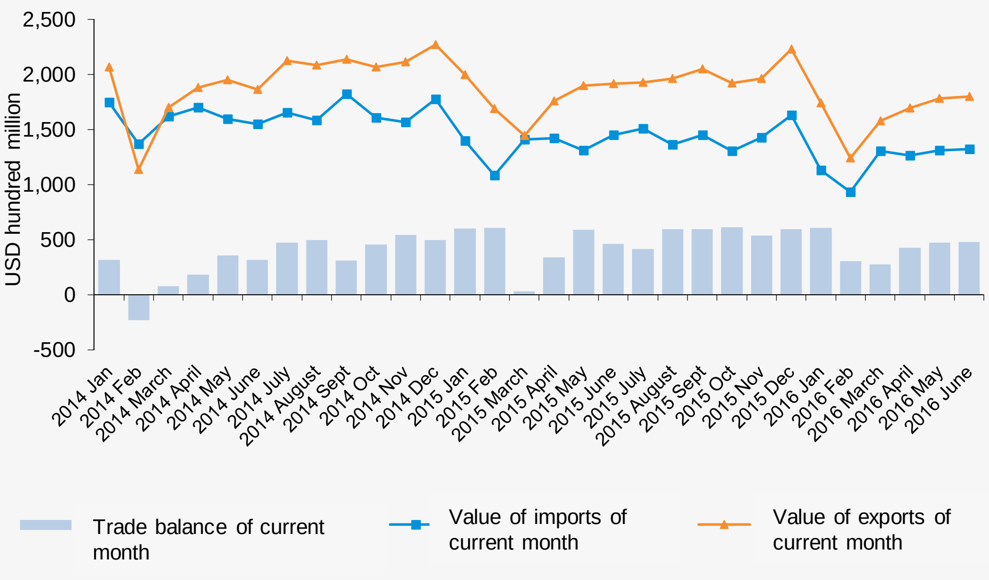
- In the second quarter of 2016, government revenue amounted to RMB 4.66 trillion, an increase of RMB 342.5 billion, or 7.93%. The central government collected RMB 2.15 trillion, a YoY increase of 4.98%, and local governments collected RMB 2.51 trillion, a YoY increase of 10.59%.
- In the second quarter of 2016, national public expenditure reached RMB 5.12 trillion, an increase of RMB 673.4 billion, or 15.14%. The central government spent RMB 792 billion, an increase of RMB 66.5 billion or 9.17%. Local governments spent RMB 4.33 trillion, an increase of RMB 606.9 billion, or 16.31%.

- In the second quarter of 2016, national fiscal revenue reached RMB 8.55 trillion, up 7.43%, and tax revenue reached RMB 7.22 trillion, up 8.61%.
- Since the beginning of 2016, fiscal revenue has risen due to the consumption tax increase on refined oil and cigarettes, improvements in the sales of commodity housing in some cities, and an increase in the turning over of profit to the government by some organisations.

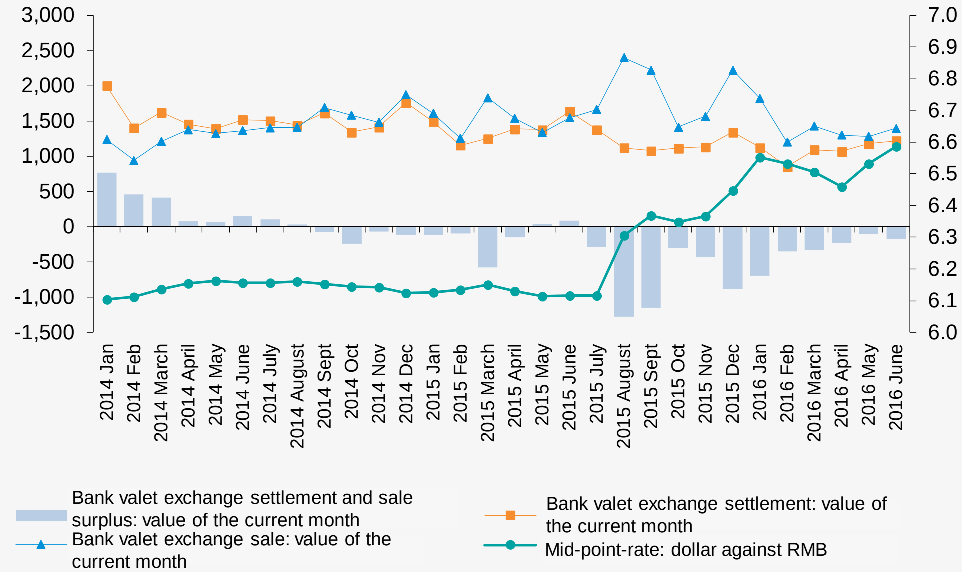
Source: National Bureau of Statistics of the People's Republic of China, Wind Info,

Foreign Trade and Exchange Rate

Import and Export Trade (USD hundred million)



Bank Valet Exchange Settlement and Sale and Exchange Rate



- In the second quarter of 2016, the value of imports and exports was USD 918.3 billion, a YoY decrease of 5.98%. The value of exports reached USD 528.3 billion, an increase of 15.89% compared to the first quarter of 2016. The value of imports was USD 390 billion, an increase of 15.7% compared to the first quarter. The trade surplus was USD 138.3 billion.
- In the first half of 2016, the value of imports and exports reached USD 1.71 trillion, a decrease of 8.99%. Export value accounted for USD 984.2 billion, a 8.18% drop, while import value accounted for USD 727.1 billion, a decrease of 10.08%. The trade balance reached USD 257.1 billion, a drop of 2.34%. This shows that China's export and import trade in the first half of 2016 remained at the same level as the corresponding period in 2015. The export and import trade trends in the first half of 2016 indicates that as the Renminbi expectedly depreciated, total export volumes began to rise, while there was downward pressure on imports. Confidence in both consumers and economic growth needed to be boosted.
- In the second quarter of 2016, bank valet exchange settlements reached USD 346.3 billion while sales hit 397.5, resulting in a deficit of USD 51.2 billion.
- In the second quarter of 2016, the central parity of the RMB against the USD was RMB 6.5259 to USD 1. The US Dollar appreciated 7.7% from 6.1167 in July 2015 to 6.5874 in June 2016.

Source: Wind Info, National Bureau of Statistics of the People's Republic of China, State Administration of Foreign Exchange

2 Listed bank 1H 2016 financial data analysis

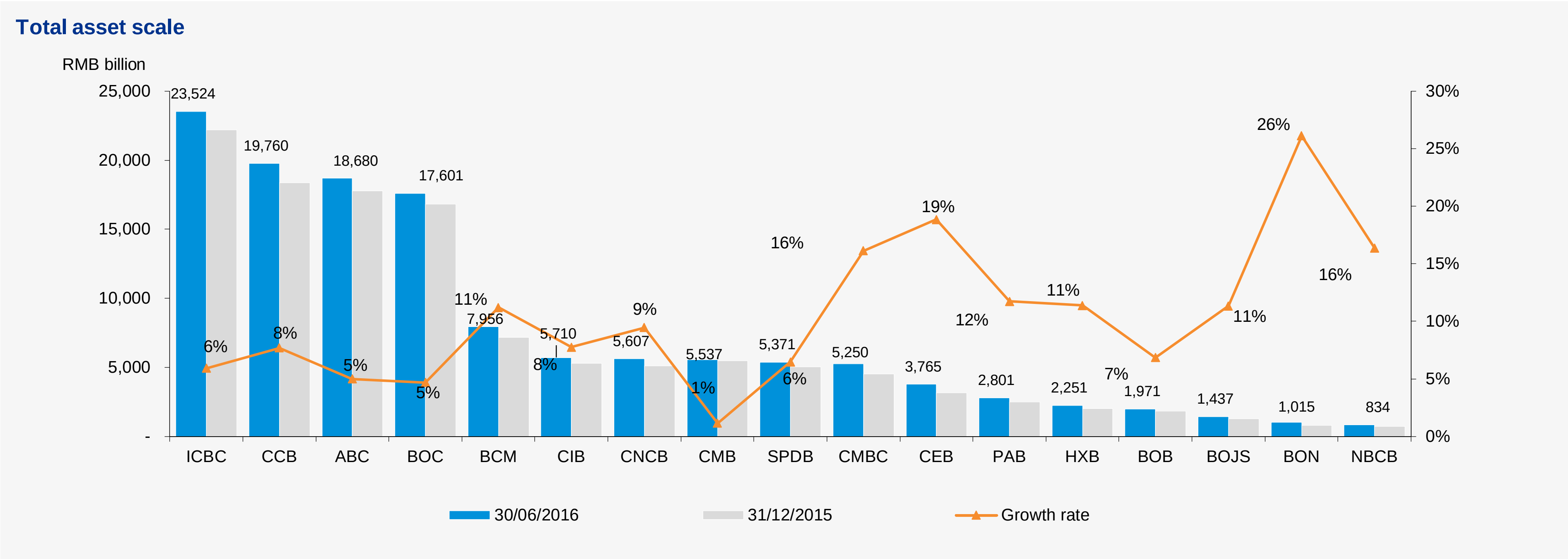
Condition of assets – Asset scale and quality

In the first half of 2016, the assets and liabilities of the banking sector continued to expand. Banks placed more emphasis on balancing capital, risk and income and further optimising their asset allocation structures. While striving to expand interest-bearing assets, they also intensified risk control efforts. As non-credit assets became increasingly important, banks started to take an active stance on their liability businesses and tried to diversify the risk through their bond, interbank deposits and asset securitisation businesses.

In the first half of 2016, investment took up an increasing share of banks' total assets. Affected by the exposure to bill risks in early 2016, as well as narrowed gains from interest arbitrage resulting from stronger regulations in the interbank market, interbank assets declined in the first half of 2016, while investment increased. Bank deposits grew at a slower rate and saw no significant change in their share in banks' asset structures. Optimisation of liability structures continued to be an ongoing process for listed banks.

In the midst of the economic slowdown, credit demand remained sluggish. Interest-bearing assets grew at a slow but steady rate. Buoyed by destocking policies, property markets across the country recovered, which led to an increase in real estate loans and a significant increase in loans to small businesses and consumers to buy property. With an increase in credit risk, listed banks saw an increase in total non-performing loans (NPLs), and most recorded an increase in NPL ratios.

Condition of assets - Asset scale



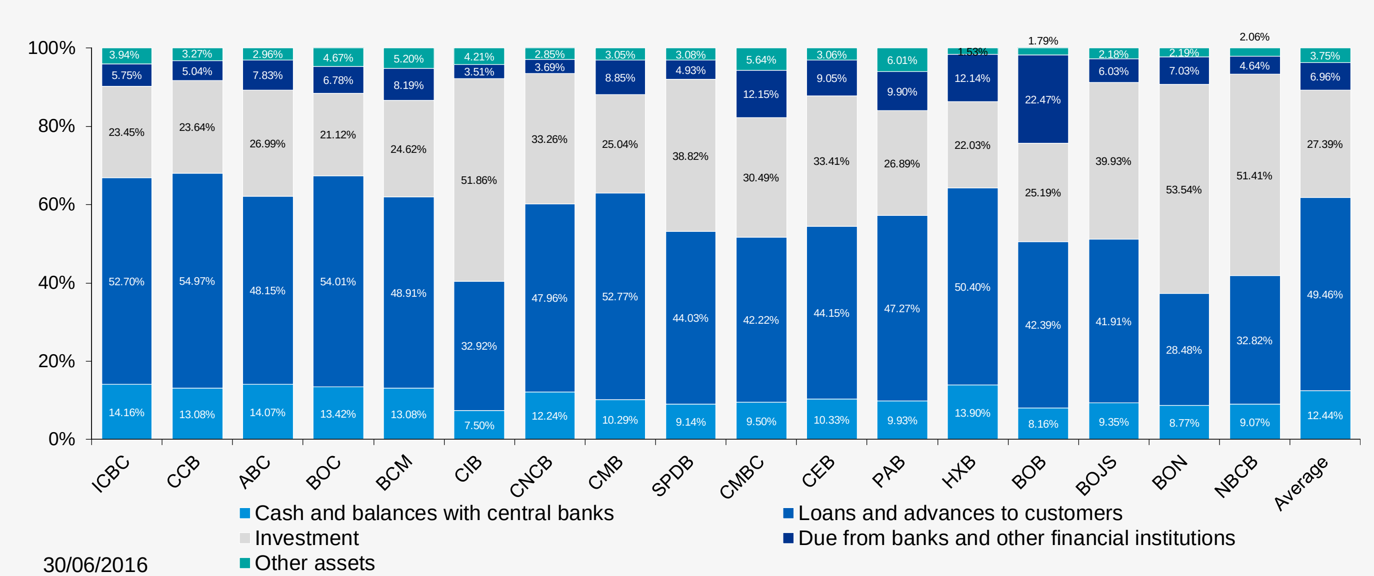
In the first half of 2016, the listed banks' total assets grew, with an increase of approximately 7.4% compared to the end of 2015, mainly resulting from the expansion of investment and bank loans and advances.

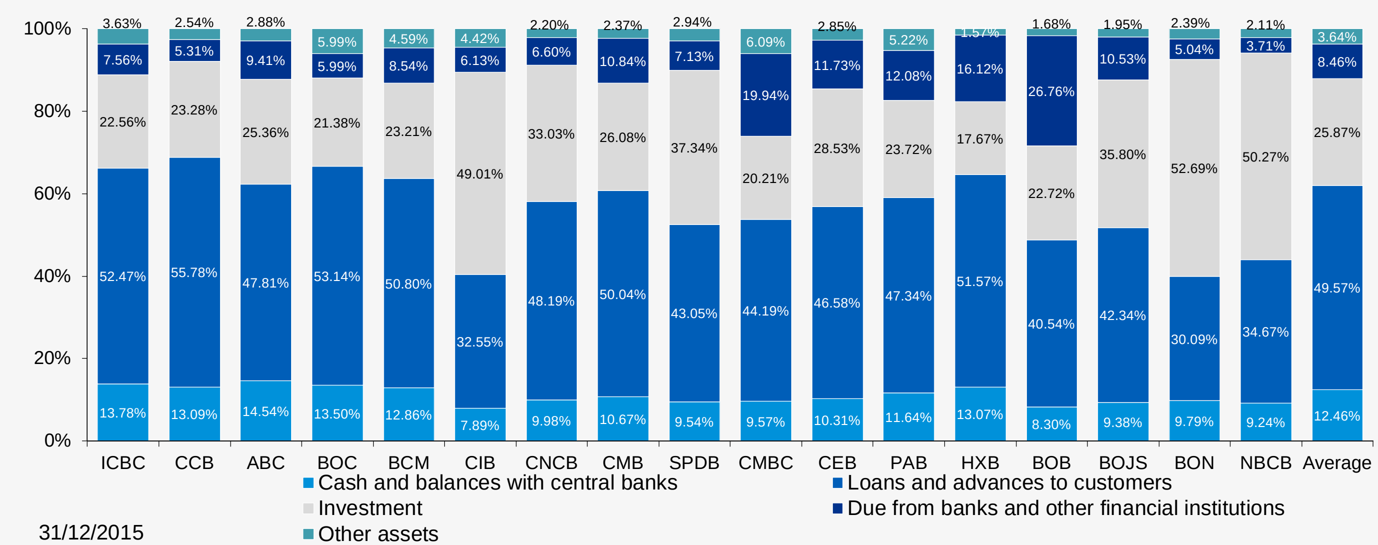
Compared to the five major state-owned banks, some of the joint-stock commercial banks and city commercial banks experienced more active expansion. BON enjoyed the greatest asset growth of 26%, compared to the end of previous year, resulting from the rapid growth in accounts receivable and inter-bank deposits.

CMB's growth rate was low at 1%, as the bank accelerated the adjustment of its quality asset allocation and emphasis on strategic development.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of assets - Asset structure





While total asset scale expanded in the first half of 2016, the asset structure of listed banks changed compared with the end of last year: the proportion of investment increased by 1.52%, while the proportion of cash due from central banks decreased by 0.02%. The proportion of interbank transactions and that of loans and advances dropped by 1.50% and 0.11%, respectively, while the proportion of other assets increased by 0.11%.

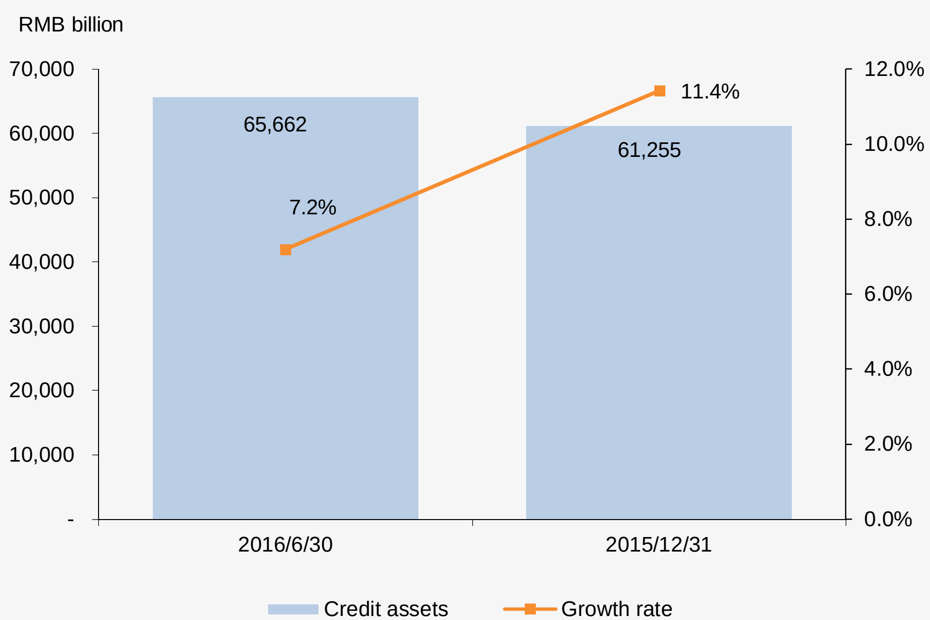
As a result of the slowdown of the real economy and increasing credit risk, the listed banks sought to mitigate risks through measures such as raising thresholds, cutting back on lending and controlling credit scale for industries or areas with higher risk. At the same time, they tried to lower their risk exposure by adjusting their capital lending direction and optimising their asset structure.

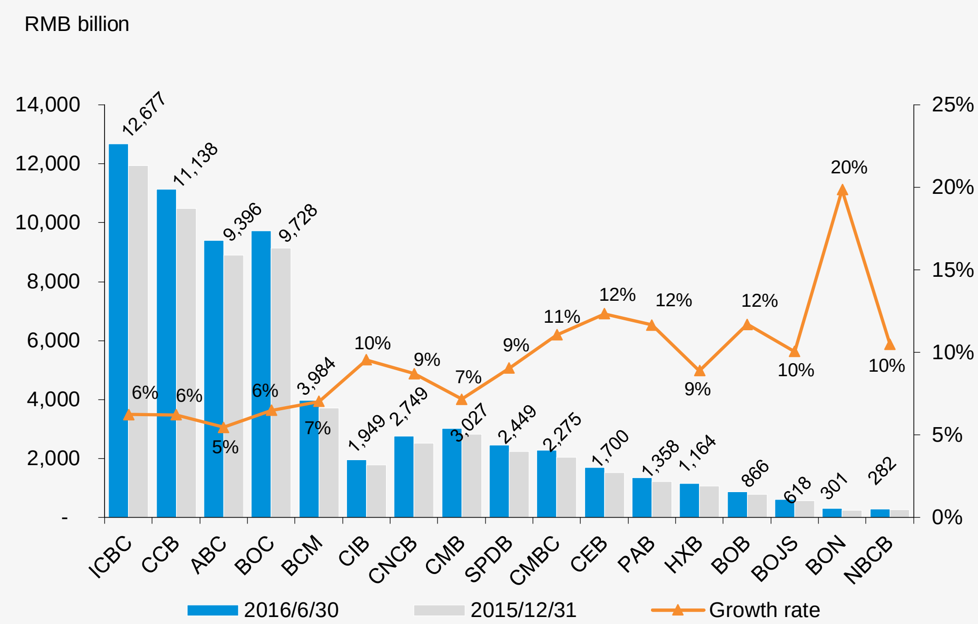
In addition, under a tightening regulatory environment, the banks were inclined to apply liquidity management to interbank operations. The structural adjustment of assets held for interbank operations resulted in variations of risk weight, which narrowed the arbitrage margin in interbank operations and limited the proportion of assets held for interbank operations to total assets.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of assets - Total loans

Credit asset scale





In the first half of 2016, total credit assets of listed banks amounted to RMB 65.66 trillion, an increase of 7.2% compared with the end of 2015.

Since the beginning of 2016, China's economy has been steadily recovering. The central bank continues to adopt a robust monetary policy, resulting in increasing demand for loans. The domestic economy is still adjusting to market shocks, which led to an apparent slowdown in the loan growth rate compared with 2015. In response, the listed banks increased their total lending scale, adjusted asset structure and enhanced risk control.

In the first half of 2016, the growth rate of listed banks' credit assets slowed down, with the credit asset scale of listed banks on the rise compared to the end of 2015.

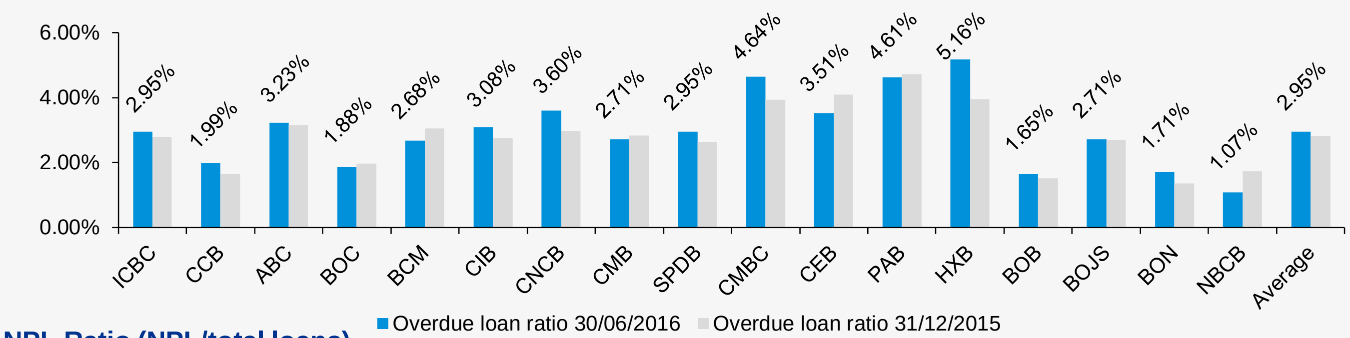
The five major state-owned banks' credit asset scale maintained a growth rate of 5% to 7%, and the joint-stock banks mainly ranged from 9% to 12%, among which CEB and PAB experienced high growth.

The increase in CEB's mainly include loans to major key projects and medium, small and micro enterprises, made in the process of transformation of credit asset operations. Meanwhile, PAB actively adapted to market changes, marketed quality customers and projects to expand customer loans.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of assets - Loan quality

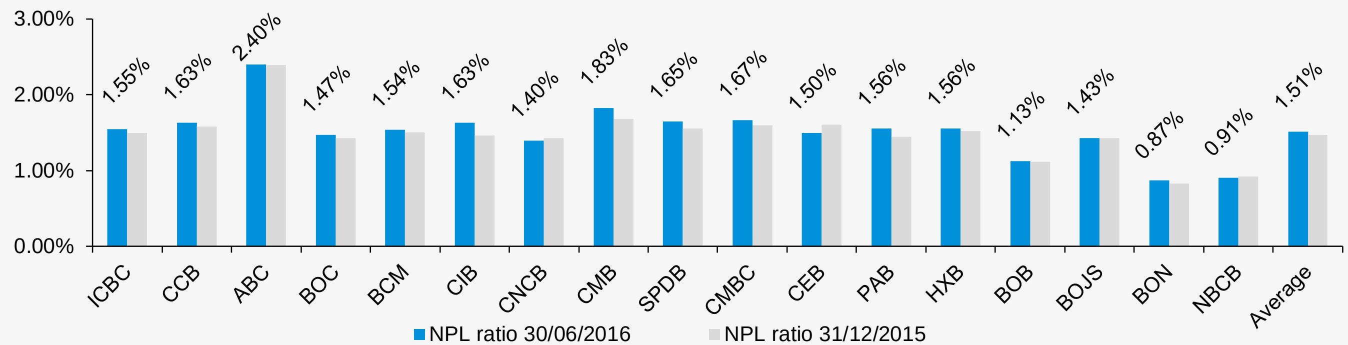
Overdue Loan Ratio (overdue loans/total loans)



In the first half of 2016, the average overdue loan ratio of the commercial banks in the corresponding graph was 2.95%, compared to 2.81% at the end of 2015. The overdue loan ratio of 11 banks had increased among the 17 listed banks, while the remaining six banks had a decreased overdue loan ratio.

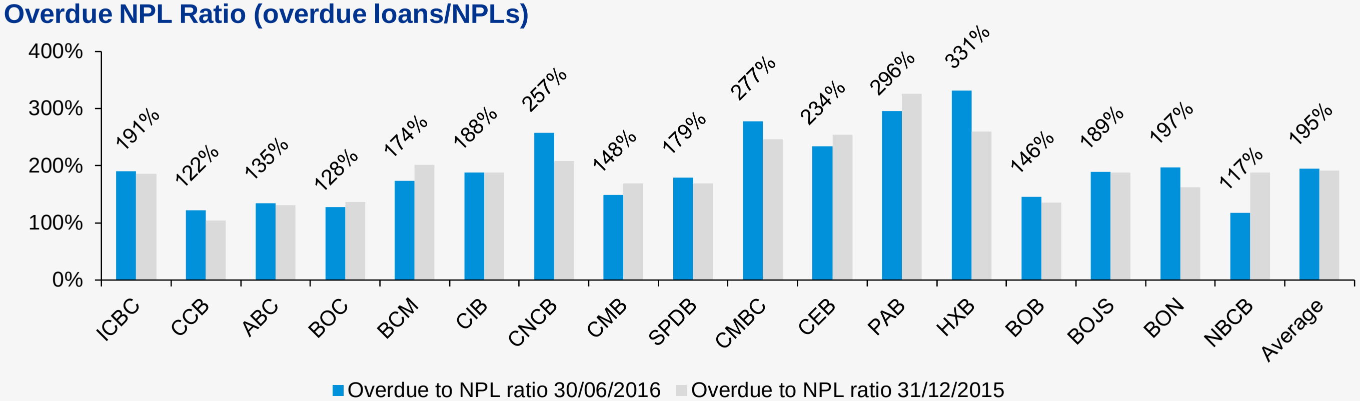
In the first half of 2016, HXB, with the highest overdue loan ratio of 5.16%, saw a notable increment of 1.2% compared to its ratio at the end of 2015.

NPL Ratio (NPL/total loans)



In the first half of 2016, the NPL ratios of most of the listed banks increased compared to the end of 2015. The average NPL ratio was 1.51%, an increase of 0.04% compared to the end of 2015. Among all listed banks, BON had the lowest NPL ratio of 0.87%, while ABC had the highest NPL ratio of 2.40%, a slight increase of 0.01% compared to the end of 2015.

Overdue NPL Ratio (overdue loans/NPLs)



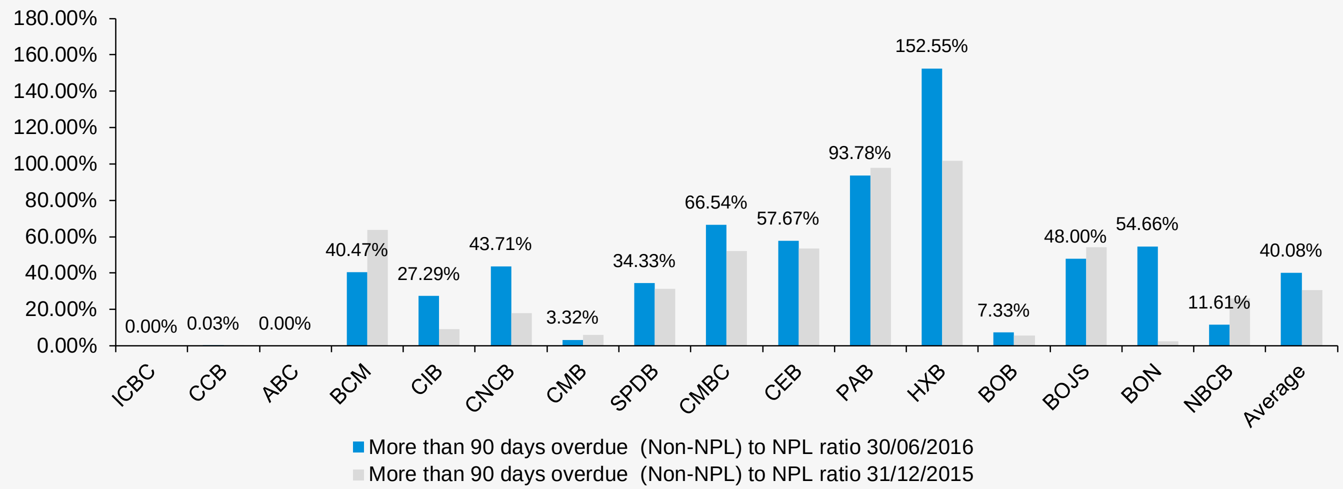
In the first half of 2016, the average overdue to NPL ratio of the listed banks was 195%, an increase from the end of 2015. 11 out of the 17 listed banks showed an increase in the overdue to NPL ratio, while only 6 of them decreased.

In the first half of 2016, 71.57% to its overdue NPL ratio compared to the end of 2015, and had HXB experienced the largest increase, the highest overdue NPL ratio of 331% among all listed banks.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of assets - Loan quality (continued)

More than 90 Days Overdue (Non-NPL) to NPL Ratio

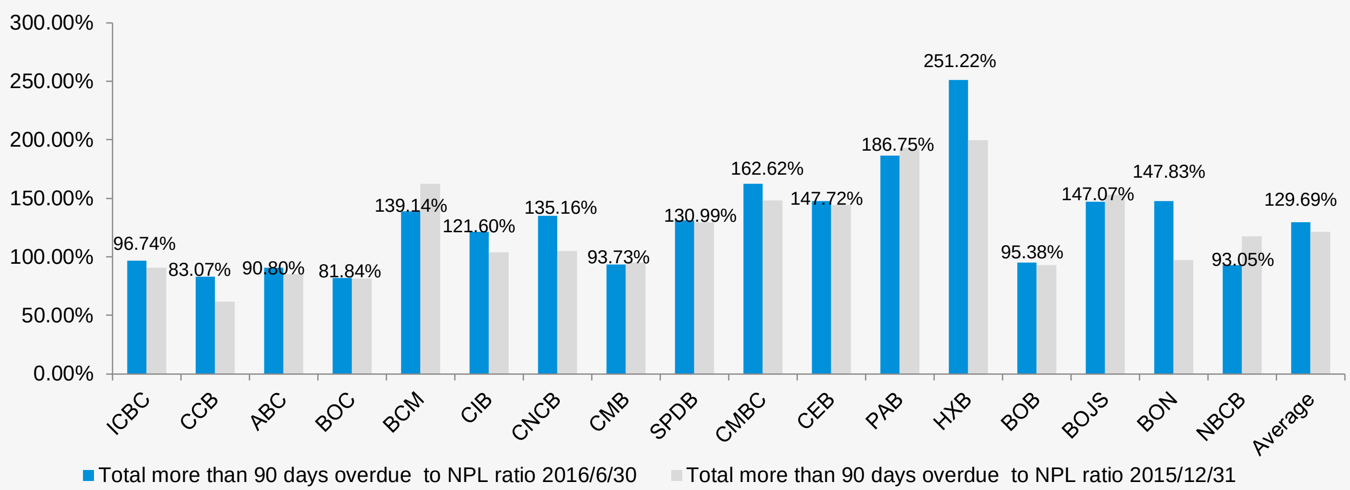


Note: BOC did not disclose the ratio in its half year report.

In the first half of 2016, the average ratio of more than 90 days overdue（Non-NPL）to NPL ratio was 40.08%, an increase compared to the end of 2015. Among the 16 listed banks that disclosed this ratio, nine banks showed an increase in more than 90 days overdue（Non-NPL）to NPL ratio.

In the first half of 2016, HXB had the highest more than 90 days overdue（Non-NPL）to NPL ratio of 152.35%, a significant increase from 101.73% at the end of 2015.

Total More than 90 Days Overdue to NPL Ratio

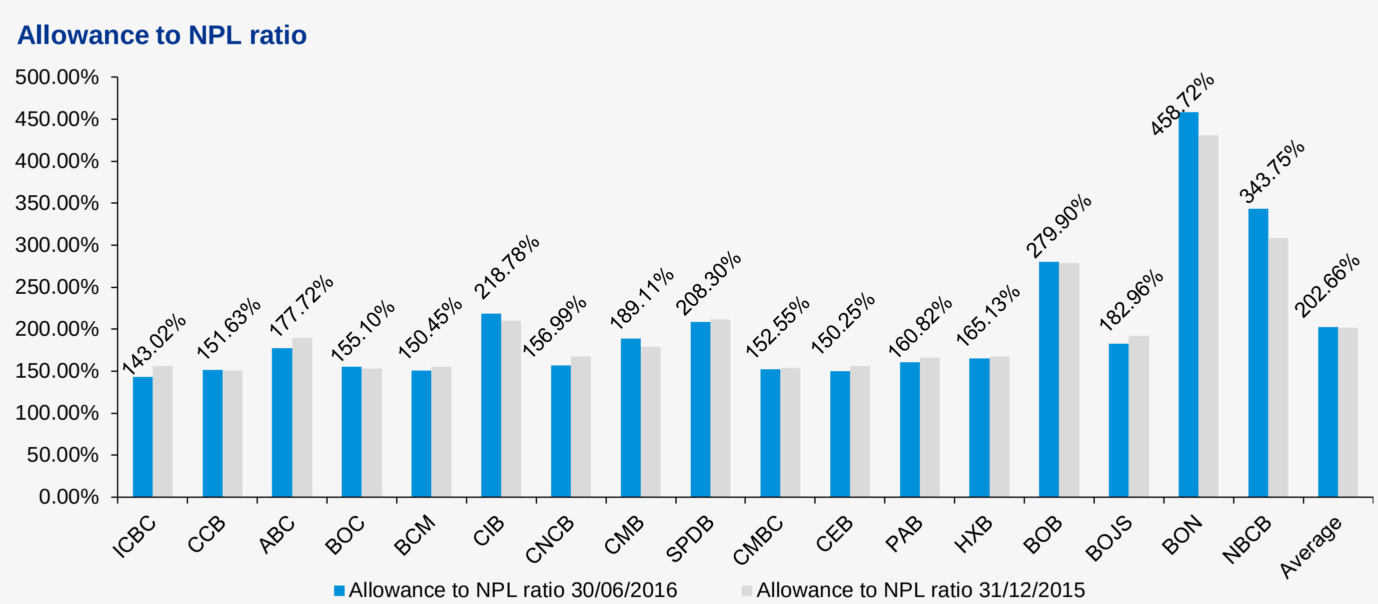


In the first half of 2016, the average ratio of total more than 90 days overdue to NPL ratio was 129.69%, an increase from the end of 2015. Among the 17 listed banks, 12 banks showed an increase in total more than 90 days overdue to NPL ratio, while five of them decreased.

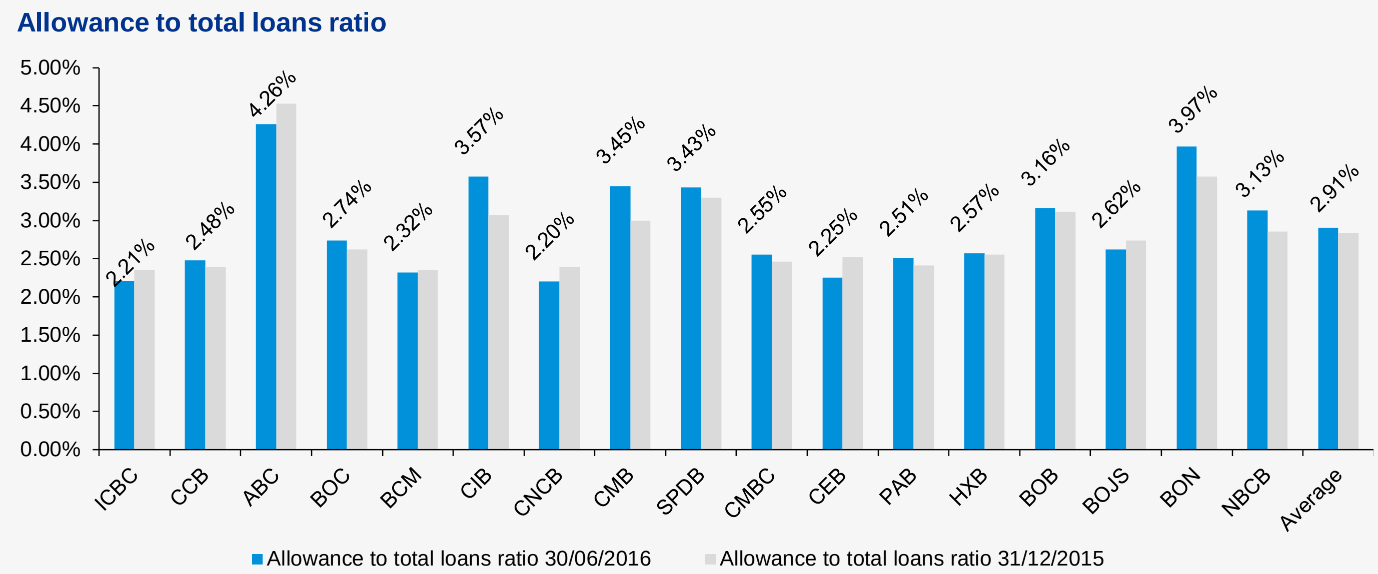
In the first half of 2016, HXB had the highest total more than 90 days overdue to NPL ratio of 251.22%, and had the largest increase of 51.59% among listed banks compared to the end of 2015.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of assets - Loan quality (continued)



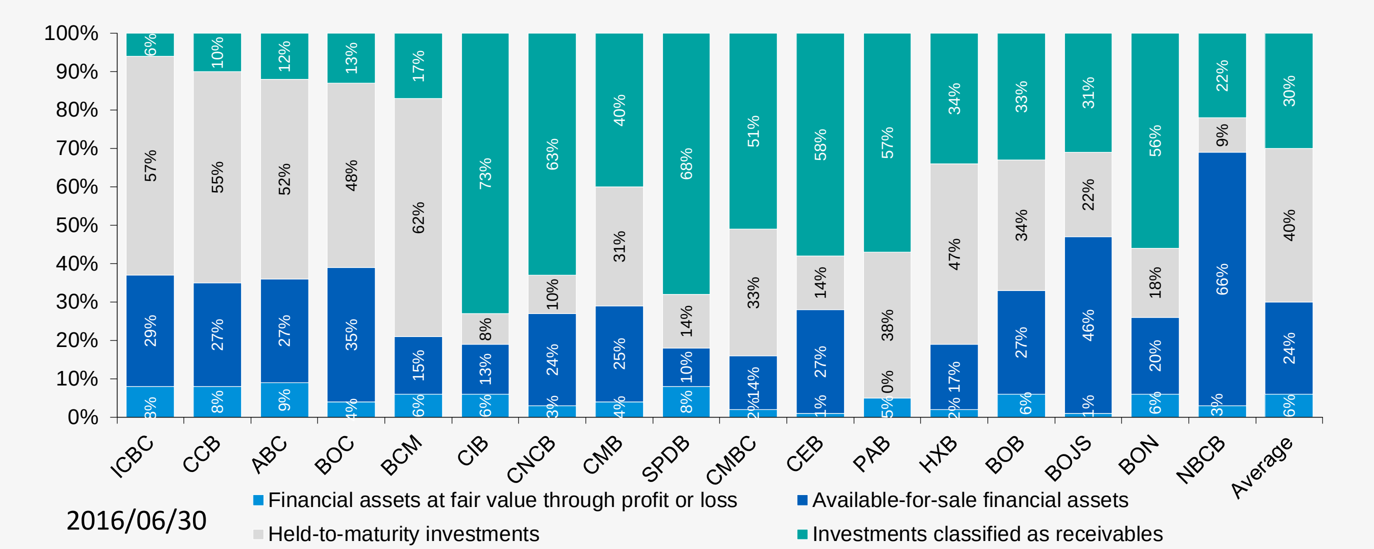
In the first half of 2016, the average allowance to NPL ratio was 202.66%, an increase compared to 201.58% at the end of 2015. The provision of the listed banks were still at a high level, and BON recorded a provision coverage of 458.72%, the highest among all listed banks.

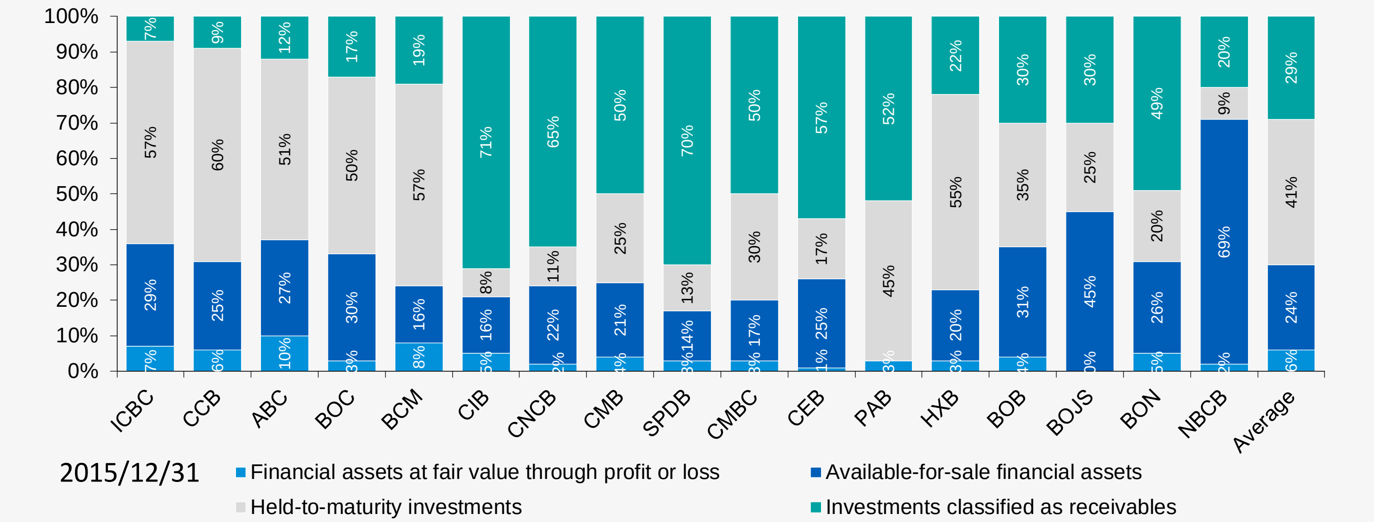


In the first half of 2016, the average allowance to total loans ratio of listed banks was 2.91%, an increase compared to 2.84% at the end of 2015, mainly resulting from the provision increase based on their credit loan quality.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of assets -Investment





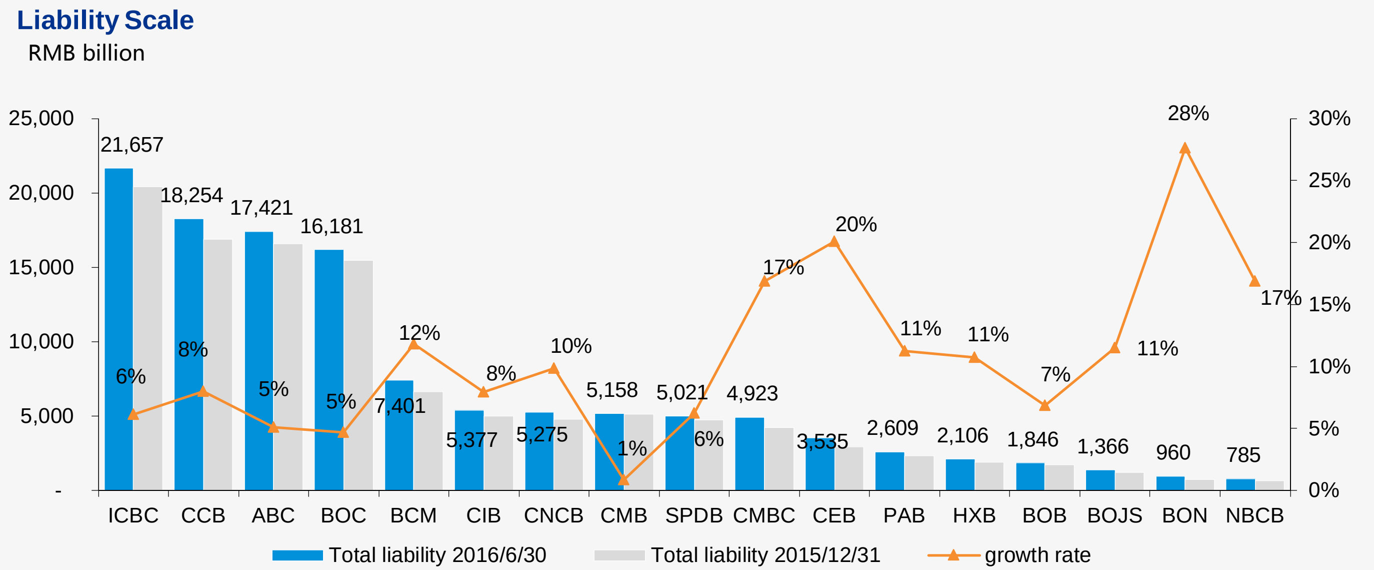
In the first half of 2016, listed banks increased the scale of their investment as a proportion of asset structure. Overall investment increased by an average rate of 14% compared with the end of 2015.

In terms of general investment structure, financial assets at fair value through profit and loss, financial assets available for sale and investments in receivables took up a larger share compared with the end of 2015, whereas held-to-maturity investments recorded a smaller share.

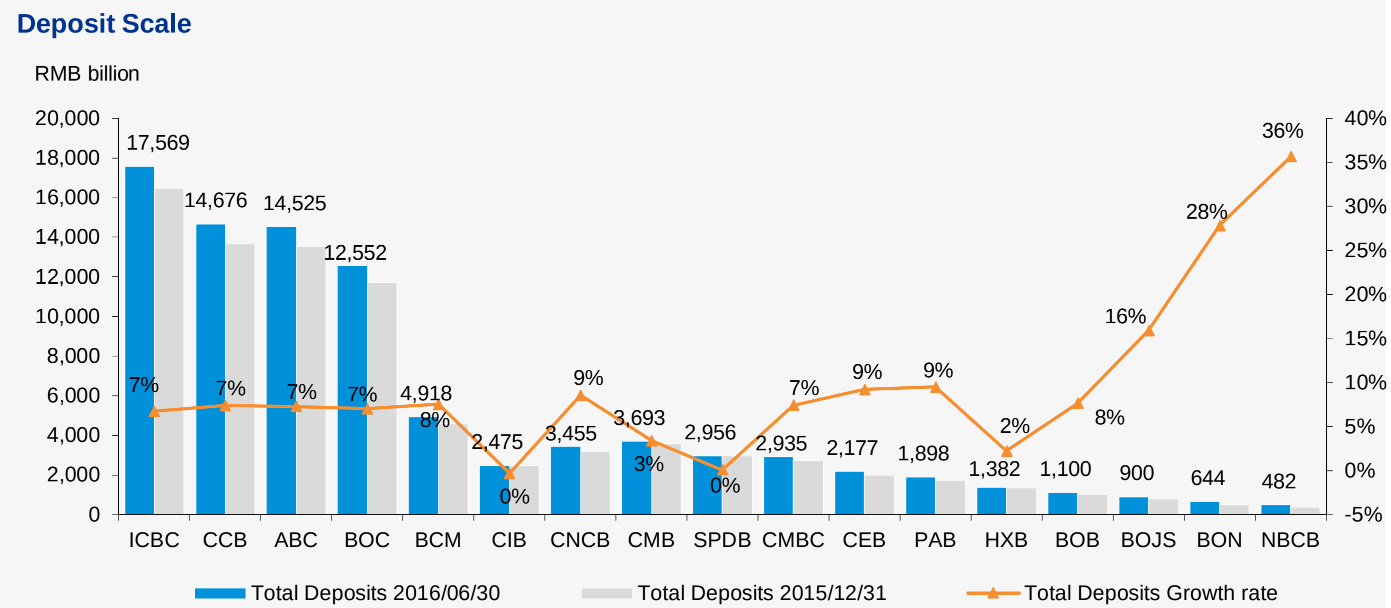
In the first half of 2016, the investment structures of listed banks differed. The five major state-owned banks still held a high percentage of held-to-maturity investments, whereas other commercial banks increased the proportion of their investments in receivables and available-for-sale financial assets to varying degrees. Financial assets at fair value through profit and loss accounted for more than 6% of total investments in ICBC, CCB and ABC.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of liabilities – Liability and deposit scale



In the first half of 2016, the total liabilities of the listed banks increased on average by 8% compared with the end of 2015, demonstrating a similar growth trend as the total assets.
More notable growth was seen in joint-stock commercial banks and city commercial banks, compared with the total listed banks' liability scale growth. BON recorded the highest increase of 28%, followed by CEB with a 20% increase and CMBC with a 17% increase. This rise was mainly due to the increase in deposits from customers, bonds payable and other liabilities.

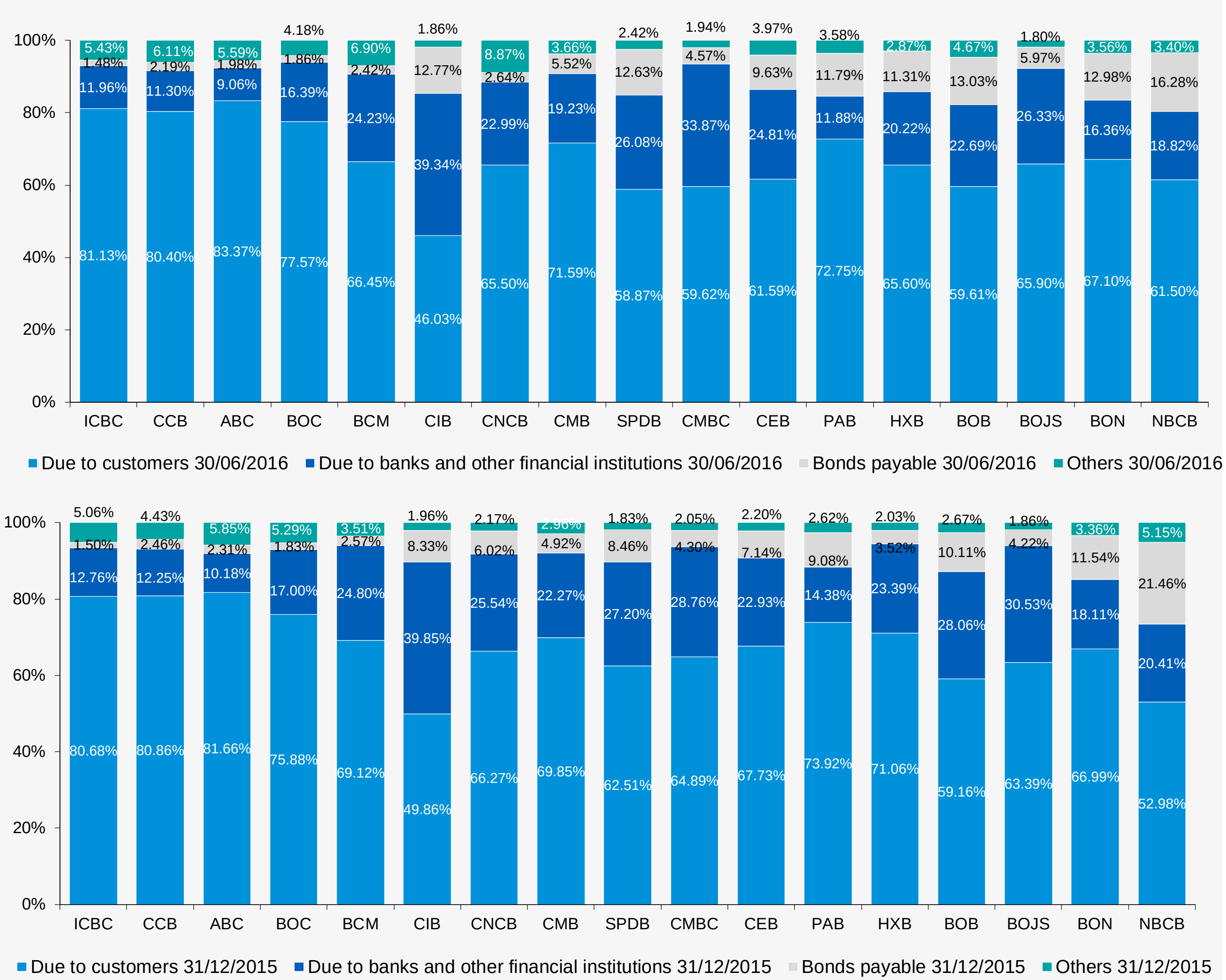


In the first half of 2016, the total deposits of listed banks amounted to RMB 88 trillion, an increase of 6.9% compared with the end of 2015, mainly due to capital inflows from sluggish equity markets and restrained development of basic industries. NBCB recorded the highest increase of 36% in deposits, followed by BON with a 28% increase. This was largely because the two city commercial banks experienced rapid expansion and enhanced deposit taking efforts.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Condition of liabilities - Liability and deposit scale (continued)

Liability Structure



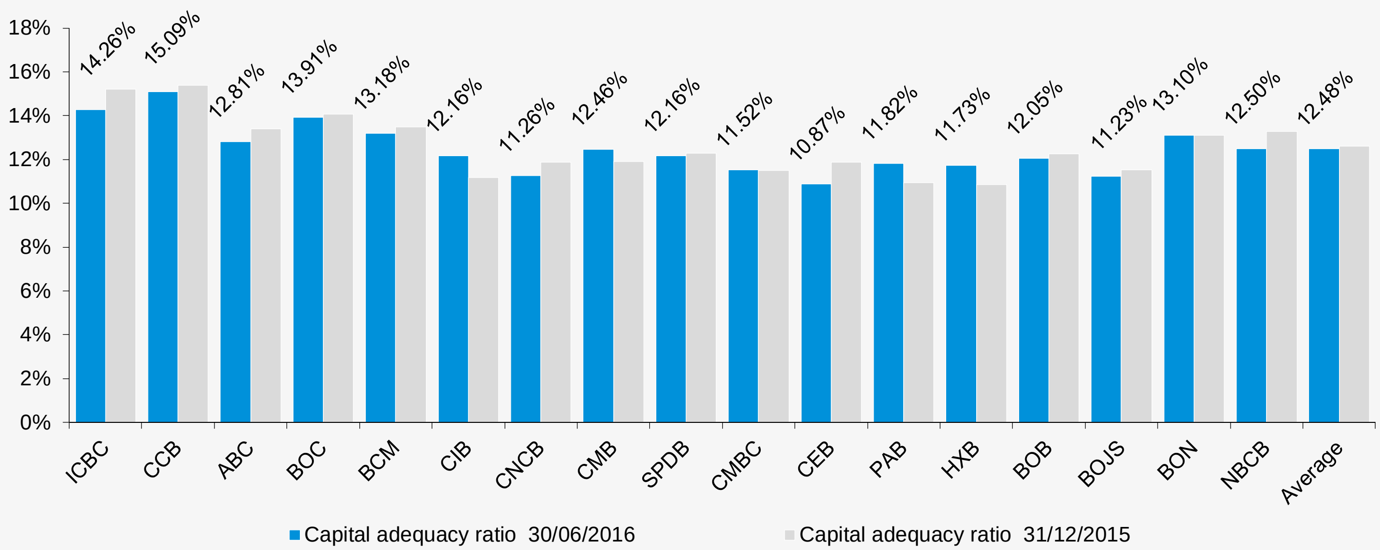
In the first half of 2016, the liability structure of listed banks was basically unchanged compared with the end of 2015. Customer deposits remained the major component of the listed banks' liabilities. Except for BCM, the major state-owned banks had higher deposit proportions. ICBC, CCB and ABC recording proportions of over 80%, reflecting the advantages they had in attracting deposits.

In comparison, joint-stock commercial banks and city commercial banks held a higher proportion due to banks and other institutions than the five major state-owned banks. CIB and CMBC had proportions of 39% and 34%, respectively. Since joint-stock banks and city commercial banks often lack deposit resources, they need to regularly take in interbank deposits to enhance liquidity while adopting an active approach to asset allocation. Therefore, liquidity gaps arising from the allocation of interbank assets often need to be filled by their interbank liability business.

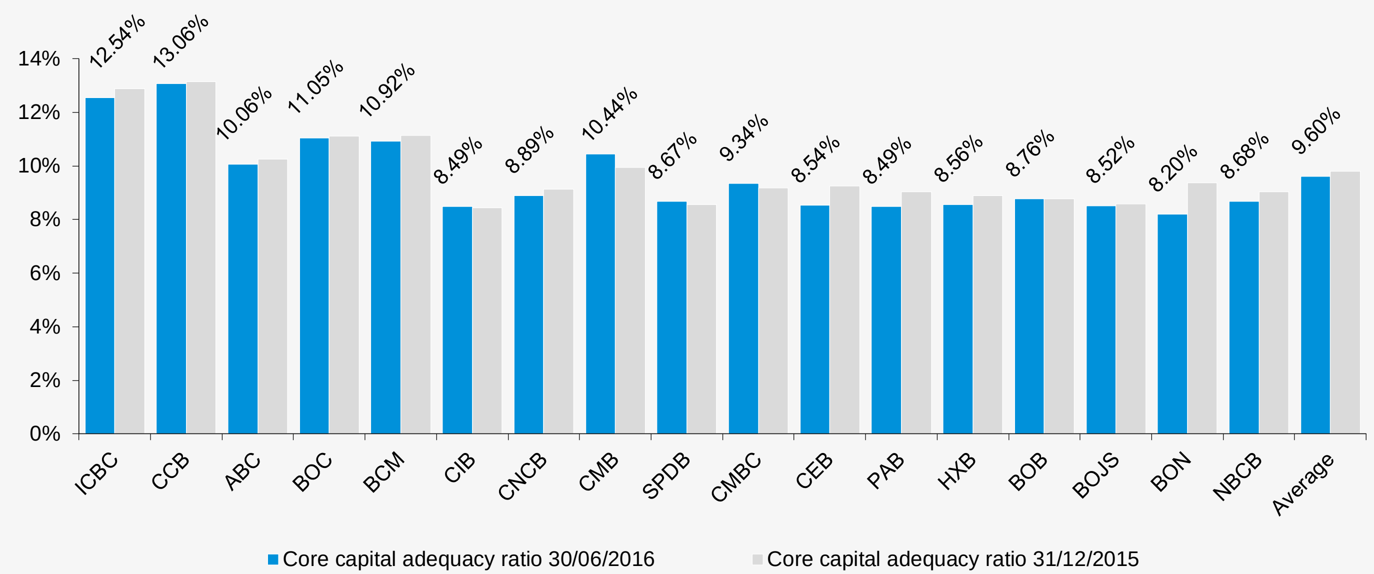
In order to cope with the complex macro-economic environment, listed banks will continue to optimise their liability structure, enhance deposit taking efforts and expand the channels for raising liabilities in order to develop their liability business.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Risk management - Capital adequacy ratio and core capital adequacy ratio



As of 30 June 2016, the average capital adequacy ratio of the listed banks was 12.48%, a decrease of 0.12% from 12.60% at the end of 2015. Listed banks saw their capital adequacy ratios decrease, with CEB and ICBC recording the largest decreases of 1% and 0.96%, respectively. The decreases resulted from the fact that the growth rate of average risk-weighted assets was higher than that of net capital.



As of 30 June 2016, the average core capital adequacy ratio of the listed banks was 9.60%, a decrease of 0.20% compared with the end of 2015. CMB posted the sharpest rise of 0.51%, mainly due to the increase of its net core capital. BON posted the sharpest decrease of 1.18% in core capital adequacy ratio, mainly due to the fact that the secondary capital bonds it issued on 2016 drove up its supplementary capital.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

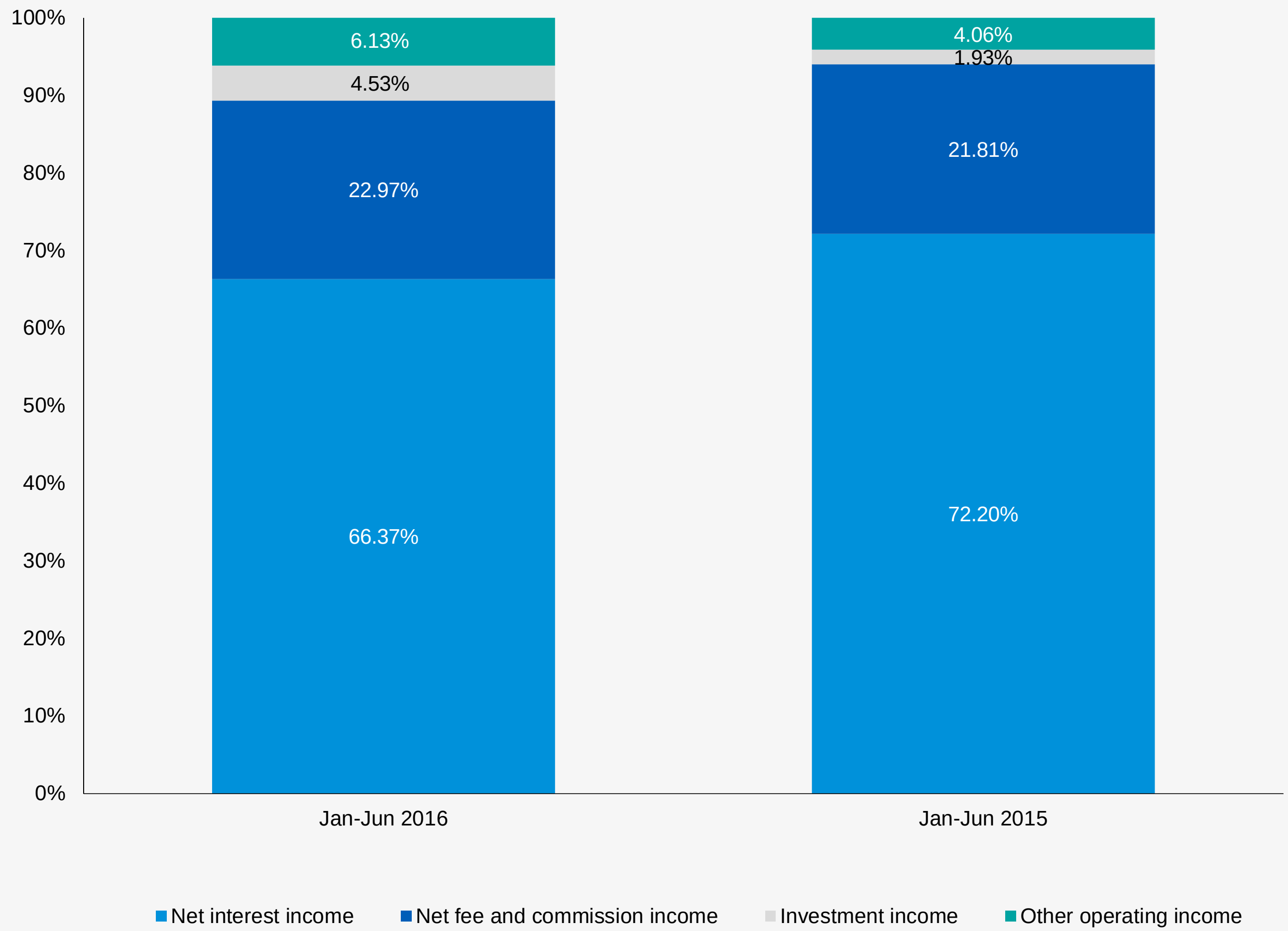
Profitability - Profitability analysis

In the first half of 2016, the net profit of listed banks recorded steady growth compared to the same period in 2015. The impact of cutting loan benchmark interest rates in 2015 was felt in early 2016 when banks' assets were re-priced and net interest margins narrowed.

The increase in listed banks' net earnings can be mainly attributed to the continued expansion of interest-bearing assets, the growth of non-interest income and cost compression. In the first half of 2016, the interest-bearing assets maintained steady growth. As banks redoubled their efforts to adjust their income structure, the proportion of non-interest income increased at a rapid pace. Banks also redoubled their efforts to manage their costs, and the cost-income ratio continued to improve. Impacted by the reform of replacing business tax with VAT, there has been change in the income structure.

In the first half of 2016, the upward trend of the listed banks' non-performing loan ratio, high credit risk cost and the high level of loan allowance have had a negative impact on the listed banks' net earnings.

Profitability - Operating Income and income structure analysis



In the first half of 2016, the total operating income of listed banks increased by 5.5% year-on-year.

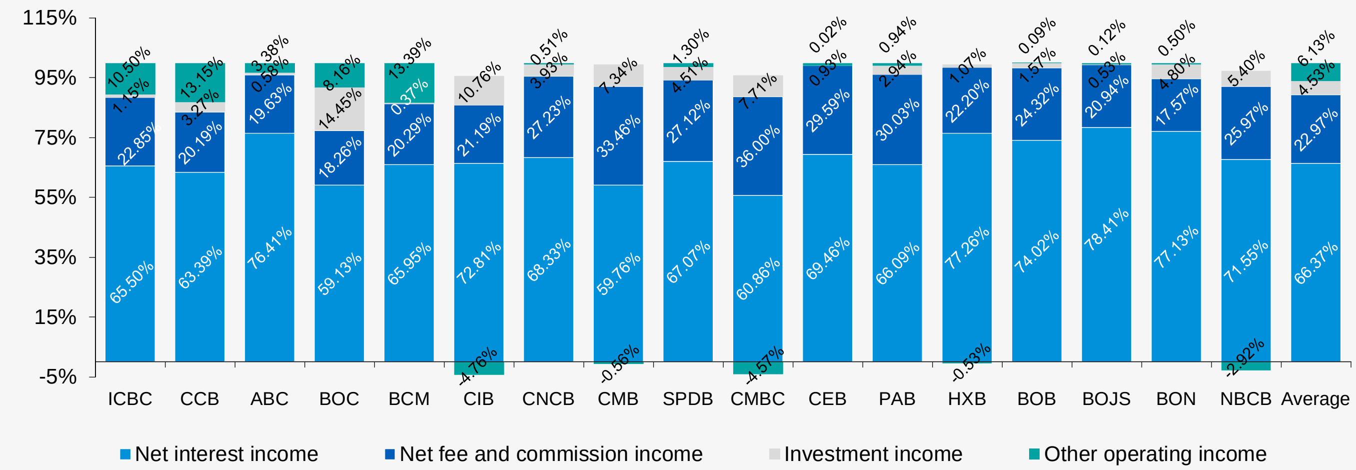
The operating income in the first half of 2016 comprised the following items:

- The proportion of net interest income was 66.37%, down 5.83% year-on-year.
- The proportion of service charges and net commission income was 22.97%, up 1.16% year-on-year.
- Investment income accounted for 4.53%, up 2.60% year-on-year.
- Other operating income, including income from changes in fair value, foreign exchange income and income from other business operations, accounted for 6.13%, up 2.07% year-on-year.

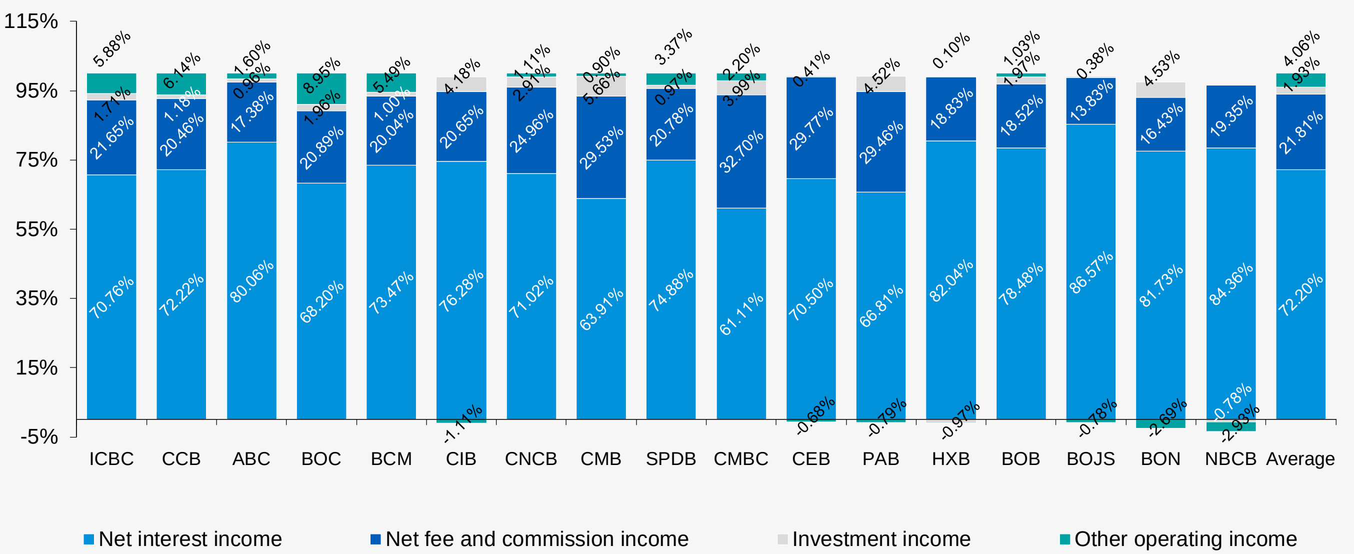
Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability – operating income and income structure analysis (continued)

2016 H1 operating income structure



2015 H1 operating income structure



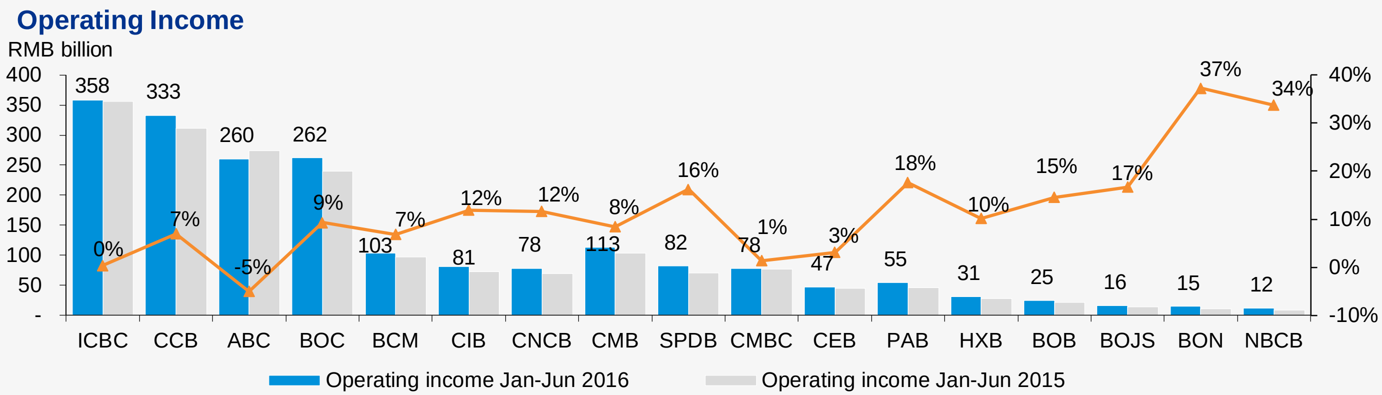
Compared with the first half of 2015, the average proportion of net interest income in total operating income of the listed banks declined. This was due to the listed banks adjusting their income structure to reduce the reliance on interest income amid narrowing net interest spread and net interest margin.

During the first half of 2016, net fee and commission income of listed banks increased by 11.14% YoY, and the average proportion of net fee and commission income in total operating income increased by 1.16% YoY. This resulted from the income growth in consulting, wealth management, agency and commission, bank card services and other intermediary business.

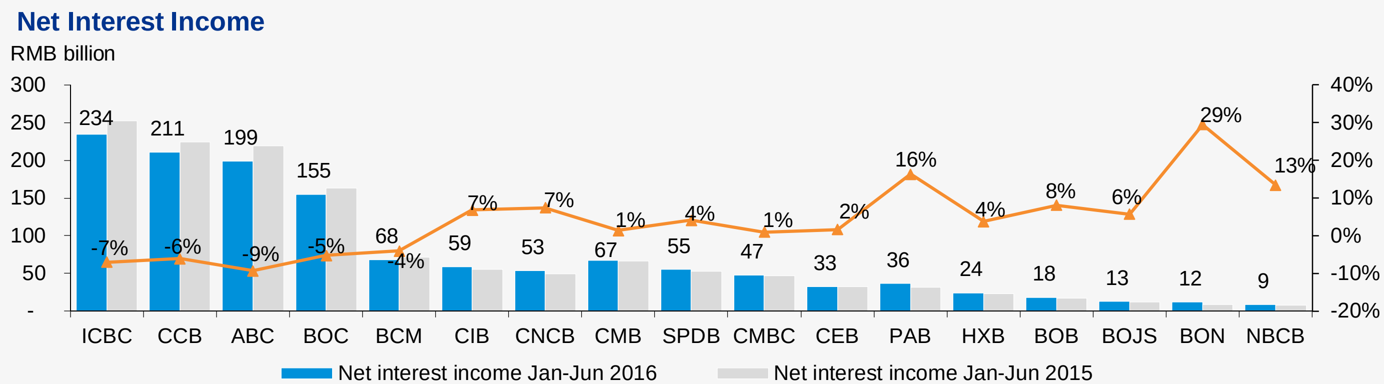
During the first half of 2016, the average proportion of listed banks' investment income increased by 2.6%, while the average proportion of other operating income increased by 2.07%.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability - Operating income scale

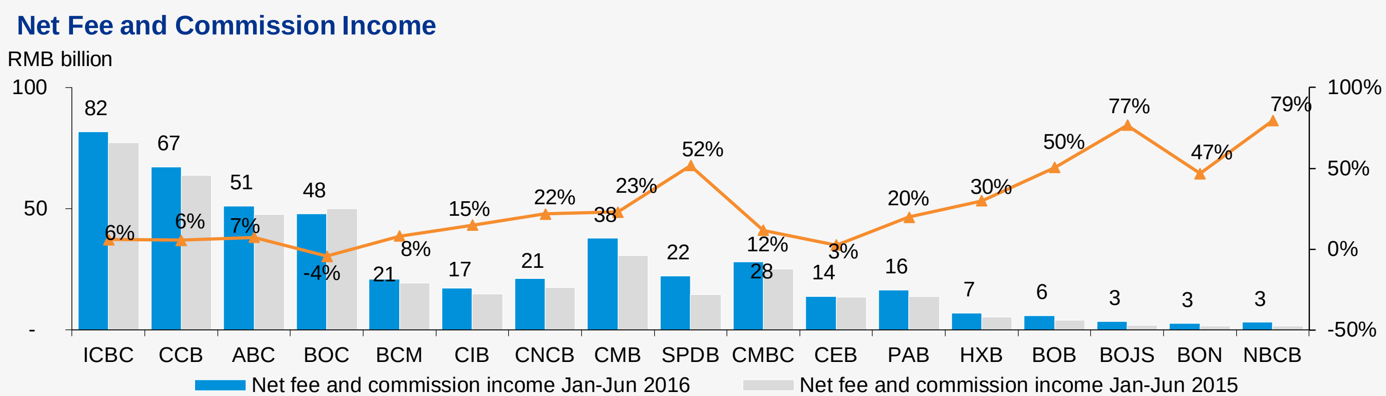


During the first half of 2016, many listed banks experienced an increase in operating income scale compared with the corresponding period in 2015. This was due to the increase in net interest income and net commission income. BON had the largest increase of 37% YoY in operating income.



During the first half of 2016, the five state-owned banks experienced a decline in net interest income compared with the corresponding period in 2015 , mainly affected by narrowed interest margin resulting from the ongoing process of interest rate liberalisation, intensification of market competition, the re-pricing of loan interest rates in early 2016 and the impact of VAT reform.

Although the joint-stock banks and city commercial banks were also impacted by the narrowed net interest margin, the volume of interest-bearing assets have grown, which led to an increase in net interest income.

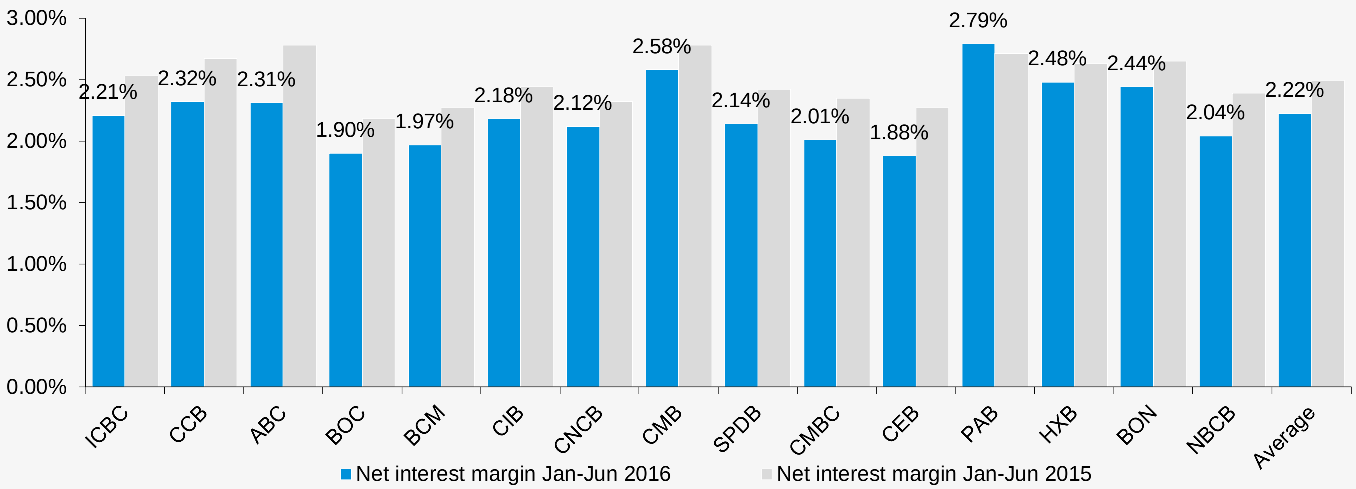


During the first half of 2016, all the listed banks, except for BOC, experienced an increase in net commission income compared with the corresponding period in 2015. In spite of a tighter regulatory policy, new financial shocks and intense market competition, China's banks took proactive steps to adjust their income structures, promote product innovation, diversify profit-making sources and reduce their reliance on traditional business. They also promoted significant income growth in the investment banking, bank card and custody, gold leasing and other intermediary businesses.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability — Net interest margin and Net interest spread

Net interest margin

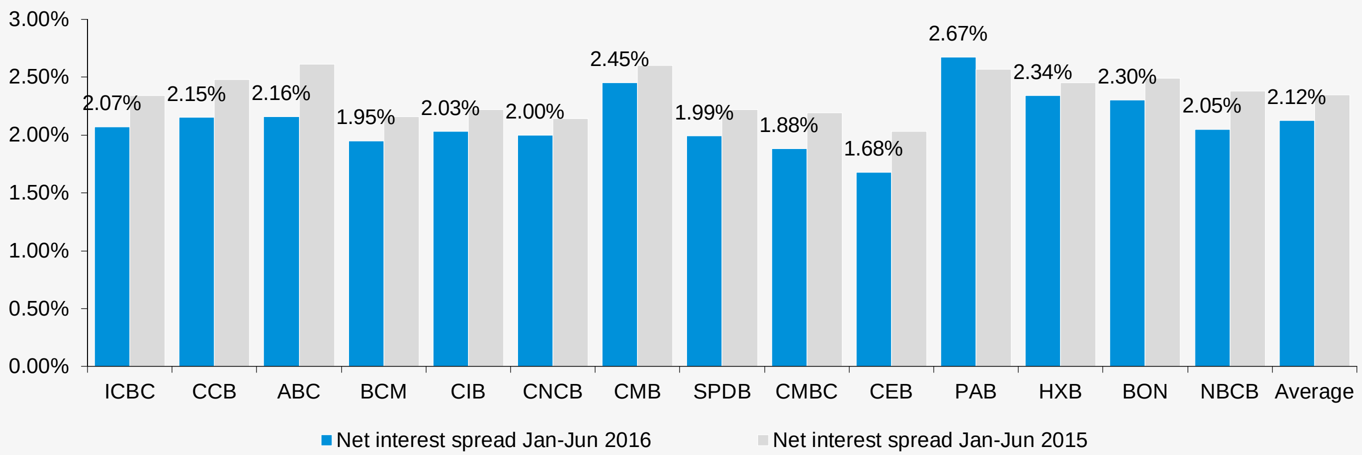


Note: BOB and BOJS did not disclose the index.

During the first half of 2016, the average net interest margin was 2.22%, down 0.27% from the corresponding period in 2015.

There are they key reasons for the narrowing of the listed banks' net interest margin. Firstly, the hysteresis effect of five interest reductions in 2015, and especially the re-pricing effect in early 2016, had a major impact on loan proceeds. Secondly, ongoing interest rate liberalisation and greater interbank competition caused a slight increase in the floating ratio of deposit interest rate. Thirdly, the VAT reform, which was implemented on 1 May 2016 and required price and tax separation of interest proceeds, resulted in the decrease in the average yield of interest bearing assets.

Net interest spread



Note: BOC, BOJS and BOB did not disclose the index.

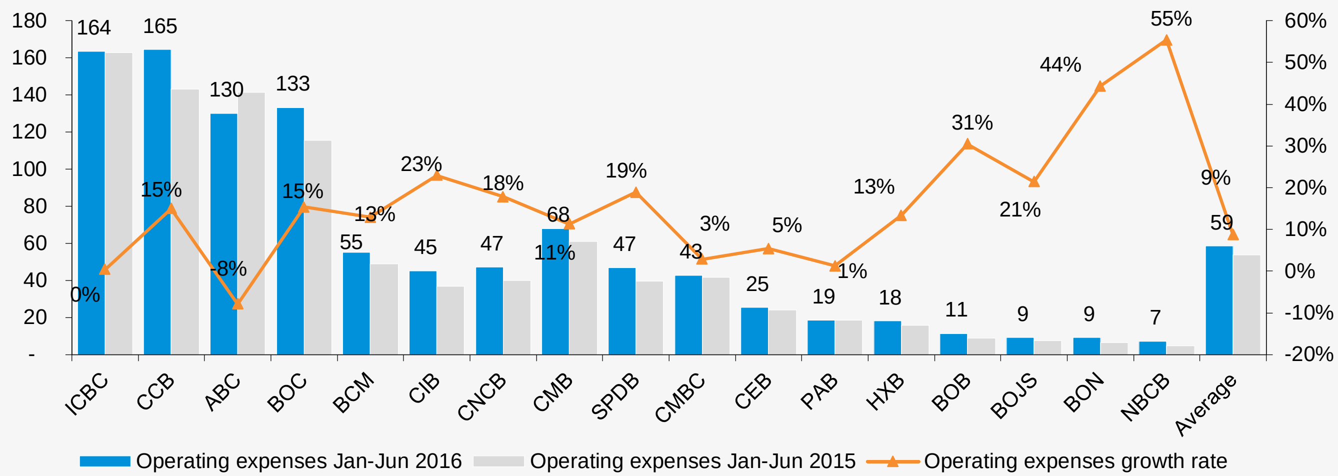
During the first half of 2016, the average net interest spread was 2.12%, 0.23% down from 2.35% in the corresponding period in 2015. Influenced by interest rate liberalisation and the re-pricing of loans and deposits, the listed banks faced pressure on their net interest spread. During the first half of 2016, the average net interest spread of the listed banks decreased. Only PAB out of the 14 disclosed listed banks experienced an increase.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability – Cost control – Operating expenses and Cost-to-income ratio

Operating expenses

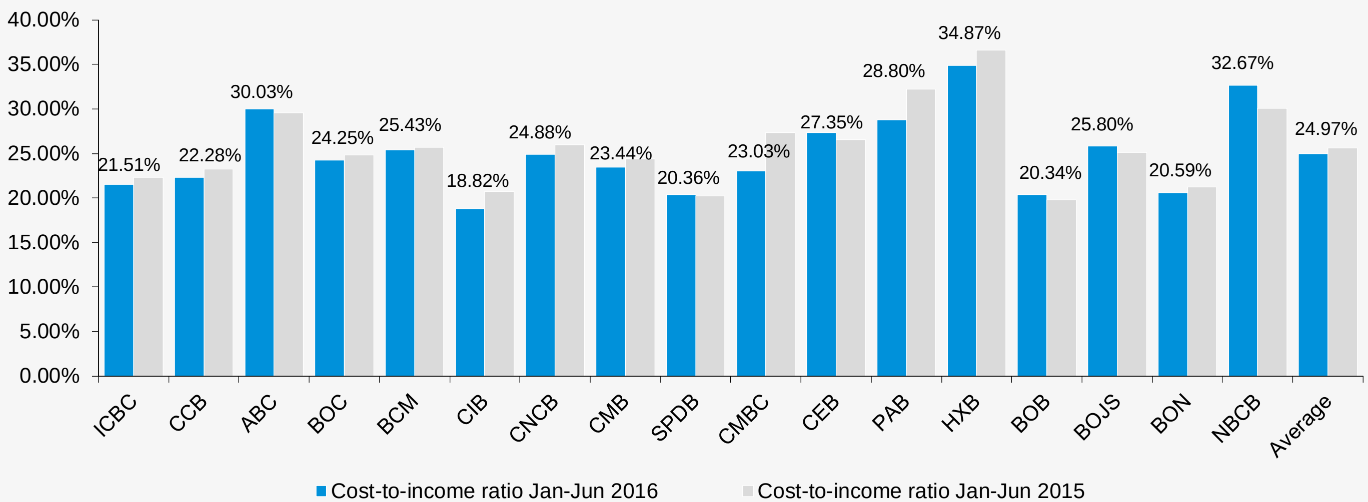
RMB billion



The operating costs of most listed banks increased during the first half of 2016. The expansion of business scale and the increase in asset impairment drove the increase in operating expenses.

NBCB and BON experienced the highest growth rates of 55% and 44%, respectively, mainly derived from the increase in asset impairment provision for risky assets.

Cost-to-income ratio

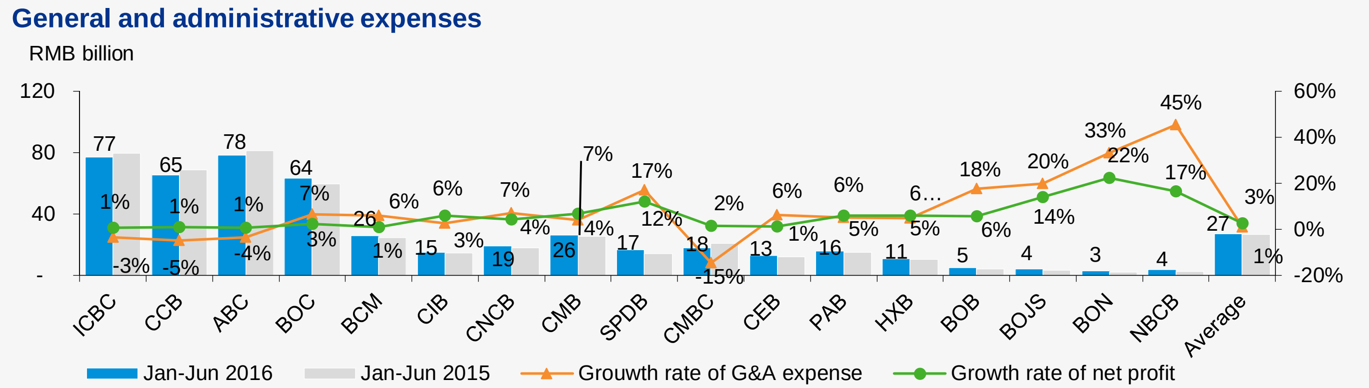


During the first half of 2016, the average cost-to-income ratio among the listed banks was 24.97%, a decline of 0.67% compared to the same period in 2015. CMBC and PAB experienced the sharpest decline, falling 4.31% and 3.42%, respectively. This was due to greater cost management and cost control optimisation.

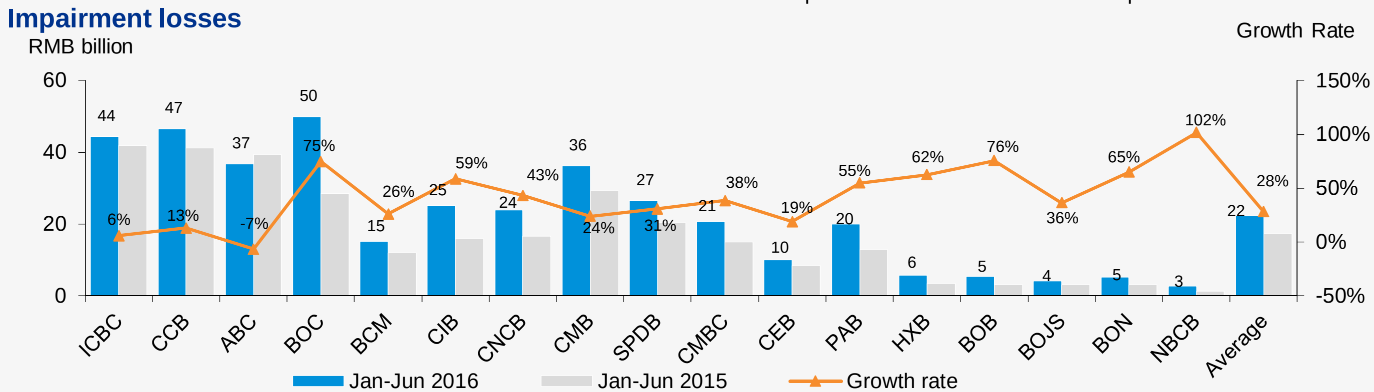
Given the increasing strictness of external regulations, as well as the need to remain competitive through ongoing product and service innovation, sustaining a low cost-to-income ratio will be a key challenge affecting listed banks' profitability going forward.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

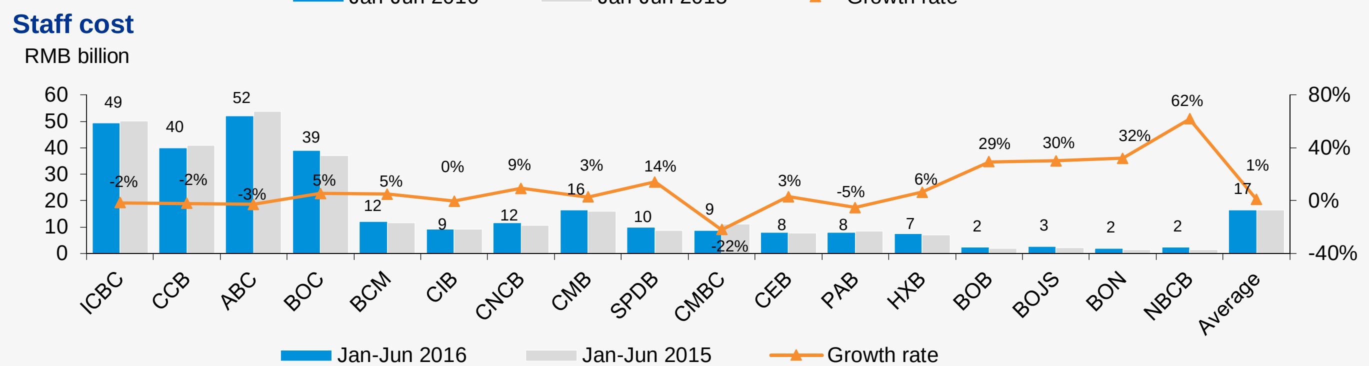
Profitability – Cost control – General and administrative expenses, Impairment losses and Staff cost



During the first half of 2016, listed banks saw a slight increase in general and administrative expenses. NBCB and BON experienced the highest growth rates, reporting increases of 45% and 33%, respectively. This was mainly due to the expansion in business scale, establishment of new outlets, adjustments to business strategies and stricter control over rigid expenditure for business management.



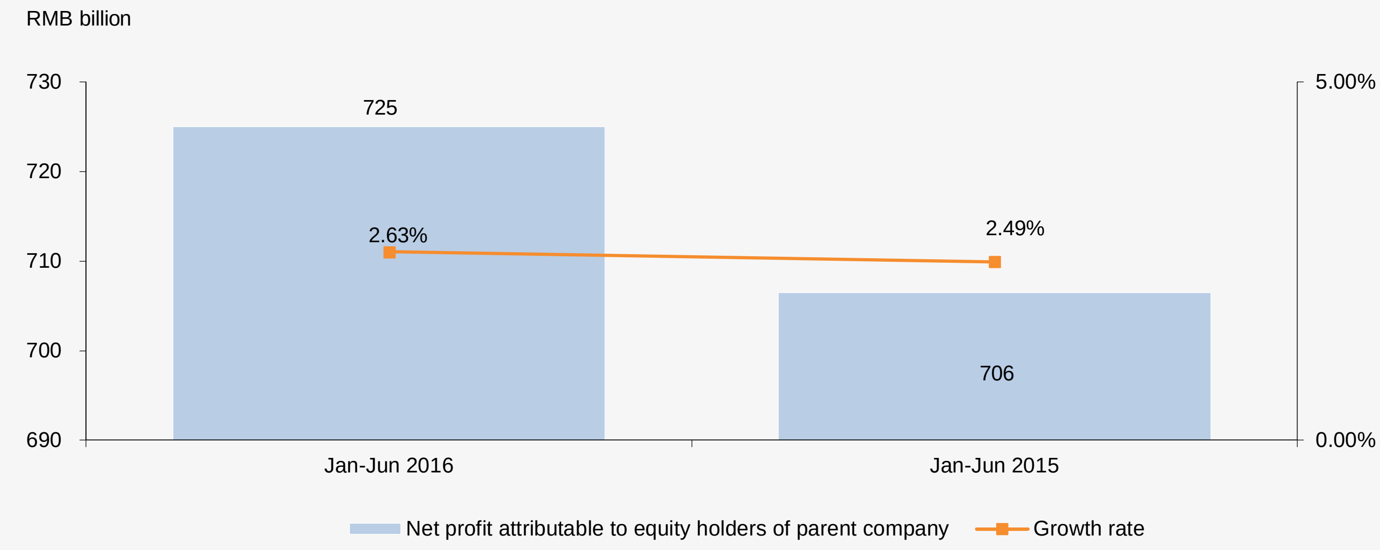
During the first half of 2016, due to the effects of the economic slowdown, accelerated industrial restructuring and other factors, the banking sector faced continued pressure in relation to asset quality, with credit risk remaining at a high level. In order to enhance risk management, the listed banks made more asset impairment provisions with an average growth rate of 28%. NBCB, BOB and BOC all experienced a YoY increase of over 70%.

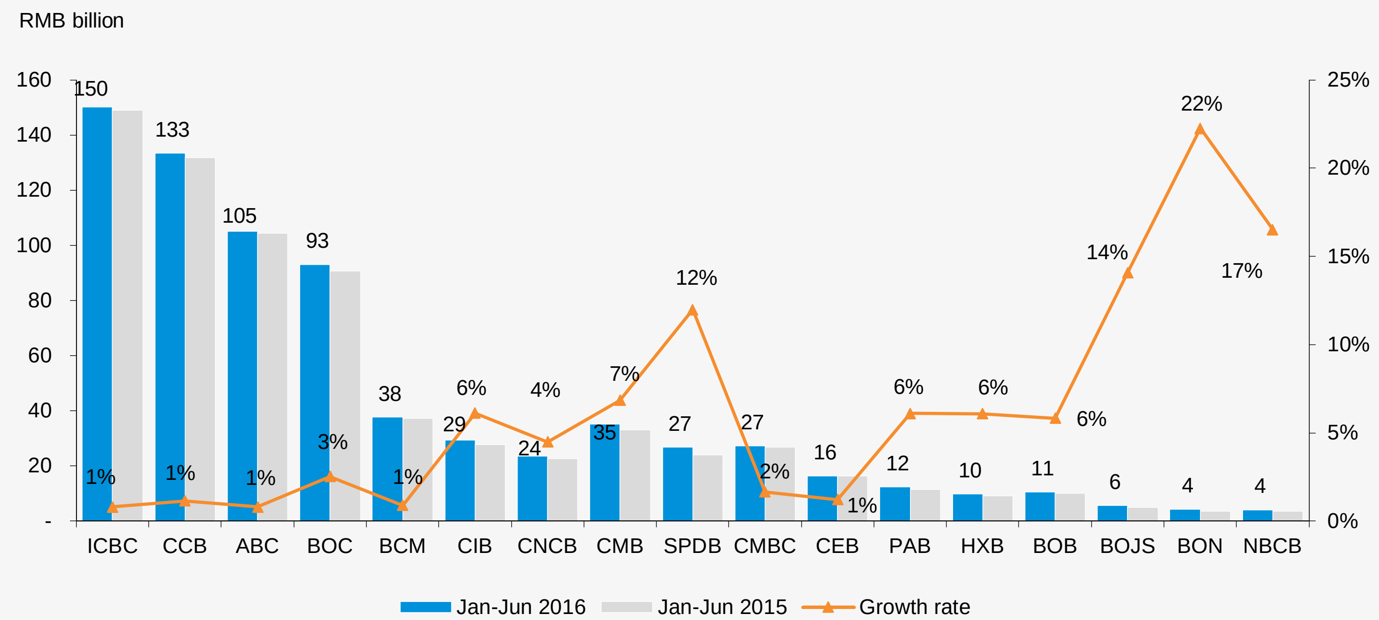


During the first half of 2016, staff costs for the listed banks went up by 1% on average. In particular, NBCB, BON and BOJS saw a rise of over 30%, primarily due to the increase in the number of employees, the expansion of business scale and establishment of new branches.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability — Net profit attributable to equity holders of the parent company

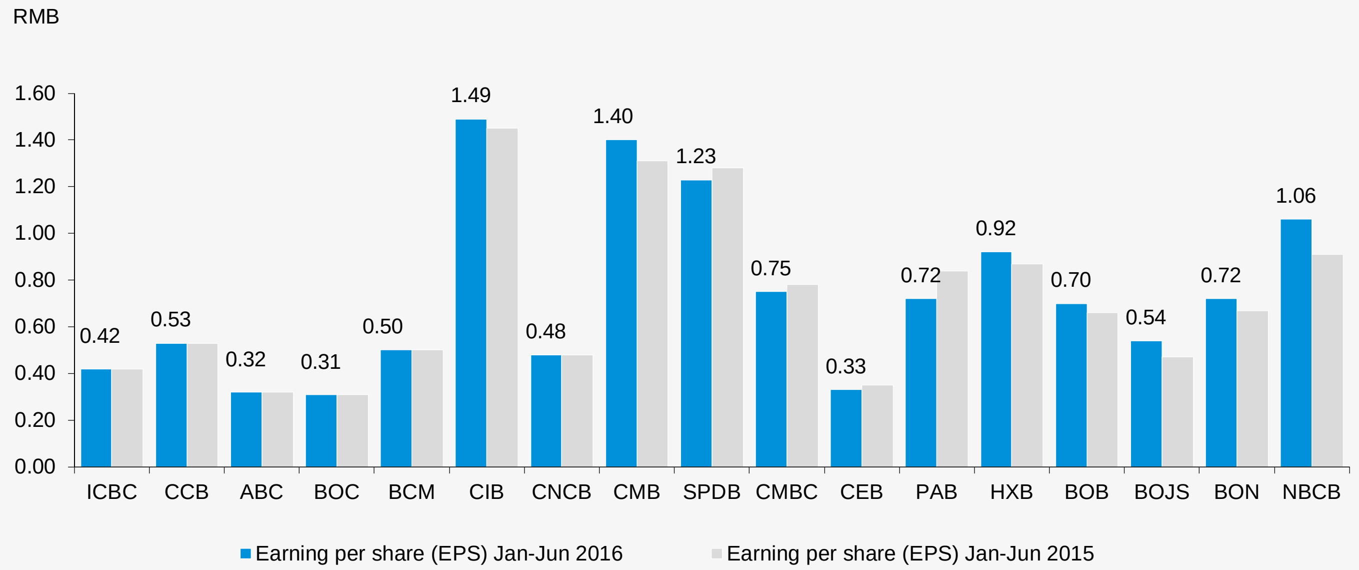




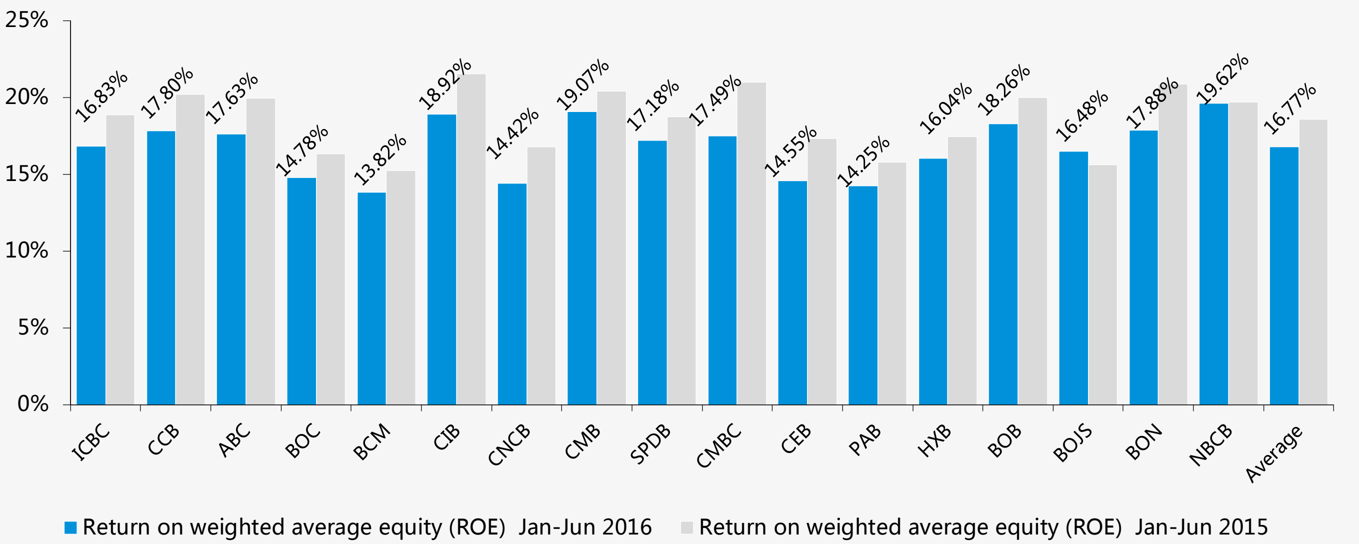
Overall, net profit attributable to parent company equity holders increased during the first half of 2016, with a faster growth rate of 2.63% compared to 2.49% during the corresponding period in 2015. Though impacted by a narrowing net interest margin, the net profit attributable to shareholders of the parent company at the listed banks continued to grow. This was mainly due to more income structure adjustment and cost management, which contributed to the increase of non-interest income and cost compression.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability — Financial performance indicators



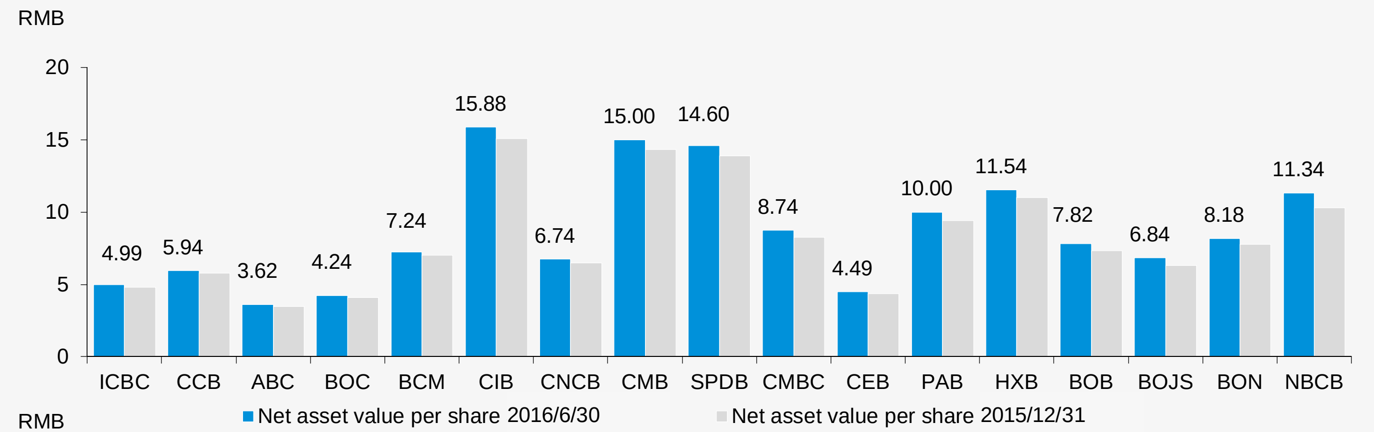
During the first half of 2016, the earnings per share (EPS) of the five major state-owned banks remained flat compared with the same period in 2015. Among other listed banks, 10 banks experienced flat or upward EPS. NBCB's EPS was RMB 0.15 higher than that of the corresponding period in 2015, mainly due to the significant income growth during this period. Two banks reported a lower EPS, mainly due to the distribution of preferred stock dividends and issuance of common stock.

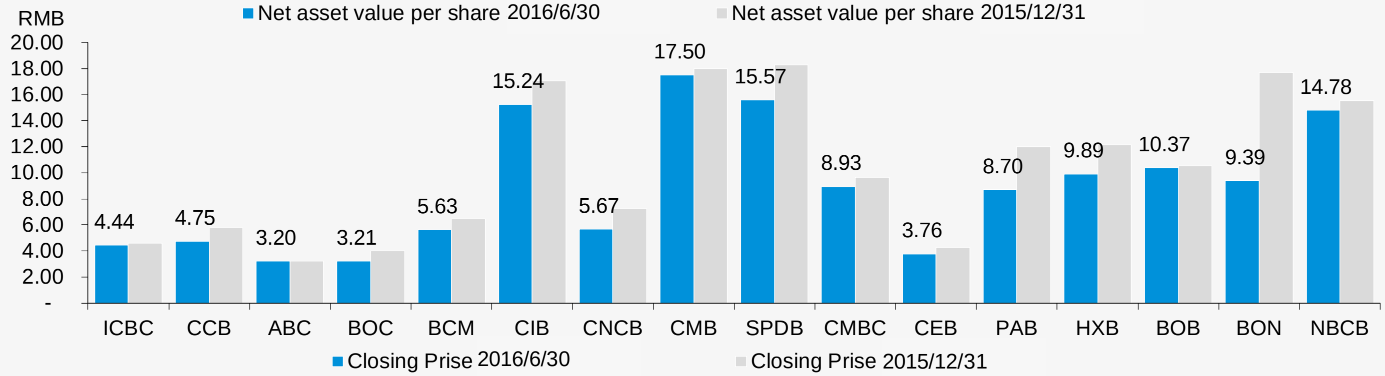


During the first half of 2016, the return on weighted average equity (ROE) of listed banks decreased by 1.80% YoY, mainly due to the slowing increase in net profit in comparison to the increase in net assets with the expansion of banking business. Notably, CMBC and BON's ROE fell by 3.49% and 2.96%, respectively.

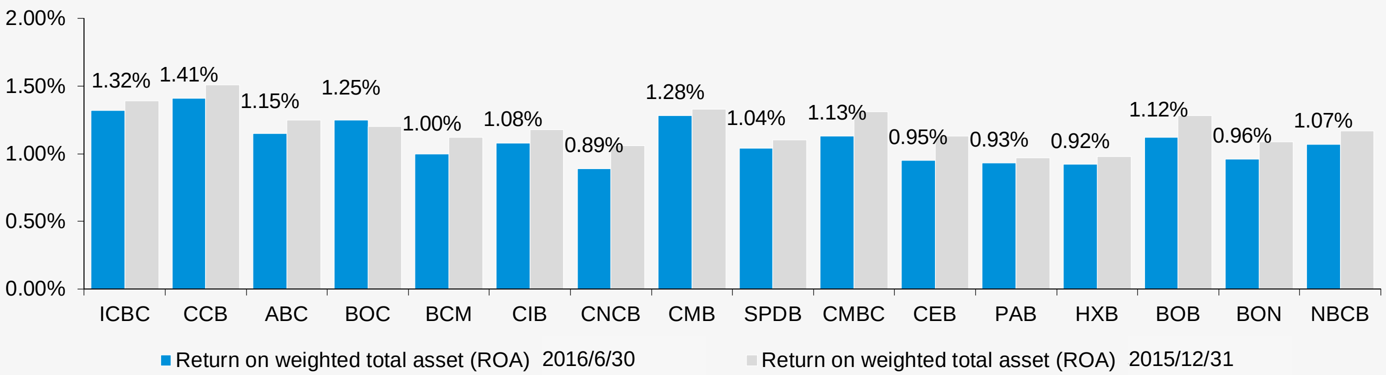
Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Profitability — Financial performance indicators (continued)





Note: BOJS was not a listed bank as at 30 June 2016.



Note: BOJS did not disclose the ratio of 2015 H1.

In general, the net asset value per share of all listed banks continued its upward trend during the first half of 2016. By the end of the first half of 2016, CIB and CMB had the highest net asset value per share of RMB 15.88 and RMB 15 respectively, representing a YoY increase of 5.17% and 4.82%, respectively.

Due to pressures from the economic downturn, low valuations in the banking sector, interest rate liberalisation and the transfer of capital reserve to common shares, the share price of most listed banks fell during the first half of 2016. The share prices of BON, PAB, CNCB, BOC and HXB recorded a sharp decline, with closing prices of RMB 9.39, RMB 8.7, RMB 5.67, RMB 3.21 and RMB 9.89, respectively. This corresponds to a YoY decrease of 47%, 27%, 21%, 20% and 19%, respectively.

During the first half of 2016, the annualised average return on assets (ROA) of all the banks (except BOC) experienced a YoY decline. This downward trend was largely due to smaller increases in net profit compared to faster growth in assets and business expansion.

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

3 China' banking sector: Hot topics

China's banking sector: Hot topics

Hot Topic One: Front, Middle and Back-office Integration of the Financial Market Business

Development of the financial market business and front, middle and back-office integration

As interest rate spreads as a traditional source of profit are on the decline, an increasing number of commercial banks are turning their eyes to the financial market business, which is becoming increasingly important for international commercial banks to maintain profit growth and improve market competitiveness.

Unlike some international banks, commercial banks in China have just started to develop their financial market business. But continuous deregulation of foreign exchange rates and interest rates, as well as deepened policy reform in recent years have created favourable opportunities for the development of the business. Due to a host of international and domestic financial events, such as the development of the Trans-Pacific Partnership, the anticipated rise of the US Dollar interest rate, the inclusion of the Renminbi in the SDR (Special Drawing Right) and Brexit, the volatility in interest rate and foreign exchange markets is to be expected. This will lead to more hedging and speculative activity, which will push the growth of the financial market business.

Business development can never be possible without the support of a system platform. It is thus of great importance for the financial market business to have in place a front, middle and back-office system that integrates different procedures, systems, data and functions to meet the bank's management requirements.

Some commercial banks in China have already integrated front, middle and back-office functions for their financial market business in certain areas, but they haven't been able to cover all assets or processes. Therefore, banks need to expand this coverage to include all assets and all processes. This change can also help banks to improve transaction efficiency, conduct portfolio management of their assets, enhance risk control capabilities, reduce operational and maintenance costs, and coordinate data and business functions in the future.

Hot Topic One: Front, Middle and Back-office Integration of the Financial Market Business (continued)

Benefits and value of an integrated system in promoting business development

An integrated system can improve banks' business management, process automation, data consistency, information processing and work efficiency, which is vital in developing the financial market business.

- **Integrated management of business**

  An integrated system can manage a more diverse range of businesses and cover the information of all assets traded in a financial market to the extent that management can monitor each business in an integrated manner.

- **Improved process automation**

  An integrated system can effect automatic management of transactions, present compliance positions on a real-time basis, and support online examination and approval. It can capture transaction and settlement information and automatically produce vouchers for funding and accounting records ~~thereof~~.

- **Enhanced data consistency**

  An integrated system can collect, transfer data between systems, and validate data from transactions made on different venues and various kinds of businesses. This helps ensure the consistency of data sourced from front, middle and back-office records and reduces the number of data interfaces to improve the stability and accuracy of data to be reported to ~~the~~ management.

- **Timely processing of information**

  An integrated system allows flexibility in configuring various indicators, and is able to provide a visualised processing and presentation of stocking, fund position, over-limit warning and compliance review information. Under the integrated system, compliance reviews can be effectively conducted as a part of the bank's risk management function.

- **Improved work efficiency**

  System automation can reduce the amount of manual work and allow specialists to focus on complex businesses and specific risk areas. The system automatically produces various reports for regulatory and internal management purposes, which significantly reduces the workload of manual calculation at the front, middle and back-office levels.

Hot Topic One: Front, Middle and Back-office Integration of the Financial Market Business (continued)

Expected implementation challenges

An integrated system for the financial market business involves great complexity, as it covers the entire life cycle of the financial market business, and is used by many front, middle and back-office departments, providing a comprehensive business platform that connects various upstream and downstream systems. Therefore, challenges are usually expected in developing such a system.

1 Challenge No.1: Numerous departments with different business needs

Unlike a system for a specific function, an integrated system incorporates all processes involved in the daily operation of treasury businesses, and allows daily transactions and business management on a single platform.

As an integrated system spans a long business chain and involves a large number of products and departments, a traditional demand analysis may not be appropriate. Although the needs of the departments that use the system will be considered, a holistic evaluation of demand and business operations are more important. However, this evaluation poses the biggest challenge for business departments, as they might be so aware of their business needs and expected system functions that they fail to adopt a holistic approach to business operations.

2 Challenge No.2: Various peripheral systems with different data communication needs

An integrated system for the treasury business is enabled by data communication with various peripheral systems. Systems to be connected are categorised under the following:

- External transaction platforms: the China Foreign Exchange Trade System (CFETS), stock exchanges, the Shanghai Clearing House, gold exchanges, futures exchanges, the China Financial Futures Exchange, foreign exchange platforms of foreign-funded banks, etc.
- Providers of market data: Reuters, Bloomberg, Wind, etc.
- Clearing houses and custodian institutions: systems directly connected to China Central Depository and Clearing Co., Ltd., China Securities Depository and Clearing Corporation, the Shanghai Clearing House, various custodian banks, etc.
- Other bank internal business systems: transaction processing, risk control, general ledger, financial reporting, limit management, systems for integrated management of customer information, management accounting systems, etc.

This will challenge the flexibility and extensibility of system structures, as well as interface standards and competence of implementation.

3 Challenge No. 3: Rapidly changing businesses in need of an open system

An integrated system is not built in one go. Instead, is an open project that is improved over time.

Products traded on financial markets are characterised by rapid change and high sensitivity to markets. Therefore, an integrated system should be able to quickly expand its coverage, enhance its configuration capabilities and adjust business processes in response to the changing market developments.

Preparations and changes expected from banks

Considering the complexity in building an integrated system for the financial market business, it is critical for banks to be fully prepared for potential changes to organisational structures and business models before implementation.

1 Culture and management ideas to match the requirements of integrated business processes and management models

The management of financial products is a complex process that involves various business departments, business operations and business management. An integrated system could disrupt the traditional business model under which financial products are managed on a system or department basis, exposing historical differences of front, middle and back-office systems in transaction records, parameters, management statistics and financial reporting. Furthermore, an integrated system thrives on a well-functioning mechanism that facilitates effective inter-departmental collaboration and coordination. Banks need to establish a designated department in charge of coordinating various departments under an integrated model for business processes and management. Given current management culture and business models across the banking sector, this requirement poses a challenge to the adoption of these new values and practices.

2 Business data to be standardised bank-wide

As an integrated system for the financial market business requires the use of the same business parameters across front, middle and back-office systems, this will have an impact on bank-wide standards on parameter management or reporting, especially on bank-wide standards on the management of transaction counterparties and limit management mechanisms. As the banking sector has been building its IT capabilities for years – and has therefore produced complicated systems and models – sharing and using the same system for counterparty and limit management bank-wide is a big challenge to banks' existing systems. Banks are advised to organise and standardise bank-wide business data before they commit themselves to an integrated system.

Hot Topic Two: Securitisation of Non-performing Assets

I. Background of securitisation of non-performing assets (NPAs)

Early Stage

- In 2000, the People's Bank of China approved China Construction Bank and Industrial and Commercial Bank of China to conduct pilot programmes for the securitisation of housing loans, marking government recognition of asset-backed securitisation.
- On 23 January 2003, China Cinda Asset Management Co., Ltd. and Deutsche Bank jointly launched China's first NPA securitisation scheme that combined asset securitisation and portfolio sale approaches.
- In June 2003, China Huarong was the first to launch a modified asset securitisation model via a stratified trust structure.

Recognition

- Following the official launch of the pilot programmes for securitisation of credit assets in 2005, four NPA securitisation products known as Dongyuan 06, Xinyuan 06, Xinyuan 08 and Jianyuan 08 were introduced, with a total amount of approximately RMB 13.3 billion. Jianyuan 08 was issued by China Construction Bank, and the other three products by Orient AMC and Cinda AMC. Banks can dispose of NPAs through asset securitisation, and as NPAs are derecognised off their balance sheet, more capital can be released and regulatory KPIs can be improved.

Suspension

- In 2007, the State Council approved more pilot programmes for asset securitisation. However, following the onset of the international financial crisis triggered by the subprime crisis in the United States, China suspended the issuance of asset-backed securities.

Resumption

- On 16 February 2016, the People's Bank of China, together with other seven ministries and commissions, jointly issued Opinions on Financial Support for Maintaining Industrial Growth, Adjusting Industrial Structure and Improving Industrial Efficiency, requiring intensified efforts and improved efficiency in NPA disposal, and encouraging qualified financial institutions to participate in the pilot programmes for NPA securitisation.
- Regulatory bodies have selected six banks to conduct pilot programmes. Those banks are Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, Bank of Communications and China Merchants Bank.
- More qualified institutions are likely to be included in the NPA securitisation pilot programme in the future.

What does it mean and why is it important?

The resumption of NPA securitisation in 2016 is a critical move for the following reasons:

1. It indicates China's intention to continue NPA securitisation pilot programmes to dispose of NPAs through diversified channels and to maximise returns. This would help banks improve regulatory KPIs, and attract more investors to participate to improve the effectiveness and efficiency of NPA disposal.
2. It allows banks to dispose of NPAs through special securitisation schemes. The banks can charge service fees by providing services such as NPA management and collection. This can bring new sources of income to banks.
3. It helps banks diversify the approaches and channels of NPA disposal. More importantly, asset securitisation allows more buyers to participate – in particular the qualified investors on the interbank bond market – which can help optimise China NPA market and increase the banks' NPA recovery rates.

Hot Topic Two: Securitisation of Non-performing Assets (continued)

II. Key focuses of NPA securitisation

Following the resumption of NPA securitisation pilot programmes, one of the key issues is to expand the demand for investment, and strengthen investor confidence. As the issuers of securitised assets, banks need to consider the following key areas:

Key focus areas	Description
To comply with strict requirements for information disclosure	Asset securitisation involves the transfer of credit information and cash flows to investors. Therefore, an issuer is required to **make complete and detailed disclosures** to the investors on the underlying assets, due diligence on the NPAs, valuation methodologies, review opinions of lawyers and accountants, credit enhancement arrangement, liquidity risk management and other matters. It is also required to regularly disclose to the market **information related to asset recovery and major changes in the underlying assets.**
To ensure stable cash flows can be generated from the underlying assets	1. An NPA pool should mainly consist of **loans that are classified as sub-standard and doubtful**; 2. Loans in the NPA pool **should be based on each drawdown made under a loan contract** so that each drawdown with different risks of recovery and repayment can be separately monitored and managed, with the purpose of ensuring the overall quality of the asset pool. 3. The asset pool should **contain diversified assets in terms of geographic locations and sector distribution**.
To consider diversified ways for credit enhancement	**A simplified two-tranche (senior tranche and junior tranche) structure** should be adopted; **Liquidity support**: As the amount and timing of NPA recovery are uncertain, banks might need to consider extra liquidity support by setting up a **cash reserve account or seeking external liquidity support from the junior investors or third-party organisations**.
To consider the impact of the local legal enforcement environment on NPA recovery	Cash flows of NPAs mainly rely on the disposal of collateral, which is closely linked to **local environments, government-enterprise relationships, legal systems, local market sentiment in relation to the disposal of collateral etc**.
To consider appropriate incentives and monitoring mechanism for NPA servicers	As future cash flows of securitised assets depend on whether loan service providers (usually banks that initiate asset securitisation) perform their duties diligently, the establishment of **an incentive and monitoring mechanism for loan service providers** is critical. For instance, as an incentive, a proportion of extra up-side recovery might be shared between the investors and the servicer.

Source: China Business News, Issue 2016-3-30 and KPMG analysis

Hot Topic Two: Securitisation of Non-performing Assets (continued)

II. Key focuses in NPA securitisation (continued)

Key focus areas	Recommendations
With regulators imposing strict requirements on information disclosure relating to NPA securitisation, and a large number of professional firms taking part in the due diligence process, **it takes a great deal of time and effort for banks to prepare materials on the underlying assets.** This material includes information memorandums, scanned loan documents and status reports.	• **Agree on a plan and timetable as early as possible** • Provide **adequate training for branch personnel, allowing branches to have sufficient time to prepare required materials**, such as property and land records kept at the Land Resources and Housing Administrative Bureau, and registration files with industrial and commercial registries • Appoint **experienced professional advisors** to assist banks in preparing these materials
As uncertainties exist in NPA recovery, it is critical to have proper asset selection criteria in place. It is advisable to **avoid selecting loans that parties** (such as banks, advisors, rating agencies and investors) **might have differing views on around valuation and estimated recoverable amount and time**.	• **Select loans with collateral that banks have clear title and rights** • Avoid selecting loans that involve a complex and lengthy restructuring process which is likely to bring more uncertainty during the recovery process
As NPA recovery is highly dependent on the enforcement of collateral and legal proceedings, in general, **a shorter recovery timeframe can be expected if legal proceedings are moving towards the later stage in the process.**	• **Select loans with enforcement processes or legal proceedings that have already started** • Consult **experienced professional advisors** during the due diligence process to assess the impact on valuation and recovery
It is not uncommon for investors to carry out due diligence at the same time as sell side due diligence, and therefore **a large number of people are expected during the on-site due diligence process**. If not arranged properly, this could create problems in arranging appropriate due diligence for both the sell side and buy side, and could **cause potential delays in the process**.	• Plan ahead and prepare early to ensure a reasonable and feasible due diligence plan (including timing and route etc.) • Arrange for **sufficient time and good organisation of due diligence** to allow all parties involved to ask questions on site • Consult and appoint **experienced professional advisors** to lead the due diligence process
Due to information asymmetry, different parties involved (such as banks, investors, rating agencies and advisors) may have **different views and results on NPA valuation of the underlying assets**.	• Prepare and provide **sufficient information to support banks' valuations** in a timely manner before and during the due diligence proceedings. This information includes recent sales of a pledged asset in the neighbouring area, information to support the ability and willingness of the borrowers and guarantors to repay, and information in relation to other assets of borrowers and guarantors that can potentially increase the recoverable amount • Appoint **experienced professional advisors** to assist banks in communicating with credit rating agencies and potential investors

Hot Topic Two: Securitisation of Non-performing Assets (continued)

III. Indicative timeline for NPA securitisation

1. Commencement

Approx. one to two weeks

Banks and advisors prepare a detailed due diligence work plan and timetable:

- Banks and advisors set out and agree on project milestones and an overall timetable, discuss due diligence approaches, and define selection criteria for asset selection
- Banks prepare a preliminary list of assets to be included in the asset pool, and finalise due diligence schedule, site visit route and teams
- Advisors provide a due diligence information request list, develop due diligence templates and collect information

2. Preparation of due diligence materials

Approx. one to two weeks

Advisors assist banks in preparing due diligence materials:

- Banks and advisors provide training to the branch personnel with regards to detailed due diligence arrangement and requirements; prepare information database
- Branches finalise due diligence site visit plan and list of assets for on-site inspection; arrange logistics for the site visit
- Advisors perform preliminary review of materials provided by banks; branches provide additional due diligence materials based on the feedback from the advisors

3. Review of documents and on-site due diligence

Approx. three to four weeks

Advisors and other parties involved in due diligence (such as rating agencies and potential investors) start due diligence information review and on-site due diligence:

- All parties perform on-site due diligence and review documents
- Lawyers provide legal opinions on the validity and legitimacy of assets after due diligence
- Asset appraisers prepare valuation reports
- With the assistance from the advisors, banks perform valuation of the underlying NPAs and prepare executive summary for major borrowers in the portfolio

4. Valuation discussions and finalisation of work reports

Approx. two to three weeks

All parties issue preliminary valuation results based on on-site due diligence, and discuss estimated recoverable amounts and the time of recovery. Advisors finalise various work reports.

- Banks adjust and finalise the asset pool based on the results of due diligence and valuation analysis
- Assisted by advisors, banks communicate with potential investors and credit rating agencies on estimated recoverable amounts and the time of recovery, and agree on the valuation of the underlying assets
- Advisors finalise work reports (e.g. auditors provide the agreed-upon procedure reports and tax and accounting opinions; lawyers provide legal opinions; credit rating agencies provide crediting rating results)

Preparation of filing documentations, submission for regulatory approval, investor roadshows and completion of issuance

Approx. one to two months

Banks complete internal assessment and approval processes, submit relevant materials to the regulators for approval, and arrange for investor roadshow and final issuance work:

- Banks finalise relevant information disclosure materials
- Banks, lead underwriters and trust companies prepare filing documentations for regulatory approval
- Perform investor roadshows and sales activities
- Complete product sales and issuance

Note: The above indicative timeline and work plan are for reference only, and may be subject to adjustment based on the specific circumstances and scale of the asset pool.

Hot Topic Three: Interpretation of the Guidelines on the Internal Audit of Commercial Banks

Impact of Guidelines on Internal Audit

On 16 April 2016, the China Banking Regulatory Commission (CBRC) announced amendments to the *Guidelines on the Internal Audit of Banking Financial Institutions* and issued the *Guidelines on the Internal Audit of Commercial Banks* ("Internal Audit Guidelines"), effective immediately.

With continued exposure to risk and the emergence of more innovative financial products in the banking sector, internal audit is playing an increasingly important role as the third line of defence for internal control. By making revisions in the following areas, the Internal Audit Guidelines aim to accelerate the formulation of commercial banks' internal audit system, improve the independence, effectiveness and standardisation of internal audit, optimise corporate governance and organisational structures, enhance internal control and risk management capabilities and strengthen the supervisory roles of regulators to safeguard the sound operation of commercial banks.

Improving internal audit organisational structures and enhancing the independence of an internal audit

Organisational structures: The Internal Audit Guidelines explicitly require commercial banks to establish an independent and vertical internal audit system, and ensure that the board of directors ~~to~~ assume the ultimate responsibility for the independence and effectiveness of internal audit. In addition, the Internal Audit Guidelines provide further clarifications to:

- The roles and responsibilities of the board of directors, audit committee and chief internal auditor (or the head of the internal audit department) in internal audit;
- The supervisory roles of the board of supervisors; and
- The roles of senior management in internal audit, such as providing support to ensure adequate internal audit resources are in place, reporting to the audit committee on a regular basis and taking rectification actions based on the findings and recommendations raised by internal audit.

Independence: The Internal Audit Guidelines stipulate that internal audit shall be conducted under the principles of independence and objectivity and independent of a bank's business operations, risk management, and internal control compliance. The majority of audit committee members shall be independent directors. This requirement is more stringent than that of the *Guidelines on the Internal Audit of Banking Financial Institutions*, which only required the majority of audit committee members to be non-executive directors.

Hot Topic Three: Interpretation of the Guidelines on the Internal Audit of Commercial Banks (continued)

Impact of Guidelines on Internal Audit

Accelerating the establishment of the internal audit system and clarifying internal audit procedures

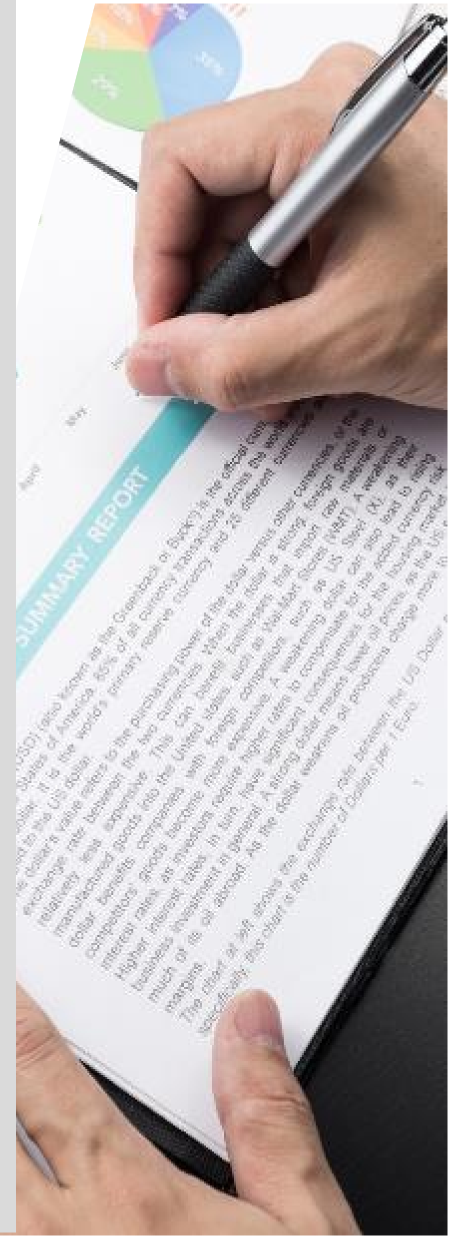
In order for the internal audit to better benefit commercial banks' internal control and risk management, the Internal Audit Guidelines revised the coverage of internal audit to include new matters such as the adequacy and effectiveness of corporate governance, rectifications of the issues identified by regulators, and audit work related to the areas specified by regulators.

With regards to institutional requirements, the Internal Audit Guidelines prescribe that commercial banks shall develop an internal audit charter to be approved by the board of directors and submitted to regulatory bodies for recordkeeping purposes. The Internal Audit Guidelines also specify the basic matters to be included in the charter. In terms of audit procedures, the Internal Audit Guidelines provide detailed standards on how to perform specific work in internal audit procedures, which include the formulation and execution of an internal audit plan, selection of audit approaches, recording of audit procedures and conclusions, treatment and follow-up of audit findings, audit quality control and self-assessment, and expressly state that internal audit results and rectifications shall be considered as important evidence for performance evaluation of the auditee.
These standards can help commercial banks accelerate the establishment and enhancement of their internal control systems, provide institutional guarantees to standardise internal audit work and ultimately make internal audit more comprehensive, effective and rewarding.

Standardising the outsourcing of internal audit activities

In order to curb non-compliance around the outsourcing of commercial banks' internal audit activities, the Internal Audit Guidelines devote a chapter to internal audit outsourcing and expressly forbid the outsourcing of a commercial bank's internal audit function, it is only allowed to outsourcing limited and particular internal audit activities.

The Internal Audit Guidelines require commercial banks to build a rigorous system for internal audit outsourcing activities, and forbid the outsourcing of such activities to their current external auditors or a third party that has provided advisory services for any auditee of the bank within three years. The Internal Audit Guidelines only allow commercial banks to outsource a limited number of special internal audit activities to a third party. In the event of such outsourcing, the bank's internal audit charter shall be observed, the board of directors shall take ultimate responsibility and a mechanism for the transfer of knowledge shall be established to improve professional competence and skills of the internal audit department.



Hot Topic Three: Interpretation of the Guidelines on the Internal Audit of Commercial Banks (continued)

Impact of Guidelines on Internal Audit

Clarifying regulatory assessment areas and approaches

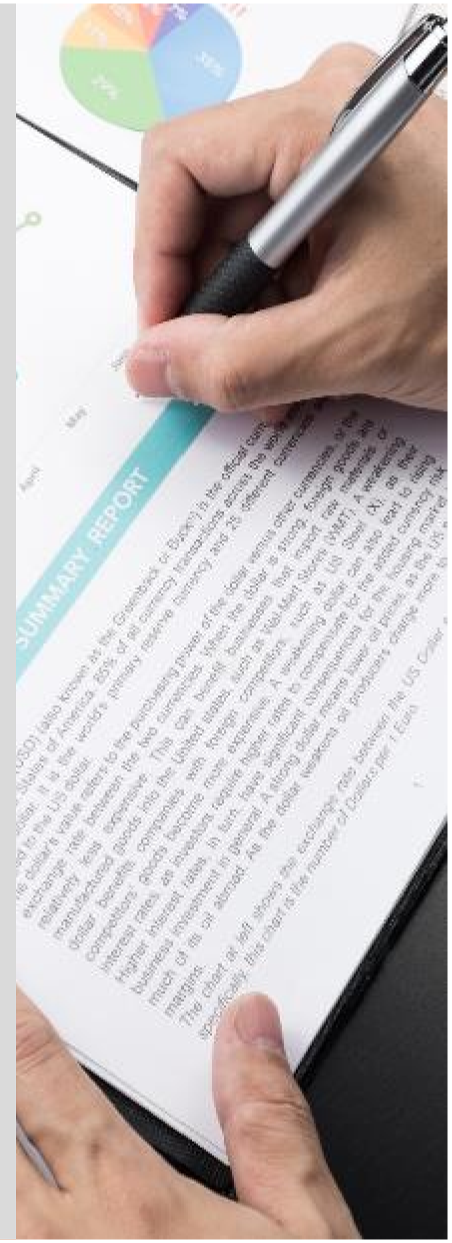
With the release of *The Internal Audit Function* in Banks by the Basel Committee in June 2012, a rapidly changing financial environment in China and a growing number of internal and external opportunities and challenges across the banking sector, communication between regulators and the internal audit function of commercial banks is becoming increasingly important.

According to the regulatory assessment section of the Internal Audit Guidelines, the internal audit department of a commercial bank shall build a mechanism to facilitate communication with banking regulators and hold regular discussions on key risks that a bank faces, measures taken to address such risks and the results of these measures. In addition, the Internal Audit Guidelines clarify matters that the internal audit department of a commercial bank needs to report to regulators, and prescribe that regulators can require the internal audit of a commercial bank to perform audits of a specified area. Regulators can also conduct an overall assessment of the effectiveness of the internal audit of a commercial bank through offsite supervision, on-site inspection, interviews and other approaches. The effectiveness of the internal audit and rectification results will be considered as part of the regulators' assessment on and rating of the overall effectiveness of a commercial bank's corporate governance and internal control.

Others

The Internal Audit Guidelines proposed different management requirements for the banking groups, and small and medium-sized rural financial institutions.

The Internal Audit Guidelines require a banking group to establish an internal audit system commensurate with its scale, risk appetite, and complexity at the group level, and ensure that its internal audit covers all businesses and institutions within the group. A rural bank, however, has certain flexibility, and can establish its audit committee, internal audit department, internal audit posts and other internal audit functions at its discretion, on the premise of ensuring effective execution of audit supervision and activities.



Hot Topic Three: Interpretation of the Guidelines on the Internal Audit of Commercial Banks (continued)

Response Measures by Commercial Banks

Following the release of the Internal Audit Guidelines, many commercial banks have performed a gap analysis between their existing situations and the new requirements and specific rules. The key focus areas are:

Review of the composition of audit committee members and timely appointment of new independent directors

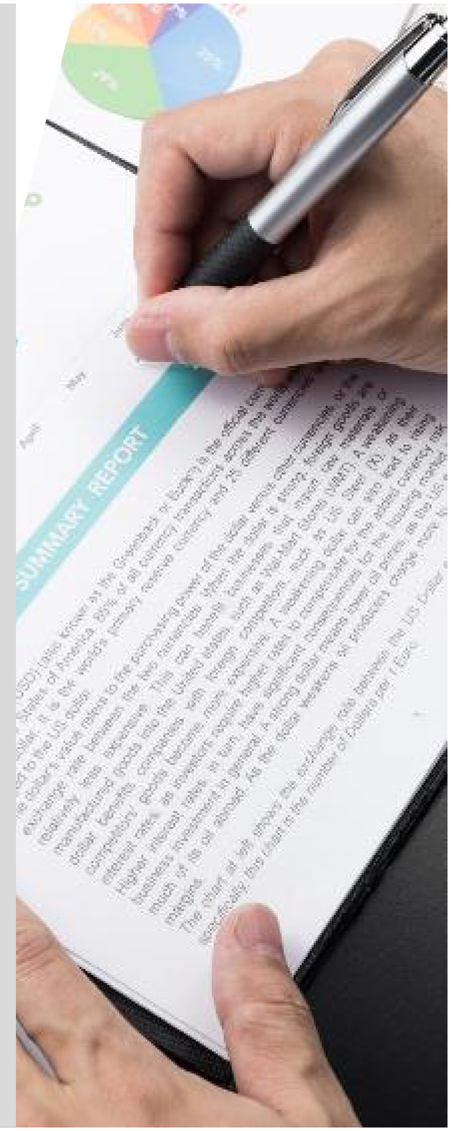
Although the Internal Audit Guidelines stipulate that the majority of audit committee members of a commercial bank should be independent directors, this requirement has no substantive impact on listed commercial banks in China. This is because they have already complied with a series of more stringent rules and regulations on corporate governance and internal control (the Guidelines on the Operation of the Audit Committee of Companies Listed on the Shanghai Stock Exchange issued by the Shanghai Stock Exchange on 19 December 2013, for instance, stipulate that independent directors should make up over half of the audit committee members).

However, in the audit committees of some wholly foreign owned enterprise (WOFE) banks, non-executive directors, rather than independent directors, play a major role. Those banks have started to appoint more independent directors. They should submit their application and status report to regulators in a timely manner to ensure complete coverage and effective execution with the Internal Audit Guidelines.

Review of internal audit charters, procedures and manuals, and active communication with regulators

Many commercial banks have completed a gap analysis against the specific requirements of the Internal Audit Guidelines for internal audit charters, procedures and activities, and have begun to revise their internal system and manuals to ensure compliance with those regulatory requirements. According to the Internal Audit Guidelines, the revised internal audit charter shall be approved by the board of directors and submitted to regulators for recordkeeping purposes.

Regarding the Internal Audit Guidelines for regulatory assessments, commercial banks should engage in active communication with regulators through an official communication mechanism and regularly discuss, the identified key risks, the measures to address such risks and rectifications (if any) and other matters.



Hot Topic Four: China Opens up its Bank Card Clearing Services Market

Introduction to bank card clearing

Bank card clearing refers to a process of settlement and transfer of money between banks, and between banks and card settlement merchants after consumption or payment by cardholders. The clearing happens between the same bank, a bank and another, as well as banks and merchants. Bank card clearing institutions refer to corporate legal persons conducting bank card clearing business. Bank card clearing institutions have achieved large-scale issuance and a wide settlement of bank cards, as well as enhanced efficiency of bank card transaction dealings and fund settlement through establishing a unified bank card clearing brand, improving clearing standard systems and business regulations, and involving card issuers and acquirers.

Timeline of China's bank clearing market

1990s

International card organisations entered the China market. MasterCard set up its Beijing office in 1988. Five years later, VISA also established its office in China.

March 2002

Permitted by the State Council, China UnionPay (CUP) was established after approval from the People's Bank of China.

As of 2014

As required by regulators , all RMB bank cards must use CUP's identification and code. Further, POS networks independently established by banks were also incorporated into CUP's network.

April 2015

The State Council released the Decision to Implement Market Access Administration of Bank Card Clearing Institutions, conducting access administration on the bank card clearing market.

July 2015

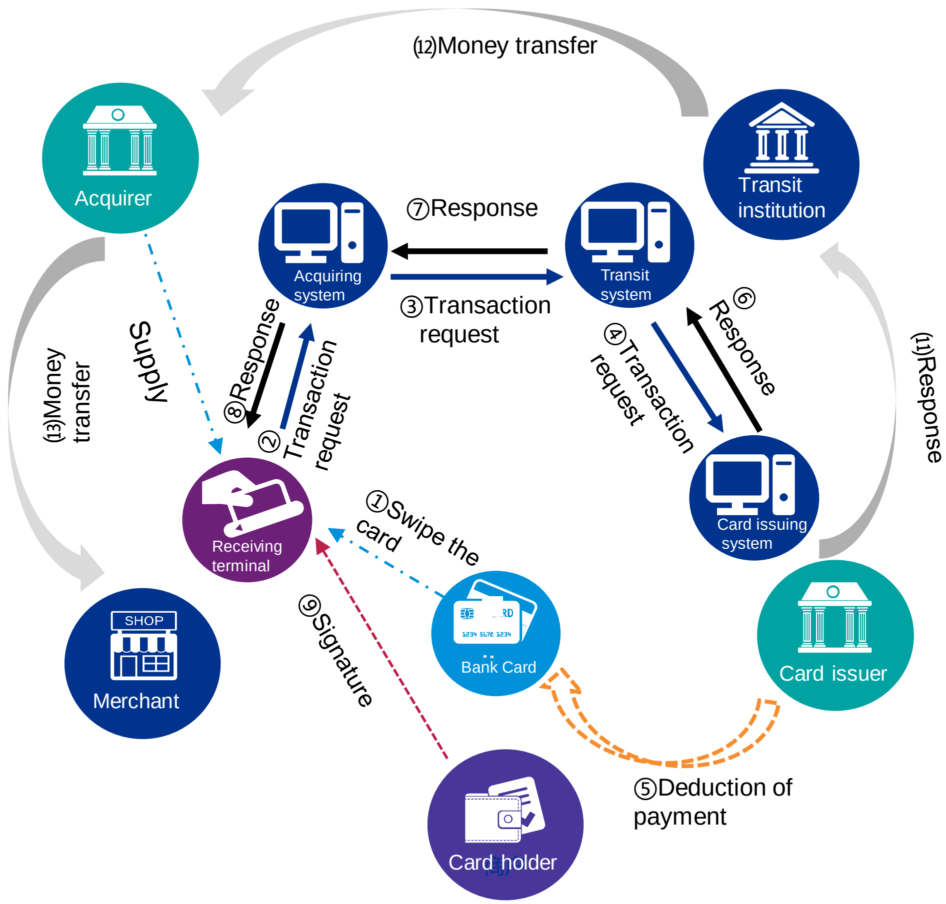
To promote the sound development of the bank card clearing market in China, regulate the administration of bank card clearing institutions, and protect the parties' lawful rights and interests, the People's Bank of China drafted the Measures for the Administration of Bank Card Clearing Institutions for public comment.

June 2016

The people's Bank of China released the Measures for the Administration of Bank Card Clearing Institutions (the "Measures") on 7 June, 2016, demonstrating the opening up of China's bank card clearing market to competition.

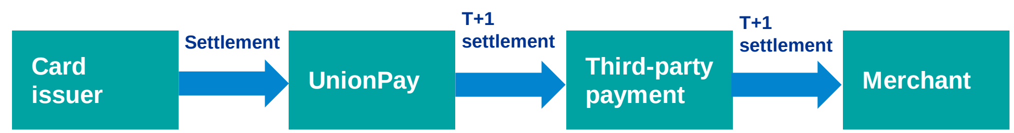
Hot Topic Four: China Opens up its Bank Card Clearing Services Market (continued)

Bank card clearing business model at a glance



Introduction to the business model

After the consumer makes a bank-card payment using a POS terminal at the acquirer's chartered merchant (step 1), the transaction request will be transferred to the acquirer's acquiring system via its POS terminal placed at the chartered merchant (step 2). It will then be passed on to CUP's transit system (step 3) and then to the bank (step 4). The bank checks the balance in the card and makes a deduction of payment accordingly (step 5). If the balance is confirmed as sufficient to complete the transaction, the bank will respond to the transaction request by providing feedback successively to CUP, acquirer's acquiring system and the merchant's POS terminal (steps 6, 7, 8). The POS terminal generates a transaction certificate which will be signed by the cardholder to confirm the completion of the transaction (step 9). The acquirer reconciles with CUP on a daily basis to calculate the clearing fund (step 10). The bank then transfers the clearing fund to CUP (step 11) who will transfer the remaining clearing fund to the acquirer's reserve fund on the next day, after deducting the commission charges for CUP and the bank (step 12). After deducting its own commission charges, the acquirer transfers the remaining clearing fund to the merchant's bank account the next day (step 13) to mark the formal completion of the transaction.

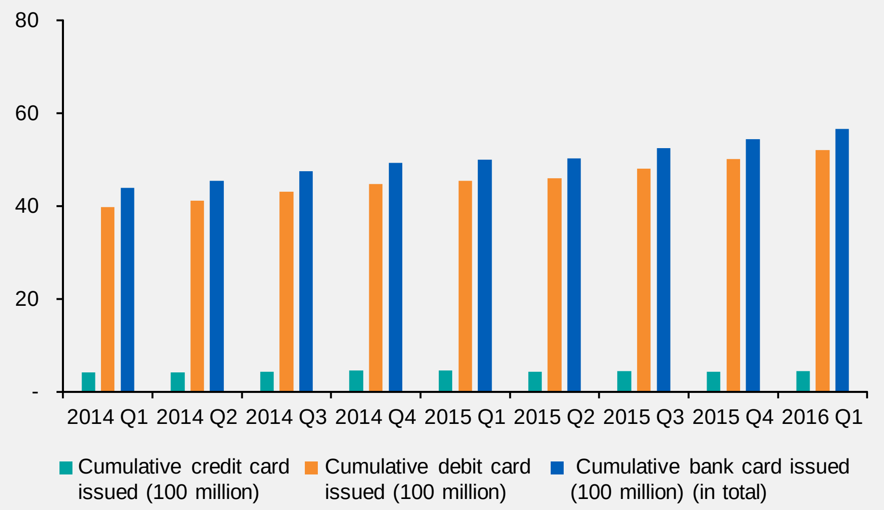


Introduction to the charging model

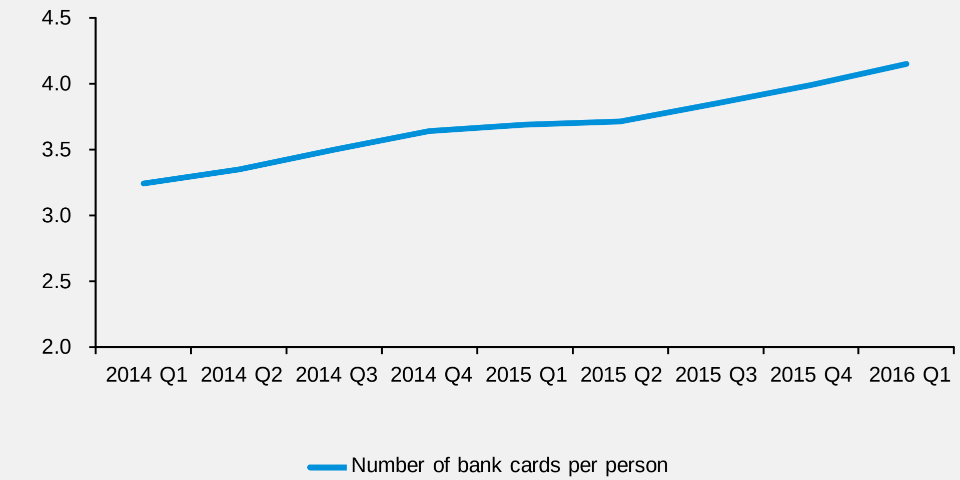
As required by relevant regulations, the merchant using the POS machine is subject to a commission charge for each card swiping, of which 70% is charged by the card issuer, 20% by the bank providing the POS machine or third-party acquirer, and 10% by CUP.

Hot Topic Four: China Opens up its Bank Card Clearing Services Market (continued)

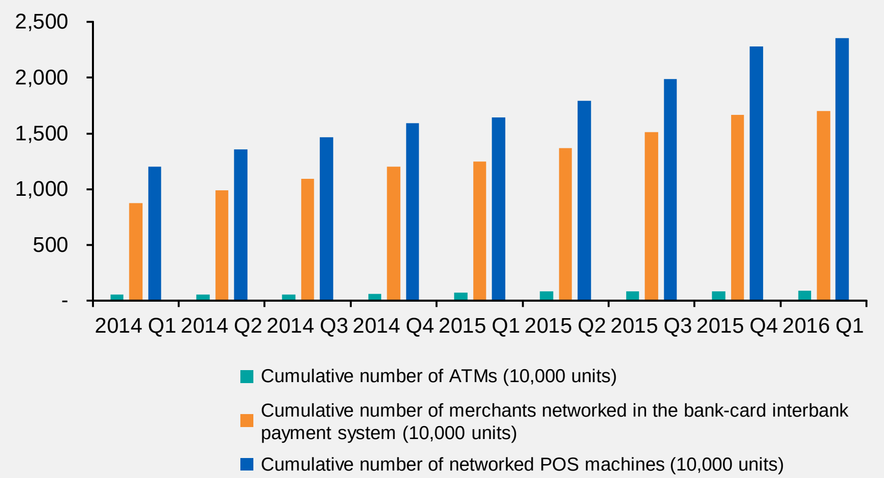
Steady increase in volume of bank card issuance

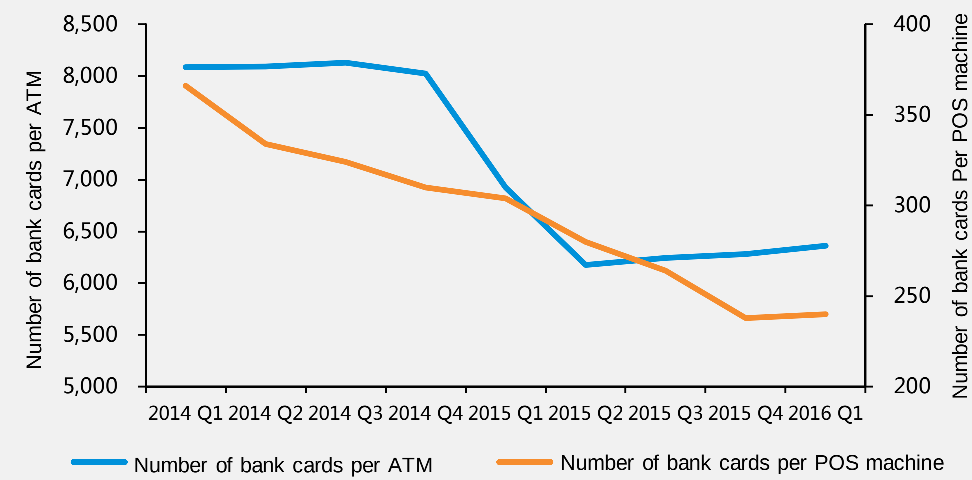


Overview of status of China's bank card clearing services market



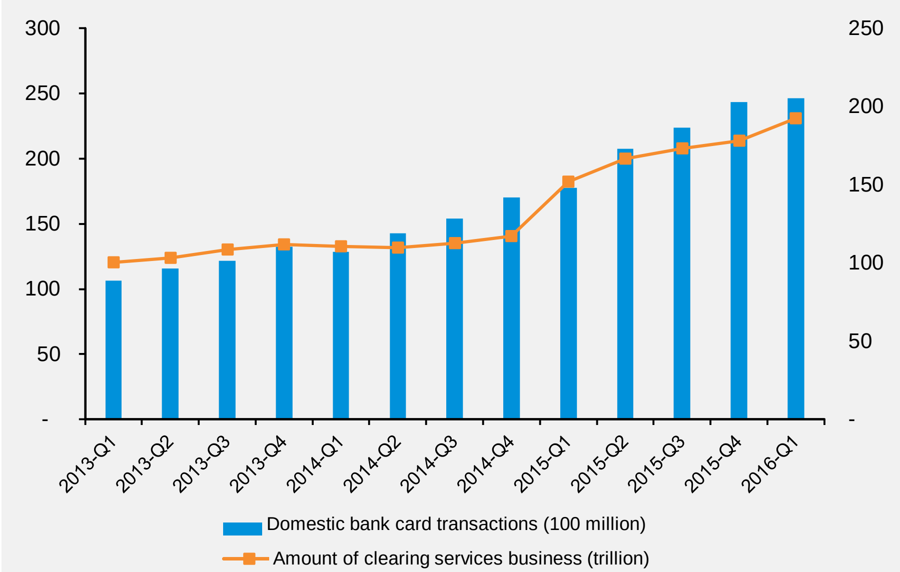
Sustained improvement in bank-card acceptance



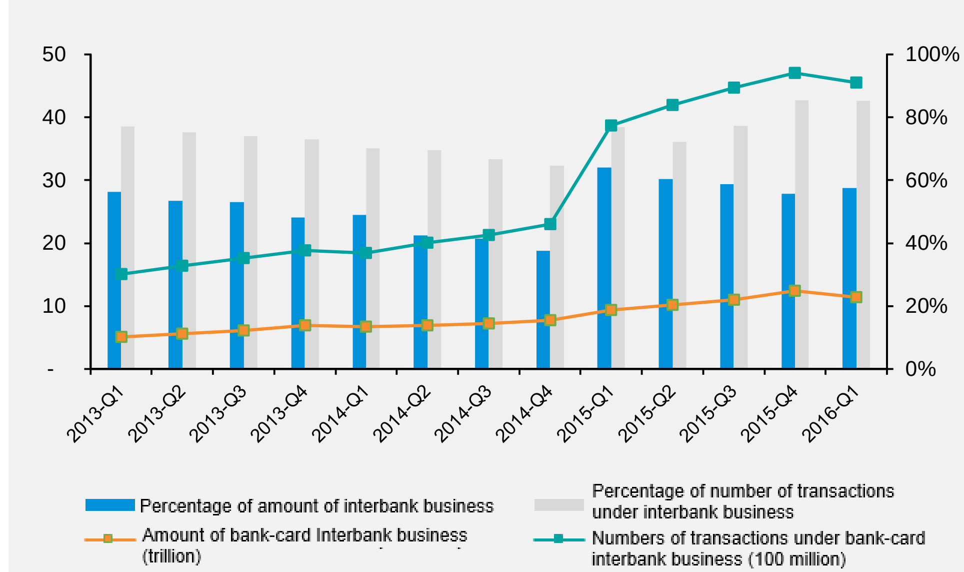


Hot Topic Four: China Opens up its Bank Card Clearing Services Market (continued)

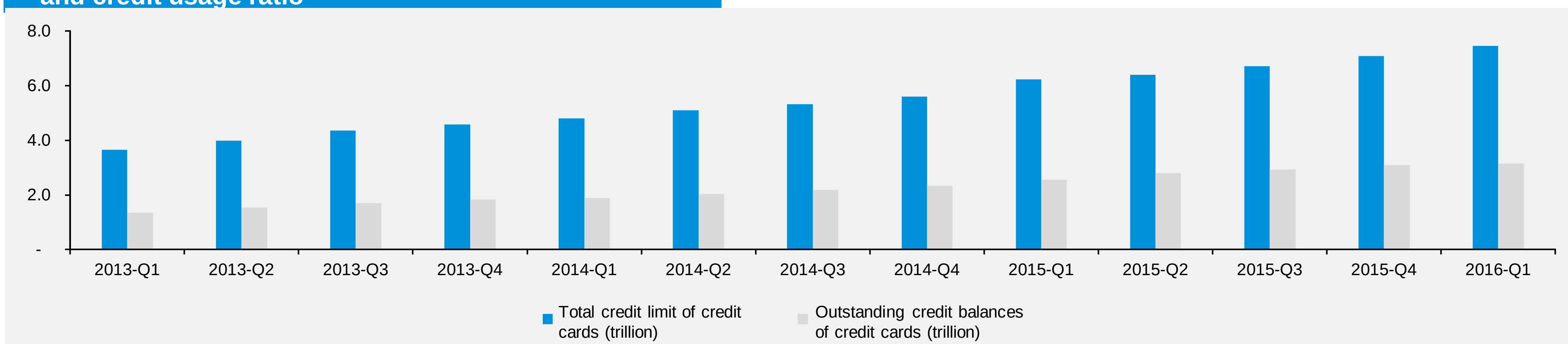
Sustained growth in bank card transactions



Significant increase in consumer banking business



Continuous increase in both credit scale of credit cards and credit usage ratio



Hot Topic Four: China Opens up its Bank Card Clearing Services Market (continued)

Major regulatory requirements and interpretation of Measures for the Administration of Bank Card Clearing Institutions

Measures for the Administration of Bank Card Clearing Institutions	Interpretation
Article 4 A bank card clearing institution shall ensure safe, stable and efficient operation of basic facilities for bank card clearing services in accordance with the laws and regulations on national security and national cyber security. The basic facilities for bank card clearing services shall meet the protection requirements of national information security. The bank card clearing institution shall use commercial code products approved by the National Administration for Code Allocation and shall not outsource their core business systems.	▪ Article 4 provides basic requirements and principles for the safe, stable and efficient operation of basic facilities for bank card clearing services, and makes it clear that their core business systems shall not be outsourced.
Article 5 For the purpose of financial information security, when bank cards issued by domestic banks are used in transactions, the transactions shall be processed by domestic banks through their basic facilities for bank card clearing services.	▪ Article 5 provides guidelines on domestic banking business to protect China's sovereignty over financial information, and information security and transactions security.
Article 11 The registered capital of a bank card clearing institution shall be no less than RMB one billion, and the capital contributor shall use proprietary funds and shall not use entrusted funds and debt capital.	▪ Article 11 provides clear requirements for the sources and the amount of capital contribution to ensure financial stability and sustainability of bank card clearing institutions.
Article 12 In a bank card clearing institution, 50% or more directors (including the chairman and vice chairman) and all senior executives shall have corresponding professional knowledge for their positions, no less than five-year of experience in banking, payment or clearing,–good conduct and reputation, and independence required for their positions. In addition to the circumstances prescribed in the Company Law of the People's Republic of China, whoever falls under any of the following circumstances shall not serve as the director or senior executive of a bank card clearing institution. (A) have a record of any serious violation of laws or criminal record. (B) It has not been five years since a director, supervisor, or senior executive has been disqualified for the office by the financial regulatory authority for his or her violation of any law or discipline. (C) It has not been two years since a former director, supervisor, or senior executive of an entity that has been given any administrative penalty by the financial regulatory authority, who was personally liable or was directly liable as a leader for the administrative penalty, is given the administrative penalty.	▪ Article 12 sets out requirements for the qualification of directors and senior management personnel in the bank card clearing institutions to ensure that the relevant personnel meet the basic requirements for compliance and professional knowledge and experience required for their positions, which will help bank card clearing institutions improve their operational performance and corporate governance.

Applications and approval for setting up bank card clearing institutions

The licence application process consists of a preparatory application and an opening application. The applicant is required to submit a preliminary application to the central bank in accordance with the requirements of *Measures for the Administration of Bank Card Clearing Institutions*. The central bank will inform the applicant of its decision **within 90 days** after receipt of the preliminary application. The applicant must complete certain preparatory work **within one year** from the date of preliminary approval and file a second application with the central bank for the opening of its business upon completion of preparation. The applicant will then obtain an approval document for the opening of its business and a licence for the bank card clearing business, and must commence its bank card clearing business **within six months**.

Hot Topic Four: China Opens up its Bank Card Clearing Services Market (continued)

Impact of opening up the bank card clearing services market

The release of *the Administration of Bank Card Clearing Institutions* set the stage for opening up the bank card clearing services market. In the near future, domestic commercial banks, international card organisations and third-party payment processors are expected to gain a share of the bank card clearing services market, which will change CUP's dominance in the market.

As different bank card clearing institutions charge different service rates in payments, bank transfers and cash withdraws, the opening up of the bank card clearing services market will enable consumers to benefit from a number of competition strategies. However, since ~~the~~ CUP has been established for 14 years, it has set up a robust set of UnionPay card facilities, including clearing standards, business rules and transaction process system. This will naturally create formidable barriers to potential entrants, and CUP's dominance in the bank-card clearing services market will remain unchanged in the short term.

At present, the competitive pressure faced by CUP stems mainly from major domestic commercial banks, which nationwide business outlets and merchants accepting their credit cards. China's bank-card clearing services market is booming at a high average growth rate, which provides new business opportunities for these banks. As a consequence, as long as they are not restricted by the government, the four state-owned banks will probably issue bank cards independently to grow their market share in bank-card clearing services.

The major state-owned banks and joint-stock banks are researching and preparing to enter the services market as soon as possible.

Opening up China's bank-card clearing services market will play a significant role in improving the efficiency of financial services, optimising the commercial market environment and promoting consumption.

Academic Insights: The Effects of the Inclusion of the Renminbi in the SDR Basket on Cross-border Capital Flow

The inclusion of the Renminbi (RMB) in the Special Drawing Right (SDR*) basket is a key milestone in the opening up of China's financial sector and the internationalization of the RMB. This not only represents recognition by the international community of China's reform and continued process of opening up, but also indicates that China will further integrate into the international community. The inclusion of RMB in the SDR basket will promote further RMB internationalisation, the opening up of Chinese capital investment and a more market-oriented RMB exchange rate regime. Against the backdrop of RMB devaluation, the rising interest rate of the dollar and the approaching cycle of rising interest rates in the US, the trend of cross-border capital flowing back to the US is becoming clearer. As a result, the prediction of cross-border capital flow, the analysis of its effects on the economic and financial sector in China, and the development of corresponding solutions are significant concerns.

**The Special Drawing Right ("SDR") is an artificial book asset, first launched in 1969 and allocated by the IMF based on its member countries' quota subscriptions, which could be used to repay the IMF debt and supplement member countries' official balance of payments deficit. The value of the SDR is currently based on a basket of five major currencies: the US dollar, euro, renminbi, yen and pound sterling.*

Author

Zhou Guangyou
Institute for Financial Studies, Fudan University

Academic Insights: The Effects of the Inclusion of the Renminbi in the SDR Basket on Cross-border Capital Flow (continued)

1. Prediction of the cross-border capital flow trend after the inclusion of RMB in the SDR basket

The predicted effects of the inclusion of RMB in the SDR basket on cross-border capital flow are as follows:

(1) Accelerated cross-border capital flow

The inclusion of RMB in the SDR basket is a key milestone in the process of China's economic reform. This not only represents recognition by the international community of China's reform continued process of opening up, but also indicates that China will further integrate into the international community. The inclusion of RMB in the SDR basket will promote further RMB internationalisation, the opening of Chinese capital investment and a more market-oriented RMB exchange rate regime. On the other hand, foreign direct investment and attracting foreign direct investment are comparatively stable items in the international balance of payment. These items are not likely to be affected by short-term elements. However, due to the continued implementation of China's 'Going Global' strategy and 'One Belt, One Road' initiative, outward foreign investment will be accelerated and long-term capital outflow based on international industrial transfers and the adjustment on the international division of labour will continue to grow. All these factors contribute to the further acceleration of Chinese cross-border capital flow.

(2) Two-way flow of cross-border capital becomes normalised

The inclusion of RMB in the SDR basket will normalise the two-way flow of cross-border capital and perhaps lead to a greater outflow than inflow in the short term. The expectation of a weaker RMB will increase due to the inclusion of RMB in the SDR basket. But in the long term, since China's economy is maintaining strong growth momentum compared to other economies and sufficient foreign reserves are still available, it is unlikely that there will be significant RMB devaluation, a sudden halt of capital inflow, large-scale capital flight or other abnormal capital flows. In the meantime, the US economic recovery is strained by economic weakness across the globe, irrespective of the fact that the Federal Reserve has been adopting an interest rate hike policy since the end of 2015. In such a situation, the interest rate hike is expected to be carried out in a slow and stable manner. Therefore, the currency policy may see a long 'grace period' before the next rate hike. This will probably cause international capital flow to China periodically, and the monthly volatility of funds outstanding for foreign exchange is expected to see an upward trend in 2016.

(3) No basis for significant devaluation or appreciation of RMB exchange rate

Since the inclusion of the RMB in the SDR basket, there have been varied opinions with respect to the trend of the RMB exchange rate. Foreign investment banks generally proclaim to short the RMB. Domestically, some experts support the opinion of less policy interference from the central bank since the inclusion of RMB in the SDR basket because they think it is an excessive cost to stabilise the RMB. Others believe that RMB devaluation should be achieved in one go. In the short run, RMB devaluation is expected to experience high pressure because of the appreciation of the main international currencies and the increase of the dollar interest rate by 25 basis points, leading to more capital outflow than inflow. Overall, the fluctuation of the RMB exchange rate is currently stable but slowly depreciating. There is no basis for a significant devaluation or appreciation of the RMB exchange rate based on China's economy growing at a higher rate and the existence of a reasonable trade surplus. The inclusion of the RMB in the SDR basket will likely increase the demand of RMB assets in some countries' foreign reserves, but its influence on the RMB exchange rate is mild due to the limited and gradually-increasing demand. Furthermore, the demand of RMB assets from institutions and individuals is also increasing gradually. All these factors will not have an obvious influence on RMB exchange rate movements.

Academic Insights: The Effects of the Inclusion of the Renminbi in the SDR Basket on Cross-border Capital Flow (continued)

2. Status quo of Chinese capital flow and relevant implications

With respect to international capital flow, there could be a smaller volume of global capital flowing to emerging economies, or even capital reflow. According to the People's Bank of China ("PBOC"), Chinese capital outflow continued at a slower pace during the fourth quarter of 2015. Based on relevant statistics and RMB deposit data from the PBOC (a decrease of USD 24 billion and USD 80 billion in the fourth and third quarter of 2015, respectively), offshore RMB deposits are also decreasing at a slower rate. However, the capital outflow during October and November ~~of~~ 2015 are still increasing, according to the information from Hong Kong Monetary Authority. The price trend of the first quarter of 2016 implies that ~~the~~ capital outflow has been exacerbated by various factors, compared to the second half year of 2015. The RMB rate regulation carried out by the PBOC in January this year was understood by market participants as a signal of a weaker RMB against the dollar. Subsequently, the interbank offered rate for offshore RMB surged to a higher level than that of August or September 2015. Compared with the third quarter of 2015, the differential between onshore and offshore spot exchange rates has expanded, while forward exchange rates for offshore RMB has seen a sharp devaluation. Also notable is the sharp contrast between the significant fluctuation of the currency market and bilateral exchange rates, and the limited fluctuation of RMB against the basket of currencies. Abnormal flows of capital will likely have adverse effects on the financial and economic sector.

Cross-border capital flow is mainly manifested in changes in capital and financial items, foreign reserves, foreign direct investment and direct investment of financial institutions.

(1) Capital and Financial Items

The statistics from the State Administration of Foreign Exchange ("SAFE") illustrate that capital and financial items have continued to experience deficits since the first quarter of 2014. This trend is hard to change despite the rebound during the fourth quarter of 2015 and the year so far in 2016 (see Diagram 1). This represents an apparent trend of Chinese capital outflow regarding capital and financial items.

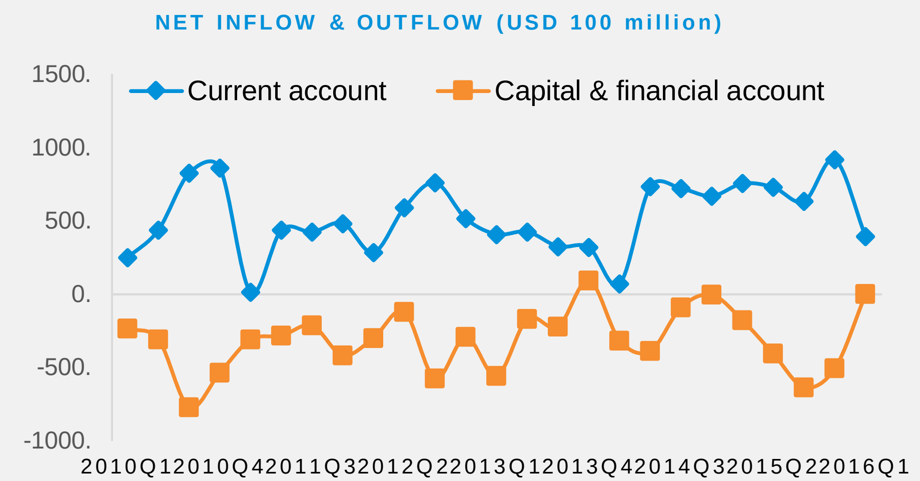


Diagram 1: Net change in inflow & outflow of current account compared to capital & financial account

Source：SAFE

2. Status quo of Chinese capital flow and relevant implications (continued)

(2) Foreign reserves

In June 2014, China's foreign exchange reserves reached a peak of USD 3.99 trillion, far more than any other nations, representing one third of total foreign currency reserves worldwide. The statistics show that the accumulation of huge foreign exchange reserves is mainly the result of a continuing surplus under the current account. However, since September 2014, China's foreign exchange reserves has been falling. This downward trend accelerated in the second half of 2015, and hit a low point of USD 3.21 trillion in June 2016, while remaining at a lower level (Diagram 2). The decline in foreign exchange reserves is an important symbol of cross-border capital outflow. The expected depreciation of the RMB, China entering a cycle of rate cuts, downward economic pressure and other factors are jointly contributing to continuous cross-border capital outflow.

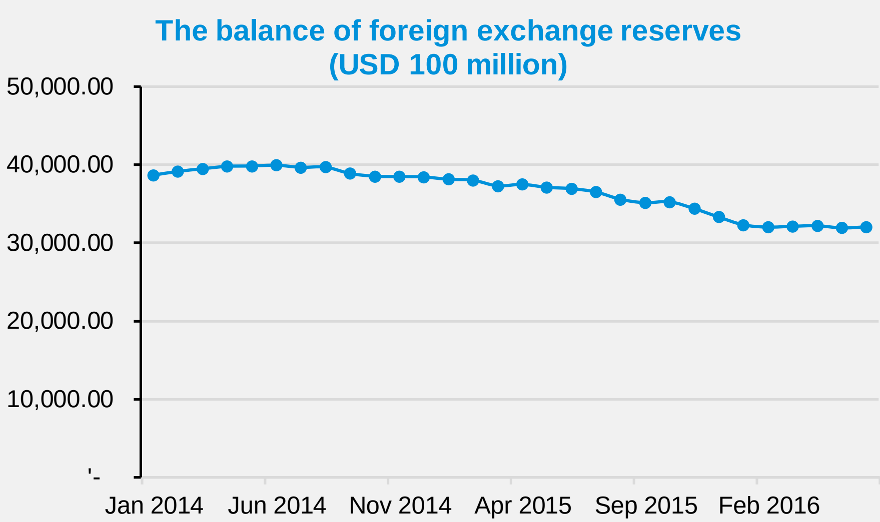


Diagram 2: The movement trend of the balance of China's foreign exchange reserves since 2014

Source：PBOC

(3) Foreign direct investment ("FDI")

FDI is an important indicator of the long-term capital flow of a country. FDI in China has slowed down since 2011 with the outflow of short-term capital. FDI decreased in 2012, grew in 2013 and 2015, and recovered slightly to USD 126.27 billion in 2015 (Diagram 3). The absolute amount of FDI has maintained general growth, but it is likely to reach an inflection point followed by a fluctuating fall. This declining trend, once settled, will likely cause an expectation of further capital outflow.

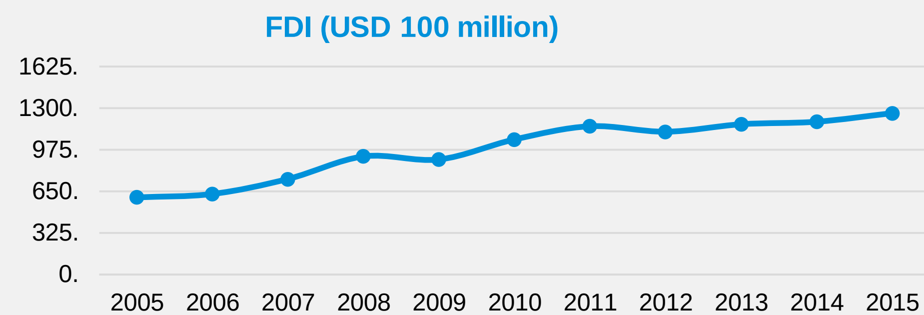


Diagram 3: The trend of FDI

Source：SAFE

Expectations over RMB devaluation, combined with the opinion held by some international organisations that the Chinese economy is facing great downward pressure, have led some foreign industrial capital and financial capital institutions to focus on other emerging nations. Therefore, this is decreasing the investment volume in, and capital investments flowing to, China. Meanwhile, due to the US economic recovery, interest rate hike expectations and the appreciation of other currencies, capital could return to the US due to the need of cross-border capital to mitigate the risk of RMB devaluation.

2. Status quo of Chinese capital flow and relevant implications (continued)

(4) Direct investment of financial institutions

According to SAFE statistics, in the first quarter of 2016, direct investment from foreign investors on Chinese financial institutions amounted to USD 2.414 billion of capital inflow, USD 1.878 billion of capital outflow and USD 536 million of net inflow. Direct investment from Chinese financial institutions on foreign entities amounted to USD 3.06 billion of capital outflow, USD 1.283 billion of capital inflow and USD 1.778 billion of net outflow (Table 1).

Table 1: Direct investment flow of financial institutions (quarterly)
Unit: USD 100 million

Item	2016 Q1
Net foreign direct investment inflow in China	**5.36**
Inflow	24.14
Outflow	18.78
Net foreign direct investment outflow	**17.78**
Inflow	12.83
Outflow	30.61

Source：SAFE

Attention should be paid to China's capital outflow. Comparing the second quarter of 2014 to the second quarter of 2015, there was a 33% increase in the current account surplus. However, the foreign exchange related reserve assets have decreased by USD 74.9 billion cumulatively, including the decrease of USD 73.6 billion in foreign exchange reserves. Aside from the effects of the expanding net outflow of capital items, capital outflow under the net errors and omissions of cross-border fund flow hit USD 254.7 billion, an increase of 5.62 times compared to the second quarter of 2014. Net errors and omissions are negative values because of statistical and economic factors, including the over-estimation of revenue and the under-estimation of expenses. Some part of the negative net errors and omissions could be a part of the outflow of illegal capital (capital flight), and attention should be paid to this.

In summary, due to the expectation of a weaker RMB in the short term after the inclusion of the RMB in the SDR basket, clear motives exist for cross-border capital outflow. These mainly include an unfavourable balance of capital and financial items, combined with a decrease in foreign reserves and foreign direct investment. In terms of the motivation for capital inflow, the inclusion of the RMB in the SDR basket is an important sign that the RMB is becoming a key international reserve currency. In the long run, the RMB will become an international currency matching China's economic power and international standing. Therefore, cross-border capital inflow will likely follow a stable and gradually increasing trend in the long term.

Currently, there are stronger motives for capital outflow than inflow. Foreign reserves have continued to decrease, which, to a certain extent, has lessened the PBOC's capability to regulate and control the exchange rate. If not appropriately dealt with, this may have adverse effects on China's financial security and stability.

Academic Insights: The Effects of the Inclusion of the Renminbi in the SDR Basket on Cross-border Capital Flow (continued)

3. Suggestions

The inclusion of the RMB in the SDR basket is a key milestone in the opening up of China's financial sector and the process of RMB internationalisation. The two-way flow of cross-border capital will become normalised in the future. In the short term, there is expected to be pressure on RMB devaluation and an excess of capital outflow rather than inflow, although there is no reasonable basis for a significant devaluation. In the long run, China, remains a main destination for the inflow of international capital. The country's cross-border capital flow will remain stable with positive prospects of RMB assets from the market, but the actual influence and pressure from capital outflow in China's economy still exist. Here are some suggestions and opinions for reference and discussion.

(1) De-pegging from the USD gradually to improve the flexibility of the RMB exchange rate

It is imperative to unpeg the RMB from the USD gradually and to refer to a basket of currencies to improve the flexibility of the RMB exchange rate. This is not only to meet the requirement of independent changes to the exchange rate after being included in the SDR basket, but also to develop China's economic and financial sector. The RMB has appreciated against the USD by more than 30% since the exchange rate reform in 2005. Recently, the quantitative easing policy adopted in the US and the expectation of a rate hike have led to the significant appreciation of the USD. Although the appreciation of the RMB against the USD has basically ceased, the pegging of the RMB to the USD has caused the RMB to appreciate against other currencies. The rise of the real effective exchange rate by 56% has had certain negative effects on the international competitiveness of China's real economy. Therefore, it is important to unpeg the RMB from the USD – which could improve its flexibility and decrease direct interference in the foreign exchange market – in order to reform the mechanisms for forming and adjusting exchange rates in China. In practice, appropriate steps and measures should be taken. The PBOC also maintains the power to step in when significant fluctuations of the RMB rate occur. This reduces the impact of reforms on the mechanism for forming the exchange rate on financial market and economic operations in order to transition smoothly.

(2) Continue to implement the managed floating exchange rate regime and improve the mechanism for forming a RMB exchange rate

Since the inclusion of the RMB in the SDR basket, the managed floating exchange rate regime should be further implemented, on which the market-oriented RMB exchange rate mechanism should be improved and the opening of capital items will be promoted in an orderly and gradual manner. In order to optimise this rate forming mechanism, the transaction parties of the inter-bank market should be expanded, trading products enriched and the market maker system improved. A varied inter-bank foreign exchange market covers RMB in exchange for foreign currency spot transactions, forwards and swap transactions. It also covers the transaction of currency swaps and options, as well as the transactions between foreign currencies, which all provides a basis for the mechanism for forming a RMB exchange rate. In addition, the flexibility of two-way fluctuation of the RMB exchange rate could be improved through a lively and diversified market, which helps prevent risk-free arbitrage transactions. Commercial banks should more actively participate in foreign exchange-related transactions to propel the market development of RMB and foreign exchange derivatives, and improve the trading mechanisms. The commercial banks should also identify the market price and improve the mechanism for determining the RMB exchange rate while satisfying risk hedging requirements in the market.

Academic Insights: The Effects of the Inclusion of the Renminbi in the SDR Basket on Cross-border Capital Flow (continued)

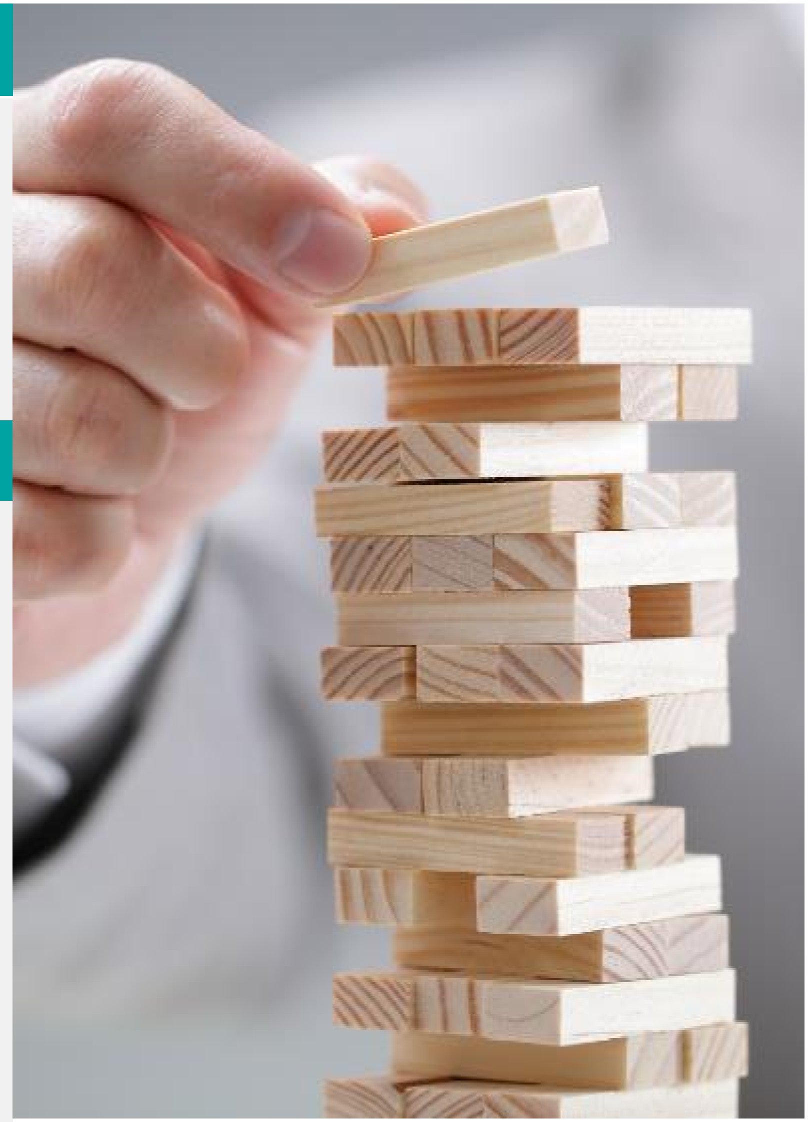
3. Suggestions (continued)

(3) Manage the expectation of RMB depreciation in the market to prevent unilateral RMB depreciation

Currently, the expectation of RMB depreciation can be managed by a middle rate. One solution is to keep the exchange rate at a steady level after a one-time depreciation. Another solution is to keep the current exchange rate steady. Given that the RMB exchange rate has depreciated 4% since August 2015 – which is close to the equilibrium exchange rate – it is reasonable to keep the current exchange rate around that level, with swings capped at a rise or fall of two to three percent. The governor should release a report saying that the exchange rate has been adjusted to the equilibrium level – or close to that level – through various channels such as official notices, Think Tanks and media to mitigate the expectation of RMB deprecation in the market.

(4) Analyse the two-way volatility trend in cross-border capital flow and develop a management strategy

In recent years, economies in Europe and the Americas have been slowly recovering while growth in emerging markets has slowed down. China is facing internal and external challenges during its transformation period, which could lead to more cross-border capital inflow and outflow volatility. Flexible adjustments should be made to counter this two-way volatility in the market. The cross-border capital flow should be managed to attract long-term and medium-term capital – especially the capital that is beneficial to China's industrial structural adjustment and economic transformation – while avoiding the flow of speculative capital. Regulations should be placed on capital flow and its purpose to provide guidance on short-term cross-border capital. For capital that mainly focuses on the domestic capital market – especially the real estate market – risk exposure standards should be set and a strict approval procedure should be implemented to prevent the inflow of speculative capital. On the other hand, a two-way controlling system on the cross-border capital flow should be maintained, and an effective controlling system for capital inflow and outflow established. One of the most important measures is to develop policies to encourage China's enterprises to make overseas investments and lower the restrictions on foreign investments, while improving their quality. More autonomy should be given to enterprises in determining foreign exchange transactions to make it more convenient for them to make payments under the current and capital accounts, and to provide them with more legal channels for capital outflow.



3. Suggestions (continued)

(5) Establish an early warning system for international capital flow to monitor abnormal capital flow

An early warning system for cross-border capital flow is an effective tool to prevent and monitor the transmission of cross-border financial risks. The following indicators should be used:

(1) Domestic macroeconomic indicators such as GDP growth, relative inflation rate and currency circulation, which reflect the macroeconomic stability of a host country.

(2) Domestic micro-financial system operational performance indicators, such as the rate of bank credit growth, leverage ratio, capital adequacy ratio and the non-performing assets to total asset ratio. Other indicators are stock price index growth rates and house price growth indexes in the capital market, which focus on examining the daily operations of financial institutions.

(3) Economic and financial indicators in the international market, such as the current account deficit, ratio of long-term and short-term debt to total external debt, the rate of debt service coverage in the private sector, foreign trade dependence on Europe countries, foreign exchange reserves, exchange rates and interest rates. These indicators reflect the competitiveness of a host country in the international market, and can be used to monitor the host country's external risks and dependence on external factors.

The early warning system can help analyse the errors and omissions in cross-border capital flow to regulate more hidden capital outflow and prevent illicit capital outflow. An emergency response plan can be developed by strengthening the monitoring of cross-border two-way capital flow and analysing the volatility of cross-border capital flow. Measures can be taken to increase the cost of short-term cross-border capital flow with effective controlling methods. This will help reduce the flow of speculative capital and make full use of the regulatory system for abnormal cross-border capital flow. Meanwhile, specific policies and measures for abnormal flows of cross-border capital should be made in due course to improve warning and monitoring systems and regulate the market.

Bibliography

Guan Tao, *Management of International capital flows under the conditions of convertibility*, China Forex[J], 2015, 17

State Administration of Foreign Exchange, *2014 China cross-border capital flows monitoring report* [R], February 2015

Li Bo, *Emerging Market Economics' strategies on the reversal of global capital flow* [J]. Modern Economic Information, 2015, 20:17

Qu Fengjie and Li Liang, *Characteristics and recent trends of cross-border capital flows* [J].Macroeconomic Management, 2015, 11:50-52

Zhang Guangting and Wang Xuguo, *Factors affecting China's cross-border capital flows under the new normal* [J].Public Finance Research, 2015, 04:74-78

Zhang Monan, *China's capital flow in the new era's condition* [N[.China Financial and Economic News, 2015-10-13005

Zong Liang, *Embracing the challenges of two-way volatility of cross-border capital flows* [N].China Economic Herald, 2015-03-17A03

Glossary of abbreviated terms

Bank names

- PBOC – People's Bank of China
- ICBC – Industrial and Commercial Bank of China
- CCB – China Construction Bank
- ABC – Agricultural Bank of China
- BOC – Bank of China
- BCM – Bank of Communications
- CIB – Industrial Bank
- CNCB – China CITIC Bank
- CMB – China Merchants Bank
- SPDB – Shanghai Pudong Development Bank
- CMBC – China Minsheng Bank
- CEB – China Everbright Bank
- PAB – PingAn Bank Co., Ltd
- HXB – Hua Xia Bank Co.,Ltd
- BOB – Bank of Beijing Co., Ltd
- BOJS – Bank of Jiangsu Co., Ltd
- BON – Bank of Nanjing Co., Ltd
- NBCB – Bank of Ningbo Co., Ltd

General terms

- MOF – Ministry of Finance
- CBRC – China Banking Regulatory Commission
- CSRC – China Securities Regulatory Commission
- SAFE – State Administration of Foreign Exchange
- SSE – Shanghai Stock Exchange
- SEHK- The Stock Exchange of Hong Kong
- SHIBOR – Shanghai Interbank Offered Rate
- NIM – Net interest margin

Sources: The banks' 2015 annual reports, 2015 half year reports and 2016 half year reports; KPMG China research

Contact us

KPMG China has around 9,000 professionals working in 17 offices: Beijing, Chengdu, Chongqing, Foshan, Fuzhou, Guangzhou, Hangzhou, Nanjing, Qingdao, Shanghai, Shenyang, Shenzhen, Tianjin, Xiamen, Hong Kong SAR and Macau SAR.

Our dedicated Financial Services team brings together partners from the Audit, Tax and Advisory practices and is closely linked to other member firms in the KPMG network.

For more information, please contact one of the financial services partners listed below.

Simon Gleave
Asia Pacific Partner-in-charge, Financial Services
☎ : +86(10)8508 7007
✉ : simon.gleave@kpmg.com

Thomas Chan
Partner, Financial Services
☎ : +86(10)8508 7014
✉: thomas.chan@kpmg.com

Christine Song
Partner, Financial Services
☎ : +86(10)8508 7015
✉ : christine.song@kpmg.com

Walkman Lee
Partner, Financial Services
☎ : +86(10)8508 7043
✉: walkman.lee@kpmg.com

Sam Shi
Partner, Financial Services
☎ : +86(10)8508 7112
✉: sam.shi@kpmg.com

Raymond Li
Partner, Financial Services
☎ : +86(10)8508 7114
✉ : raymond.li@kpmg.com

Edwina Li
China Partner-in-charge, Financial Services Assurance
☎ : +86(21)2212 3806
✉ : edwina.li@kpmg.com

Terence Fong
Partner, Financial Services
☎ : +852 2978 8953
✉: terence.fong@kpmg.com

Kenny Shi
Partner, Financial Services
☎ : +86(21)2212 2261
✉ : kenny.shi@kpmg.com

James Chen
Partner, Financial Services
☎ : +86(21)2212 2424
✉ : james.chen@kpmg.com

Ivan Li
Partner, Financial Services
☎ : +86(755)2547 1218
✉: ivan.li@kpmg.com

Larry Choi
Partner, Financial Services
☎ : +86(20)3813 8883
✉: larry.choi@kpmg.com

Arthur Wang
Partner, China Head of banking
☎ : +86(10)8508 7104
✉: arthur.wang@kpmg.com

Lewis Lu
Partner-in-charge, Tax
☎ : +86(21)2212 3421
✉: lewis.lu@kpmg.com

Tracy Zhang
Partner, Tax
☎ : +86(10)8508 7509
✉: tracy.h.zhang@kpmg.com

Thomas Li
Partner, Tax
☎ : +86(10)8508 7574
✉: thomas.li@kpmg.com

Derrick Day
Partner, DPP Accounting
☎ : +86(10)8508 5008
✉ : derrick.day@kpmg.com

Penny Li
Partner, Financial Services
☎ : +86(21)2212 2285
✉: penny.li@kpmg.com

Tony Cheung
Partner-in-charge, Advisory
☎ : +86(21)2212 2705
✉ : tony.cheung@kpmg.com

Kevin Liu
Partner, IT Advisory
☎ : +86(10)8508 7094
✉: kevin.liu@kpmg.com

Chris Wang
Partner, Financial Risk Management
☎ : +86(10)8508 7131
✉ : chris.wong@kpmg.com

Wilson Pang
Partner, Restructuring Services
☎ : +86(21)2212 3280
✉ : wilson.pang@kpmg.com

Louis Ng
Partner, Transaction Services
☎ : +86(10)8508 7090
✉ : louis.ng@kpmg.com

Jessica Xu
Partner, Risk Consulting
☎ : +86(10)8508 5952
✉ : jessica.xu@kpmg.com

Mainland China

Beijing
8th Floor, Tower E2, Oriental Plaza
1 East Chang An Avenue
Beijing 100738, China
Tel : +86 (10) 8508 5000
Fax : +86 (10) 8518 5111

Beijing Zhongguancun
Room 603, Flat B, China Electronic Plaza
No.3 Danling Street, Haidian District
Beijing 100080, China
Tel : +86 (10) 5875 2555
Fax : +86 (10) 5875 2558

Fuzhou
25th Floor, Fujian BOC Building
136 Wu Si Road
Fuzhou 350003, China
Tel : +86 (591) 8833 1000
Fax : +86 (591) 8833 1188

Qingdao
4th Floor, Inter Royal Building
15 Donghai West Road
Qingdao 266071, China
Tel : +86 (532) 8907 1688
Fax : +86 (532) 8907 1689

Tianjin
Unit 15, 47th Floor, Office Tower
Tianjin World Financial Center
2 Dagu North Road
Tianjin 300020, China
Tel : +86 (22) 2329 6238
Fax : +86 (22) 2329 6233

Chengdu
17th Floor, Office Tower 1, IFS
No. 1, Section 3 Hongxing Road
Chengdu, 610021, China
Tel : +86 (28) 8673 3888
Fax : +86 (28) 8673 3838

Guangzhou
38th Floor, Teem Tower
208 Tianhe Road
Guangzhou 510620, China
Tel : +86 (20) 3813 8000
Fax : +86 (20) 3813 7000

Shanghai
50th Floor, Plaza 66
1266 Nanjing West Road
Shanghai 200040, China
Tel : +86 (21) 2212 2888
Fax : +86 (21) 6288 1889

Xiamen
12th Floor, International Plaza
8 Lujiang Road
Xiamen 361001, China
Tel : +86 (592) 2150 888
Fax : +86 (592) 2150 999

Chongqing
Unit 1507, 15th Floor, Metropolitan Tower
68 Zourong Road
Chongqing 400010, China
Tel : +86 (23) 6383 6318
Fax : +86 (23) 6383 6313

Hangzhou
8th Floor, West Tower, Julong Building
9 Hangda Road
Hangzhou 310007, China
Tel : +86 (571) 2803 8000
Fax : +86 (571) 2803 8111

Shenyang
27th Floor, Tower E, Fortune Plaza
59 Beizhan Road
Shenyang 110013, China
Tel : +86 (24) 3128 3888
Fax : +86 (24) 3128 3899

Foshan
8th Floor, One AIA Financial Center
1 East Denghu Road
Foshan 528200, China
Tel : +86 (757) 8163 0163
Fax : +86 (757) 8163 0168

Nanjing
46th Floor, Zhujiang No.1 Plaza
1 Zhujiang Road
Nanjing 210008, China
Tel : +86 (25) 8691 2888
Fax : +86 (25) 8691 2828

Shenzhen
9th Floor, China Resources Building
5001 Shennan East Road
Shenzhen 518001, China
Tel : +86 (755) 2547 1000
Fax : +86 (755) 8266 8930

Hong Kong and Macau

Hong Kong
8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
23rd Floor, Hysan Place
500 Hennessy Road
Causeway Bay, Hong Kong
Tel : +852 2522 6022
Fax : +852 2845 2588

Macau
24th Floor, B&C, Bank of China Building
Avenida Doutor Mario Soares
Macau
Tel : +853 2878 1092
Fax : +853 2878 1096

kpmg.com/cn