

Chinese Banks: Stable Net Profitability is Insufficient to Aid Capitalisation

Net profitability ratios of the top five Chinese banks¹ remained unchanged in 2018 compared to the three-year average.

- **The top five Chinese banks posted static ROAA and ROAE ratios.** This was due to the contraction in non-interest income and higher provisioning expenses offsetting improvements in the cost of funding and efficiency.
- The Chinese banks **marginally improved their NIMs in 2018** and, with the exception of BoCom, had notably better ratios compared to the domestic peer group average at 2% for Q3 2018.
- All leading Chinese banks reported notable improvements in their efficiency ratios during the first three quarters of 2018. With the cost-to-income ratios of below 35%, **the top five Chinese banks compare favourably with their global peers.**
- There was a notable **improvement in the cost of funding in 2018** by four out of the five largest Chinese banks. This is partly related to a more accommodative monetary policy by the People's Bank of China (PBOC) as well as slowdown in growth.
- Three out of five Chinese banks **reported increased impairment charges** in 2018. The trend was mostly due to the effect of more stringent IFRS 9 provisioning guidelines.
- Despite the subdued growth in profitability, **the average ROAE of the top five Chinese banks was high** at double-digit level and mostly in line with the domestic peer median at 15% as at Q3 2018.
- Despite double-digit ROAEs, three out of the five Chinese banks generated a **negative net growth of capital**, as internal capital creation was not sufficient to offset the rapid growth in RWAs since 2012.

¹ The banks covered in this report are: Industrial & Commercial Bank of China (The) (ICBC), China Construction Bank Corporation Joint Stock Company (CCB), Agricultural Bank of China Limited (ABC), Bank of China Limited (BOC), Bank of Communications Co. Ltd (BoCom)

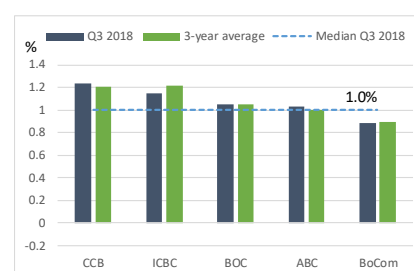
BankFocus Research

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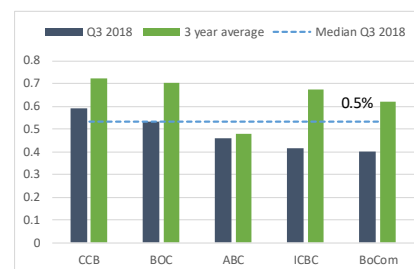
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ROAA



Non-interest income / Total assets



Legend: Median of Top 20 Chinese banks



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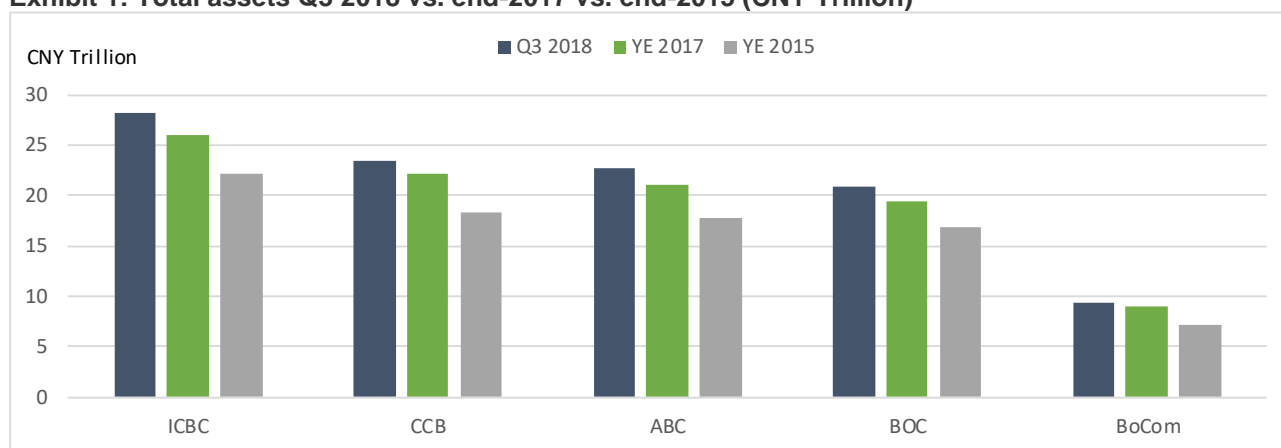
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Fast growth in Total assets and Customer Loans

The top five Chinese banks grew their total assets rapidly in the recent years. The average growth rate was 27% since 2015, which is notably faster than the growth reported by the large US and European banks for the same period.

ICBC remains the system's largest bank with Total assets of CNY28.2 trillion (\$4.0 trillion) as at Q3 2018. Its recent growth rates during the first three quarters of 2018 were subdued at 3.3%, in line with peers. The slowest growth so far was reported by **BoCom** which is the smallest entity among the five peers, with total assets of CNY9.3 trillion (\$1.3 trillion) as at Q2 2018.

Exhibit 1: Total assets Q3 2018 vs. end-2017 vs. end-2015 (CNY Trillion)

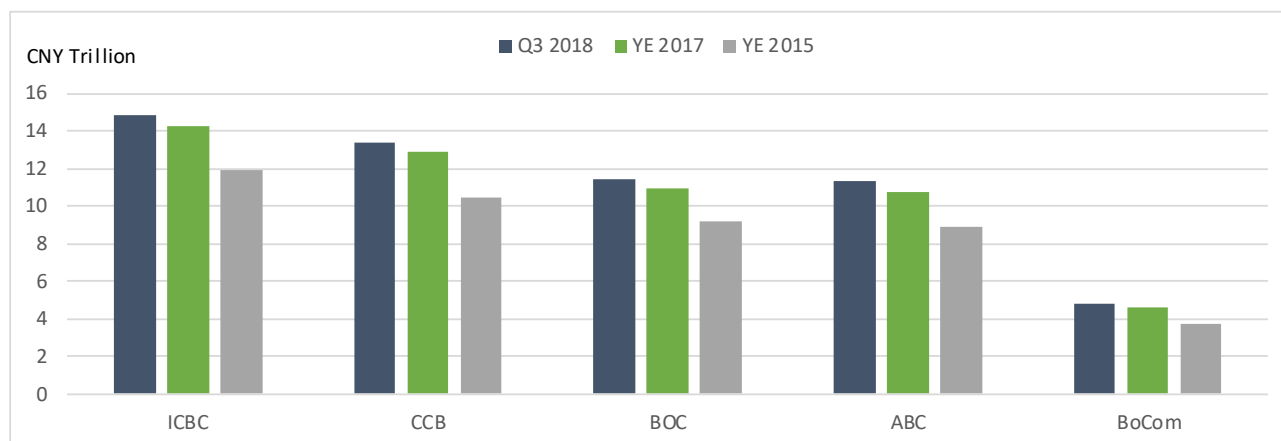


Please note the data for BoCom in this and all subsequent exhibits is based on Q2 2018 financial results

The trends in Total assets were replicated by the growth in customer loans by the top five Chinese banks. This suggests that this part of the balance sheet was responsible for the underlying growth trends in total assets.

Up to H1 2018 the Chinese banks were growing their lending relatively rapidly compared to their global peers in the US and Europe. However, Q3 2018 saw a shift in this trend towards contraction in the loan book, first time since 2016.

Exhibit 2. Gross loans & advances to customers Q3 2018 vs. end-2017 vs. end-2015 (CNY Trillion)

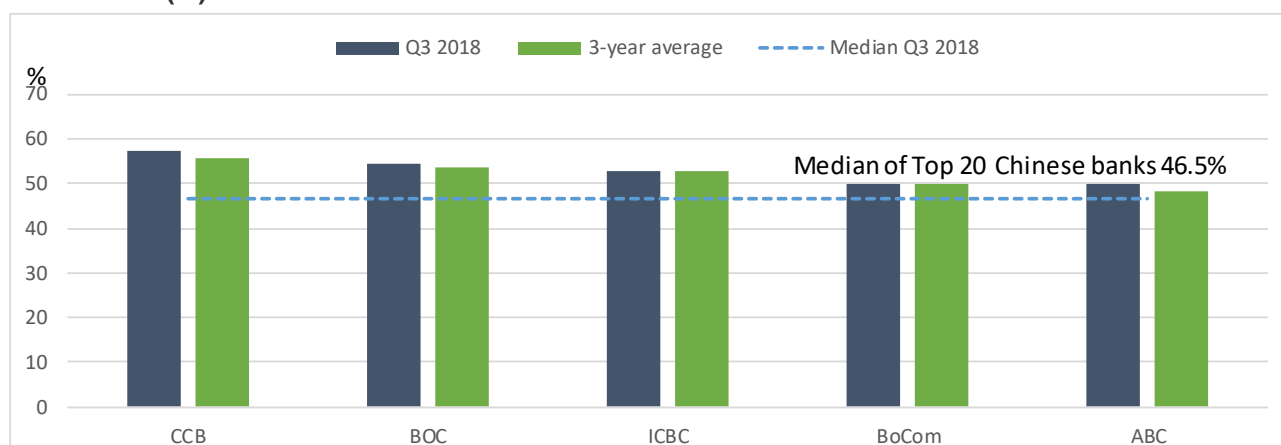


Customer lending is above the peer group median

As a result of the rapid growth in the past, the customer loans and advances represent the biggest portion of the top five Chinese banks' total assets, above 50% as at Q3 2018. This indicator is above the US and European averages, given the fact that the western banks are more diversified and rely on fee-based products (e.g. asset management, investment banking) for supplementing their operating income.

This structure of the balance sheet remained stable since 2015. This is higher than the domestic peer median at 46.5% as at Q3 2015. **This ratio suggests that the revenue profiles of the lending Chinese banks are heavily influenced by their lending operations.**

Exhibit 3: Customer loans and advances / Total assets ratio, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)

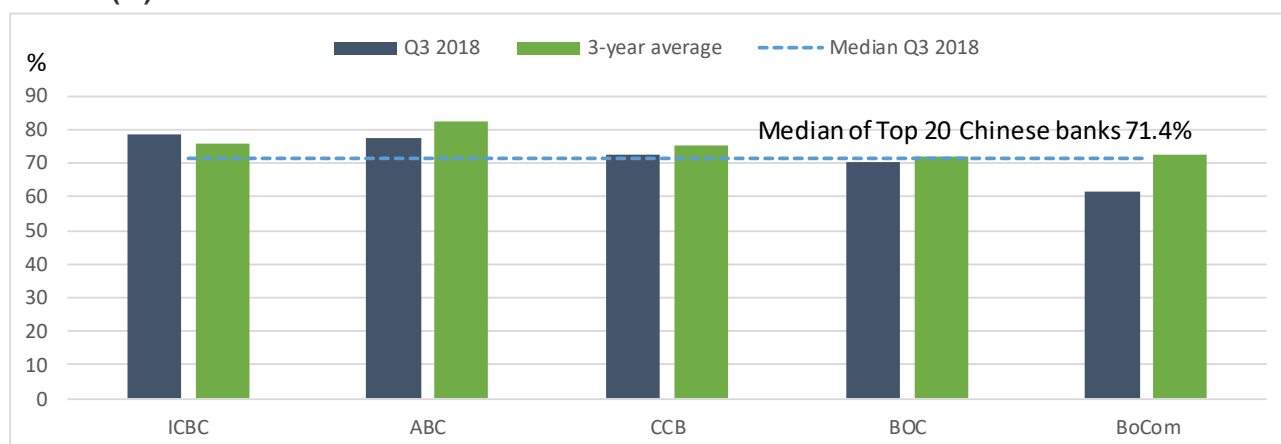


NII is the principal source of income, with little variation among peers

Net Interest Income (NII) represented the bulk of the leading Chinese banks' operating revenues, broadly in line with the domestic peer median. However, the proportion of this source of income declined somewhat in 2018, suggesting that the largest Chinese banks are also diversifying their revenues.

With the average ratio of above 72%, the leading Chinese banks' Operating revenues are more influenced by the interest rate environment and loan pricing differentials compared with the European and US peers².

Exhibit 4: Net interest income / Operating revenues, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



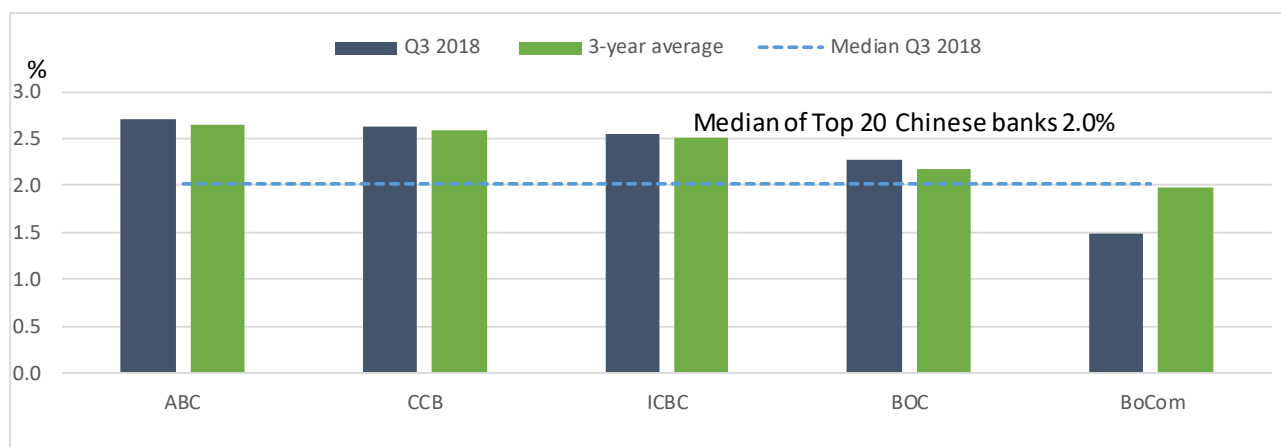
² The average ratio of NII to Operating revenues for the leading US and European banks was 59% and 54% as at Q3 2018, respectively

Marginal NIM improvement above domestic peer median

The leading Chinese banks marginally improved their Net Interest Margins (NIMs) in 2018 and, with the exception of BoCom, had notably better ratios compared with the peer group average at 2% for Q3 2018. This suggests that the largest banking franchises in China have a pricing advantage compared to smaller domestic competitors.

The average NIM of the leading Chinese banks at 2.3% compares favourably with the European banks' average NIM at 1.5%, but was weaker versus the large US banks' NIM at 3.3% as at Q3 2018.

Exhibit 5: Net interest margin (NIM), Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)

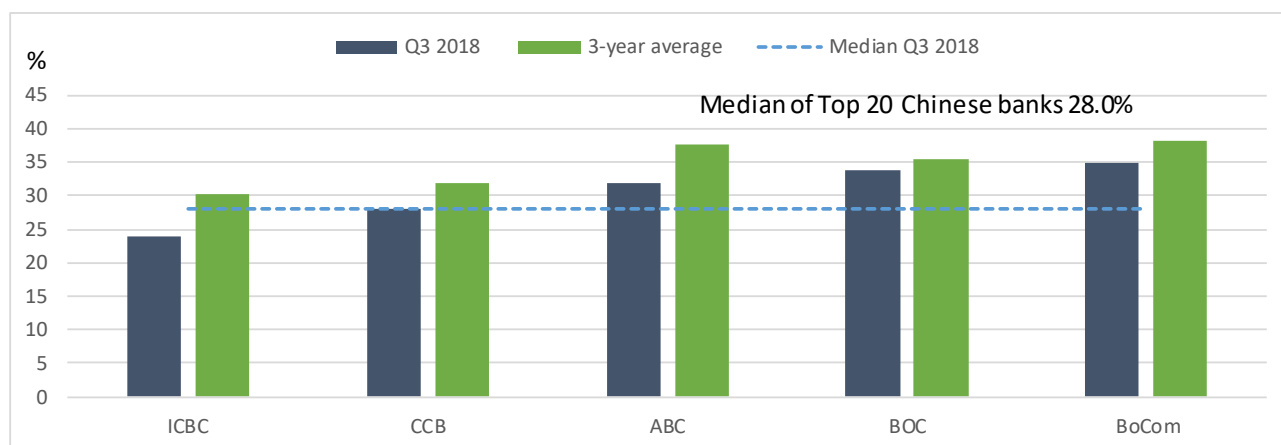


Improvement in cost-to-income ratios, albeit below domestic peer median

All leading Chinese banks reported notable improvements in their efficiency ratios during the first three quarters of 2018. **With the cost-to-income ratios of below 35%, the leading Chinese banks compare favourably with their global peers.**

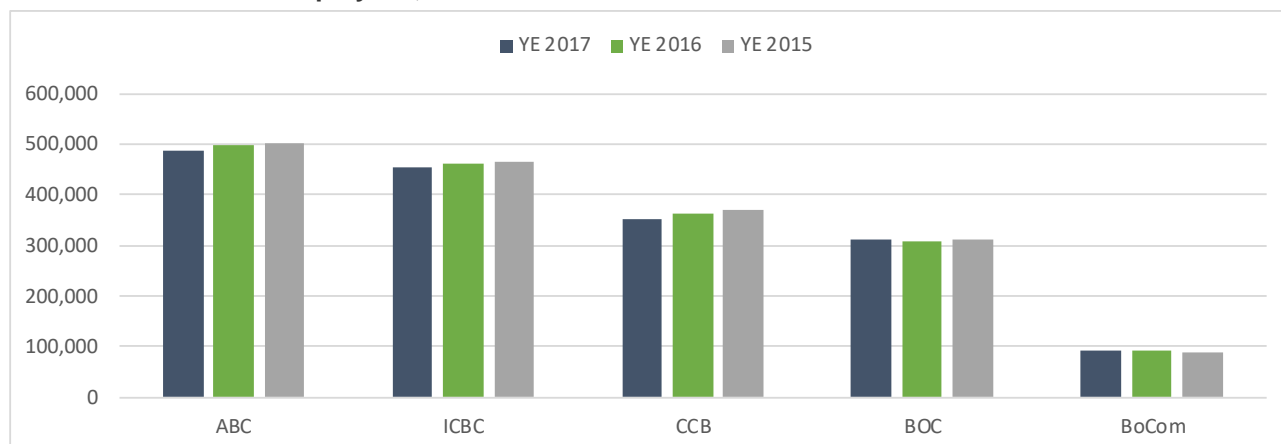
However, despite very strong efficiency ratios the four leading Chinese banks were below the industry median at 28% as at Q3 2018. This is partly due to much larger branch networks and operational activities compared to smaller domestic peers. ICBC had the best efficiency ratio among the peer group as at Q3 2018, aided by the higher operating revenues as a proportion compared to its domestic peers.

Exhibit 6: Cost to income (Efficiency) ratio, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



The three largest Chinese banks undertook some cost-cutting activities which resulted in a reduced number of employees in 2018. **BOC** and **BoCom** were the only entities who kept their staff numbers stable since 2015.

Exhibit 7: Number of employees, YE2017 vs. YE2016 vs. YE2015



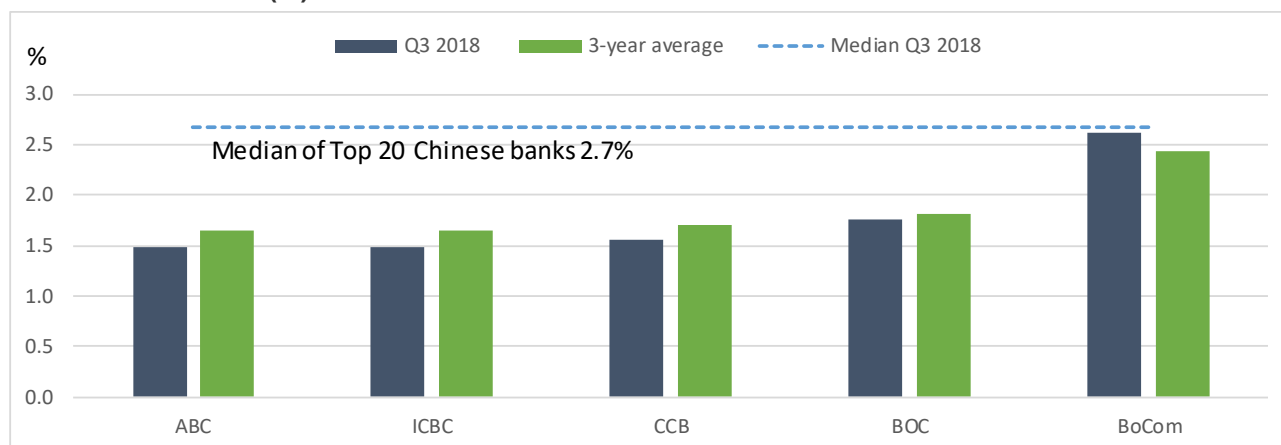
Top Chinese banks improved their cost of funding

There was a notable improvement in the cost of funding in 2018 by four out of the five Chinese banks. This is partly related to more accommodative monetary policy by the People's Bank of China (PBOC) as well as slowdown in growth.

The three leading banks had their cost of funding below 1.5% as at Q3 2018, which was better than the peer median. **This ratio also indicates significant pricing advantage of the largest Chinese banks compared with their smaller domestic peers.** This is explained by the established and loyal deposit franchises of the largest banks as well as access to cheap central bank funding benefiting the average cost of funding.

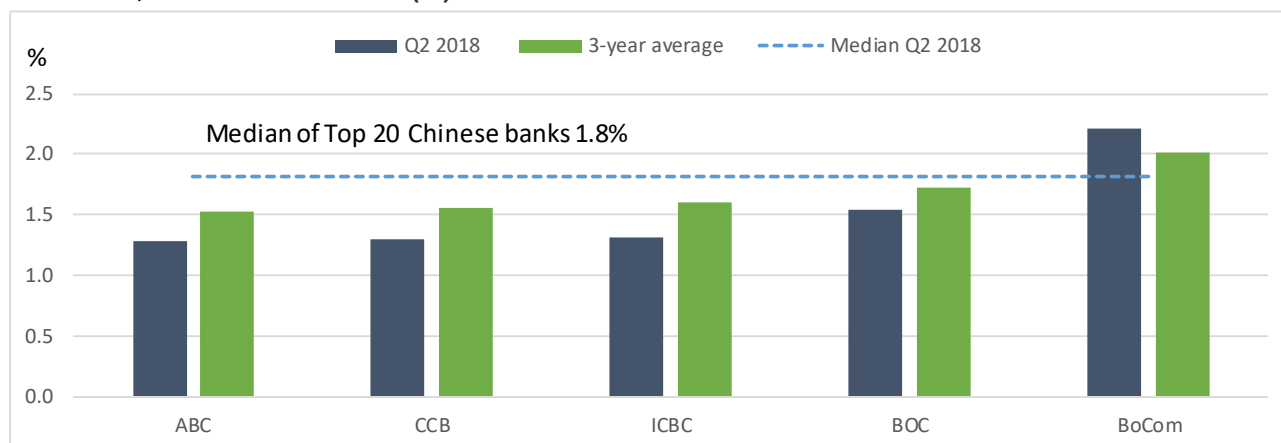
However, when compared to their global peers the cost of funding of the leading Chinese banks was higher than the average for the US and European banks at 0.9% and 0.5%, respectively.

Exhibit 8: Interest expense / Average interest bearing liabilities, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



The overall cost of funding trends were influenced by the improvement in customer funding costs. All leading Chinese banks, with the exception of **BoCom**, improved their funding costs and maintained this ratio better than the peer group average at 1.8% as at Q3 2018.

Exhibit 9: Interest expense on customer deposits / Average customer deposits, Q2 2018 vs. average of YE2017, YE2016 and YE2015 (%)



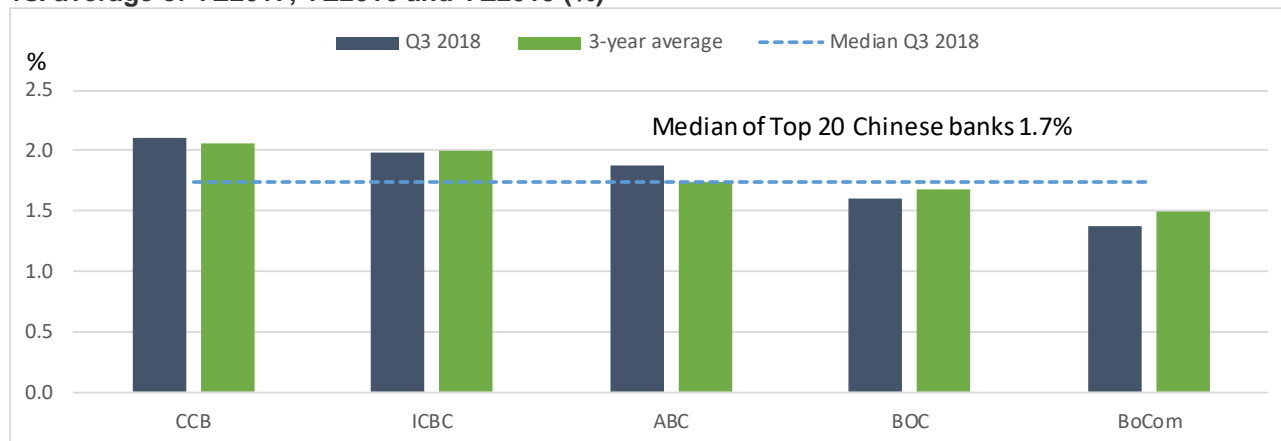
Flat Recurring earning power influenced by reduced non-interest income

However, despite improved efficiency and interest margins, the top five Chinese banks have not managed to improve their Recurring earning power in 2018. In fact, the average growth was marginally negative due to **BoCom** and **BOC** reporting decline in this ratio in 2018.

Small improvement was reported by **ABC**, with the ratio for **ICBC** and **CCB** remaining virtually flat. When compared to the domestic peer median, the leading Chinese banks show some advantage although not as clear-cut as for other profitability indicators.

These subdued profitability trends in 2018 for the leading Chinese banks compare unfavourable with the large US banks who reported the average growth of their Recurring earning power of 2.1% for the same period.

Exhibit 10: Recurring earning power (Pre-impairment operating profit / Average total assets), Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



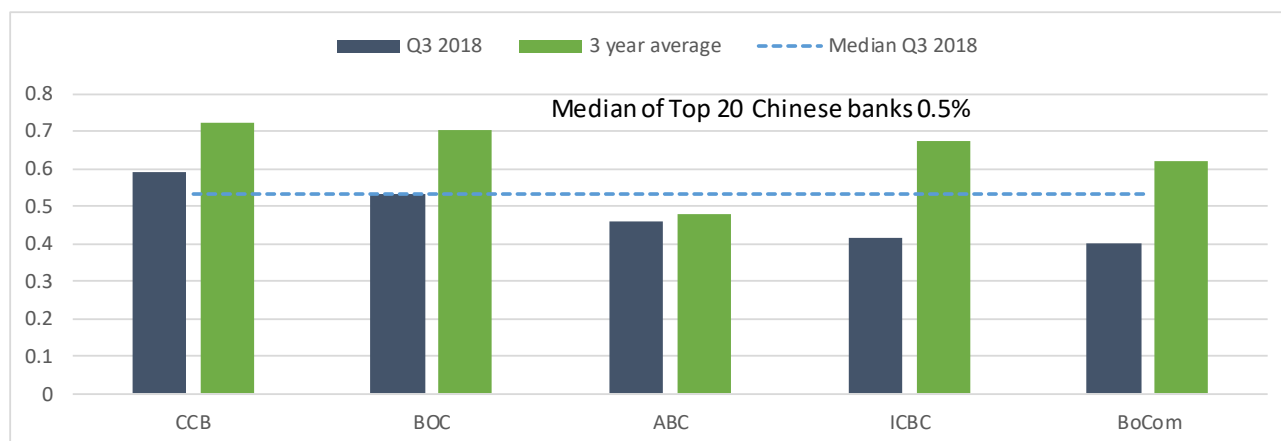
The Recurring earning power of the leading Chinese banks was influenced by the sharp reduction in non-interest income in 2018. This reduction in fee income is likely to be the consequence of the banks trimming down their wealth-management products (WMPs). WMPs allow banks to source funding from the public and other financial institutions and divert the funds to borrowers without consuming their own capital and are normally invested in non-standard or proxy-lending (i.e. shadow banking activities).

According to Moody's Investors Service, in November 2017, multiple regulators including the PBOC, China Banking Regulatory Commission, China Securities Regulatory Commission, China Insurance Regulatory Commission and SAFE, released coordinated regulatory measures that aimed at reducing

interconnectedness among financial institutions. These efforts have yielded some results with banks' outstanding WMPs declining to CNY21.0 trillion as at June 2018 from CNY22.2 trillion at the end of 2017³.

The largest reduction in non-interest income was suffered by **ICBC** and **BoCom** in 2018, while **ABC** managed to keep its non-interest income fairly stable partly due to the lower share in WMP activities (around 5% of total assets as at June 2018), compared to its peers.

Exhibit 11: Non-interest income / Total assets, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



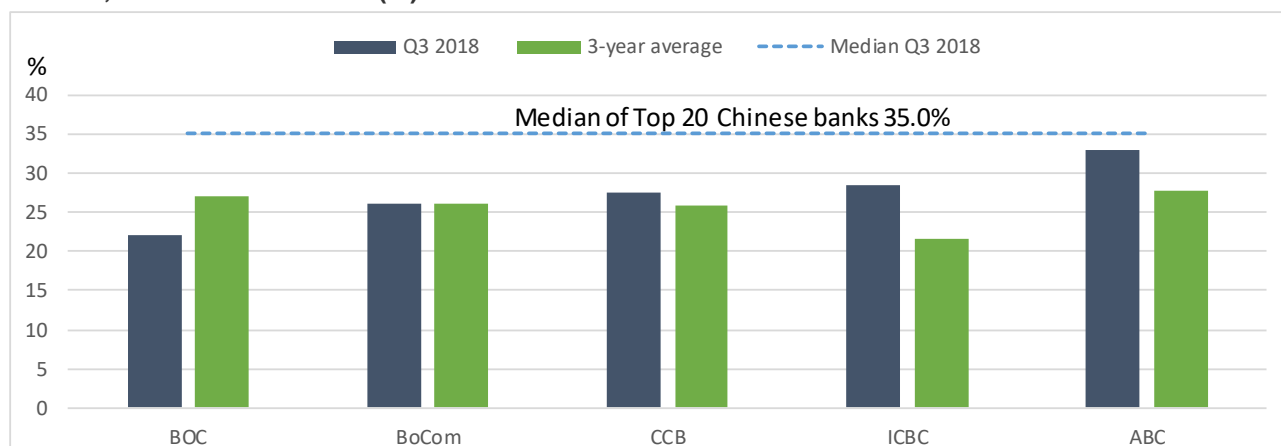
Increased impairment charges, due to IFRS 9 provisioning requirements

Three out of five Chinese banks reported increased impairment charges in 2018. **The trend was mostly related to impairment charges assessed in accordance to IFRS 9 requirements** despite the fact that asset quality trends of the leading Chinese banks improved in 2018. In addition, the non-performing loan coverage by provisions of the large Chinese banks remain very high, on average in excess of 120%.

The impairment charges of the leading banks were lower than the peer group average, indicating that the leading banks have better asset quality metrics, partly due to the corporate orientation of their loan books. Larger corporate borrowers in China tend to be lower risk and more liquid given their affiliation with the government.

ABC had the highest level in this indicator compared to the peers, indicating a relatively higher risk profile of its loan portfolio given its agricultural focus.

Exhibit 12: Total net impairment charges / Pre-impairment operating profit, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



³ Source: *Banking System Outlook – China, 27 September, 2018*

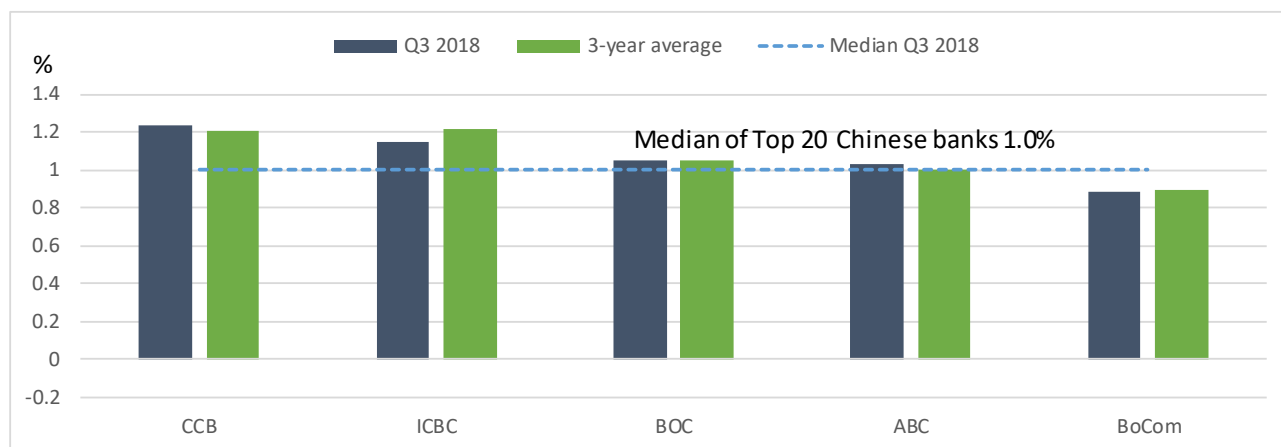
Net income ratios remain static

The majority of the leading Chinese banks reported flat ROAAs, albeit mostly higher than the peer median at 1% as at Q3 2018. **This static performance at the net income level suggests that the contraction in non-interest income offset the efficiency and cost of funding improvements.**

CCB and **ICBC** were the strongest performers in line with a higher ranking in terms of Recurring earning power (Exhibit 10 above). **BoCom** remained at the low-end of the peer ranking, similar to other profitability indicators.

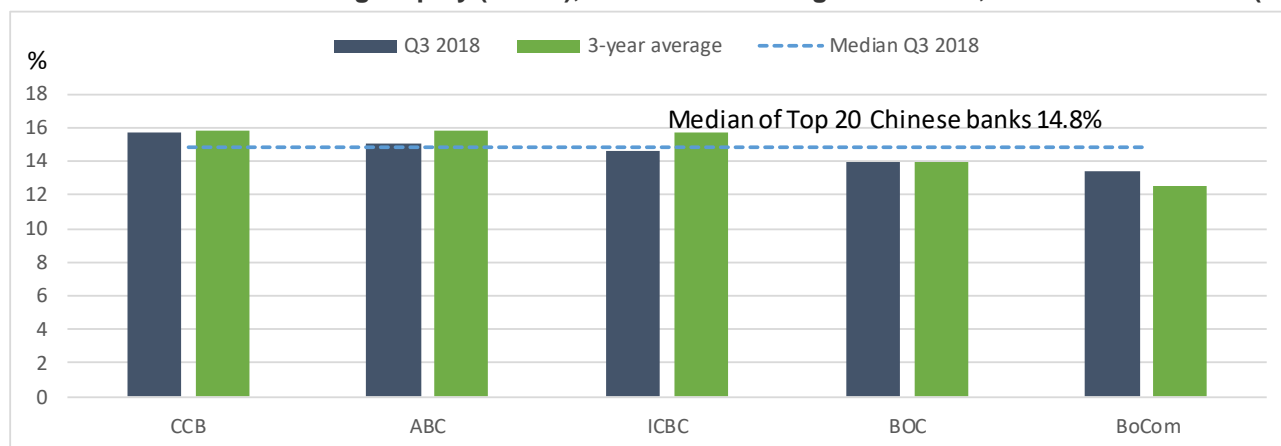
The subdued ROAA trends of the top five Chinese banks were broadly in line with their large European peers and compared unfavourably with the large US peers with the average ROAA at 1.3% as at Q3 2018.

Exhibit 13: Return on average assets (ROAA), Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



Despite the flat growth in net income, **the average ROAE of the top five Chinese banks was high at double digit level and mostly in line with the domestic peer median at 15% as at Q3 2018.** Based on ROAE the Chinese banks performed better than the leading US peers with the average ROAE at 12.6% as well as significantly ahead of large European banks at 7.6% as at Q3 2018.

Exhibit 14: Return on average equity (ROAE), Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



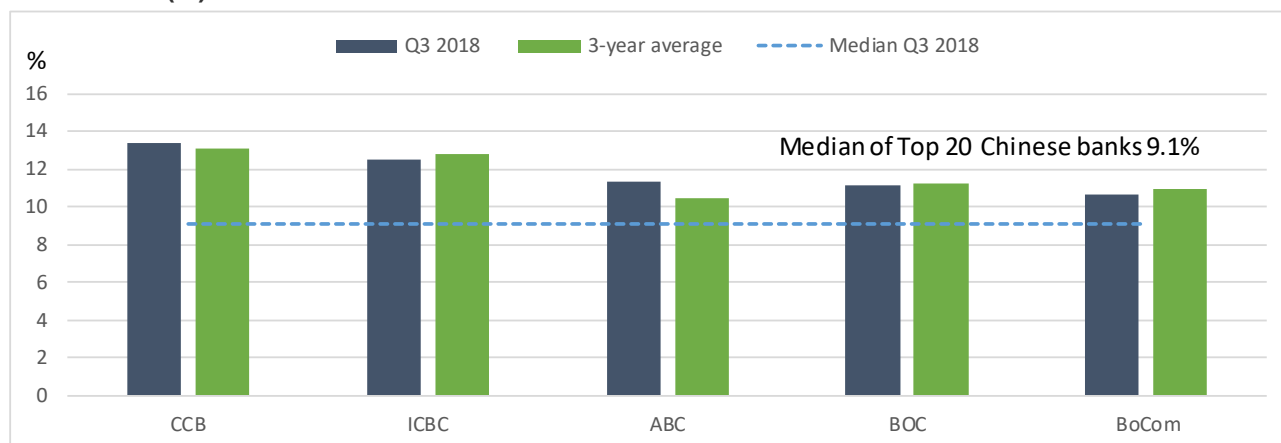
Stable trends in risk-weighted capitalisation

The top five Chinese banks did not improve their CET1 ratios despite having the benefit of double-digit ROAEs. Only **ABC** was able to deliver a 50 bps increase in its CET1 ratio, partly due to the CNY100 billion capital raising completed in June 2018.

At the same time, all leading Chinese banks had significantly better regulatory CET1 capital ratios compared to the domestic peers at 9.1% as at Q3 2018.

The average CET1 ratios of the top five Chinese banks compared favourably to global peers with the leading US banks at 10.9%, but unfavourably versus the large European banks at 13.2% as at Q3 2018.

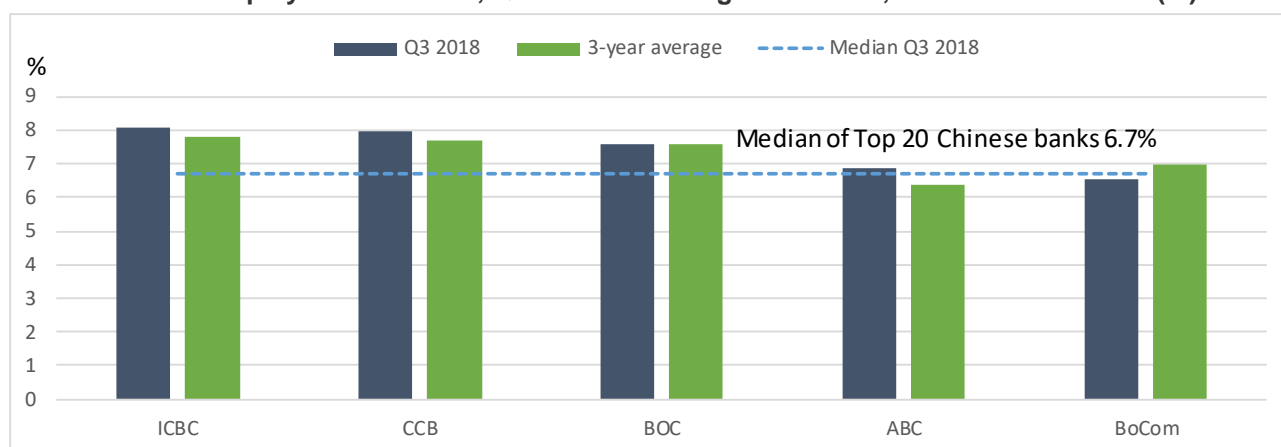
Exhibit 15: Common Equity / Core Tier 1 ratio (as reported), Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



The same trends were apparent in non-risk weighted capitalisation, which remained flat for the leading Chinese banks in 2018. Similar to its CET1 ratio, **ABC** improved its non-risk weighted capital ratio, albeit just to reach the peer group average.

ICBC and **CCB** had comfortable non-risk weighted capital ratios at 8% albeit still below the average for the large US peers at 11% as at Q3 2018.

Exhibit 16: Total equity / Total assets, Q3 2018 vs. average of YE2017, YE2016 and YE2015 (%)



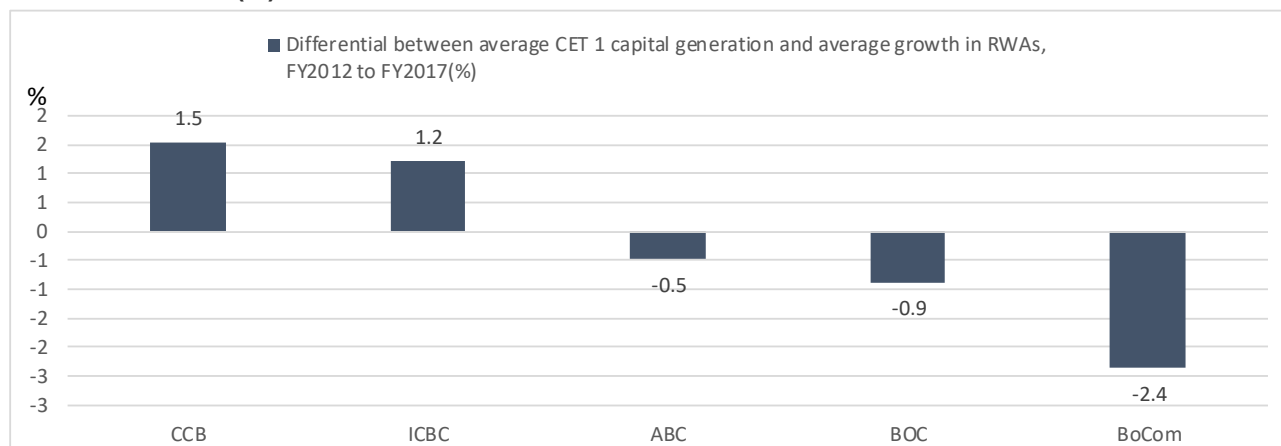
CCB and ICBC ahead of peers in long-term capital generation

In order to measure the ability of the top five Chinese banks to generate sufficient capital internally for their growth purposes, we compared CET1 capital generation⁴ with RWA growth over the medium-term.

Over the period of 2012 to 2017 **CCB** and **ICBC**, the two banks with the highest profitability ratios ranked ahead of the peers in CET1 capital generation. However, the average rate of net internal capital creation for the top five Chinese banks was negative at 20 bps and compared unfavourably to US and even most European peers⁵.

Three out of the five Chinese banks generated a negative net growth of capital when compared with the growth of RWAs.

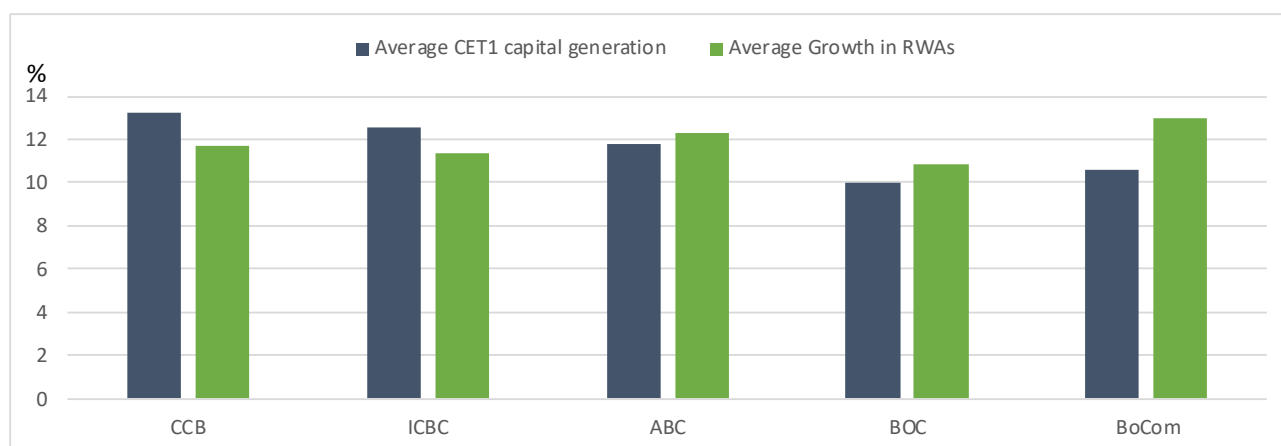
Exhibit 17: Differential between average CET 1 capital generation and average growth in RWAs, FY2012 to FY2017(%)



Two principal factors explain this constrained internal capital creation rate. Firstly, a high growth of RWAs that exceeded the average CET1 capital generation over the medium-term (Exhibit 18). Secondly, a consistently high level of dividend payments by the five Chinese banks, which reduced internal capital creation. On average the dividend payout ratio of the Chinese banks was at 30% since 2012.

In conclusion, despite the high ROAEs the leading Chinese banks display dependence on external capital as post-dividend net profitability was not sufficient to match their RWA growth historically.

Exhibit 18: Average CET 1 capital generation and average growth in RWAs, FY2012 to FY2017(%)



⁴ CET1 capital generation includes dividend payment, while ROAE is based on pre-dividend profit after tax

⁵ The average capital creation of the leading seven US banks was 6% and 1.5% for 12 European banks for 2012-2017

Appendix I: Selected ratios of the leading Chinese banks

Customer loans & advances / Total assets (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	52.7	53.3	-0.6
China Construction Bank Corporation Joint Stock Company	57.3	56.8	0.5
Agricultural Bank of China Limited	49.8	49.0	0.8
Bank of China Limited	54.6	54.7	-0.1
Bank of Communications Co. Ltd	50.1	49.5	0.6

Net interest income / Operating revenues (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	78.3	77.3	1.0
China Construction Bank Corporation Joint Stock Company	72.5	75.6	-3.1
Agricultural Bank of China Limited	77.2	84.9	-7.7
Bank of China Limited	70.3	74.1	-3.8
Bank of Communications Co. Ltd	61.8	69.2	-7.4

Net interest margin (NIM) (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	2.6	2.4	0.2
China Construction Bank Corporation Joint Stock Company	2.6	2.4	0.2
Agricultural Bank of China Limited	2.7	2.5	0.2
Bank of China Limited	2.3	2.1	0.2
Bank of Communications Co. Ltd	1.5	1.6	-0.1

Cost to income (Efficiency) ratio (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	23.9	27.6	-3.7
China Construction Bank Corporation Joint Stock Company	27.9	28.7	-0.8
Agricultural Bank of China Limited	31.9	35.1	-3.2
Bank of China Limited	33.7	33.1	0.6
Bank of Communications Co. Ltd	34.8	37.8	-3.0

Interest expense / Average interest bearing liabilities (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	1.5	1.5	0.0
China Construction Bank Corporation Joint Stock Company	1.6	1.5	0.1
Agricultural Bank of China Limited	1.5	1.5	0.0
Bank of China Limited	1.8	1.7	0.1
Bank of Communications Co. Ltd	2.6	2.4	0.2

Total net impairment charges / Pre-impairment operating profit (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	28.4	26.1	2.3
China Construction Bank Corporation Joint Stock Company	27.5	29.8	-2.3
Agricultural Bank of China Limited	33.0	29.1	3.9
Bank of China Limited	22.2	28.9	-6.7
Bank of Communications Co. Ltd	26.0	27.4	-1.4

Recurring earning power (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	2.0	2.0	0.0
China Construction Bank Corporation Joint Stock Company	2.1	2.0	0.1
Agricultural Bank of China Limited	1.9	1.7	0.2
Bank of China Limited	1.6	1.6	0.0
Bank of Communications Co. Ltd	1.4	1.3	0.1

Return on average assets (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	1.2	1.1	0.1
China Construction Bank Corporation Joint Stock Company	1.2	1.1	0.1
Agricultural Bank of China Limited	1.0	1.0	0.0
Bank of China Limited	1.1	1.0	0.1
Bank of Communications Co. Ltd	0.9	0.8	0.1

Return on average equity (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	14.6	14.6	0.0
China Construction Bank Corporation Joint Stock Company	15.7	14.8	0.9
Agricultural Bank of China Limited	15.1	14.9	0.2
Bank of China Limited	14.0	12.9	1.1
Bank of Communications Co. Ltd	13.5	11.9	1.6

CET 1 ratio (as reported) (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	12.5	12.8	-0.3
China Construction Bank Corporation Joint Stock Company	13.3	13.1	0.2
Agricultural Bank of China Limited	11.3	10.6	0.7
Bank of China Limited	11.1	11.2	-0.1
Bank of Communications Co. Ltd	10.6	10.8	-0.2

Total equity / Total assets (%)

Bank Name	Q3 2018	YE 2017	Change
Industrial & Commercial Bank of China (The) - ICBC	8.1	7.9	0.2
China Construction Bank Corporation Joint Stock Company	8.0	7.8	0.2
Agricultural Bank of China Limited	6.9	6.4	0.5
Bank of China Limited	7.6	7.6	0.0
Bank of Communications Co. Ltd	6.6	6.8	-0.2

Research methodology and scope

Using BankFocus search steps we analysed the following financials and ratios: Total Assets, Gross loans and advances to customers, Number of employees, Customer loans & advances / Total assets, Net interest margin (NIM), Cost to income (Efficiency) ratio, Recurring earning power (Pre-impairment operating profit / Average total assets), Return on average assets (ROAA), Return on average equity (ROAE), Net interest income / Operating revenues, Total equity / Total assets, Common Equity / Core Tier 1 ratio (as reported), Interest expense / average interest bearing liabilities, Interest expense on customer deposits / Average customer deposits, and Total net impairment charges / Pre-impairment operating profit.

We analysed the top four Chinese commercial banks for the period of YE2015 to Q3 2018 and Bank of Communications Co, Ltd (BoCom) was for the period of YE2015 to Q2 2018.

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

Get in touch if you have any analytical questions**Irakli Pipia**

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