

Joint-Stock Banks Capable of Sustaining Lending Growth Under Earning Pressure

A Study on the Credit Quality of Chinese Joint-stock Banks Amid COVID-19

June 15, 2020

Key Takeaways

- Joint-stock banks are expected to quickly expand their lending portfolio in 2020 to help the economy recover from the effects of COVID-19.
- Capitalization will come under pressure due to fast business growth and weakened earnings, but we believe these banks have the resilience to keep capitalization above minimum regulatory requirements.
- The central and regional governments' massive capital injection into Hengfeng Bank, China's smallest joint-stock bank, demonstrates the authorities' supportive stance for this group of banks. Therefore, we expect the joint-stock banks to maintain a stable credit outlook in 2020 despite COVID-19-related pressure.
- Given their varying capital and reserve buffers prior to the pandemic, joint-stock banks have different capacities in terms of offering credit to the real economy while absorbing credit losses caused by COVID-19.

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About This Article

S&P Ratings (China) Co., Ltd. (S&P China) has conducted a desktop analysis of a selection of 200 banks in China, including six mega banks, 12 joint-stock banks, 32 foreign banks, 100 city banks and 50 rural banks, representing 93% of China's banking industry by assets. We have chosen these banks based on their asset size, representativeness of any specific type of bank and availability of public information. The analysis contained herein has been performed using S&P China Methodologies. S&P China Methodologies and analytical approaches are intended specifically for use in China only and are distinct from that used by S&P Global Ratings. An S&P China opinion must not be equated with or represented as an opinion by S&P Global Ratings or relied upon as an S&P Global Ratings opinion.

This desktop analysis has been conducted using publicly available information only, and is based on S&P China's methodology for banks and our understanding of both the banking industry in China as well as our understanding of the institutions themselves. The analysis involves applying our methodology to public information to arrive at a potential view of credit quality across the banking sector. It is important to note that the opinions expressed in this report are based on public information and are not based on any interactive rating exercise with any particular institution. However, where we have conducted an interactive rating with a specific issuer, our insights and analysis learned from that review with those issuers, may have also been incorporated in our results contained herein. The opinions expressed herein are not and should not be represented as a credit rating and should not be taken as an indication of a final credit rating of any particular institution, but are initial insights of potential credit quality based on the analysis conducted. This desktop analysis does not involve any surveillance. The opinions expressed herein are not and should not be viewed as recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security.

We have conducted this desktop analysis on individual institutions and present the results contained herein at an aggregate group level by types of institutions. The different sections of this research show the statistics and performance of different groups of institutions and the market more broadly against the metrics we generally consider most relevant under our methodology.

Given the desktop nature of this analysis, and that we have not conducted an interactive review with most of those institutions, we may have made certain assumptions in lieu of confirmed information and where relevant we may also have attempted to consider any possibility of parent, group, government or other forms of potential support, to inform our view of potential credit quality. S&P China is not responsible for any losses caused by reliance on the content of this desktop analysis.

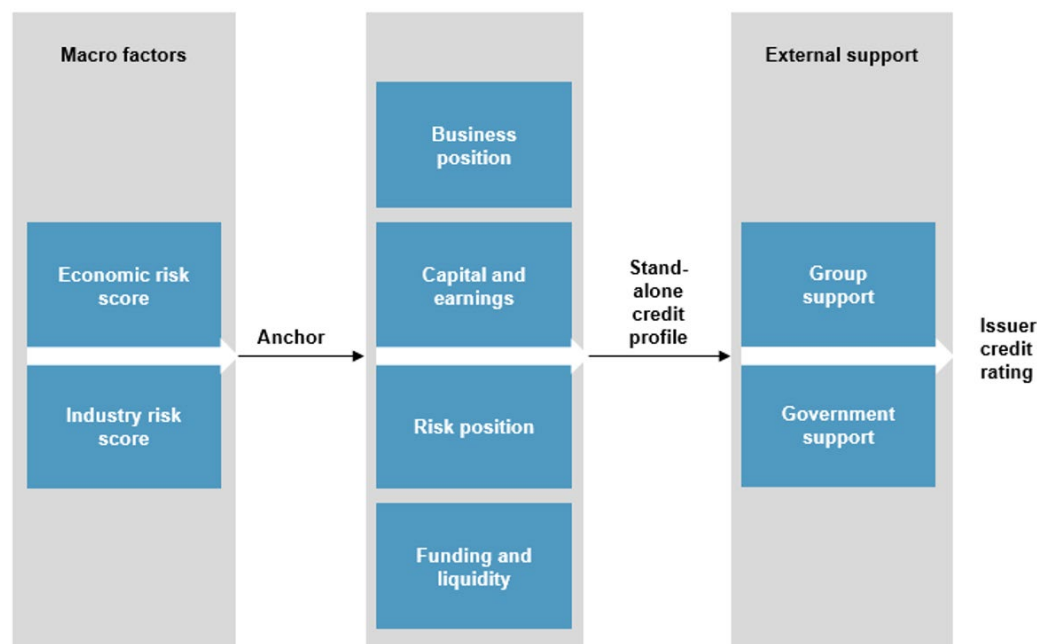
Overview

This desktop analysis is based on S&P Global (China) Ratings Financial Institutions Methodology. We typically determine the stand-alone credit quality based on our assessment of an institution's anchor, a starting point, and then incorporating its own characteristics compared with the anchor. S&P Global (China) Ratings typically applies an anchor of 'bbb+' for banks. The entity-specific factors that we may use to adjust from the anchor include business position, capital and earnings, risk position, and funding and liquidity. We then determine the issuer credit quality based on the stand-alone credit quality and our assessment of potential group and government influence.

This report looks specifically into joint-stock banks, one sub-sector of the banking universe we examined in our other reports (see *Diversity Across China's Banking System – A Deep Dive: A Study on Credit Quality Differentiation Among Chinese Banks*, October 21, 2019, and *Key Differentiation Factors of Credit Quality of Domestic Banks in China*, March 3, 2020).

Chart 1

Financial Institutions Methodology Framework of S&P Global (China) Ratings



We typically apply an anchor of 'bbb+' for banks operating in China.

Note: After assessing the issuer's entity-specific factors, a holistic assessment may be applied to evaluate its credit characteristics in aggregate and versus peers before arriving at SACP.

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Unlike geographically limited city and rural banks, joint-stock banks can operate across China. After the first joint-stock bank was set up in 1987, China had issued 12 joint-stock bank licenses by 2005. These banks have played important roles in China's market economy reform journey over the past three decades.

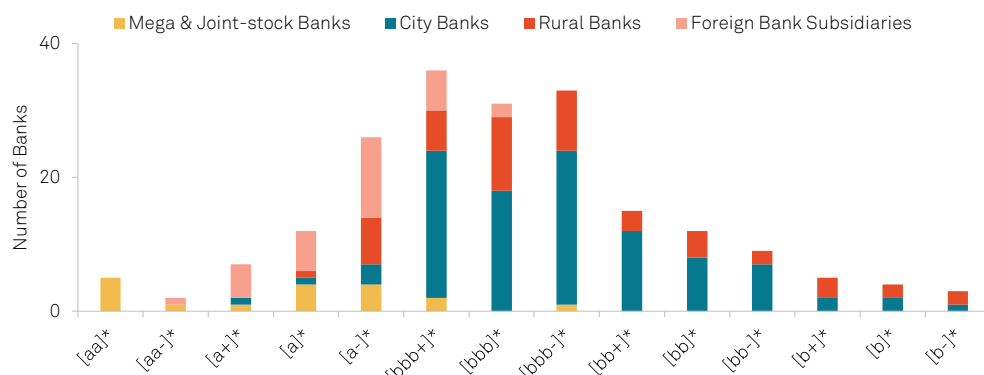
After the state-owned mega banks, joint-stock banks have become among the most recognizable banking brands in China. The 12 joint-stock banks accounted for 22% of the commercial banking market in China in terms of assets as of the end of 2019. Typically, they are smaller than the state-owned mega banks but larger than most regional banks.

Thanks to their strong brands and national network, our desktop analysis finds that joint-stock banks typically have average or above-average indicative stand-alone credit quality, ranging from [bbb_{spc}] category to [aa_{spc}] category.

Thanks to their systemic importance in the domestic market, we believe the joint-stock banks are likely to receive extraordinary government support in times of stress, thus their indicative issuer credit quality, ranging from [BBB_{spc}] category to [AA_{spc}] category, typically incorporates varying levels of government support.

Chart 2

Distribution of Indicative Stand-alone Credit Quality of 200 Major Banks in China



Joint-stock banks typically have average or above-average indicative stand-alone credit quality, ranging from [bbb_{spc}] category to [aa_{spc}] category.

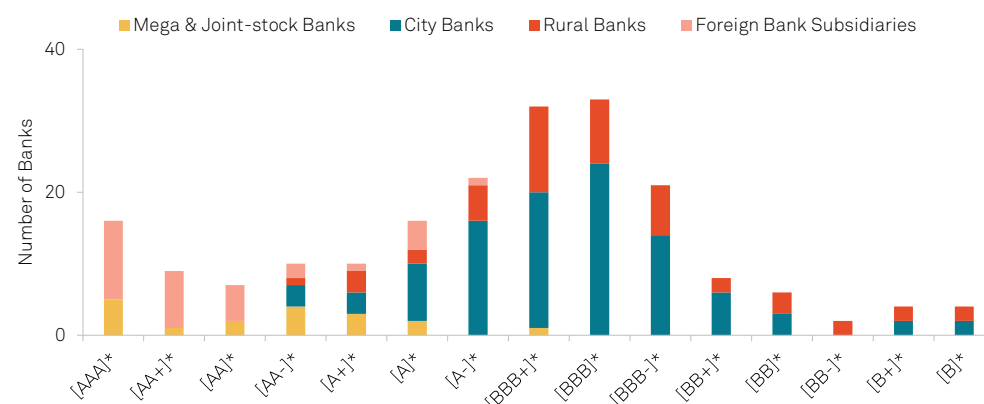
Note 1: Our assessment of indicative stand-alone credit quality doesn't consider the possibility of group or government support in times of stress.
Note 2*: The indicative credit quality distributions expressed in this report are S&P China's indicative views of credit quality derived from a desktop analysis based on public information without interactive review with any particular institution or the full credit rating process such as a rating committee (except for some institutions for which we have assigned ratings on). The opinions expressed herein are not and should not be represented as a credit rating and should not be taken as an indication of a final credit rating of any particular institution.

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Chart 3

Distribution of Indicative Issuer Credit Quality of 200 Major Banks in China



Joint-stock banks' indicative issuer credit quality, ranging from [BBB_{spc}] category to [AA_{spc}] category, typically incorporates varying levels of government support.

Note 1: Our assessment of indicative issuer credit quality considers the possibility of group or government support in times of stress.
Note 2*: The indicative credit quality distributions expressed in this report are S&P China's indicative views of credit quality derived from a desktop analysis based on public information without interactive review with any particular institution or the full credit rating process such as a rating committee (except for some institutions for which we have assigned ratings on). The opinions expressed herein are not and should not be represented as a credit rating and should not be taken as an indication of a final credit rating of any particular institution.

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Credit Outlook of Joint-stock Banks in 2020

Risk Factor	Outlook in 2020	Key Points
Business Position	Stable	<p>Joint-stock banks have widely recognized brands and good geographic diversification in China.</p> <p>We don't expect the COVID-19 outbreak to have a negative impact on their business position and they are expected to play a positive role in supporting the real economy as the outbreak recedes.</p>

Capital & Earnings	Stable with negative pressure	Capital is under pressure due to rapid loan growth and weakening earnings in 2020. Despite the pressure, we expect joint-stock banks to be resilient enough to maintain minimum capital as required by the regulator.
Risk Position	Stable with negative pressure	After NPL ratios peaked in 2017, most joint-stock banks have managed to stabilize their asset quality performance in recent years. COVID-19 will put pressure on asset quality, but the extent of the impact is still highly uncertain.
Funding & Liquidity	Stable with upward trend	Typically, joint-stock banks are more reliant on wholesale funding than mega banks. Joint-stock banks typically have controllable liquidity risk due to easy access to the interbank market. We expect their liquidity profiles to remain stable and funding costs to fall in 2020 as systemwide liquidity remains abundant amid a more accommodative monetary policy environment.
Stand-alone Credit Quality	Stable with negative pressure	COVID-19's impact on the joint-stock banks' stand-alone credit quality will vary depending on their asset quality profiles and reserve levels prior to the pandemic. Under the assumption of u-shape economic recovery, we expect the pandemic's impact to be an earning shock rather than a capital one.
Government Support	Stable with upward trend	Level of state ownership varies, but central and local governments have substantial stakes in most of the joint-stock banks. Given these banks' large sizes, we typically believe they have systemic importance in China. The government bailout of Hengfeng Bank, the smallest joint-stock bank, in late 2019 demonstrates the government's strong willingness to support this sub-sector.
Issuer Credit Quality	Stable	The majority of joint-stock banks maintained sound stand-alone credit quality before the COVID-19 outbreak. Strong government support is likely to keep this sub-sector stable despite COVID-19.

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After the government bailout of Hengfeng Bank in 2019, we anticipate all joint-stock banks to maintain a stable credit profile in 2020 despite the COVID-19 pandemic. Nevertheless, given their varying capital and reserve buffers before the pandemic, they have very different capacities when it comes to offering credit to the real economy to help the economic recovery while absorbing credit losses caused by COVID-19.

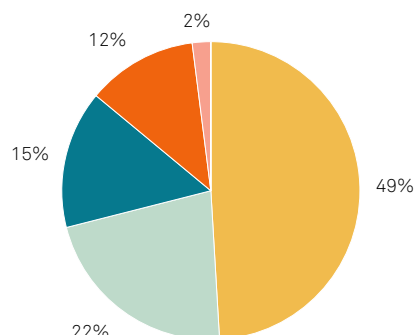
Business Position

Joint-stock banks' asset market share remains stable. The 12 banks' total market share by assets in the commercial banking industry is about 22%. The market share of each joint stock bank varies from 0.7% to 3.1%.

Chart 4

Breakdown of Asset Market Share of China's Commercial Banking Sector

■ Mega Banks ■ Joint-stock Banks ■ City Banks ■ Rural Banks ■ Foreign Bank Subsidiaries



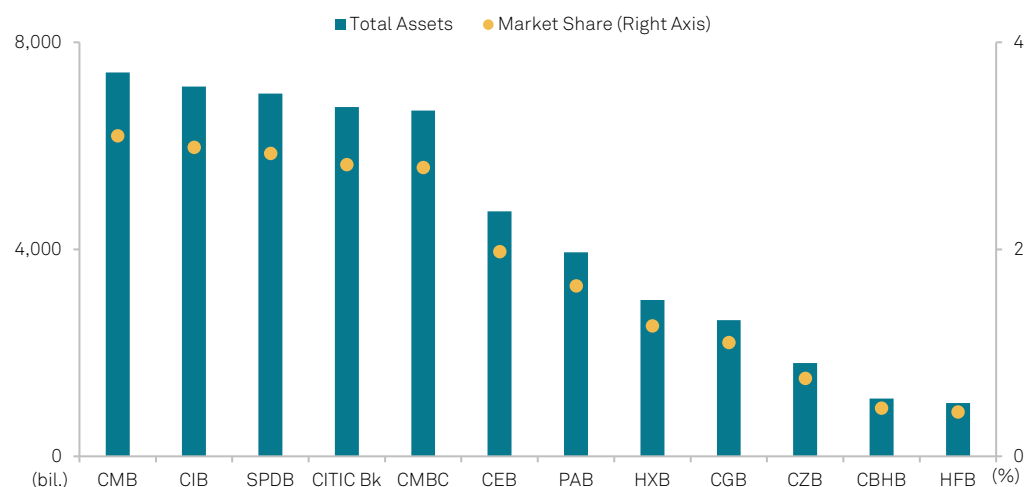
Bank Type	No. of Banks
Mega banks	6
Joint-stock banks	12
Foreign bank subsidiaries	41
City banks	134
Rural banks	1,397
Private Banks	17

The 12 joint-stock banks account for about 22% of the commercial banking market.

Sources: CBIRC, collected and adjusted by S&P Global (China) Ratings
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Chart 5

Total Assets and Market Share of Joint-stock Banks as of End of 2019



The market share of individual joint-stock banks varies from 0.7% to 3.1%.

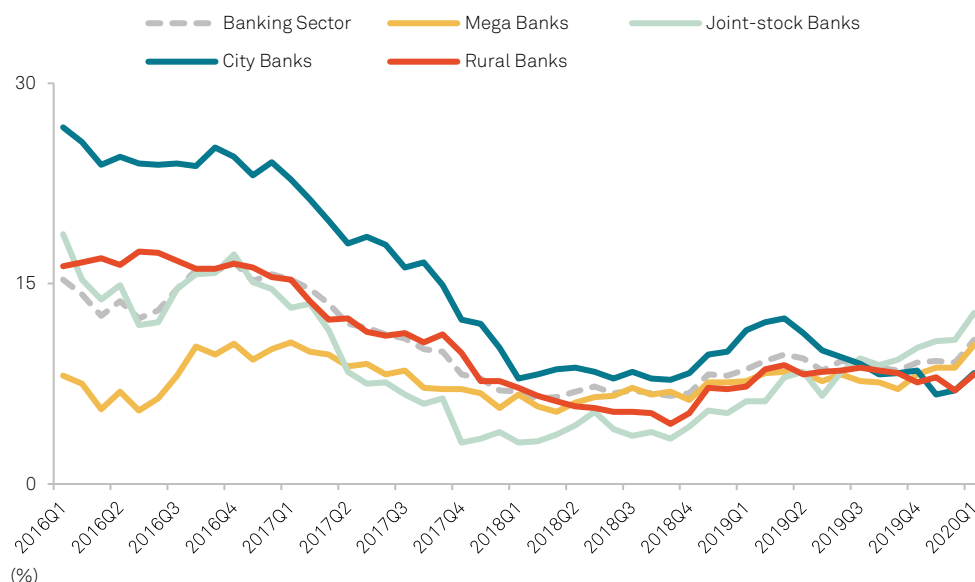
Note: CMB-China Merchants Bank, CIB-Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.
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We expect rapid business growth for joint-stock banks in 2020. As regional banks are expected to slow their growth going forward due to capital pressure, we anticipate that joint-stock banks may have the highest business growth rate in 2020. In the first quarter, their asset growth rate YoY was 12.8%, higher than the industry average of 10.8% and the mega bank average of 10.4%.

Chart 6

Total Asset Growth YoY

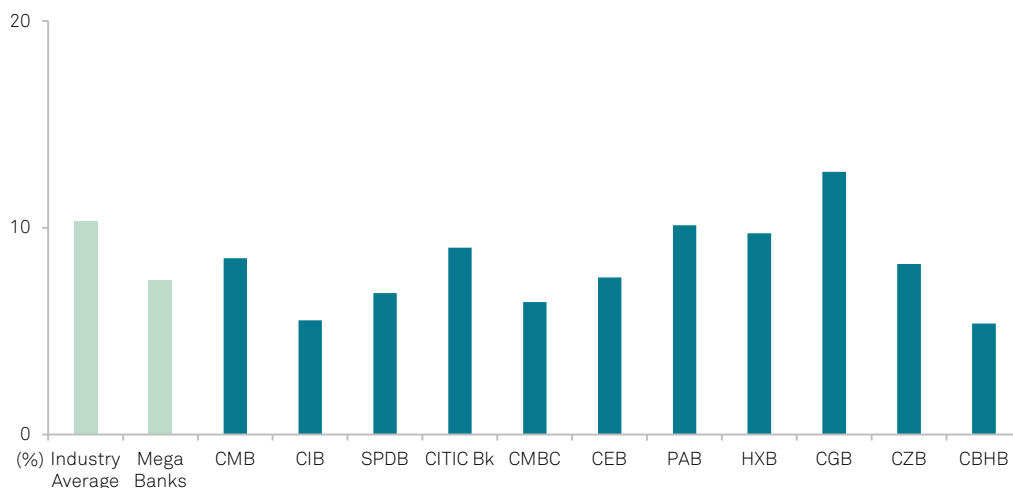


Joint-stock banks had the highest asset growth rate in the first quarter of 2020.

Source: CBIRC, collected and adjusted by S&P Global (China) Ratings.
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Chart 7

Compound Annual Growth of Bank Assets from 2017 to 2019



Individual joint-stock bank's asset growth rates vary.

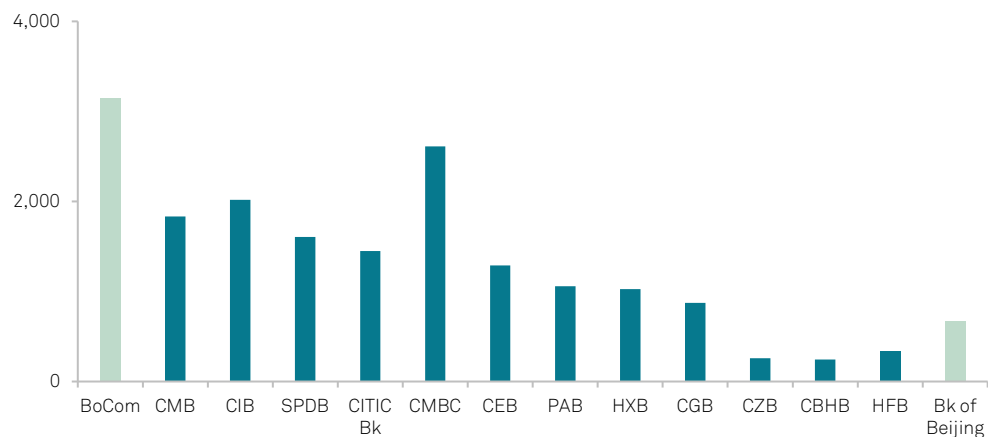
Note: CMB-China Merchants Bank, CIB-Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: CBIRC, public information of banks, collected and adjusted by S&P Global (China) Ratings.
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Compared with regional banks, joint-stock banks have the advantage of national network coverage. The business network coverage varies among joint-stock banks.

Chart 8

Number of Bank Branches as of End of 2019



Joint-stock banks' branch network is generally bigger than most regional banks but smaller than mega banks.

Note: BoCom-Bank of Communications, CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

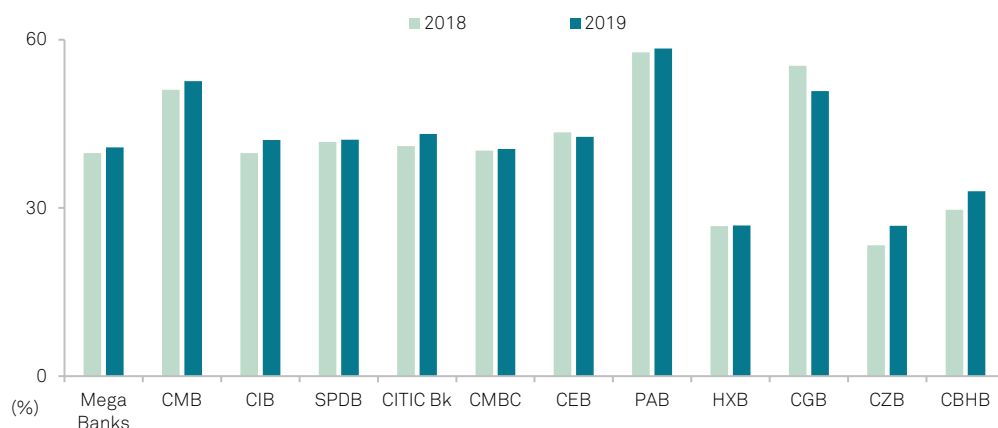
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Similar to mega banks, most joint-stock banks have been increasing their exposure to retail lending which has better granularity and steadier asset quality performance compared with corporate lending. We believe the shift in business focus towards retail lending has contributed to the stabilization of their asset quality in recent years.

Chart 9

Retail Loans/Gross Customer Loans



We believe the shift in business focus towards retail lending has contributed to the stabilization of joint-stock banks' asset quality in recent years.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

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Characteristics of Banks with Different Indicative Business Position Scores

Score	Typical Profile
0	Very large state-owned mega banks with very good geographic diversification across China or beyond.
1	Large state-owned mega banks or leading national joint-stock banks, with good geographic diversification across China.
2	Mid-sized joint-stock banks or leading regional banks with good geographic diversification at least at provincial level, or leading foreign bank subsidiaries.
3	Small joint-stock banks, middle-sized regional banks based in first or second tier cities, or mid-sized foreign bank subsidiaries.
4	Small regional banks in second or third tier cities with high geographic concentration, or mid and small-sized foreign bank subsidiaries.
5	Small regional banks in third or fourth tier cities with very high geographic concentration, or small foreign bank subsidiaries.
6	The bank's business operations are materially riskier than its peers. This category applies only in exceptional circumstances.

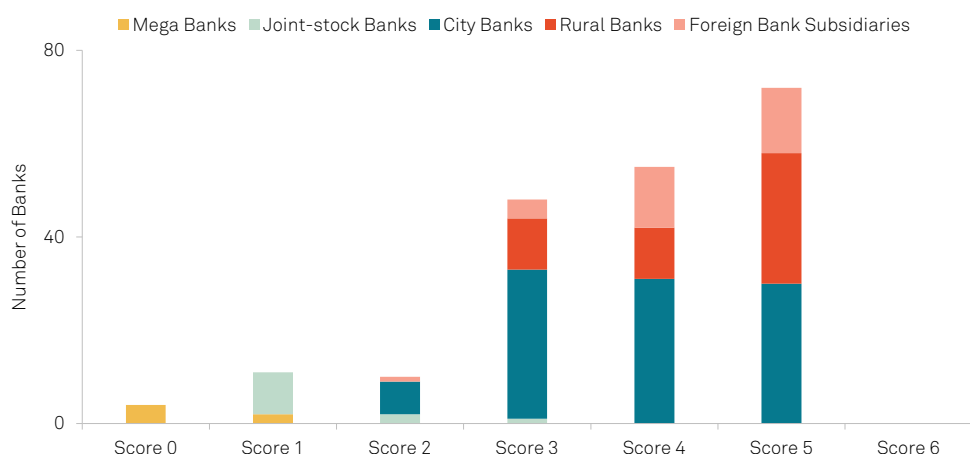
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In addition to market share, business stability and diversification considerations, our business position assessment also considers corporate governance, management capability, strategy execution, and other qualitative factors.

Chart 10

Indicative Business Position Score Distribution of 200 Major Banks



Joint-stock banks tend to have strong business franchise thanks to their good geographic diversification and well-known brands.

Note 1: For testing purpose, we score the business position of Chinese banks in a scale of 0 to 6. 0 means the strongest position and 6 means the weakest.

Note 2: The indicative scores expressed in this report are S&P China's indicative views of risk factors derived from a desktop analysis based on public information without interactive review with any particular institution or the full credit rating process such as a rating committee (except for some institutions for which we have assigned ratings on). The opinions expressed herein are not and should not be represented as part of a credit rating.

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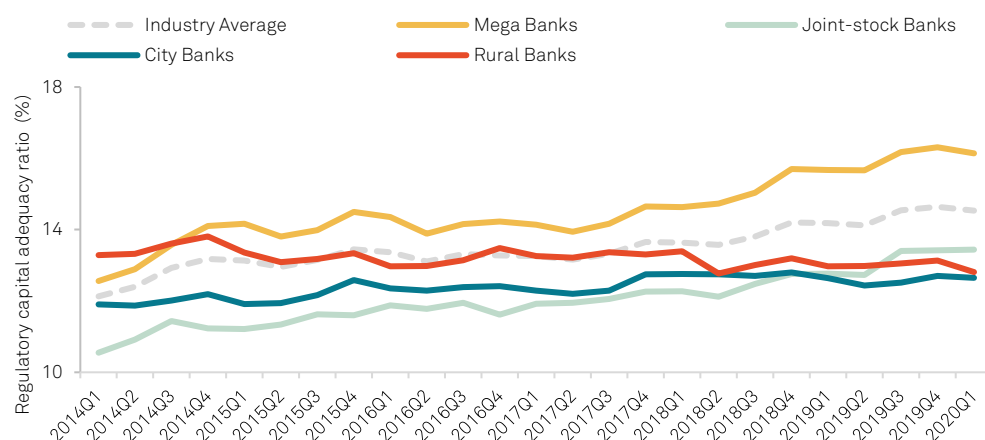
Capital & Earnings

Joint-stock banks have gradually increased their reported regulatory capitalization in recent years, which puts them in a better position to cope with the coronavirus disruption. As of the end of the first quarter of 2020, their average regulatory capital adequacy ratio was 13.44%, unchanged from the end of 2019.

Nevertheless, joint-stock banks' reported average capitalization is significantly lower than the mega banks. The difference is largely attributable to two factors: first, mega banks have a stronger capital base, and second, most mega banks use an internal rating-based ("IRB") approach to calculate regulatory capital ratio. IRB approach typically leads to a higher capital ratio, while most joint-stock banks use the standard approach.

Chart 11

Reported Capital Adequacy Ratio



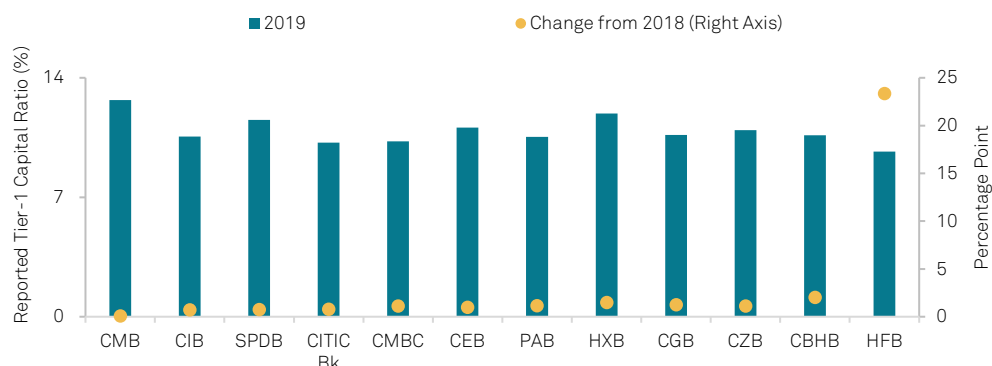
Joint-stock banks have gradually increased their reported capital adequacy ratios in recent years.

Sources: CBIRC, collected and adjusted by S&P Global (China) Ratings.
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Except for Hengfeng Bank which had massive capital injection in 2019, most joint-stock banks had stable or mildly improving tier-1 capital ratio in 2019. As of the end of 2018, Hengfeng Bank had a tier-1 capital ratio of -13.65% due to bad debts. Thanks to capital injection from central and local governments, its tier-1 capital was restored to 9.68% by the end of 2019.

Chart 12

Reported Tier-1 Capital Adequacy Ratio as of End of 2019



Most joint-stock banks had stable or mildly improving tier-1 capital ratios in 2019.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

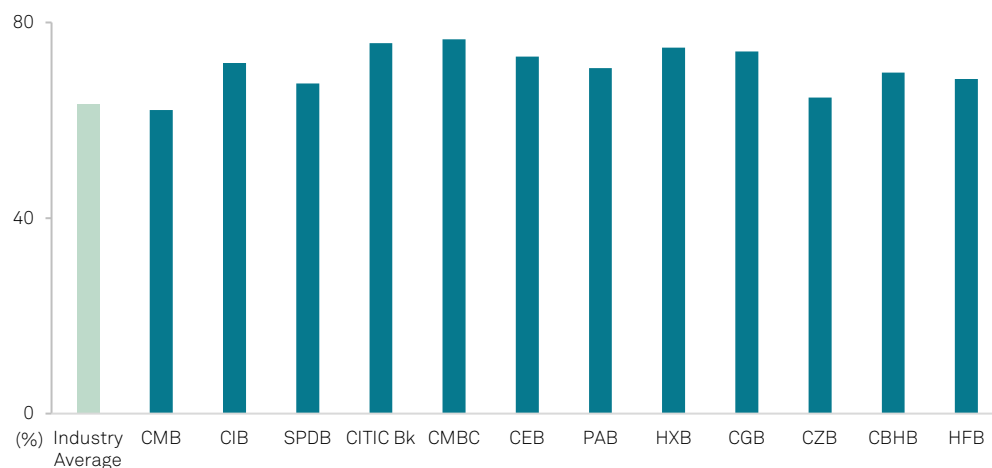
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Typically, joint-stock banks have higher risk-weighted asset (“RWA”) density compared to the industry average. We believe this is mostly attributable to their larger loan portfolio. To calculate reported regulatory capital adequacy ratios, most joint-stock banks use a standard approach and China Merchants Bank is the only joint-stock bank using IRB approach. China Merchants Bank’s RWA density, as measured by the ratio of reported RWA to total assets, is lower than its peers.

Chart 13

Reported Risk-weighted Assets/Total Assets as of End of 2019



Typically, most joint-stock banks have higher RWA density compared to the industry average.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

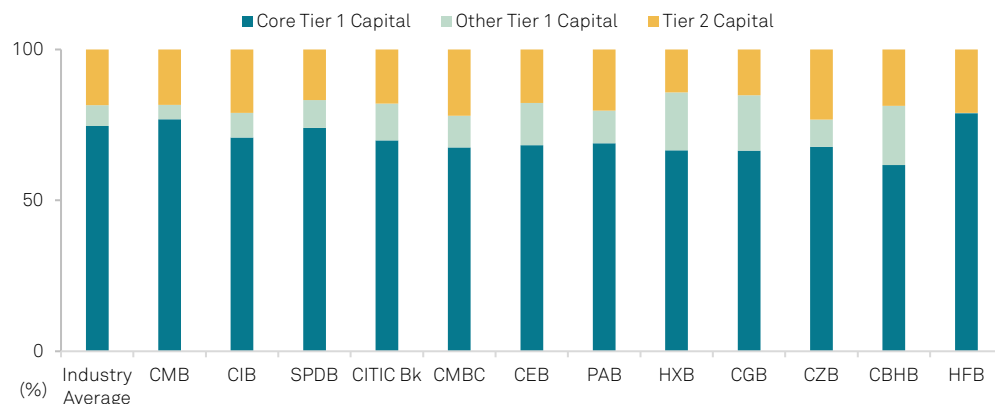
Sources: CBIRC, public information of banks, collected and adjusted by S&P Global (China) Ratings.

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Compared with the industry average, joint-stock banks generally use more hybrid bonds in their capital structure. In 2019 in particular, they issued a lot of perpetual bonds, which are classified as additional tier-1 capital.

Chart 14

Capital Structure as of End of 2019



The majority of joint-stock banks have more hybrid bonds in their capital structure compared with the industry average.

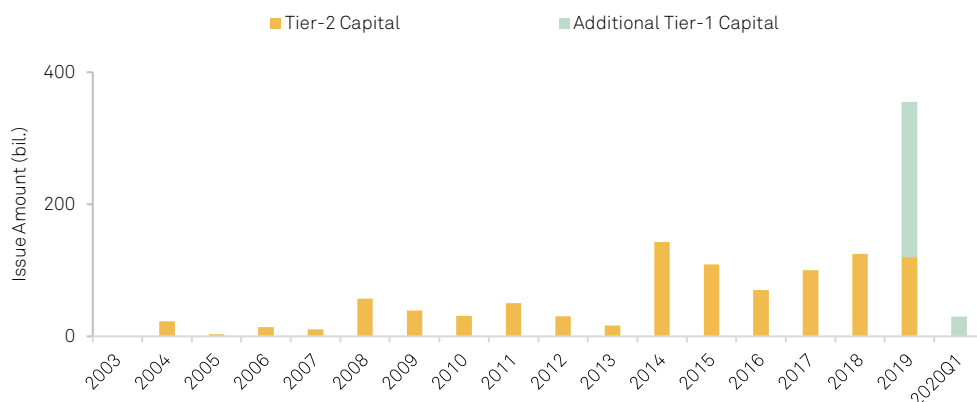
Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: CBIRC, public information of banks, collected and adjusted by S&P Global (China) Ratings.

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Chart 15

Hybrid Bonds Issued by Joint-stock Banks



Since 2019, joint-stock banks have been issuing perpetual bonds to ease their tier-1 capital pressure.

Note: Additional tier -1 capital refers to perpetual bonds; tier-2 capital includes hybrid capital bonds, subordinated bonds and tier-2 capital bonds.

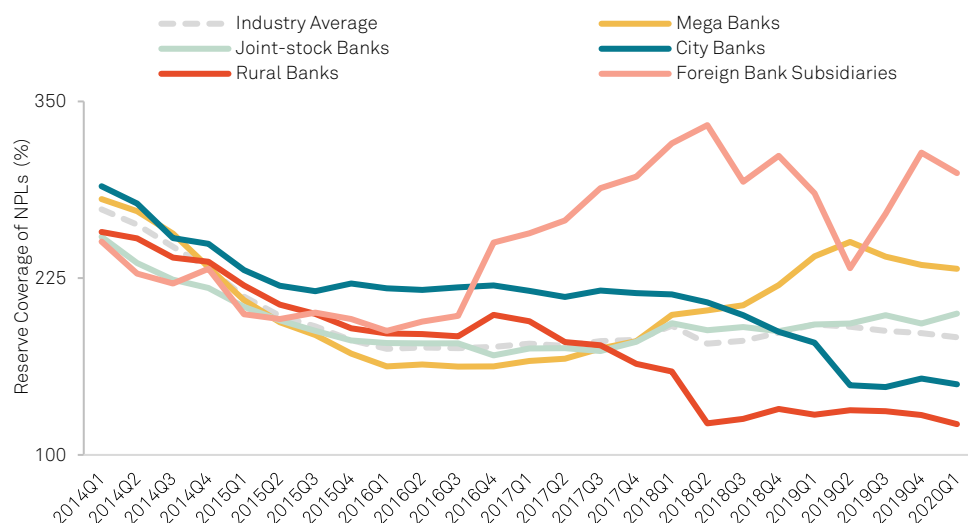
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Thanks to stabilization of asset quality performance, joint-stock banks managed to improve their reserve coverage ratio in recent years. As of the end of the first quarter of 2020, their average reserve coverage ratio was 200%, 7 percentage points higher than the end of 2019. However, we expect this ratio to come under pressure as the COVID-19 pandemic pushes bad debt levels higher going forward.

Chart 16

Reserve Coverage of Non-performing Loans (NPL)



Joint-stock banks' reserve coverage ratio is close to the industry average.

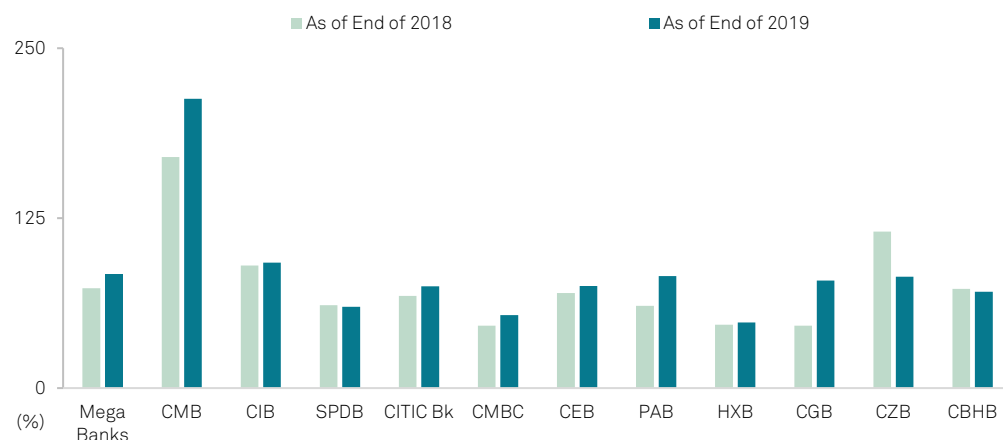
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Before the pandemic, the joint-stock banks varied in terms of their reserve buffers against non-performing loans (NPL) and special mention loans (SML), resulting in the banks differing in terms of their abilities to defend against rising bad debts during the COVID-19 outbreak. As of the end of 2019, China Merchants Bank's reserve buffer was 2.1 times that of its NPL+ SML. In contrast, this buffer was only around 0.5 times for some other banks, making them more vulnerable during the pandemic.

Chart 17

Loan Loss Reserve/(NPL+SML)



Before the pandemic, joint-stock banks had varying reserve levels in relation to their problematic loans.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank.

Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

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In addition to their reserve levels, another factor potentially affecting the capitalization of joint-stock banks is off-balance sheet wealth management products (“WMP”). To win over retail clients in urban areas where bank competition is intense, joint-stock banks have issued significant amounts of off-balance sheet WMPs. As of the end of 2019, the total off-balance sheet WMPs issued by joint-stock banks was about 34% of their total loans, about 16 percentage points higher than the industry average level. Although off-balance sheet WMPs are not included in the regulatory capital calculation, we believe they may potentially consume capital if the banks decide to make their WMP investors whole in an effort to manage reputational risk.

Chart 18

Off-balance Sheet WMPs /Gross Customer Loans as of End of 2019



To win over retail clients, joint-stock banks have issued significant amounts of off-balance sheet WMPs.

Note 1: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Note 2: The industry average data is as of the end of June 2019.

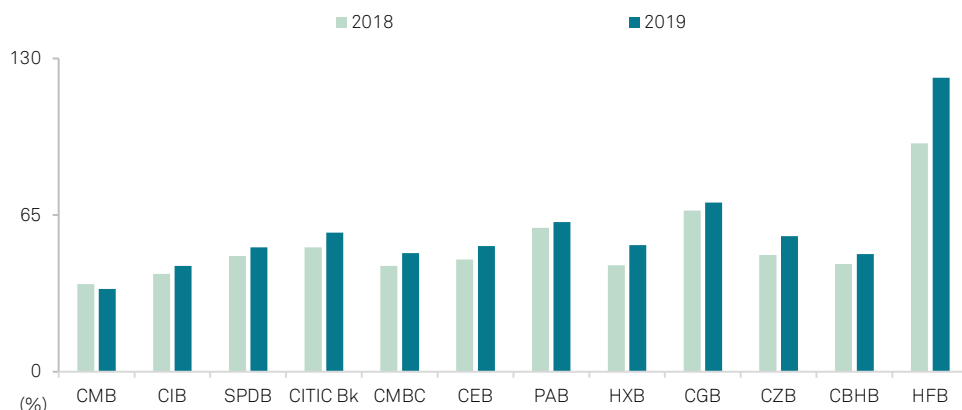
Sources: CBIRC, www.chinawealth.com.cn, public information of banks, collected and adjusted by S&P Global (China) Ratings.

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Compared with mega banks, the impairment charges of joint-stock banks account for a higher percentage of pre-provision operating profits, making them less resilient against increasing credit costs brought on by the pandemic. In 2019, their average credit cost, as measured by the ratio of new provisioning to average gross loans, was 1.7%, 0.7 percentage points higher than the mega banks’ average. In addition, the average credit cost of 11 joint-stock banks excluding Hengfeng Bank increased from 1.6% in 2018 to 1.7% in 2019. We expect a more significant increase this year.

Chart 19

New Provisioning/Pre-provisioning Operating Profits



Provisioning pressure was increasing before the pandemic.

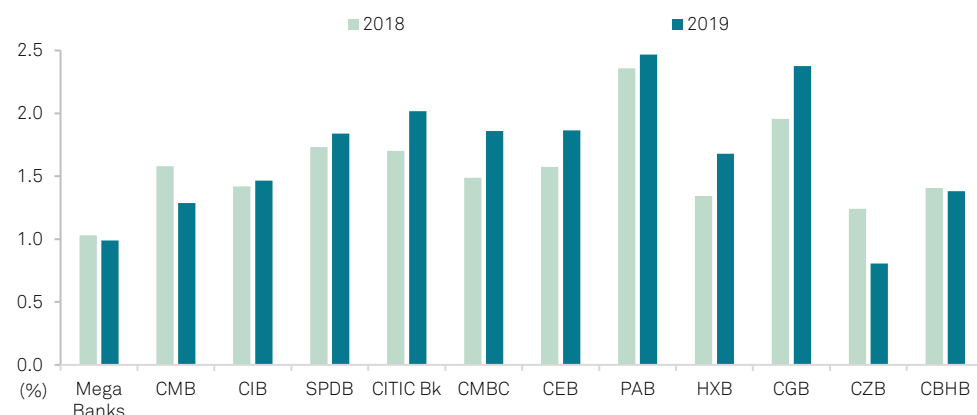
Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

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Chart 20

New Provisioning/Average Gross Customer Loans



The credit costs of joint-stock banks were typically higher than mega banks.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank.

Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

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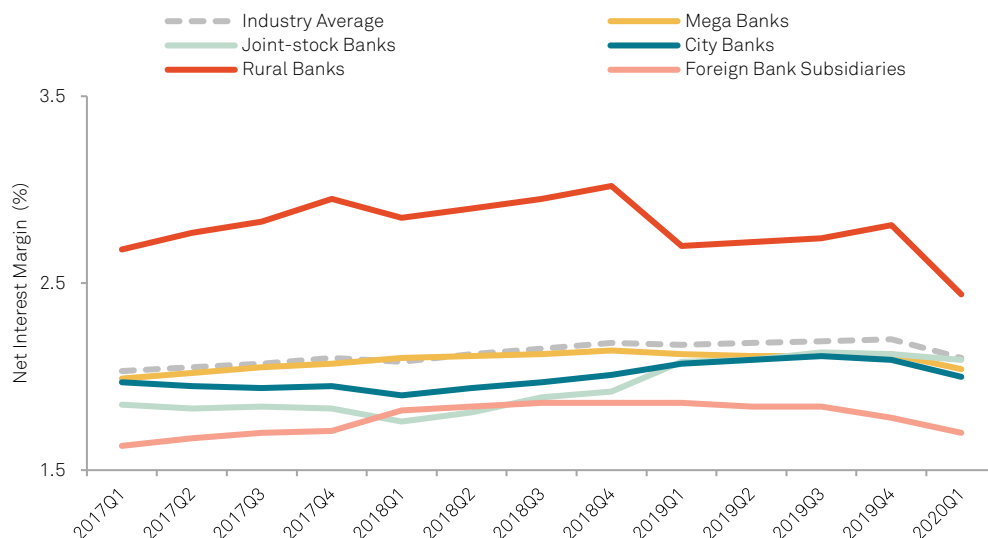
We expect net interest margin (“NIM”) compression in 2020 as the government aims for lower financing costs for the real economy during the recovery from COVID-19. In the first five months of 2020, the 1-year loan prime rate (“LPR”) of China’s banking industry dropped by 30 bps.

Nevertheless, as heavy borrowers in the interbank market, the joint-stock banks are set to benefit from lower interest rates for their wholesale funding in 2020’s more accommodative monetary policy environment. In the first quarter of 2020, joint-stock banks’ average NIM was 2.09%, only 3 basis points lower than in the fourth quarter of 2019. We believe the impact of the LPR drop will be felt more acutely in the fourth quarter of 2020 as it takes time for the existing loan portfolio to switch to the LPR mechanism.

Joint-stock banks typically have varying NIMs, which leads to diverging profitability. Although the industry average NIM remained basically unchanged in 2019, most joint-stock banks improved their NIMs by controlling their funding costs more effectively.

Chart 21

Net Interest Margin (NIM)



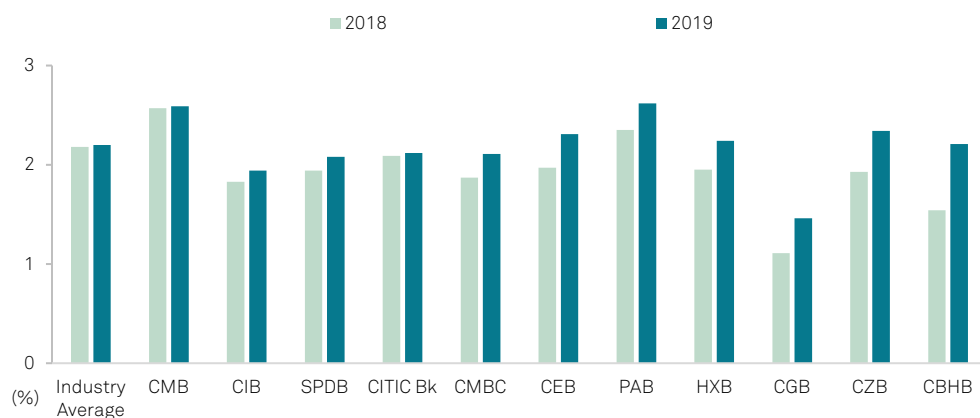
Joint-stock banks' NIMs are generally consistent with the industry average.

Sources: CBIRC, collected and adjusted by S&P Global (China) Ratings.

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Chart 22

Reported Net Interest Margin (NIM)



Joint-stock banks' NIMs vary, leading to diverse profitability.

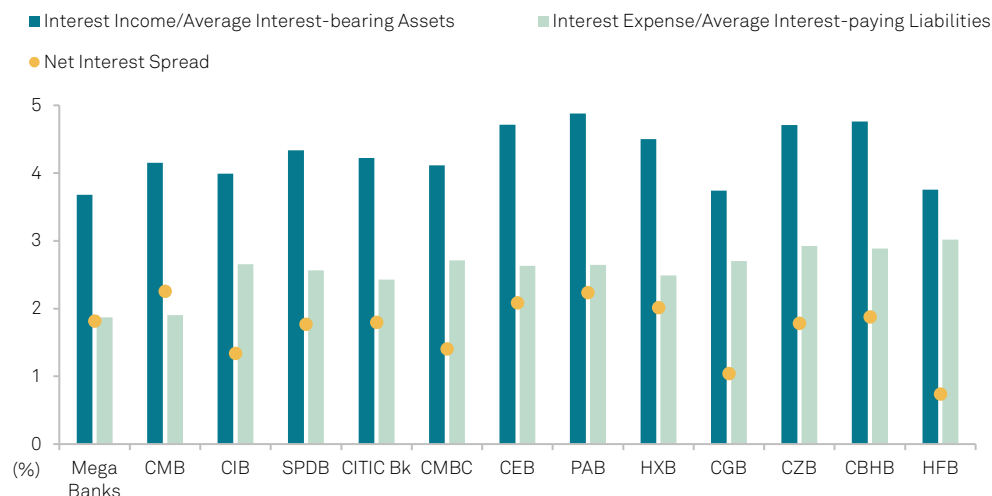
Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank.

Sources: CBIRC, public information of banks, collected and adjusted by S&P Global (China) Ratings.

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Chart 23

Net Interest Spread in 2019



Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

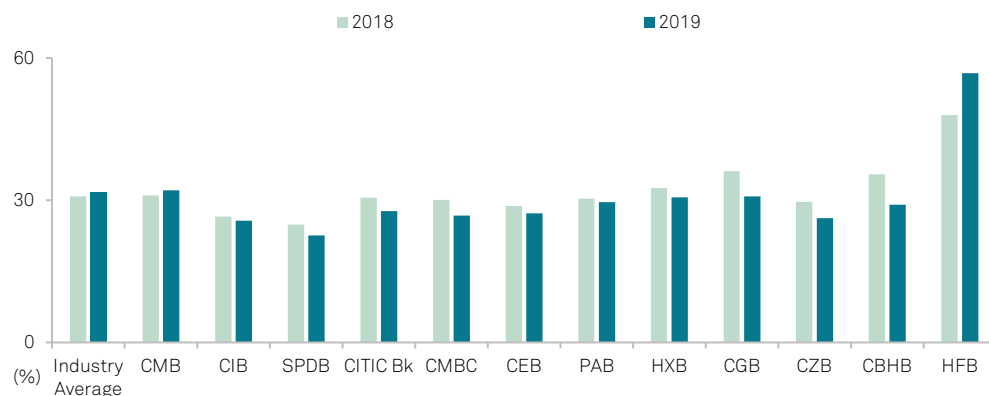
Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

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Except for China Merchants Bank, most joint-stock banks' funding costs are higher than the mega banks.

Chart 24

Cost-to-income Ratio



Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: CBIRC, public information of banks, collected and adjusted by S&P Global (China) Ratings.

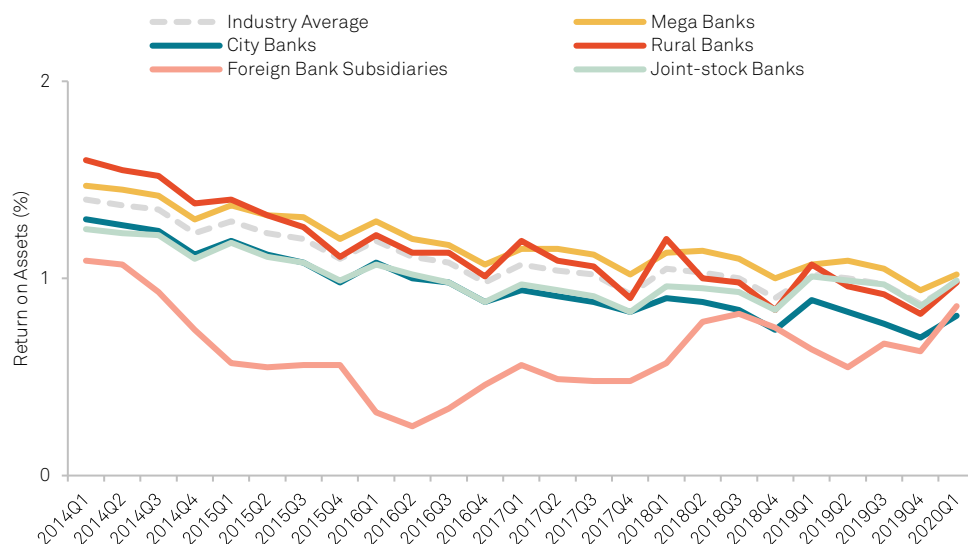
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Most joint-stock banks have a cost-to-income ratio consistent with the industry average.

As a group, joint-stock banks' return on assets ("ROA") is consistent with the industry average. As of the end of the first quarter of 2020, their average annualized ROA was 0.99%, 0.13 percentage points higher than 2019. We expect significant earning pressure in the following quarters because of the economic impact of COVID-19. We believe this earning pressure comes from both NIM compression and increased impairment charges.

Chart 25

Return on Assets

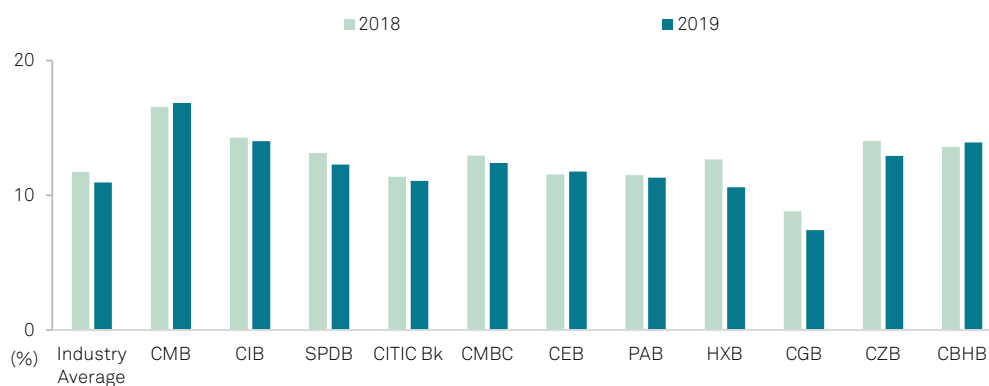


As a group, joint-stock banks' ROA is consistent with the industry average.

Sources: CBIRC, collected and adjusted by S&P Global (China) Ratings.
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Chart 26

Reported Return on Equity ("ROE")



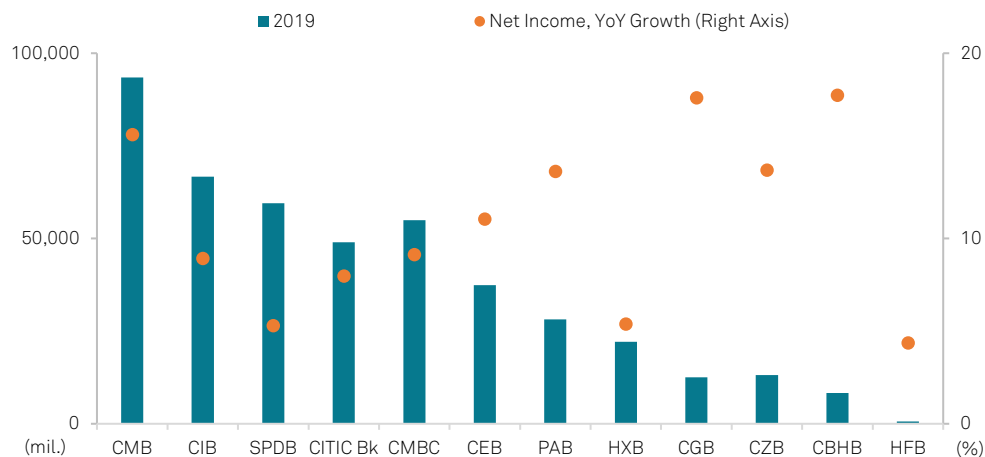
Some joint-stock banks' ROE was under pressure in 2019 due to higher credit costs.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank.

Sources: CBIRC, public information of banks, collected and adjusted by S&P Global (China) Ratings.
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Chart 27

Net Income in 2019



Despite the higher credit costs, all joint-stock banks increased their net income in 2019.

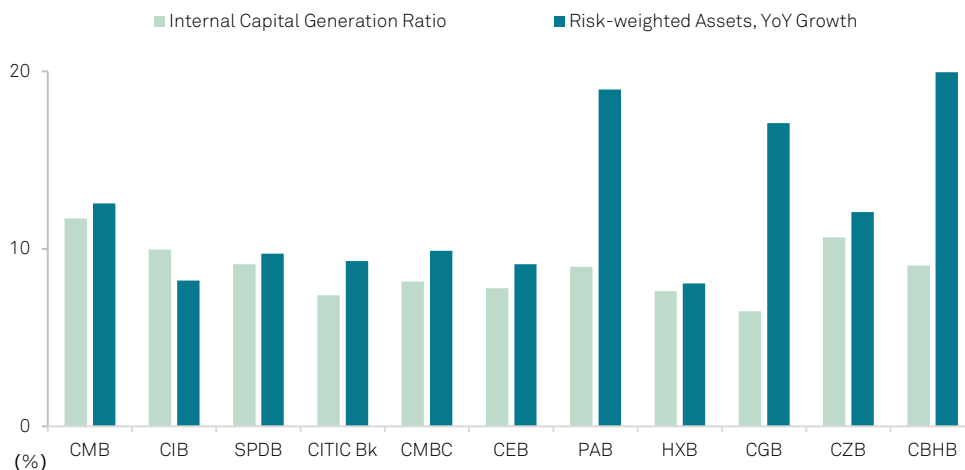
Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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Due to rapid business growth, most joint-stock banks' internal capital generation capacity could not keep pace with their RWA growth in 2019, with capital ratios kept stable through large hybrid bond issuance. In the first quarter of 2020, the total assets of joint-stock banks grew by 4.8% compared to the end of 2019, putting further pressure on capitalization.

Chart 28

Internal Capital Generation Capacity Vs. RWA Growth in 2019



Joint-stock banks' rapid business growth has put pressure on capitalization.

Note 1: Internal capital generation ratio = (net income – cash dividends)/average total equity.

Note 2: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank.

Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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We expect downward pressure on capitalization in 2020 but anticipate joint-stock banks to continue meeting minimum regulatory capital requirements. The capitalization pressure mainly comes from two fronts: first, as part of efforts to support the real economy, we expect rapid lending growth in 2020; second, weakened earnings due to higher credit costs and NIM compression may slow down internal capital generation.

According to our scenario analysis, the majority of joint-stock banks are strong enough to sustain their capital base above minimum regulatory requirements in a stress scenario of a sharp earning shock and rapid lending growth. In the extreme scenario of 10% RWA growth and zero earnings for 2020, the majority of joint-stock banks, accounting for 85% of the total assets of joint-stock banks, could still keep their capitalization above minimum regulatory requirements. The banks which may fall below the minimum tier-1 regulatory capital requirement of 8.5% in this extreme scenario would only have a mild shortage which could be fixed by issuing perpetual bonds or equity, or simply slowing down business growth.

In the unlikely (but still possible) scenario of 15% RWA growth and zero earnings for 2020, 6 joint-stock banks, accounting for 58% of the total assets of joint-stock banks, could still keep their capitalization above minimum regulatory requirements, demonstrating their strong resilience against COVID-19 disruption. We believe these banks can play positive role in economic recovery by pumping credit into the real economy while keeping themselves financially sustainable.

Chart 29

Stress Scenario Analysis of Earning Shock on Capitalization of 12 Joint-stock Banks

Joint-stock banks show significant divergence in terms of capital resilience in stress scenarios of an earning shock combined with rapid lending growth.



Note: We assume no dividend payout for 2020 earnings for this scenario analysis.

Source: S&P Global (China) Ratings.

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Characteristics of Banks with Different Indicative Capital and Earnings Scores

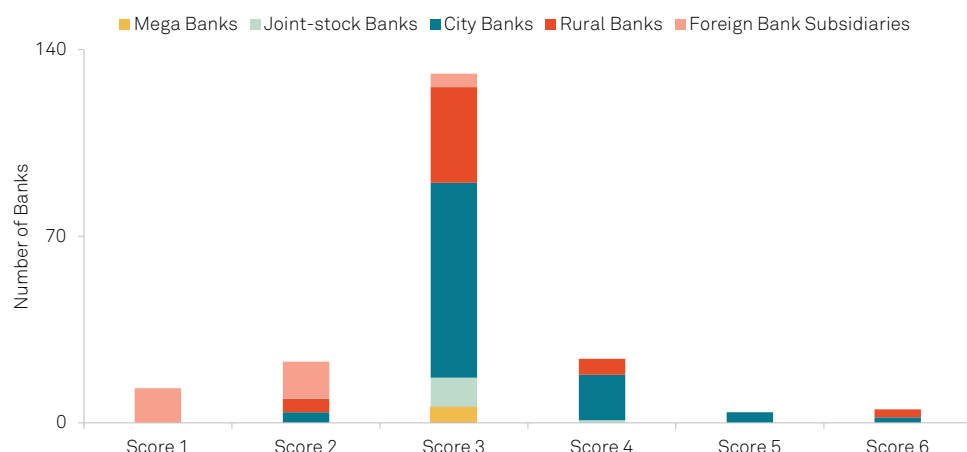
Score	Typical Profiles
1	We expect the capital adequacy ratios adjusted by S&P Global (China) Ratings to be much higher than the industry average at least for the next 24 months.
2	We expect the capital adequacy ratios adjusted by S&P Global (China) Ratings to be somewhat higher than the industry average at least for the next 24 months.
3	We expect the capital adequacy ratios adjusted by S&P Global (China) Ratings to be consistent with the industry average and able to meet the minimum regulatory capital requirements at least for the next 24 months.
4	We expect the capital adequacy ratios adjusted by S&P Global (China) Ratings to be somewhat lower than the industry average in the next 24 months.
5	We expect the capital adequacy ratios adjusted by S&P Global (China) Ratings to be lower than the industry average in the next 24 months.
6	We expect the capital adequacy ratios adjusted by S&P Global (China) Ratings to be significantly lower than the minimum regulatory requirements and we expect that without timely capital injection, the bank's operations would become unsustainable.

Source: S&P Global (China) Ratings.

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Chart 30

Indicative Capital & Earnings Score Distribution of 200 Major Banks



Most joint-stock banks' capital positions are in line with the industry average.

Note 1: For testing purpose, we score the capital position of Chinese banks in a scale of 1 to 6. 1 means the strongest capital position and 6 means the weakest.

Note 2: The indicative scores expressed in this report are S&P China's indicative views of risk factors derived from a desktop analysis based on public information without interactive review with any particular institution or the full credit rating process such as a rating committee (except for some institutions for which we have assigned ratings on). The opinions expressed herein are not and should not be represented as part of a credit rating.

Source: S&P Global (China) Ratings.

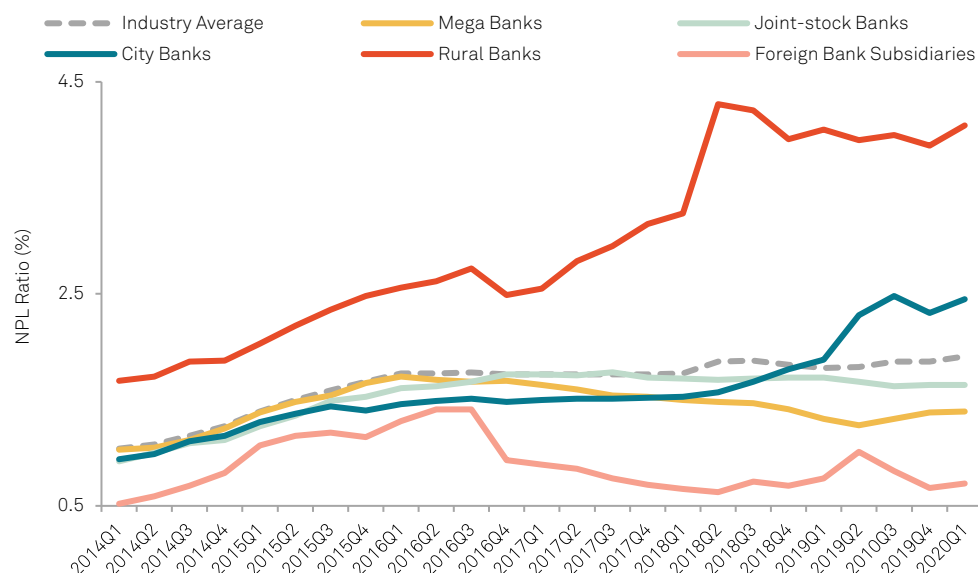
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Risk Position

Because of their extensive exposure to the real economy in China, most joint-stock banks typically have a risk position in line with the industry average. In our opinion, the good diversification of their loan books in terms of geography and client base helps them have a more stable asset quality performance compared with regional banks.

Chart 31

Non-performing Loan (“NPL”) Ratio



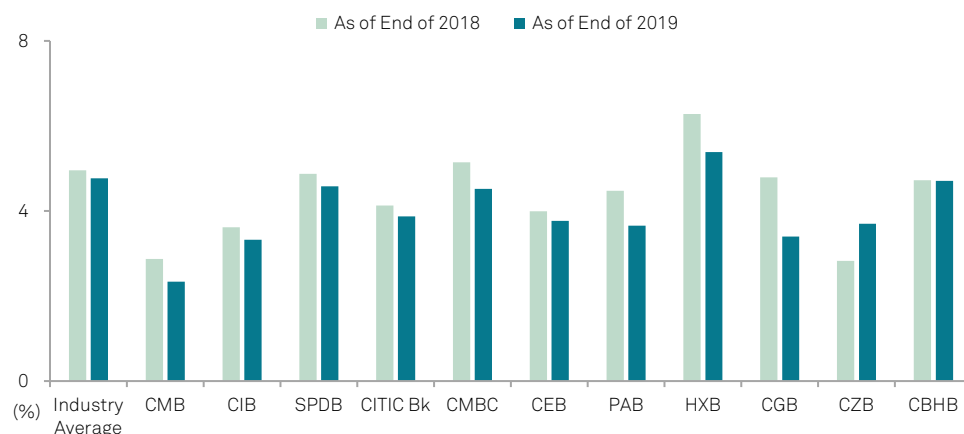
Sources: CBIRC, collected and adjusted by S&P Global (China) Ratings.

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Joint-stock banks improved their asset quality metrics in 2019 by adjusting their loan portfolio structure and writing-off bad debts. As of the end of 2019, 11 joint-stock banks' average NPL+SML ratio was 3.81% (excluding Hengfeng Bank), 0.45 percentage points lower than the end of 2018. Nevertheless, there is significant divergency among different banks. China Merchants Bank had a SML+NPL ratio of 2.34%, 2.43 percentage points lower than the industry average as of the end of 2019. In contrast, Hengfeng Bank had serious asset quality problems which wiped out its capital base in 2018.

Chart 32

SML+NPL Ratio



Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank.

Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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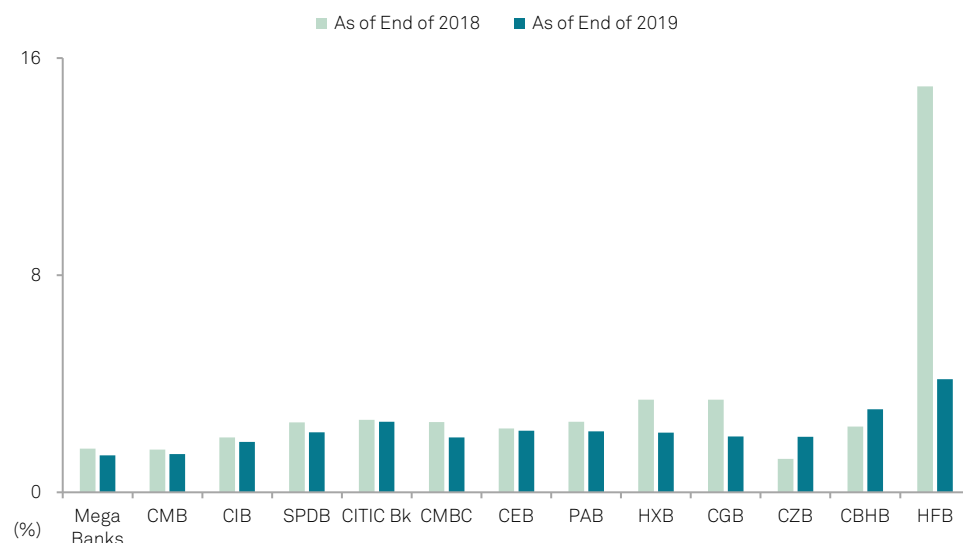
After the NPL ratio peaked in 2017, most joint-stock banks have managed to stabilize their asset quality performance in recent years.

Most joint-stock banks improved their asset quality metrics in 2019.

In terms of overdue loans, joint-stock banks are generally under higher pressure than mega banks. As of the end of 2019, the average overdue loan ratio of joint-stock banks was 2.2%, 0.8 percentage points higher than the mega bank average.

Chart 33

Overdue Loans/Gross Customer Loans



As of the end of 2019, the average overdue loan ratio of joint-stock banks was 2.2%, 0.8 percentage points higher than the mega bank average.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

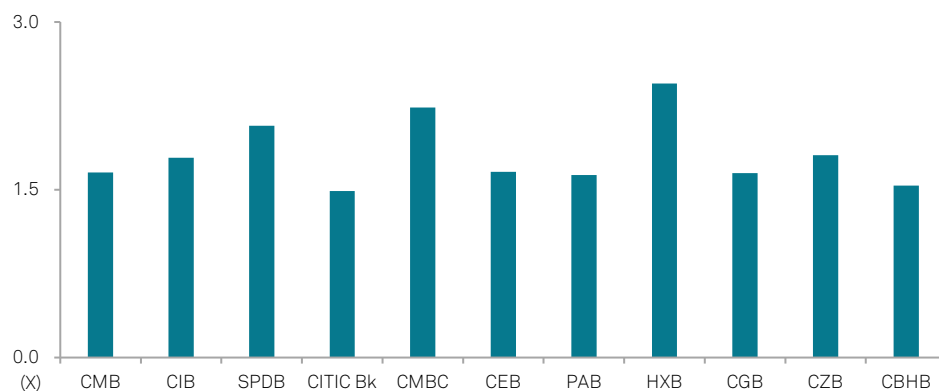
Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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In terms of loan credit risk classification practices, we believe most joint-stock banks are disciplined and consistent. As of the end of 2019, all joint-stock banks had NPL + SML ratios higher than overdue loan ratios, indicating they classified their overdue loans as at least SMLs.

Chart 34

(SML+NPL) /Overdue Loans as of End of 2019



In terms of loan credit risk classification practices, we believe that most joint-stock banks are disciplined and consistent.

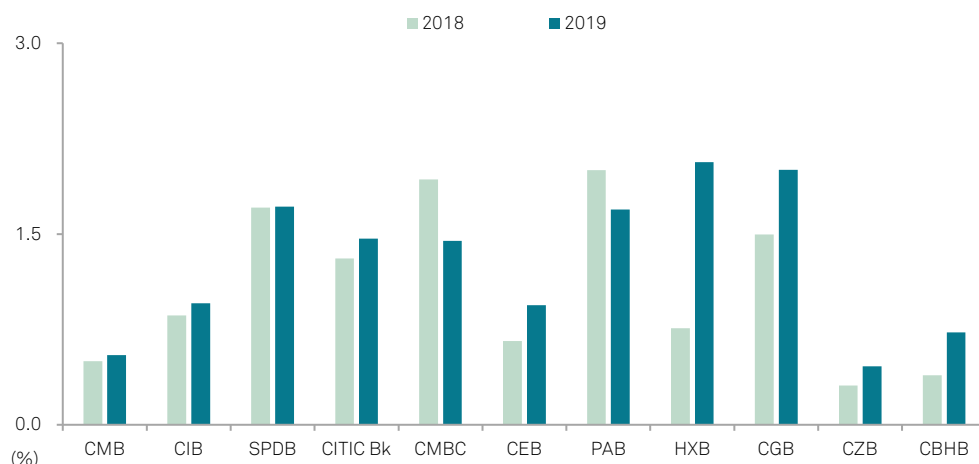
Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank.

Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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Chart 35

Net Write-off Ratio



Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank.

Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

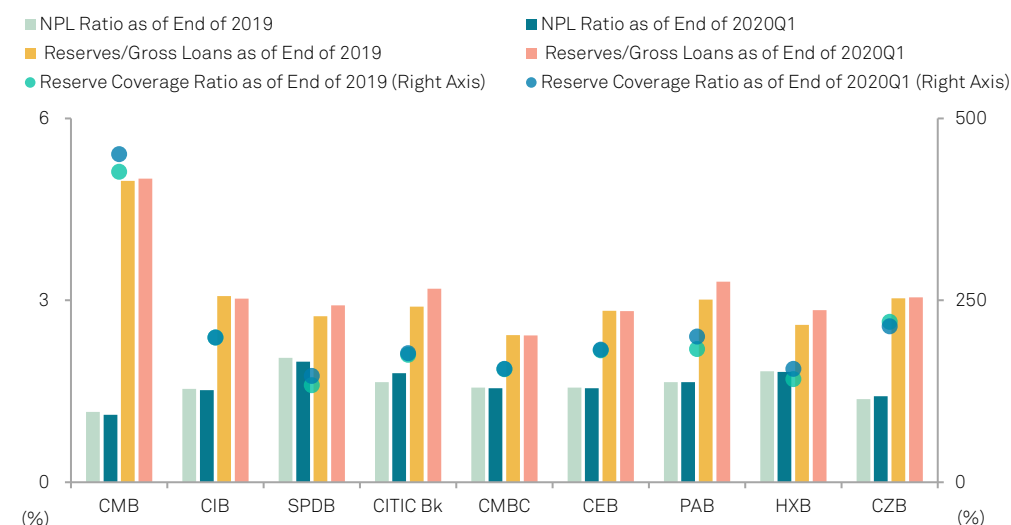
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Writing-off is important for joint-stock banks to keep their NPL ratios low.

COVID-19 will put significant pressure on asset quality, but the exact extent of the impact is still uncertain. We expect the impact to vary among banks based on their asset quality and reserve levels prior to the pandemic. As of the end of the first quarter of 2020, the joint-stock bank's average NPL ratio was 1.60%, the same as the end of 2019. We believe the stable asset quality metrics so far can largely be attributed to the lagging effect of bad debt classification, the forbearance measures given to hard-hit borrowers and rapid new loan growth.

Chart 36

Asset Quality and Reserves



Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CZB-China Zhesang Bank.

Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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We believe the stable asset quality metrics as of the end of Q1 2020 are largely due to the lagging effect of bad debt classification, the forbearance measures given to hard-hit borrowers and rapid new loan growth.

Characteristics of Banks with Different Indicative Risk Position Scores

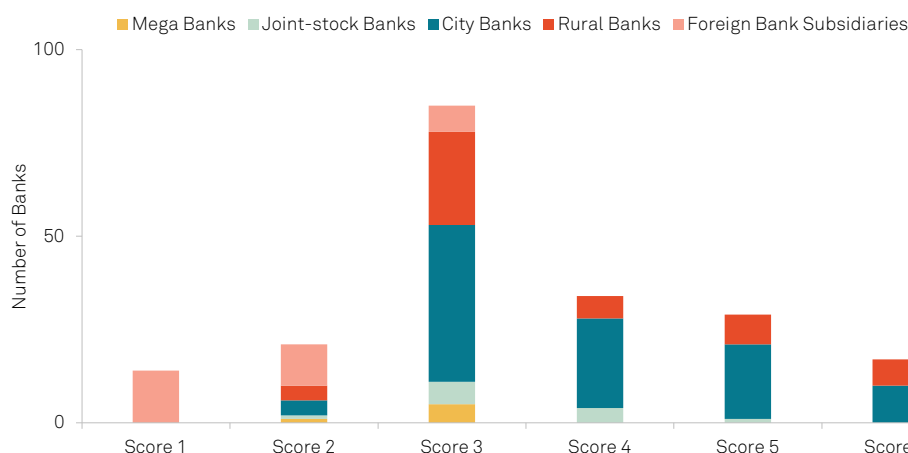
Score	Typical Profile
1	Risk appetite is much lower than the industry average, and the asset quality is generally insensitive to the economic cycle in China.
2	Risk management is better than the industry average, risk appetite is prudent, and the asset quality performance is better than the industry average through the economic cycle.
3	Risk management capability and asset quality performance are consistent with the industry average.
4	Risk management capability and asset quality performance are somewhat worse than the industry average.
5	Risk management capability and asset quality performance are worse than the industry average.
6	Risk management capability and asset quality performance are far worse than the industry average, and there may be serious flaws with its overall internal control.

Source: S&P Global (China) Ratings.

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Chart 37

Indicative Risk Position Score Distribution of 200 Major Banks



Most joint-stock banks have average risk positions because of their extensive exposure to China's real economy.

Note 1: For testing purpose, we score the risk position of Chinese banks in a scale of 1 to 6. 1 means the strongest position and 6 means the weakest.

Note 2: The indicative scores expressed in this report are S&P China's indicative views of risk factors derived from a desktop analysis based on public information without interactive review with any particular institution or the full credit rating process such as a rating committee (except for some institutions for which we have assigned ratings on). The opinions expressed herein are not and should not be represented as part of a credit rating.

Source: S&P Global (China) Ratings.

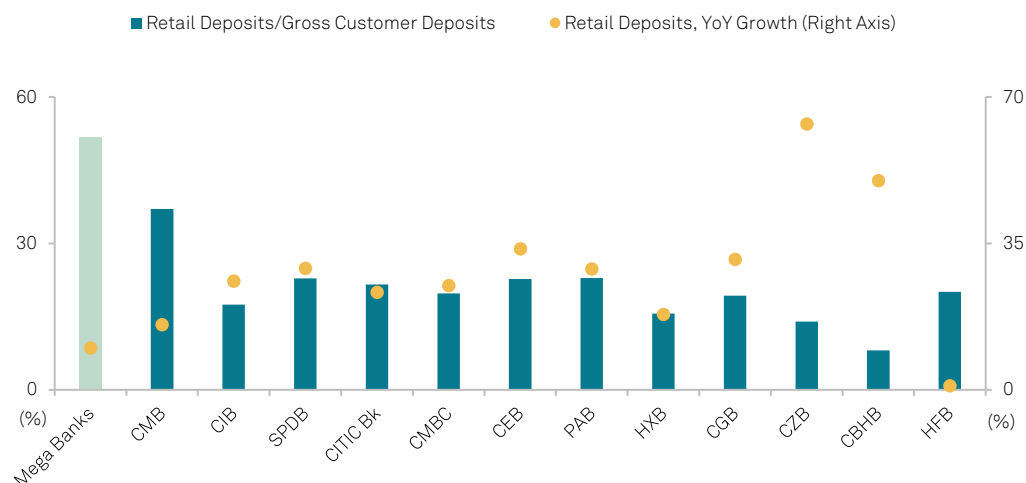
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Funding & Liquidity

Compared with mega banks which typically have a massive retail deposit base across China, joint-stock banks generally have a smaller but fast-growing retail deposit business. Wealth management products have been important for them to attract retail customers in urban areas. This urban retail clientele tends to be more sensitive to interest yields and less sticky compared to depositors in rural and county areas.

Chart 38

Retail Deposits as of End of 2019



Compared with other joint-stock banks, China Merchants Bank has a distinct advantage in its retail deposit base.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

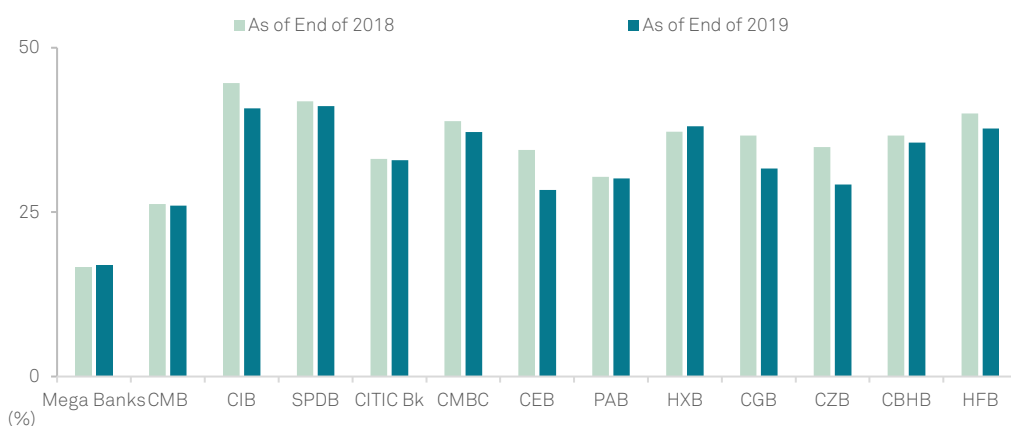
Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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Joint-stock banks are typically more reliant on wholesale funding compared to mega banks. As the second strongest group of banks only after the mega banks, they tend to have easy access to the interbank market. In addition, many joint-stock banks reduced their use of wholesale funding in 2019, which improved their funding profile.

Chart 39

Wholesale Funding/Total Liabilities



Many joint-stock banks reduced their reliance on wholesale funding in 2019.

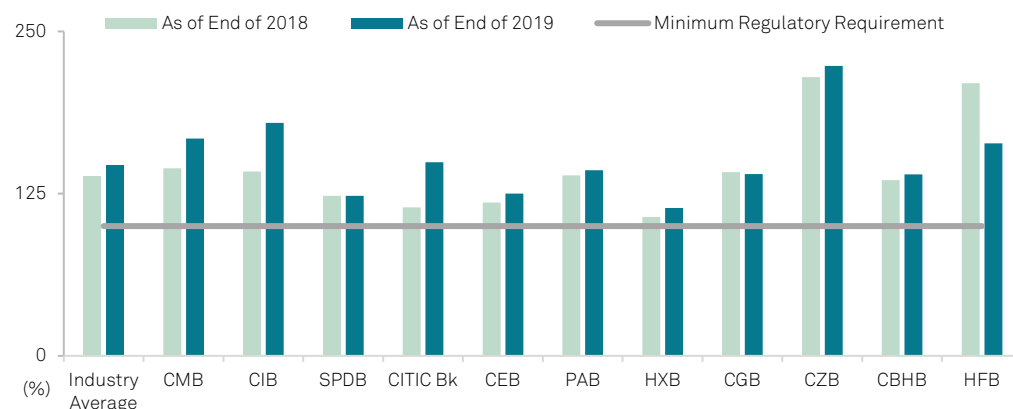
Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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Chart 40

Reported Liquidity Coverage Ratio (LCR)



Most joint-stock banks improved their liquidity coverage ratio in 2019.

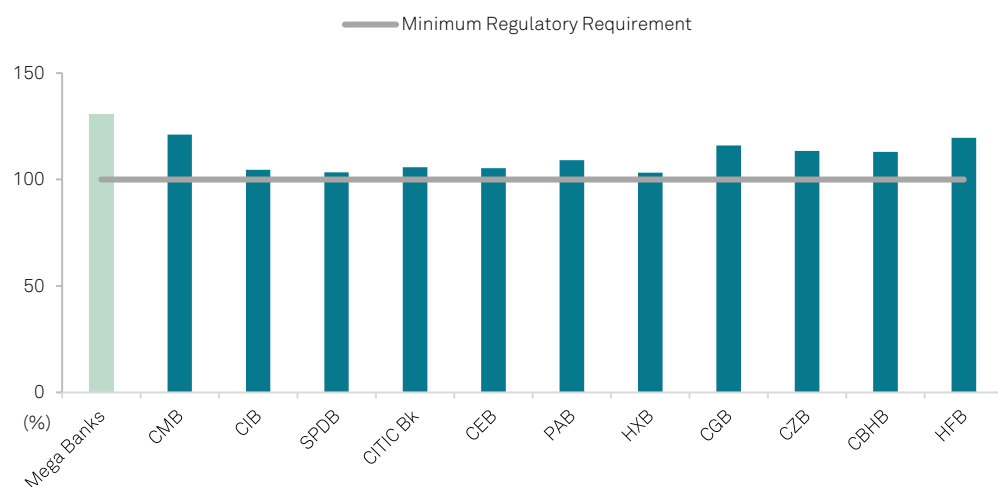
Note 1: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Note 2: LCRs for CMB are the arithmetical average of the month-end ratios for 2018Q4 and 2019Q4, respectively.

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Chart 41

Reported Net Stable Funding Ratio (NSFR) as of End of 2019



All joint-stock banks can meet the regulatory requirements on NSFR, but with a smaller headroom than mega banks.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

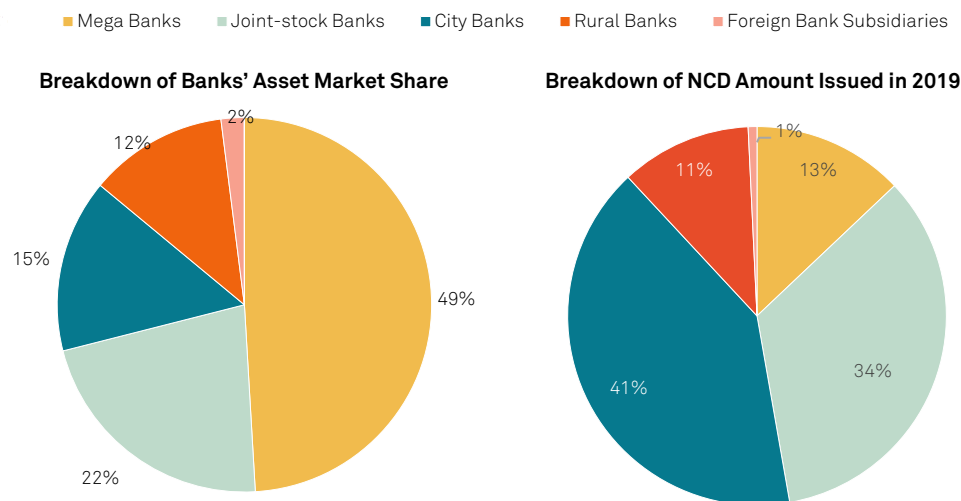
Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

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Although most joint-stock banks rely heavily on wholesale funding, we expect them to maintain a stable funding and liquidity profile as the market generally has strong confidence in them. After the Baoshang Bank takeover in late May 2019, while the credit spreads of negotiable certificates of deposits (“NCD”) of regional banks increased significantly, joint-stock banks’ spreads were generally unaffected.

Chart 42

NCD Issuance Size Vs. Total Asset Size

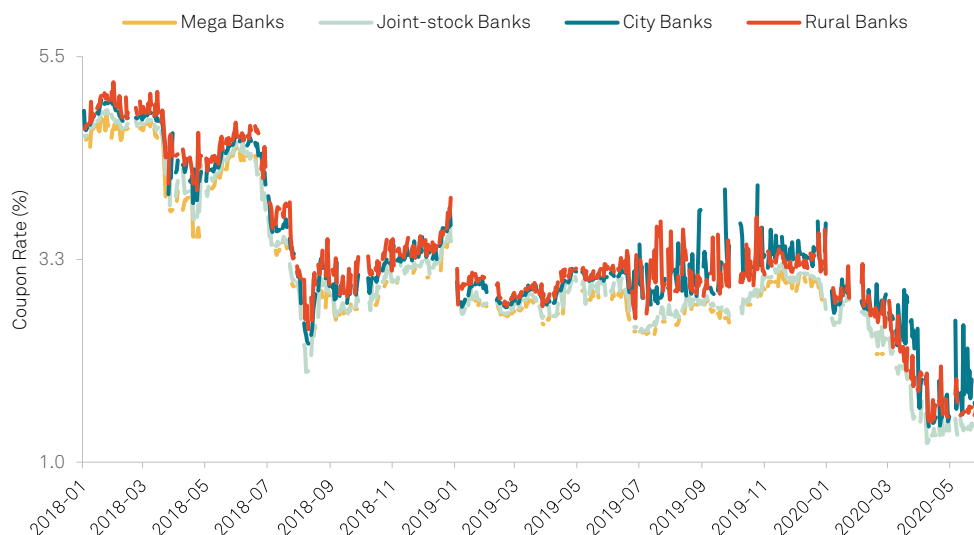


Sources: CBIRC, Wind, collected & adjusted by S&P Global (China) Ratings.
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The joint-stock banks and city banks rely more on NCD funding compared with other types of banks.

Chart 43

Average Coupon Rate of 3-month NCDs

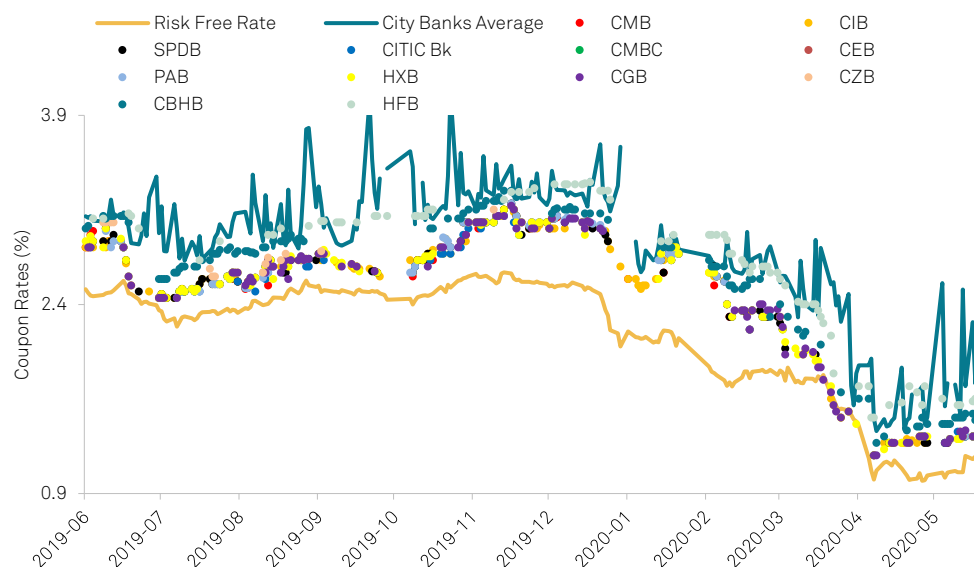


Sources: Wind, collected and adjusted by S&P Global (China) Ratings.
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The joint-stock banks typically have higher NCD funding costs than mega banks but lower than regional banks.

Chart 44

Coupon Rate of 3-month NCDs



The NCD spreads of joint-stock banks are generally concentrated in a narrow band.

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zhesang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: Wind, collected & adjusted by S&P Global (China) Ratings.

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We expect the joint-stock banks to have a stable and sound liquidity profile in 2020. Because of the adjustment to monetary policy in response to the pandemic, the banking sector's funding costs in the interbank market dropped significantly in the first half of 2020, with systemwide liquidity expected to remain ample through the year.

Characteristics of Banks with Different Indicative Funding & Liquidity Scores

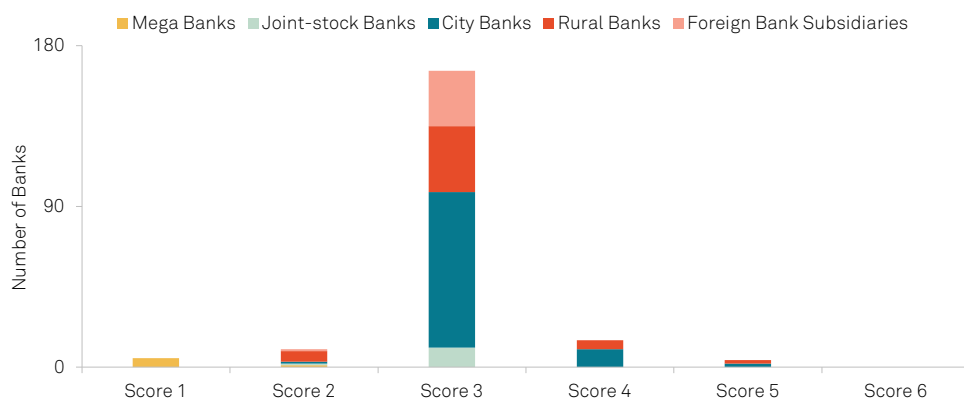
Score	Typical Profiles
1	Strongest retail deposit base across China, and lower-than-industry-average reliance on wholesale funding. Strongest liquidity position in China and tendency to benefit from "flight to quality" phenomenon when the market is stressed, thanks to very strong investor confidence.
2	Strong deposit base, stable and easy access to the interbank market for funding, lower-than-industry-average reliance on wholesale funding, and conservative liquidity management with superior liquidity-related ratios compared with the industry average.
3	Funding structure and liquidity position consistent with the industry average, with sufficient liquidity to meet minimum regulatory requirements on liquidity ratios even when the market is stressed.
4	Funding structure and liquidity position somewhat worse than the industry average, typically with a high reliance on wholesale funding, but still able to meet minimum regulatory requirements on liquidity ratios under normal market circumstances.
5	Liquidity position worse than the industry average, and the bank may have persistent difficulty in meeting minimum regulatory requirements on liquidity ratios when the market is stressed.
6	Eroded market confidence in the bank leading to highly unpredictable liquidity position, high chance of requiring central bank intervention for liquidity support.

Source: S&P Global (China) Ratings.

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Chart 45

Indicative Funding & Liquidity Position Score Distribution of 200 Major Banks



Note 1: For testing purpose, we score the funding & liquidity profile of Chinese banks in a scale of 1 to 6. 1 means the strongest position and 6 means the weakest.

Note 2: The indicative scores expressed in this report are S&P China's indicative views of risk factors derived from a desktop analysis based on public information without interactive review with any particular institution or the full credit rating process such as a rating committee (except for some institutions for which we have assigned ratings on). The opinions expressed herein are not and should not be represented as part of a credit rating.

Source: S&P Global (China) Ratings.

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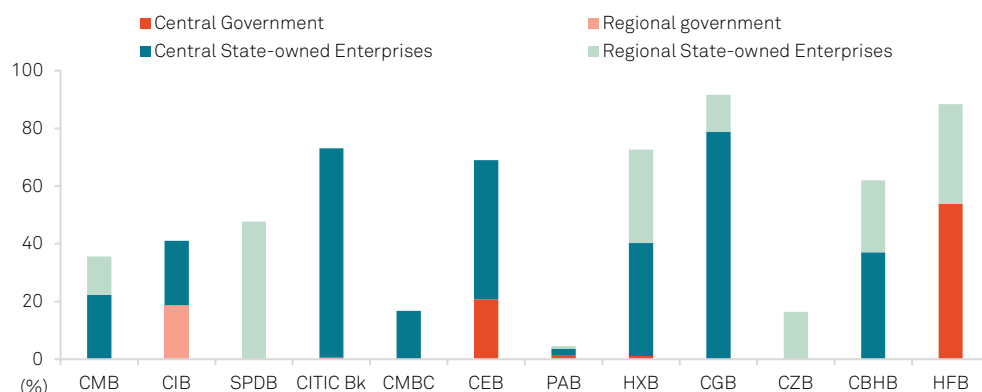
We believe most joint-stock banks' overall funding and liquidity profiles are in line with the industry average.

Government Support

The level of state ownership of joint-stock banks varies, but central and local governments do have substantial stakes in most of them. Nevertheless, given these banks' large sizes, we typically believe they have various levels of systemic importance in the domestic market. Therefore, even for joint-stock banks not under government control, we believe there is a possibility of government support. In addition, we believe the government's willingness to support banks becomes stronger during the pandemic as financial stability is a top priority for this special period.

Chart 46

State Ownership among Top 10 Shareholders as of End of 2019



Note 1: Central government ownership includes ownership by the Ministry of Finance, Central Huijin Investment Ltd. and Social Security Fund.

Note 2: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

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The level of state ownership of joint-stock banks varies, but central and local governments have substantial stakes in most of them.

Although some joint-stock banks have associations with financial holding groups or conglomerates, we typically believe the most likely source of support during a crisis would be the government.

Brief Introduction on the Shareholder Structure of Joint-stock Banks

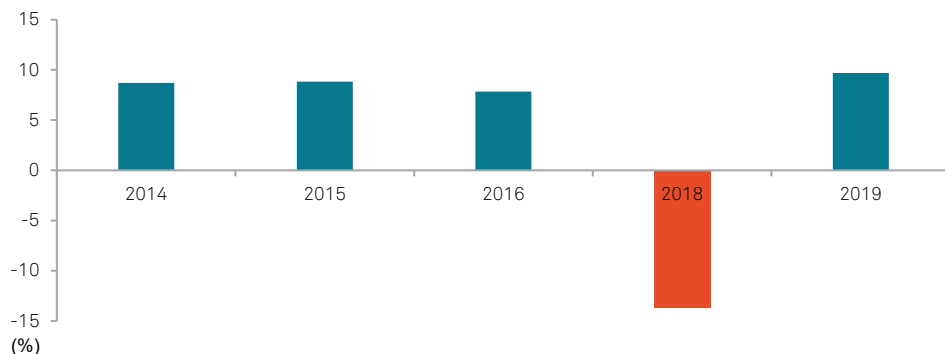
Bank Name	Shareholder Structure
China Merchants Bank	China Merchants Bank doesn't have a controlling shareholder. China Merchants Group, a conglomerate owned by the central government, and its associated companies have about 30% of the total shares of the bank. China Merchants Group is its largest shareholder, but the bank is not consolidated into the conglomerate's financial statements.
China Industrial Bank	China Industrial Bank doesn't have a controlling shareholder. Its largest shareholder is the Fiscal Department of Fujian Province.
Shanghai Pudong Development Bank	Shanghai Pudong Development Bank doesn't have a controlling shareholder. Its largest shareholder is Shanghai International Group, a municipal state-owned enterprise ("SOE").
China Citic Bank	China Citic Bank's controlling shareholder is Citic Group. The bank is consolidated into Citic Group's financial statements. Citic Group is a conglomerate owned by the central government. The bank's assets are about 90% of the group's total assets. In 2018, the operating revenue of the bank accounted for 35% of the group's revenue, and its net income accounted for 67%.
China Minsheng Bank	China Minsheng Bank doesn't have a controlling shareholder, and its biggest shareholder is HKSCC Nominees Limited given its status as a listed company on the Hong Kong Stock Market. Its second largest shareholder is Dajia Life Insurance.
China Everbright Bank	China Everbright Bank's controlling shareholder is China Everbright Group which is owned by the central government. The bank is consolidated into the group. The bank accounts for about 91% of the group's total assets. In 2018, its contribution to the group was 68% and 80% in terms of operating revenue and net income respectively.
Ping An Bank	Ping An Bank's controlling shareholder is Ping An Group. Ping An Group is a leading insurance group in China. Ping An Bank is consolidated into Ping An Group's financial statements. Ping An Bank accounts for about 48% of its group's total assets. In 2019, Ping An Bank's operating revenue accounted for 12% of the group, and its net income accounted for 17%.
Hua Xia Bank	Hua Xia Bank doesn't have a controlling shareholder. Its largest shareholder is Shougang Group, a state-owned steel company.
China Guangfa Bank	China Guangfa Bank doesn't have a controlling shareholder. Its largest shareholder is China Life Group, which is China's largest state-owned life insurer. China Life doesn't consolidate Guangfa Bank into its financial statements.
China Zheshang Bank	China Zheshang Bank doesn't have a controlling shareholder. Its largest shareholder is HKSCC Nominees Limited because of its listing on the H-share market, and its second largest shareholder is Zhejiang Provincial Financial Holdings Co., Ltd, a provincial SOE.
China Bohai Bank	China Bohai Bank has no controlling shareholder. Its largest shareholder is TEDA Investment Holding Co., Ltd., a municipal SOE based in Tianjin.
Hengfeng Bank	Hengfeng Bank received extraordinary support from both the central government and Shandong provincial government in 2019. Its largest shareholder is currently Central Huijin Investment Ltd.

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Chart 47

Reported Tier-1 Capital Adequacy Ratio of Hengfeng Bank



Note: Because the bank didn't publish its 2017 annual report, data for 2017 is not available.

Sources: Annual Reports of Hengfeng Bank, collected and adjusted by S&P Global (China) Ratings.

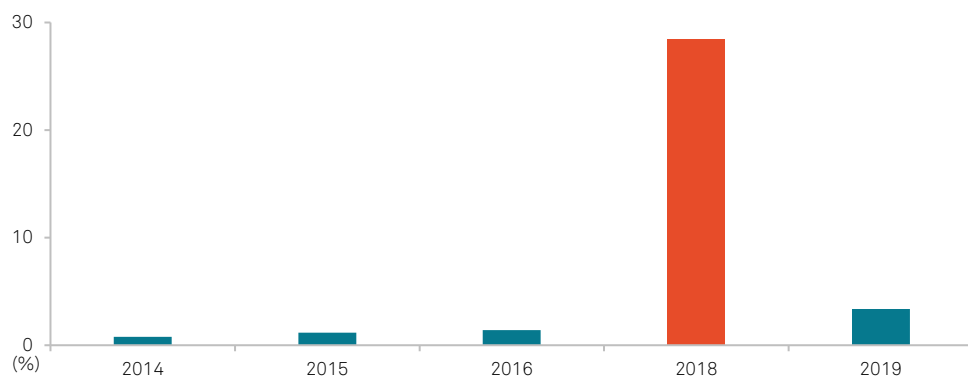
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The government-led capital injection has been critical to the viability of Hengfeng Bank.

Authorities played a critical role in the bailout of Hengfeng Bank. Headquartered in Shandong Province, Hengfeng Bank suffered serious bad debt problem and undercapitalization after years of mismanagement. In December 2019, Hengfeng Bank issued 100 billion shares, 60 billion of which were subscribed by Central Huijin Investment Ltd., and 36 billion subscribed by the Shandong state-owned distressed asset management company. After the capital injection, Hengfeng Bank's equity reached RMB 111.2 billion, and Central Huijin becomes its largest shareholder. As of the end of 2019, its tier-1 capital ratio was 9.68%, representing a significant improvement from -13.65% as of the end of 2018 thanks to a government-led capital injection. The bank reduced its NPL ratio from 28% as of the end of 2018 to 3.4% as of the end of 2019 by selling and writing off non-performing assets.

Chart 48

Reported Non-performing Loan Ratio of Hengfeng Bank



Note: Because the bank didn't publish its 2017 annual report, data for 2017 is not available.

Sources: Annual Reports of Hengfeng Bank, collected and adjusted by S&P Global (China) Ratings.

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Hengfeng Bank reduced its NPL ratio from 28% to 3.4% by selling and writing off non-performing assets.

The central and local governments' support for Hengfeng Bank, the smallest joint-stock bank, demonstrates the authorities' willingness to support joint-stock banks. We typically regard the joint-stock banks' importance level to the central government as high or moderate given their systemic importance in the domestic market. Some joint-stock banks with strong ties to provincial

governments may also receive support from their respective provincial governments. As demonstrated by the bailout of Hengfeng Bank, support for banks typically consists of a coordinated effort among different levels of governments.

Bank type	Assessment of Importance Level to the government
Mega bank	– In our view, the mega banks are generally critical to the central government.
Joint-stock bank	– We generally regard joint-stock banks as highly or moderately important to the central government given their large size and high profiles. Some of them may also have high importance levels to some provincial governments.
Regional bank	– The possibility of government support varies. Some regional banks are state-owned with strong ties to local governments while others are privately-owned with weak links with local authorities. There is also a possibility of support from the central government. We typically view regional banks' importance level to the central government as moderate or low.

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This report does not constitute a rating action.

Appendix 1: Financial Metrics of Joint-stock Banks as of End of 2019

Total Assets		Reported Tier-1 Capital Ratio		Reported ROE in 2019		NPL+SML Ratio		Loan Loss Reserve/(NPL+SML)		Wholesale Funding/Total Liabilities	
Bank	(bils)	Bank	(%)	Bank	(%)	Bank	(%)	Bank	(%)	Bank	(%)
CMB	7,417	CMB	12.7	CMB	16.8	CMB	2.3	CMB	212.7	CMB	26.0
CIB	7,146	HXB	11.9	CIB	14.0	CIB	3.3	CIB	92.3	CEB	28.4
SPDB	7,006	SPDB	11.5	CBHB	13.9	CGB	3.4	PAB	82.5	CZB	29.2
CITIC Bk	6,750	CEB	11.1	CZB	12.9	PAB	3.7	CZB	81.9	PAB	30.1
CMBC	6,682	CZB	10.9	CMBC	12.4	CZB	3.7	CGB	79.1	CGB	31.6
CEB	4,733	CGB	10.7	SPDB	12.3	CEB	3.8	CEB	75.0	CITIC Bk	32.9
PAB	3,939	CBHB	10.6	CEB	11.8	CITIC Bk	3.9	CITIC Bk	74.8	CBHB	35.6
HXB	3,021	CIB	10.6	PAB	11.3	CMBC	4.5	CBHB	70.9	CMBC	37.2
CGB	2,633	PAB	10.5	CITIC Bk	11.1	SPDB	4.6	SPDB	59.8	HFB	37.7
CZB	1,801	CMBC	10.3	HXB	10.6	CBHB	4.7	CMBC	53.7	HXB	38.1
CBHB	1,113	CITIC Bk	10.2	CGB	7.4	HXB	5.4	HXB	48.2	CIB	40.8
HFB	1,029	HFB	9.7	HFB	1.8					SPDB	41.1

Note: CMB-China Merchants Bank, CIB-China Industrial Bank, SPDB-Shanghai Pudong Development Bank, CITIC Bk-China CITIC Bank, CMBC-China Minsheng Banking Corp., CEB-China Everbright Bank, PAB-Ping An Bank, HXB-Hua Xia Bank, CGB-China Guangfa Bank, CZB-China Zheshang Bank, CBHB-China Bohai Bank, HFB-Hengfeng Bank.

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Appendix 2: Related Methodologies & Research

Methodology Applied:

S&P Global (China) Ratings Financial Institutions Methodology.

Related Research & Commentary:

Diversity Across China's Banking System – A Deep Dive A Study on Credit Quality Differentiation Among Chinese Banks.

Key Differentiation Factors of Credit Quality of Domestic Banks in China.

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