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Chinese bank capitalization: What do markets really think?

BankFocus Research
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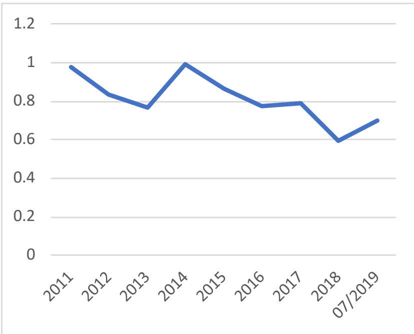
This is third and final in a series of reports exploring bank capitalization based on accounting, regulatory and market metrics. The leading Chinese banks[1] grew their assets considerably, accompanied by modest improvements in their regulatory and accounting capitalization since 2011. High return on equity has been under pressure over the medium-term. The market capitalization of the Chinese banks remains well below the book value with trends uncorrelated with regulatory and balance sheet indicators.

- The Chinese banks **grew their assets considerably** by more than $10 trillion since 2011. At the same time, their shareholders' equity increased by $900 billion, keeping up with the balance sheet growth.
- The **RWAs of the Chinese banks grew faster** than their assets for the same period constraining improvements in the regulatory CET1 and Total capital ratios.
- Consequently, the regulatory CET 1 ratios of the Chinese banks **improved only marginally** by 43 basis points since 2011, the rate of increase below their European and US peers.
- The **profitability of the Chinese banks has been under downward pressure** over the medium terms. However, with the average ROAE ratio at 14%, the Chinese banks' profitability is far ahead of their European peers and is comparable to that of the US banks.
- **Asset quality ratios show high coverage of recognised impaired loans.** However, despite these strong ratios, the asset quality of the Chinese banks may come under pressure from the refinancing risk of highly indebted corporates and scaling down of shadow bank lending.
- The market capitalization of the Chinese banks **failed to recover** from the lows in end-2018 and remains below book value**.** It seems that equity markets have taken a cautious view on the Chinese banks' balance sheet transparency, quality of growth and potential asset quality problems which can emerge outside of their loan books.

Market capitalization / Shareholders' funds, YE 2011 to H1 2019



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[1] *For the peer group list refer to "Research methodology and scope" on pg. 9*

Rapid growth in total assets and equity

In this third and final report we compare Chinese bank capitalization trends based on several different indicators – regulatory, accounting and market-based. We selected 14 largest Chinese commercial banks to compare trends for these ratios since 2011.

We started looking at total asset growth rates which indicate that the 14 Chinese banks grew considerably adding almost $10 trillion (87% growth) to their combined balance sheets since 2011. The stock of book equity increased by more than $900 billion (130% growth) for the same period. These trends supported the balance sheet (accounting) capitalization for the Chinese banks (see below).

The period of uninterrupted asset growth lasted up until 2017, followed by a flat growth in 2018. The latest trend was associated with the regulatory restrictions on fast expanding shadow-banking activities and interbank business. However, we expect growth to resume as the Chinese authorities are keen to stimulate the economy and lending to privately owned enterprises.

The growth rates of shareholders' equity remained mostly stable, with the exception of a small slowdown in 2016. The high growth rates in equity are related to strong internal capital generation (double digit ROAEs) and adequate retention (average dividend pay-out ratios below 30%).

Overall, the Chinese have benefited from a strong customer demand and accommodative macroeconomic policies so far. However, the customer indebtedness remains high and potentially exposes the Chinese banks to asset quality pressures.

The banks which grew their total assets most during 2011 - 2018 include: Bank of Nanjing by 306%, Industrial Bank by 156%, China Minsheng Banking Corporation by 147%, Bank of Beijing by 147%.

The banks which improved their stock of balance sheet equity ahead of their peers include: Industrial Bank by 254%, Bank of Beijing by 221%, Bank of Nanjing by 191%, China Minsheng Banking Corporation by 189%.

Exhibit 1: Total assets YE 2011 to YE 2018, ($ Trillion)

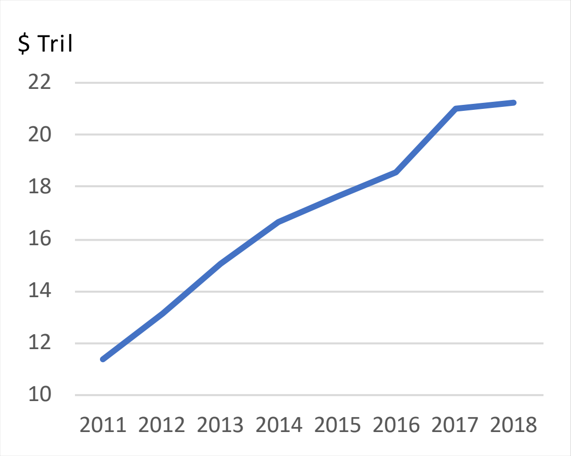
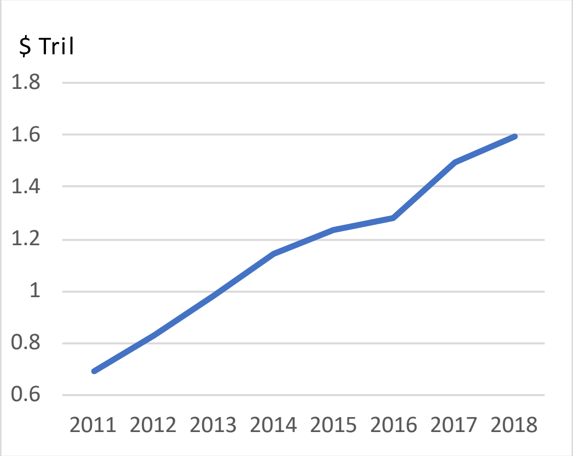


Exhibit 2: Total equity YE 2011 to YE 2018, ($ Trillion)



Higher rates of RWA growth

The pattern of Risk Weighted Assets (RWAs) growth was similar but the rate of growth at 109% was higher than the asset growth for the Chinese banks since 2011. **The elevated RWA growth in recent years was due to a migration of some previous shadow banking assets back to loans on banks' balance sheets.**

At the same time the average Risk weighted intensity[2] of the Chinese banks increased visibly to 67% as at end-2018 from 59% as at end-2011. This indicates a worsening asset risk of the Chinese banks over the medium-term. **Both these RWA trends kept downward pressure on the regulatory capitalization ratios of the Chinese banks.**

Exhibit 3: Total RWAs YE 2011 to YE 2018, ($ Trillion)

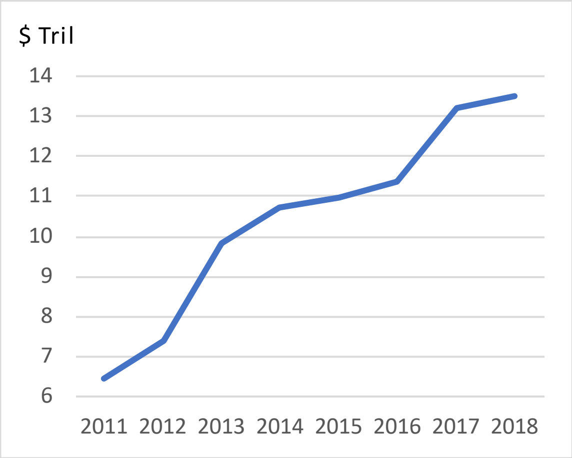
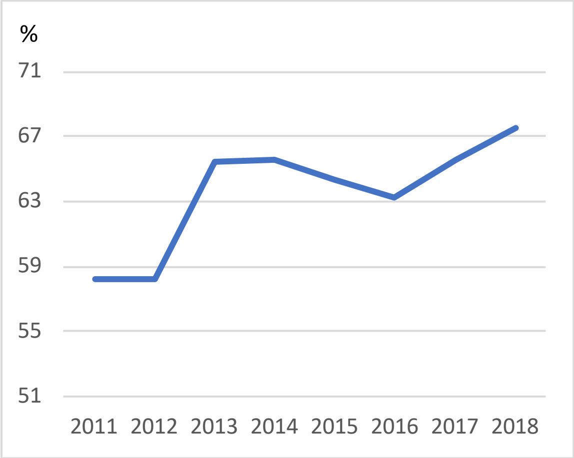


Exhibit 4: Risk weighted asset intensity (RWA / Total Assets) YE 2011 to YE 2018, (%)



Regulatory capitalization of banks improved after volatility

Reflecting the offsetting trends in shareholders' equity and RWA growth, the CET 1 ratios of the Chinese banks improved only marginally by 43 basis points since 2011. This is a relatively modest increase compared to the European and even the US peers who improved the same indicator by 400 and 100 basis points for the same period, respectively.

A higher rate of growth in Total capital ratio was aided by the issuances of onshore Tier 2 securities, which represented the bulk of issuances of capital instruments by the Chinese banks (RMB 500 billion in 2018).

The banks which improved the absolute value of CET1 capital during 2011 - 2018 were: Industrial Bank 263%, Bank of Beijing by 228%, Bank of Nanjing by 212%, China Minsheng Banking Corporation by 203%.

The banks whose CET 1 ratio contracted were: Bank of Nanjing by 3.4%, China CITIC Bank by 1.3%, Bank of Beijing 0.7%.

Exhibit 5: CET 1 ratio YE 2011 to YE 2018 (%)

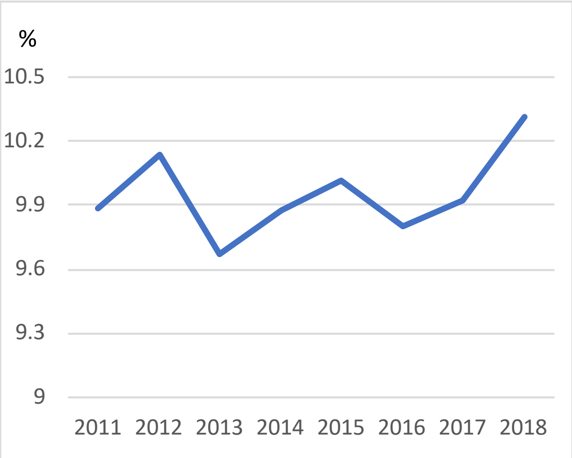
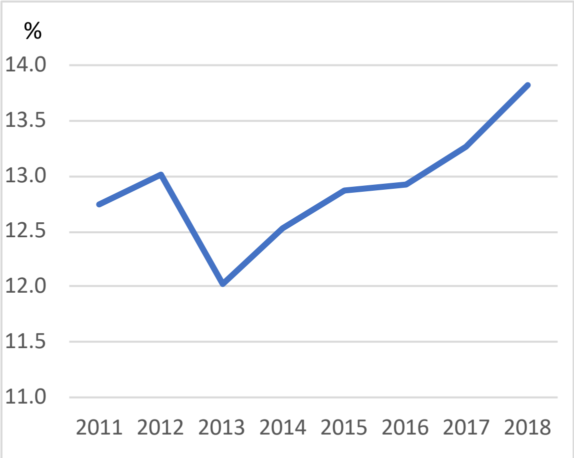


Exhibit 6: Total capital adequacy ratio (as reported) YE 2011 to YE 2018 (%)



[2] *Risk weighted intensity is defined as Risk weighted assets divided by total assets*

Non-regulatory capitalization improved due to recent slowdown

The slow-down in asset growth during the last years resulted in improved non-regulatory Total equity to Total assets ratios (i.e. simple leverage). The simple leverage ratio for the Chinese banks increased to 7.0% as at end-2018 from 6.2% as at end-2011, after a period of downward pressure in 2014/16. The latest indicator is higher compared to the European bank average at 6.3%, but lower than the US average at 8.6% as at end-2018.

A capital retention of the Chinese banks has been relatively high given their moderate average dividend pay-out ratio at 28% since 2011.

The banks which improved the simple leverage ratio most during 2011-2018 were: Hua Xia Bank by 2.27%, ICBC by 1.99%, Industrial Bank by 1.84%, China Merchants Bank 1.65%.

The banks whose simple leverage ratio underperformed for the same period were: Bank of Nanjing by -2.2%, China CITIC Bank by 0.43%, Bank of Communications by 0.85%.

Exhibit 7: Total equity / Total assets YE 2011 to YE 2017 (%)

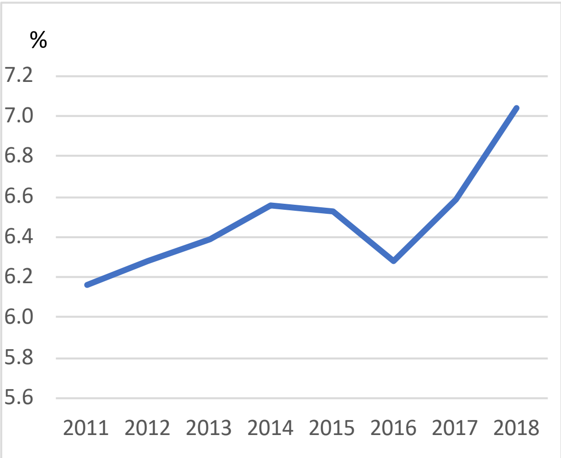
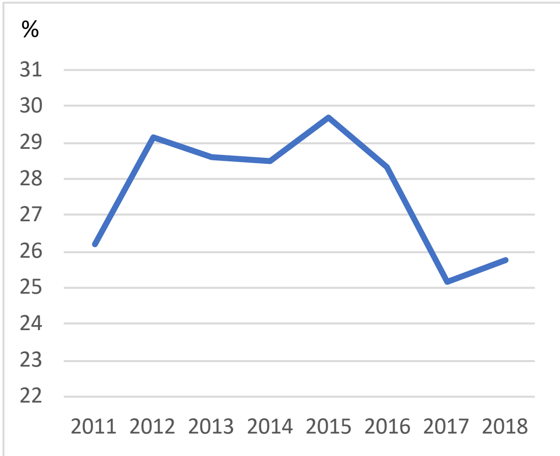


Exhibit 8: Dividend pay-out ratio YE 2011 to YE 2018 (%)



Profitability of Chinese banks is under pressure

The profitability of the Chinese banks was under downward pressure up until 2018. This trend is related to declining interest margins as well as reduced fee income from slowdown in the shadow banking sector.

However, even with the latest average ROAE ratio at 14%, the Chinese banks' profitability is far ahead of their European peers (2018: ROAE at 8%) and is comparable to that of the US banks.

A similar trend was observed in ROAAs, with a gradual slowdown since 2012. The rapid asset growth during past years has resulted in declining profitability due to the denominator effect, without a corresponding improvement in profitability.

Only one Chinese bank improved its ROAA during this period: Hua Xia Bank by 0.07%.

The banks which underperformed on this metric (ROAA) were: China Minsheng Banking Corporation by -0.43%, China CITIC Bank by -0.35%, BOCOM by -0.30%, CCB by -0.25%.

Exhibit 9: ROAE YE 2011 to YE 2018 (%)

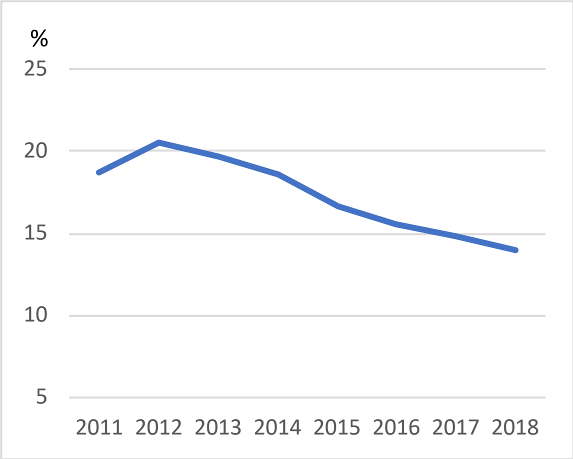
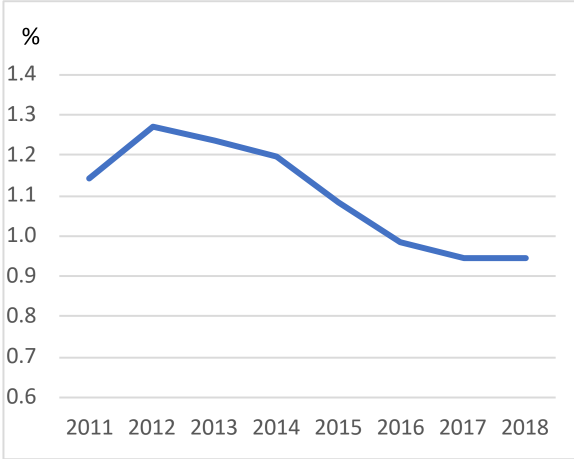


Exhibit 10: ROAA YE 2011 to YE 2018 (%)



Headline asset quality ratios are strong

The average provisioning coverage ratio of impaired loans remains very high despite a steady decline since 2011. The latest coverage ratio at 240% for the Chinese banks is significantly higher compared to the US average at 144% and the European average at 61% as at end-2018. However, this level of coverage does not include Special mention loans, a leading indicator for future delinquencies[3]. The Special mention loans represented an additional 3% of total loans for the Chinese banks as at end-2018.

With such high provisioning coverage, the unreserved reported impaired loans to capital ratio remains conservative at -13% as at end-2018. We expect this indicator to deteriorate significantly in the near term.

Despite these strong ratios, the asset quality of the Chinese banks may come under pressure from the refinancing risk of highly indebted corporates and scaling down of shadow bank lending. In our view, the asset risk of the Chinese banks is not fully captured by the standard loan book ratios and significant credit risks may reside in off-balance sheet and investment portfolios.

Exhibit 11: Loan loss reserves / Impaired loans YE 2011 to YE 2018 (%)

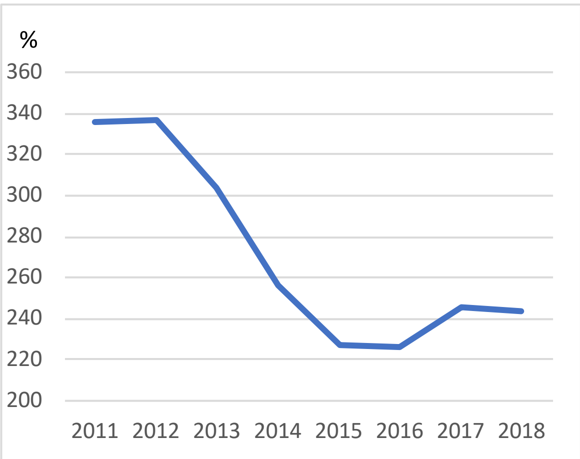
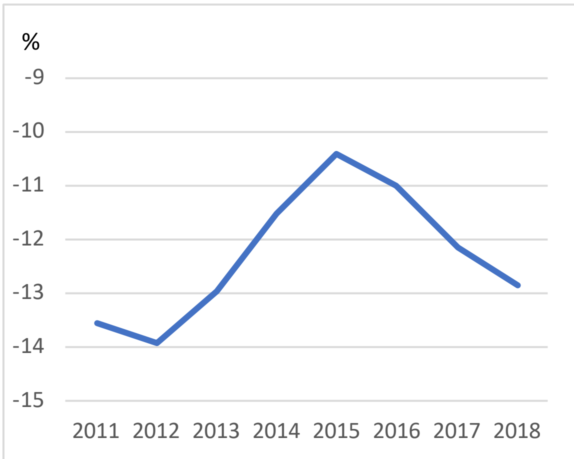


Exhibit 12: Unreserved impaired loans / Total equity YE 2011 to YE 2018 (%)



[3] *The latest asset quality ratios for the European and Chinese banks were prepared under IFRS 9 accounting standards*

Market capitalization indicates market concerns

The market capitalization of the Chinese banks fluctuated between 0.6 to 1.0 of the Shareholders' equity since 2011. The latest dip was associated with a global downturn in stock markets experienced in end-2018. Similar to European banks the Chinese banks struggled to recover from this downturn and the current valuations are at historic lows and below the book value.

Similar to their European peers, the Chinese banks failed to reach their average market capitalization above the book value since 2011. This is despite the fact that the Chinese banks have far better profitability, asset quality and non-regulator capitalisation indicators compared to the European peers. Perhaps, the concerns surrounding balance sheet transparency, quality of growth and high indebtedness of customers kept the Chinese bank market capitalisation under pressure.

In terms of market capitalization trends, however, there seems to be no correlation with regulatory or balance sheet ratios. In addition, the discrepancy in market capitalization among the Chinese banks was sizeable with larger banks showing weaker metrics.

The banks with the highest market capitalization ratio include: Bank of Ningbo at 1.47, China Merchants Bank at 1.31, Bank of Nanjing at 0.96.

The banks with the lowest market capitalization ratio were: BOCOM at 0.33, China CITIC Bank at 0.42, BOC at 0.45.

Exhibit 13: Market Capitalization / shareholders' funds YE 2011 to H1 2019

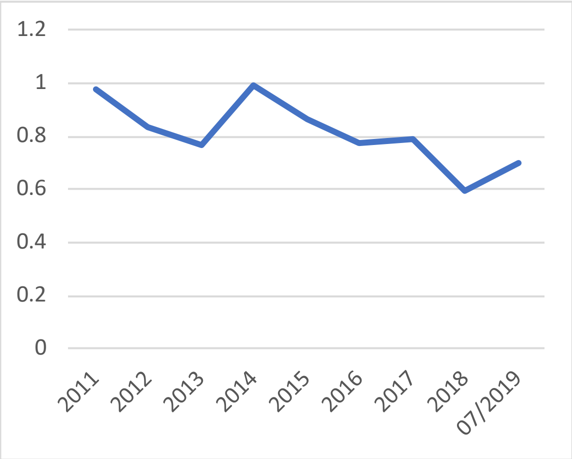
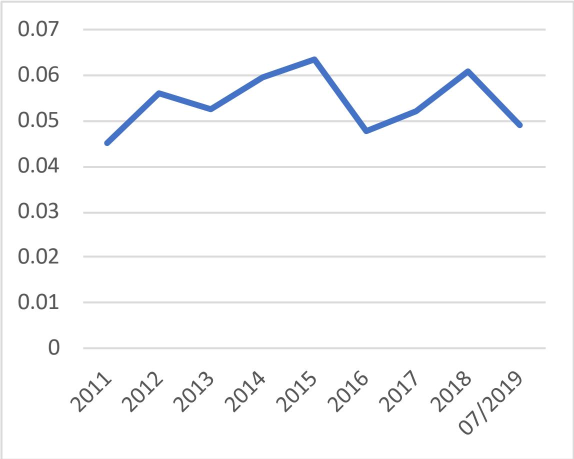


Exhibit 14: Market capitalization / Total assets (Tobin's Q) YE 2011 to H1 2019



In conclusion, it seems that equity investors have taken a cautious view of the Chinese banks, despite their strong headline metrics. The historic multiples indicate that their balance sheet and regulatory capitalisation has been consistently discounted by the markets, similar to the European banks and unlike the US peers.

Appendix I: Selected ratios for Chinese banks

CET1 Ratio (%)

Company name	2018	2017	Change
Industrial & Commercial Bank of China (The) - ICBC	13.0	12.8	0.2
China Construction Bank Corporation Joint Stock Company	13.8	13.1	0.7
Agricultural Bank of China Limited	11.6	10.6	1.0
Bank of China Limited	11.4	11.2	0.2
China Merchants Bank Co Ltd	11.8	12.1	-0.3
Bank of Communications Co. Ltd	11.2	10.8	0.4
Shanghai Pudong Development Bank	10.1	9.5	0.6
China CITIC Bank Corporation Limited	8.6	8.5	0.1
Industrial Bank Co Ltd	9.3	9.1	0.2
China Minsheng Banking Corporation	8.9	8.6	0.3
Hua Xia Bank co., Limited	9.5	8.3	1.2
Bank of Beijing Co Ltd	8.9	8.9	0.0
Bank of Ningbo	9.2	8.6	0.6
Bank of Nanjing	8.5	8.0	0.5

Total equity / Total assets (%)

Company name	2018	2017	Change
Industrial & Commercial Bank of China (The) - ICBC	8.2	7.9	0.3
China Construction Bank Corporation Joint Stock Company	8.2	7.8	0.4
Agricultural Bank of China Limited	7.1	6.4	0.7
Bank of China Limited	7.6	7.6	0.0
China Merchants Bank Co Ltd	7.6	7.1	0.5
Bank of Communications Co. Ltd	6.8	6.8	0.0
Shanghai Pudong Development Bank	7.1	6.5	0.6
China CITIC Bank Corporation Limited	6.9	6.7	0.2
Industrial Bank Co Ltd	6.7	6.2	0.5
China Minsheng Banking Corporation	7.0	6.4	0.6
Hua Xia Bank co., Limited	7.4	6.0	1.4
Bank of Beijing Co Ltd	6.9	6.8	0.1
Bank of Ningbo	6.0	5.1	0.9
Bank of Nanjing	5.5	5.1	0.4

ROAA (%)

Company name	2018	2017	Change
Industrial & Commercial Bank of China (The) - ICBC	1.1	1.1	0.0
China Construction Bank Corporation Joint Stock Company	1.1	1.1	0.0
Agricultural Bank of China Limited	0.9	1.0	-0.1
Bank of China Limited	0.9	1.0	-0.1
China Merchants Bank Co Ltd	1.2	1.2	0.0
Bank of Communications Co. Ltd	0.8	0.8	0.0
Shanghai Pudong Development Bank	0.9	0.9	0.0
China CITIC Bank Corporation Limited	0.8	0.7	0.1
Industrial Bank Co Ltd	0.9	0.9	0.0
China Minsheng Banking Corporation	0.9	0.9	0.0
Hua Xia Bank co., Limited	0.8	0.8	0.0
Bank of Beijing Co Ltd	0.8	0.9	-0.1
Bank of Ningbo	1.0	1.0	0.0
Bank of Nanjing	0.9	0.9	0.0

Unreserved impaired loans / Total equity (%)

Company name	2018	2017	Change
Industrial & Commercial Bank of China (The) - ICBC	-7.9	-5.8	-2.1
China Construction Bank Corporation Joint Stock Company	-11.3	-8.0	-3.3
Agricultural Bank of China Limited	-18.1	-15.6	-2.5
Bank of China Limited	-8.4	-6.4	-2.0
China Merchants Bank Co Ltd	-27.1	-20.7	-6.4
Bank of Communications Co. Ltd	-8.3	-6.3	-2.0
Shanghai Pudong Development Bank	-7.6	-5.8	-1.8
China CITIC Bank Corporation Limited	-8.5	-9.9	1.4
Industrial Bank Co Ltd	-12.1	-11.8	-0.3
China Minsheng Banking Corporation	-4.6	-7.9	3.3
Hua Xia Bank co., Limited	-8.8	-9.3	0.5
Bank of Beijing Co Ltd	-14.0	-15.6	1.6
Bank of Ningbo	-21.3	-21.3	0.0
Bank of Nanjing	-22.5	-20.8	-1.7

Research methodology and scope

Using BankFocus search steps we analysed the following financial factors: Total assets, Total equity, CET 1 ratios, RWAs, Total capital adequacy ratio (as reported), Total equity / Total assets, ROAA, ROAE, Market Capitalization / shareholders' funds, Market capitalization / Total assets (Tobin's Q), RWA intensity, Loan loss reserves / Impaired loans, and Unreserved impaired loans / Total equity for the period from 2011 to 2018.

We analysed 14 Chinese banks for this report:

China: Industrial & Commercial Bank of China (The) - ICBC, China Construction Bank Corporation Joint Stock Company, Agricultural Bank of China Limited, Bank of China Limited, China Merchants Bank Co Ltd, Bank of Communications Co. Ltd, Shanghai Pudong Development Bank, China CITIC Bank Corporation Limited, Industrial Bank Co Ltd, China Minsheng Banking Corporation, Hua Xia Bank co., Limited, Bank of Beijing Co Ltd, Bank of Ningbo, Bank of Nanjing

The exhibits in the report are based on Moody's Analytics BankFocus, unless otherwise stated.

Please get in touch if you have any analytical questions

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