标普信评

S&P Global
China Ratings

Issue Rating Notice:

Bank of China Limited 2021 Financial Bonds (Series 2) Rated "AAA_{spc}"

July 15, 2021

Bond Name:	Bank of China Limited 2021 Financial Bonds (Series 2)
Issuer Credit Rating:	AAA_{spc}/Stable
Issue Credit Rating:	AAA_{spc}

S&P Global (China) Ratings has assigned its 'AAA_{spc}' rating to the 2021 Financial Bonds (Series 2) issued by Bank of China Limited ("BOC"; AAA_{spc}/Stable).

We have equalized the credit rating of this bond with the issuer credit rating on BOC since it is senior unsecured debt of the bank. The principal amount of this bond is RMB 30 billion and it has a 3-year term. In the event of liquidation of the Issuer, the claims of the holders of the bonds will rank pari passu with the claims of the general creditors, and shall rank in priority to the claims of all holders of long-term subordinated debts, tier-2 capital instruments, hybrid capital bonds, other additional tier-1 capital instruments and equity capital. The bank issues this bond to optimize its debt structure and increase working capital.

Related Issuer Credit Rating Report

Credit Rating Report: Bank of China Limited July 15,2021.

Related Methodology

S&P Global (China) Ratings Financial Institutions Methodology, January 31, 2019.

S&P Global (China) Ratings General Considerations On Rating Modifiers And Relative Ranking, May 21, 2019.

Model Applied

None.

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Surveillance Plan

Bank of China Limited 2021 Financial Bonds (Series 2)

Surveillance Plan

S&P Ratings (China) Co., Ltd. shall monitor the credit quality of the rated issuer and issue on a periodic and an ongoing basis. If any material credit events are likely to change the credit quality of the issuer or issue, we will conduct ad-hoc surveillance, and determine whether the outstanding ratings need to be adjusted.

标普信评

S&P Global

China Ratings

Credit Rating Report:

Bank of China Limited

Issuer Credit Rating*: AAA_{spc}; Outlook: Stable

July 15, 2021

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*This rating is an Issuer Credit Rating (ICR). An ICR reflects our view of the senior unsecured credit rating of an issuer and is not specific to an individual issuance that it may issue.

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The rating presented in this report is effective from the rating date, until and unless we make any further updates.

This document is prepared in both English and Chinese. The English translation is for reference only, and the Chinese version will prevail in the event of any inconsistency between the English version and the Chinese version.

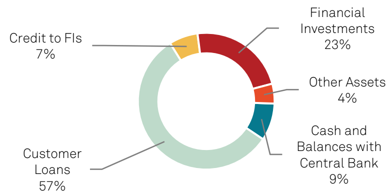
Tear Sheet

Company Name	Rating Type	Current Rating	Rating Date	Outlook/CreditWatch
Bank of China Limited	Issuer Credit Rating	AAA_{spc}	July 15, 2021	Stable

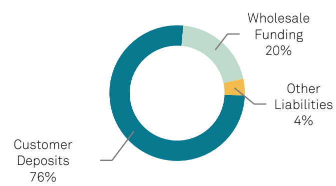
Industry Classification: Commercial bank.

Company Overview: Bank of China Limited ("BOC") is the fourth largest bank in China by asset size, and one of the six state-owned mega banks. Compared to its peers, it has a more internationally diversified business franchise. As of the end of 2020, it reported total assets of 24.40 trillion RMB and reported a return on equity of 10.61% in 2020.

Asset Breakdown as of End of 2020



Liability Breakdown as of End of 2020



Economy and Industry Trends: China is recovering from the slowdown in economic growth caused by COVID-19. As consumption growth continues to pick up, there is no sign yet that investment and net exports are flaming out. However, the overall nature of the recovery has been unbalanced. Large parts of the manufacturing sector are operating at or above capacity while other industries such as personal services and tourism are still facing weak demand. Despite potential tailwinds such as a tightening policy environment, we expect full-year economic growth of 8% for 2021 as the economy continues to gradually rotate towards private consumption, a necessary step if growth is to maintain momentum.

Despite the lingering uncertainty caused by the pandemic, we believe the overall credit outlook for commercial banks in China will remain stable because of strong government support and the robust economic recovery. Although China's commercial banking sector reported stable asset quality performance in 2020, we continue to expect pressure on impairment charges and profitability going forward because of legacy asset quality woes and the pandemic. State-owned mega banks are expected to maintain stable capitalization and resilient profitability, while regional banks are under more pressure. Therefore, we believe the stand-alone credit profiles of commercial banks are likely to show greater differentiation. With government support and regulatory oversight, the issuer credit quality of the banking industry is expected to remain stable in the foreseeable future.

Credit Highlights: As one of China's six state-owned mega banks, BOC is China's fourth largest commercial bank. It has solid and massive corporate and retail customer bases in China. It also has a strong business franchise in Hong Kong and is more internationally diversified than its peers. It has superior business stability, adequate capitalization, stable asset quality, a diverse and large funding base and superior liquidity profile. COVID-19 is likely to continue to weigh on its asset quality and profitability, but we believe the bank is resilient enough to maintain its good capitalization and overall stand-alone creditworthiness. In addition, we believe the likelihood of the bank receiving timely and sufficient extraordinary support from the central government in times of need is extremely high given its critical importance to China's financial stability.

Key Metrics:

	2017	2018	2019	2020	2021.03
Total assets (bil)	19,467.42	21,267.28	22,769.74	24,402.66	25,834.29
Customer deposits (bil)	13,657.92	14,883.60	15,817.55	16,879.17	17,910.57
Net income (bil)	184.99	192.44	201.89	205.10	57.31
Reported capital adequacy ratio (%)	14.19	14.97	15.59	16.22	15.71
Reported return on equity (%)	12.24	12.06	11.45	10.61	12.17
Non-performing loans ratio (%)	1.45	1.42	1.37	1.46	1.30
Reserve coverage ratio (%)	159.18	181.97	182.86	177.84	189.88
Customer deposits/total liabilities (%)	76.34	76.16	76.07	75.90	75.74

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

Rating Snapshot:

Anchor	bbb+
Business Position	+3
Capital and Earnings	0
Risk Position	0
Funding and Liquidity	+2
Stand-alone Credit Profile	aa_{spc}
Government Support	+2
Issuer Credit Rating	AAA_{spc}
Outlook	Stable

Business Position: BOC is China's fourth largest commercial bank. It has balanced and strong business franchise in corporate and retail banking in the domestic market and enjoys a more internationally diversified presence than its peers. Bank of China (Hong Kong) Ltd. is the second-largest bank by assets in Hong Kong and also one of the region's three note-issuing banks.

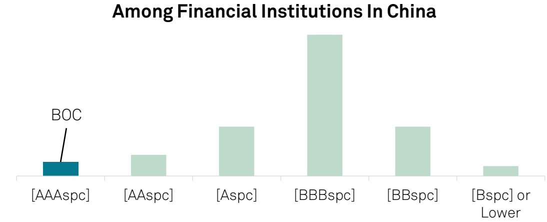
Capital and Earnings: BOC has adequate capitalization and healthy profitability. Given its status as a global systematically important bank, we expect it to strengthen its capitalization. We expect COVID-19 to continue to weigh on its profitability due to high impairment charges, but its capital base will remain adequate and stable thanks to its robust earnings and hybrid bond issuance.

Risk Position: The asset quality performance of the bank's loan portfolio is consistent with the industry average and its mega bank peers. Its asset quality has come under pressure due to COVID-19 but we expect the pressure to be controllable given China's robust economic recovery. Meanwhile, the good asset quality of BOC's overseas portfolio also contributes to the overall stability of its asset quality.

Funding and Liquidity: BOC has a solid and sticky corporate and retail deposit base in China, and its use of wholesale funding is limited. It also has very good liquidity metrics. As a state-owned mega bank, it benefits from "flight to quality" when the market has general credit risk concerns over the banking sector. Therefore, its funding and liquidity stability is much better than the industry average.

External Support: We believe that BOC is extremely likely to receive support from the central government in times of need, considering its status as a state-owned mega bank and its critically important role in maintaining financial stability in China.

BOC's Relative Issuer Credit Rating Position Among Financial Institutions In China



Note: This chart serves as a hypothetical example of S&P Global China Ratings' rating distribution of financial institutions. Ratings below AAA_{spc} could be adjusted by "+" and "-".

Peer Group Comparison: (The peer group is the six state-owned mega banks in China, including BOC, ICBC, CCB, ABC, PSBC and BoCom.)

(2018-2020 three-year average)	BOC	Max	Min	Average	Asset weighted average	Median
Total assets (bil)	22,813.23	30,384.68	10,044.80	20,683.24	23,586.27	23,855.41
Customer deposits (bil)	15,860.11	23,173.77	6,157.85	15,362.95	17,514.99	17,278.38
Net income (bil)	199.81	309.92	59.25	187.17	220.97	205.23
Reported regulatory capital adequacy ratio (%)	15.59	17.26	13.72	15.61	15.97	15.77
Cost-to-income ratio (%)	27.61	56.95	23.16	31.90	29.02	28.06
Return on average assets (%)	0.91	1.09	0.59	0.89	0.94	0.90
Return on average equity (%)	10.82	12.69	10.19	11.53	11.76	11.54
Non-performing loans ratio (%)	1.42	1.55	0.87	1.39	1.44	1.50
Reserve coverage ratio (%)	180.89	381.43	162.92	232.37	221.92	200.90
Customer deposits/total liabilities (%)	76.04	96.24	66.54	80.76	80.85	81.07
Liquidity coverage ratio (%)	138.60	231.22	121.68	148.28	140.85	131.27

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

Rating Summary

Company Name	Rating Type	Current Rating	Rating Date	Outlook/CreditWatch
Bank of China Limited	Issuer Credit Rating	AAA_{spc}	July 15, 2021	Stable

Stand-alone Credit Profile	aa_{spc}
Anchor	bbb+
Business Position	+3
Capital & Earnings	0
Risk Position	0
Funding & Liquidity	+2
Holistic Adjustment	0

+

External Support	+2
Government Support	+2

Issuer Credit Rating
AAA_{spc}/Stable

Credit Highlights

Strengths	Weaknesses
The bank is extremely likely to receive central government support in times of stress.	COVID-19 has put pressure on asset quality.
It is the fourth largest commercial bank in China with a more internationally diversified business franchise than its peers.	Profitability may be weakened by higher credit cost.
It has a very stable deposit base and superior liquidity profile.	

Rating Outlook

The stable outlook reflects our expectation that BOC's business operations and financial strength will remain stable over the next two years and beyond. We also anticipate that its critical importance to the central government will remain stable.

Downside Scenario: We may consider lowering its issuer credit rating ("ICR") if we believe that its importance to the central government has declined, which is highly unlikely in our view. We may also consider lowering its stand-alone credit profile ("SACP") if BOC fails to effectively manage the credit risk of its lending business, resulting in a significant deterioration of asset quality metrics, or if its capital adequacy ratios can no longer meet minimum regulatory requirements and there is no plausible plan for immediate and effective remediation.

Upside Scenario: We may consider raising its SACP if its adjusted capital adequacy ratios rise significantly above the industry average, and its management is committed to maintaining high capitalization on a sustainable basis, or if it improves its asset quality performance to a level significantly better than the industry average.

Related Methodologies, Models & Research

Methodology Applied:

- S&P Global (China) Ratings Financial Institutions Methodology.
- S&P Global (China) Ratings General Considerations on Rating Modifiers and Relative Ranking.

Model Applied: None.

Anchor

Macro-Economic and Industry Trend

Considering the economic risk and industry risk faced by China's commercial banking industry, we typically apply an anchor of "bbb+" to commercial banks in China.

China is recovering from the slowdown in economic growth caused by COVID-19. As consumption growth continues to pick up, there is no sign yet that investment and net exports are flaming out. However, the overall nature of the recovery has been unbalanced. Large parts of the manufacturing sector are operating at or above capacity while other industries such as personal services and tourism are still facing weak demand. Despite potential tailwinds such as a tightening policy environment, we expect full-year economic growth of 8% for 2021 as the economy continues to gradually rotate towards private consumption, a necessary step if growth is to maintain momentum.

Despite the lingering uncertainty caused by the pandemic, we believe the overall credit outlook for commercial banks in China will remain stable because of strong government support and the robust economic recovery. China's commercial banking sector reported stable asset quality performance in 2020, and this stability has been attributed to China's effective control over the pandemic, the lagging effect of NPL recognition, fast growth of new lending and writing off efforts. We continue to expect pressure on impairment charges and profitability going forward because of legacy asset quality woes and the pandemic.

State-owned mega banks are expected to maintain stable capitalization and resilient profitability, while regional banks are under more pressure. Therefore, we believe the stand-alone credit profiles of commercial banks are likely to show greater differentiation. With government support and regulatory oversight, issuer credit quality within the banking industry is expected to remain stable in the foreseeable future.

Considering the economic risk and industry risk faced by China's commercial banking industry, we apply an anchor of "bbb+" to BOC.

Stand-alone Credit Profile

BOC is China's fourth largest commercial bank by asset size.

It has very strong franchise in Chinese Mainland and Hong Kong. Compared to other mega banks, BOC is more internationally diversified.

Therefore, we apply a three-notch upward adjustment for its business position.

BOC is one of the country's six state-owned mega banks. It has solid and massive corporate and retail customer bases in China. It also has a strong business franchise in Hong Kong and is generally more internationally diversified than its peers. As of the end of 2020, it reported total assets of 24.40 trillion RMB and a regulatory capital adequacy ratio of 16.22%. In 2020, it reported a return on equity of 10.61%.

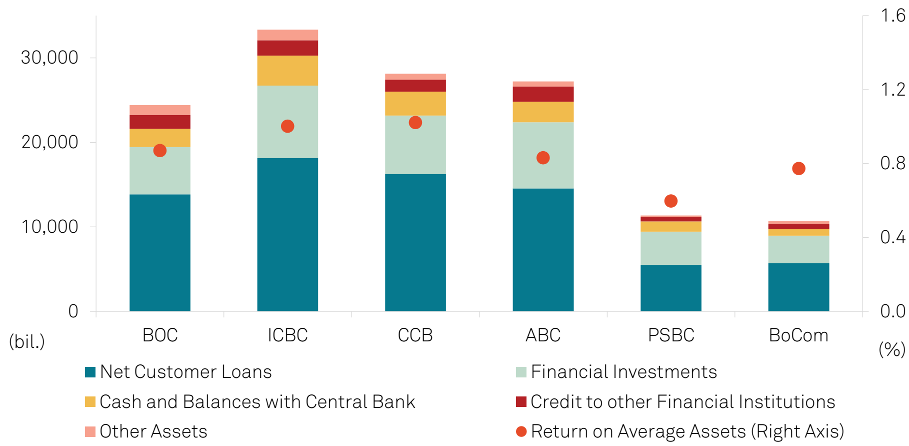
Business Position

BOC is the fourth-largest commercial bank in China. As of the end of 2020, it reported gross loans of 14.22 trillion RMB and a deposit base of 16.88 trillion RMB, representing 9.7% and 7.7% commercial bank market share of loans and deposits in China, respectively. Its loan book grew by 8.8% in 2020. Its fast balance sheet growth is consistent with government guidance on supporting the real economy through the pandemic period. BOC has a balanced business revenue mix. In 2020, 38% of its revenue came from its corporate business, 39% retail business and 12% capital market business.

Chart 1

BOC Is China's Fourth Largest Commercial Bank by Asset Size

Peer Comparison: Total Asset Breakdown as of End of 2020 and Return on Average Assets in 2020



Note 1: Return on average assets = net income / [(total assets at the beginning of the year + total assets as of the end of the year)/2] * 100%.

Note 2: ICBC - Industrial and Commercial Bank of China Limited, CCB - China Construction Bank Corporation, ABC - Agricultural Bank of China Limited, PSBC - Postal Savings Bank of China Co., Ltd., BoCom - Bank of Communications Co., Ltd.

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

Table 1

BOC -- Market Share in Commercial Banking Sector

(%)	2017	2018	2019	2020	2021.03
Total assets/total assets of China's commercial banking industry	9.89	10.13	9.51	9.18	9.36
Gross customer loans/total loans of China's commercial banking industry	11.14	10.70	10.08	9.68	9.69
Customer deposits/total deposits of China's commercial banking industry	8.07	8.15	7.98	7.73	7.88
Retail deposits/total domestic retail deposits of China's commercial banking industry	8.94	8.87	8.51	8.12	Not available

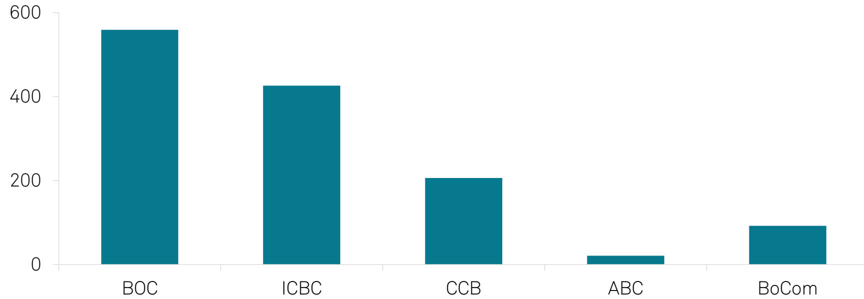
Sources: BOC, CBIRC and PBOC, collected and adjusted by S&P Global (China) Ratings.

Compared to the other mega banks, BOC has a more extensive global branch network and more internationally diversified business. BOC operated in 61 countries and regions as of end of 2020. In 2020, its revenue outside the Chinese mainland contributed to 23.4% of its total revenue. Compared to its peers, the bank has a leading position in cross-border custodian business, panda bond and off-shore bond underwriting, foreign exchange trading and cross-border RMB settlement. The size of its overseas loan book shrank slightly in 2020 due to the pandemic but we believe its overseas business will regain growth momentum after the global economy begins to recover from the pandemic.

Chart 2

BOC Has the Most Extensive Overseas Operations and Best Geographical Diversity Among Peers

Peer Comparison: Number of Network Outlets and Subsidiaries Outside Chinese Mainland as of End of 2020



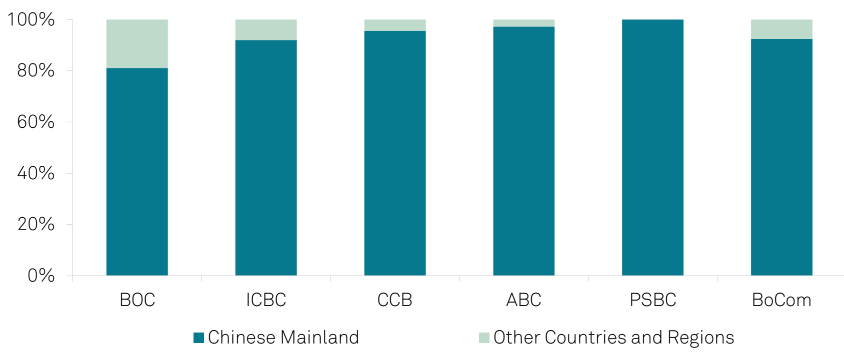
Note: Including Hong Kong, Macao, Taiwan and other countries and regions.

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

Chart 3

Compared to Its Peers, BOC Has a More Internationally Diversified Loan Book

Peer Comparison: Geographic Breakdown of Loans as of End of 2020



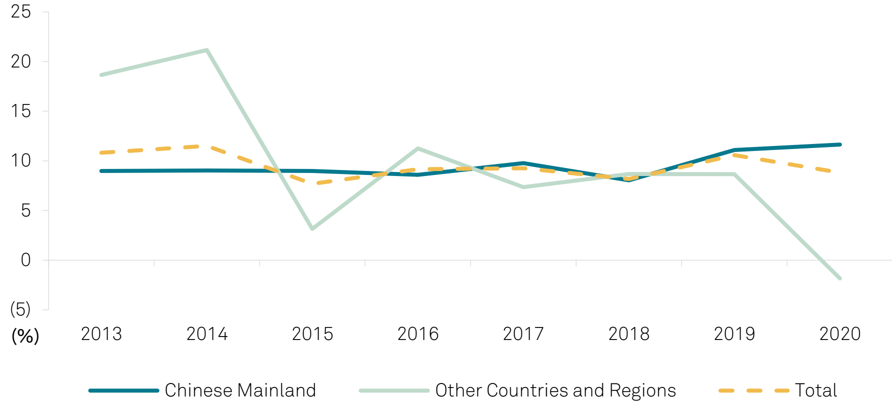
Note: Hong Kong, Macao, and Taiwan are included in other countries and regions.

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

Chart 4

BOC's Loan Growth Rate Outside the Chinese Mainland Has Slowed Down During COVID

BOC: Loan Growth Rate YoY



Note: Hong Kong, Macao, and Taiwan are included in other countries and regions.

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

Bank of China (Hong Kong) Ltd ("BOCHK"), its Hong Kong-based subsidiary, is very important to its international business expansion. BOCHK has a very strong business franchise in Hong Kong as the second-largest bank by assets and also one of the three note-issuing banks. In our view, BOCHK has great business growth potential thanks to the development of the Guangdong-Hong Kong-Macau Greater Bay Area. BOCHK also acts as BOC's regional center in Southeast Asia, covering nine countries in the region.

BOC has a group of strong subsidiaries which contributes to its business diversification in terms of business lines.

Table 2

Major Subsidiaries of BOC	
Bank of China (Hong Kong) Limited ("BOCHK")	BOCHK is the Hong Kong-based banking subsidiary of BOC. It is the second-largest bank by assets and one of the three note-issuing banks in Hong Kong. As of the end of 2020, it had total assets of 3,321 billion HKD. Its net income was 28.5 billion HKD in 2020.
BOC Aviation Limited ("BOC Aviation")	BOC Aviation is a Singapore-based subsidiary of BOC. It is one of the world's leading aircraft operating leasing companies and is the largest aircraft operating leasing company headquartered in Asia by value of aircraft fleet. As of the end of 2020, BOC Aviation's total assets were 23.6 billion USD. Its net income was 0.5 billion USD in 2020.
Bank of China Group Investment Limited ("BOCG Investment")	BOCG is a Hong Kong-based subsidiary of BOC, focusing on direct investment and investment management. It also holds BOC Aviation on behalf of BOC. As of the end of 2020, its total assets were 133.8 billion HKD. Its net income was 4.9 billion HKD in 2020.
BOC Fullerton Community Bank Co., Ltd. ("BOC Fullerton Community Bank")	BOC Fullerton Community Bank is the community bank operations of BOC headquartered in Beijing. It is the largest domestic community bank group in China. As of the end of 2020, it controlled 124 community banks with 176 sub-branches, its loans balance was 55.2 billion RMB, its non-performing loan ratio was 1.43% and reserve coverage ratio was 249.11%. In 2020, its net income was 0.9 billion RMB.

BOC Group Life Assurance Co., Ltd. (“BOC Life”)	BOC conducts life insurance business in Hong Kong through BOC Life. BOC Life is a market leader in RMB-denominated insurance business in Hong Kong. As of the end of 2020, its total assets were 179.9 billion HKD. Its net income was 0.9 billion HKD in 2020.
Bank of China Group Insurance Company Limited (“BOC Insurance”)	BOC conducts property and casualty (P&C) insurance business in the Chinese mainland through BOC Insurance. As of the end of 2020, BOC Insurance's total assets were 12.9 billion RMB. In 2020, its net income was 316 million RMB.

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

Table 3

BOC -- Business Position

	2017	2018	2019	2020	2021.03
Total assets (bil)	19,467.42	21,267.28	22,769.74	24,402.66	25,834.29
Year-over-year growth of total assets (%)	7.27	9.25	7.06	7.17	Not applicable
Gross customer loans (bil)	10,896.56	11,819.27	13,068.79	14,216.48	14,977.94
Year-over-year growth of gross customer loans (%)	9.26	8.47	10.57	8.78	Not applicable
Customer deposits (bil)	13,657.92	14,883.60	15,817.55	16,879.17	17,910.57
Year-over-year growth of customer deposits (%)	5.55	8.97	6.28	6.71	Not applicable
Operating income (bil)	483.28	504.11	549.18	565.53	157.86
Year-over-year growth of operating income (%)	(0.07)	4.31	8.94	2.98	Not applicable
Net income (bil)	184.99	192.44	201.89	205.10	57.31
Year-over-year growth of net income (%)	0.51	4.03	4.91	1.59	Not applicable
Net fees and commissions income/operating income (%)	18.35	17.30	13.44	13.35	17.66

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

Table 4

Peer Comparison -- Business Position

(2018-2020 three-year average)	BOC	Peer Group				
		Max	**Min**	**Average**	**Asset-weighted average**	**Median**
Total assets (bil)	**22,813.23**	30,384.68	10,044.80	20,683.24	23,586.27	23,855.41
Year-over-year growth of total assets (%)	**7.83**	8.93	5.79	7.91	8.19	8.19
Gross customer loans (bil)	**13,034.84**	16,935.18	4,989.10	11,485.71	13,218.35	13,247.17
Year-over-year growth of customer loans (%)	**9.27**	16.35	8.51	10.80	10.38	9.33

Customer deposits (bil)	**15,860.11**	23,173.77	6,157.85	15,362.95	17,514.99	17,278.38
Year-over-year growth of customer deposits (%)	**7.32**	8.72	6.03	7.80	7.95	8.00
Operating income (bil)	**539.61**	837.29	230.44	536.12	617.55	583.77
Year-over-year growth of operating income (%)	**5.41**	8.56	5.41	7.07	6.80	6.90
Net income (bil)	**199.81**	309.92	59.25	187.17	220.97	205.23
Year-over-year growth of net income (%)	**3.51**	10.56	3.40	4.89	4.28	3.92
Net fees and commissions income /operating income (%)	**14.70**	18.82	5.53	13.98	14.49	15.50

Note: We have chosen the five other state-owned mega banks in China, including ICBC, CCB, ABC, PSBC and BoCom, as the peers of BOC, for peer comparison purpose. The weights for the asset-weighted average calculation are the three-year average of total assets of these banks from 2018 to 2020. Therefore, the weights of BOC, ICBC, CCB, ABC, PSBC and BoCom are 18.38%, 24.48%, 20.63%, 20.06%, 8.35% and 8.09% respectively.

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

Capital and Earnings

BOC has solid capitalization and robust earnings, and we expect its capital adequacy to remain adequate and consistent with the industry average and its mega bank peers in the next 12 months.

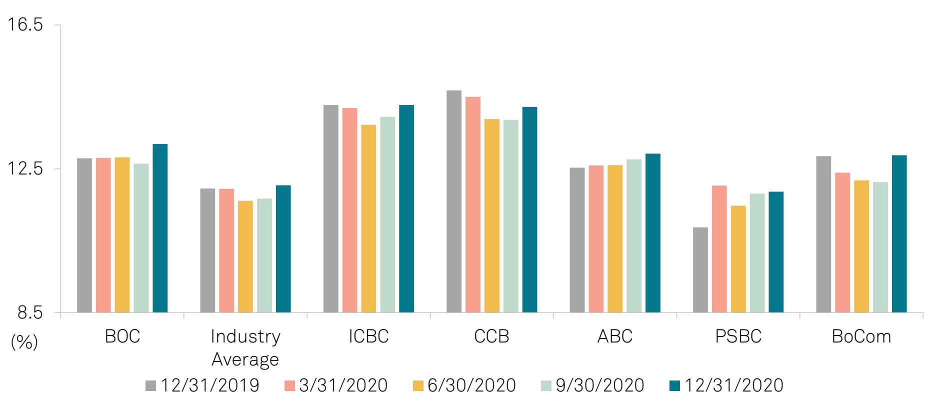
Therefore, there is no notching adjustment for its capital and earnings.

BOC's reported capital adequacy ratios are adequate and consistent with its mega bank peers. As of the end of 2020, its reported regulatory Tier-1 capital adequacy ratio was 13.19%, consistent with the mega bank average and 3.19 percentage points higher than the minimum regulatory requirement of 10%.

Chart 5

BOC's Capital Position Is Comparable with Mega Bank Peers

Peer Comparison: Reported Tier-1 Capital Adequacy Ratio



Note: Together with ICBC, CCB, ABC and BoCom and China Merchants Bank, BOC uses an internal rating-based ("IRB") approach to calculate regulatory capital ratios. Compared with the standard approach used by other Chinese banks beyond these six, the IRB approach typically leads to higher regulatory capital ratios. Typically, a bank's Tier-1 capital adequacy ratio under the standard approach would be about 2-3 percentage points lower than its reported ratio under the IRB approach due to lower risk weights for loans under IRB approach. We believe BOC's capitalization is adequate and consistent with the industry average under standard approach.

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

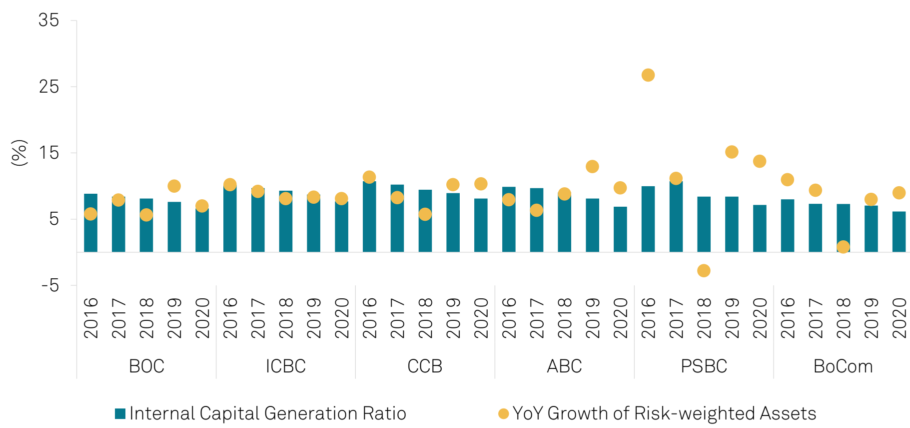
We expect BOC to increase its capitalization as it is a globally systemically important bank ("G-SIB") and subject to the higher capital requirements of the Financial Stability Board ("FSB"). According to FSB requirements, BOC is expected to increase its total loss absorbing capacity ("TLAC") to 20% of its risk-weighted assets at the beginning of 2025, before a further increase to 22% at the beginning of 2028.

The pandemic has slowed down BOC's progress in meeting higher FSB TLAC requirements, as intensified lending activities and lower short-term profitability caused by COVID-19 have led to higher-than-usual capital consumption. In 2020, its internal capital generation ratio was about 6.6%, 0.36 percentage point lower than its RWA growth rate. We expect capital consumption to slow down as the Chinese economy recovers and fewer extraordinary measures are needed in 2021. We expect BOC's tier-1 capital adequacy ratio under the IRB approach to be about 13.4% as of the end of 2021, comfortably above the minimum regulatory requirement.

Chart 6

BOC's Internal Capital Generation Capacity is Generally Consistent with Its RWA Growth Pace

Peer Comparison: Internal Capital Generation Capacity Vs RWA Growth Rate



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

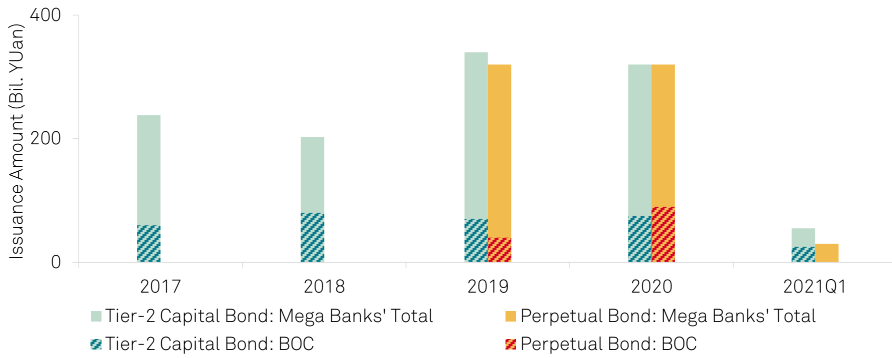
Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

Hybrid bond issuance has been important for mega banks in maintaining stable capitalization. In 2020, BOC issued 75 billion RMB Tier-2 capital bonds, 90 billion RMB perpetual bonds and 2.82-billion-dollar preferred shares, accounting for 3.06%, 3.67% and 0.81%, respectively, of its total capital as of end of 2020. We expect more hybrid bond issuance going forward as BOC makes efforts to meet TLAC targets.

Chart 7

Hybrid Bond Issuance Has Been Important for Mega Banks in Maintaining Stable Capitalization

Peer Comparison: Issuance of Hybrid Bonds in China



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

Table 5

BOC -- Tier-1 Capital Adequacy Ratio Forecast by S&P Global (China) Ratings

	2019A	2020A	2021F
Total risk-weighted assets (bil)	14,123.9	15,109.1	16,330.6
- Credit risk (bil)	13,126.4	14,072.7	15,256.8
- Market risk (bil)	130.2	130.8	131.8
- Operational risk (bil)	867.4	905.6	941.9
Tier-1 capital (bil)	1,806.4	1,992.6	2,181.2
Tier-1 capital adequacy ratio forecast by S&P Global (China) Ratings (%)			13.4

This forecast is based on IRB approach.

As of the end of 2020, outstanding off-balance sheet wealth management products (WMPs) accounted for 9.8% of BOC's gross loans, and only a small portion of the underlying assets were non-standard products. Considering the growth of net asset value-based products and the regulator's continuous efforts in reducing implicit guarantee of banks over their WMPs, we don't expect these outstanding WMPs to have a significant impact on the bank's overall capitalization.

S&P Global (China) Ratings' base case assumptions for this forecast include: 1. It total assets grow by around 8% in 2021; 2. As of the end of 2021, NPL ratio remains about 1.5% and reserve coverage ratio remains about 185%; 3.NIM stays about 1.8%; 4. Its cost-to-income ratio remains around 26% ; 5. Its return on average equity is above 9.5% for 2021; 6. Its annual dividend payout ratio remains at 30% for 2021; and 7. We take into account the planned Tier-1 capital instrument issuance (including perpetual bonds and preferred shares) into the forecast. In the first half of 2021, BOC issued 50 billion RMB perpetual bonds.

Note: A - actual; F - forecast.

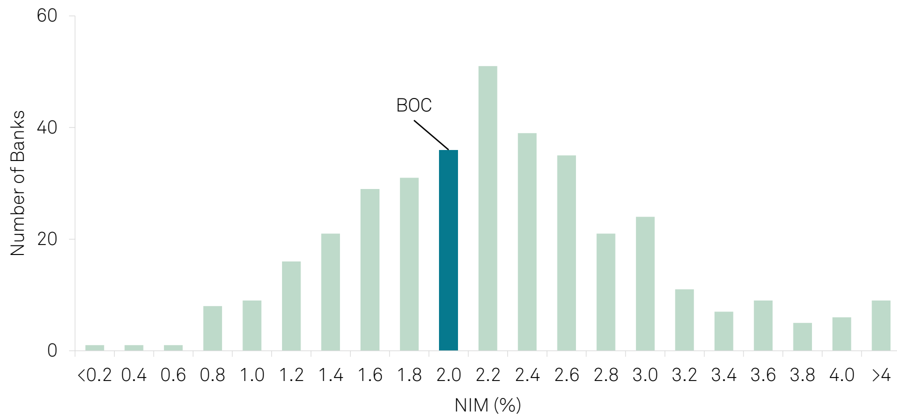
Sources: BOC, S&P Global (China) Ratings.

We expect the bank to maintain a stable net interest margin ("NIM") level going forward. Amid a government push for lower borrowing costs for the real economy during the COVID-19 period, BOC's NIM dropped 4 bps to 1.85% in 2020 compared to 2019. Its NIM tends to be slightly lower than the industry average. We believe this is mainly because of its significant international loan book which has a lower average interest yield.

Chart 8

BOC's NIM Is Slightly Lower Than the Industry Average Due to Its Larger International Loan Book

Industry Distribution: Net Interest Margin of Major Banks in China in 2020

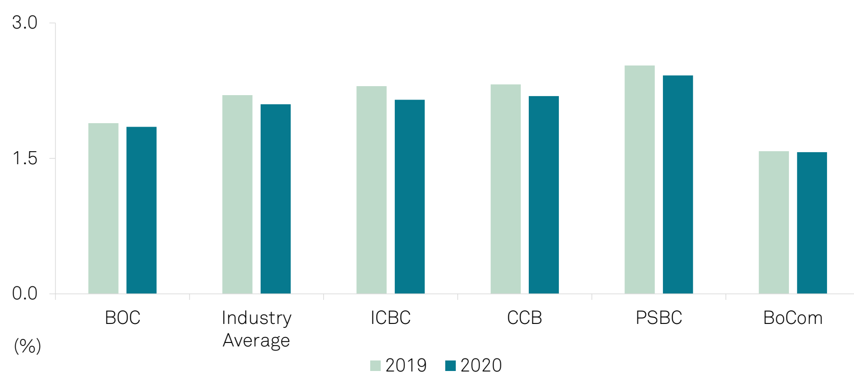


Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

Chart 9

BOC's NIM Is Comparable to That of Its Peers

Peer Comparison: Reported Net Interest Margin



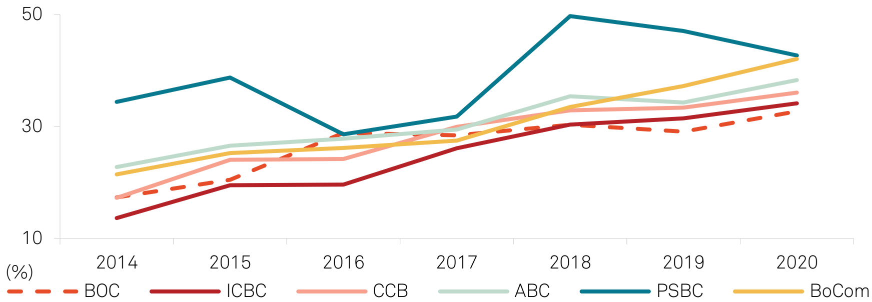
Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings

Similar to most of its peers, its impairment charges have increased in recent years. From 2015 to 2019, its ratio of new provisioning/pre-provision operating profits increased from 20% to 29%. As a result of more intensive provisioning during COVID-19, this ratio increased 4 percentage points to 33% in 2020. We expect credit cost pressure to continue in 2021.

Chart 10

Similar to Its Peers, BOC's Impairment Charges have been Increasing

Peer Comparison: New Provisioning/Pre-provision Operating Profits



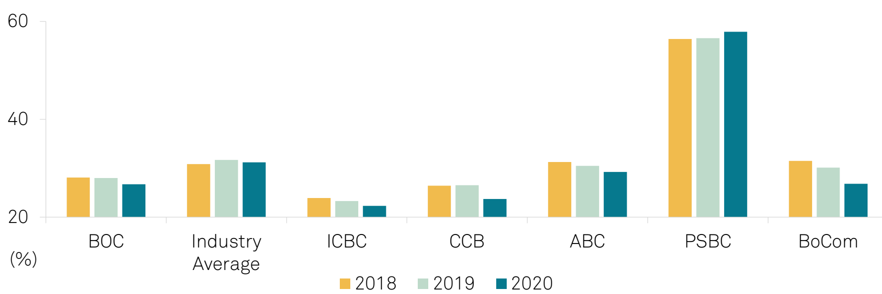
Sources: Public information of banks, collected & adjusted by S&P Global (China) Ratings.

BOC's cost-to-income ratio is better than the industry average and consistent with the mega bank average. Its average cost-to-income ratio from 2018 to 2020 was 27.6%, 1.4 percentage points lower than the weighted average of mega banks and 3.6 percentage points lower than the industry average. We expect the bank to maintain effective cost control in the foreseeable future.

Chart 11

BOC's Cost-To-Income Ratio Is Better Than the Industry Average

Peer Comparison: Cost-to-income Ratio



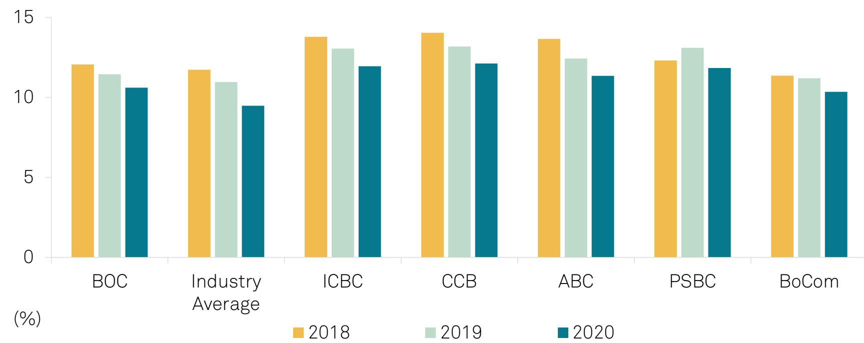
Sources: CBIRC, public information of banks, collected & adjusted by S&P Global (China) Ratings.

Similar to most of its peers, BOC's profitability is under pressure due to high credit cost and NIM compression. Its average reported return on equity was 11.37% from 2018 to 2020, 0.65 percentage points higher than the industry average. In 2020, its reported ROE was 10.61%, down by 0.84 percentage points compared to 2019. We expect moderately better earnings in 2021 but are aware of the continuing credit cost pressure.

Chart 12

Similar to Peers, BOC's Profitability Is Under Pressure Due to Increasing Credit Cost

Peer Comparison: Reported Return on Equity



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

Table 6

BOC -- Capital and Earnings

(%)	2017	2018	2019	2020	2021.03
Reported regulatory capital adequacy ratio	14.19	14.97	15.59	16.22	15.71
Reported regulatory Tier-1 capital adequacy ratio	12.02	12.27	12.79	13.19	12.77
Reported net interest margin	1.84	1.95	1.89	1.85	1.78
Cost-to-income ratio	28.34	28.09	28.00	26.73	23.39
Asset provisioning/pre-provision operating profits	28.40	30.29	29.05	32.68	31.06
Loan provisioning/average gross customer loans	0.81	0.95	0.79	0.76	Not applicable
Return on average assets	0.98	0.94	0.92	0.87	Not applicable
Reported return on equity	12.24	12.06	11.45	10.61	12.17

Note: Return on average assets = net income / [(total assets at the beginning of the year + total assets as of the end of the year)/2].

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

Table 7

Peer Comparison -- Capital and Earnings

(2018-2020 three-year average)	BOC	Peer Group				
		Max	Min	Average	Asset-weighted average	Median
Reported regulatory capital adequacy ratio	**15.59**	17.26	13.72	15.61	15.97	15.77
Reported Tier-1 capital adequacy ratio	**12.75**	14.44	11.20	12.93	13.22	12.70

Net Interest Margin adjusted by S&P Global (China) Ratings	**1.80**	2.44	1.49	2.03	2.06	2.13
Cost-to-income ratio	**27.61**	56.95	23.16	31.90	29.02	28.06
Asset provisioning/pre-provision operating profits	**30.67**	46.46	30.67	36.12	34.63	35.02
Loan provisioning /average gross customer loans	**0.83**	1.06	0.83	0.99	0.99	1.01
Return on average assets	**0.91**	1.09	0.59	0.89	0.94	0.90
Return on average equity	**10.82**	12.69	10.19	11.53	11.76	11.54

Note 1: The peer group includes the six state-owned mega banks.

Note 2: Net Interest Margin (NIM) adjusted by S&P Global (China) Ratings = adjusted interest income/ [(interest-bearing assets at the beginning of the year + interest-bearing assets as of the end of the year)/2].

Note 3: Return on average assets =net income/ [(total assets at the beginning of the year +total assets as of the end of the year)/2].

Note 4: Return on average equity =net income/ [(total equity at the beginning of the year +total equity as of the end of the year)/2].

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

Risk Position

We expect BOC to maintain an asset quality performance broadly in line with that of its mega-bank peers and the industry average. Its average non-performing loan ("NPL") ratio from 2018 to 2020 was 1.42%, consistent with the mega bank weighted average and 43 bps lower than the industry average. Its average special mention loan ("SML") ratio from 2018 to 2020 was 2.33%, similar to the mega bank weighted average and 54 bps lower than the industry average.

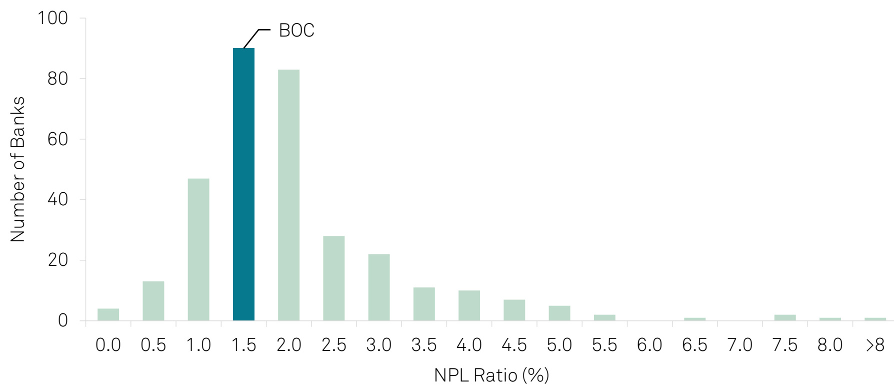
BOC's asset quality metrics are in line with the industry average and its mega bank peers.

Therefore, there is no notching adjustment for its risk position.

Chart 13

BOC's NPL Ratio Is Consistent with The Industry Average

Industry Distribution: NPL Ratio of Major Banks in China as of End of 2020

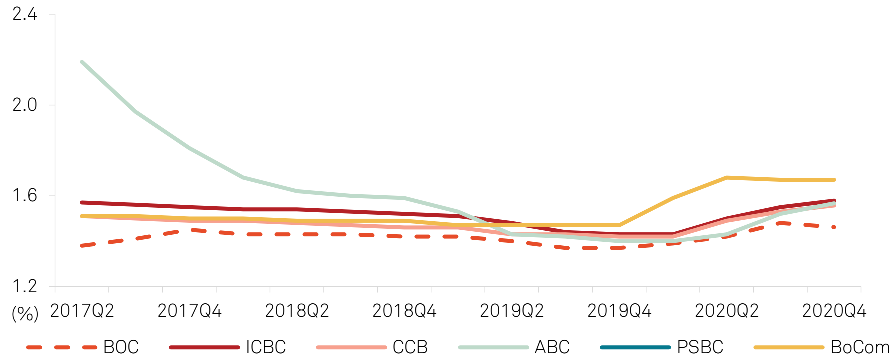


Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

Chart 14

BOC's NPL Ratio Is Comparable to Its Mega Bank Peers

Peer Comparison: NPL Ratio



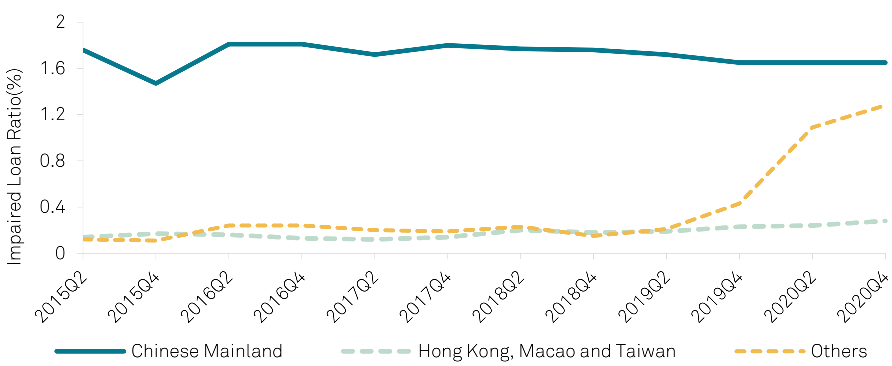
Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

The asset quality performance of BOC's overseas portfolio, particularly its Hong Kong portfolio, is better than its domestic loan book. As of the end of 2020, its overseas loans (including Hong Kong) accounted for 19% of its gross loans, and the overseas impaired loan ratio was 0.64%, much lower than BOC's overall impaired loan ratio of 1.46%; in particular, BOC's loans in Hong Kong, Macao and Taiwan accounted for 12% of its gross loans, with an impaired loan ratio of only 0.28% despite the pandemic. While international lending (excluding Hong Kong, Macao and Taiwan) has seen an increasing impaired loan ratio since 2019, we believe overall asset quality pressure is controllable since BOC's international loan portfolio only accounts for about 7% of its gross loan book, and we expect better performance after other countries recover from COVID.

Chart 15

BOC's Asset Quality Performance in Hong Kong Is Better Compared to Its Overall Loan Book

BOC: Impaired Loan Ratios by Regions



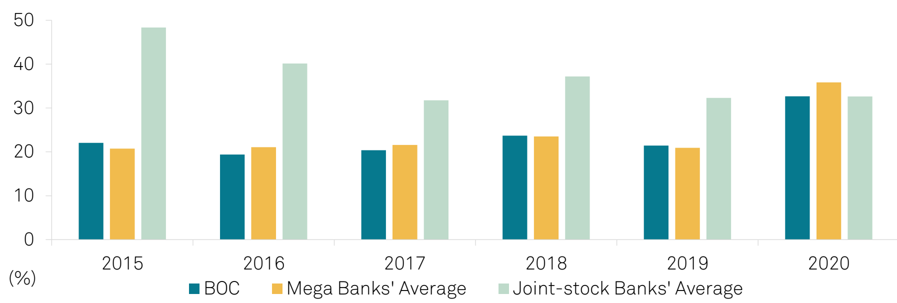
Source: BOC, collected and adjusted by S&P Global (China) Ratings.

BOC's asset quality is under pressure due to COVID-19 but we expect such pressure to be controllable given China's robust economic recovery. Factors which contribute positively to its asset quality stability include good geographical and industry diversification, good asset quality outside the Chinese mainland, and a large portfolio of large high-quality corporate borrowers. Negative factors which may weigh on its asset quality include exposure to micro-and-small enterprises ("MSEs"), large high-risk high-leverage privately-owned enterprises and credit card borrowers whose debt servicing capacity has come under pressure from the pandemic.

Chart 16

Mega Banks' SML Migration Ratio Increased During Covid

Peer Comparison: Downward Migration Ratio of SMLs



Note: Downward migration ratio of SMLs = downward migration amount of SMLs at the beginning of the period / (SMLs at the beginning of the period - decrease of SMLs within the period) * 100%.

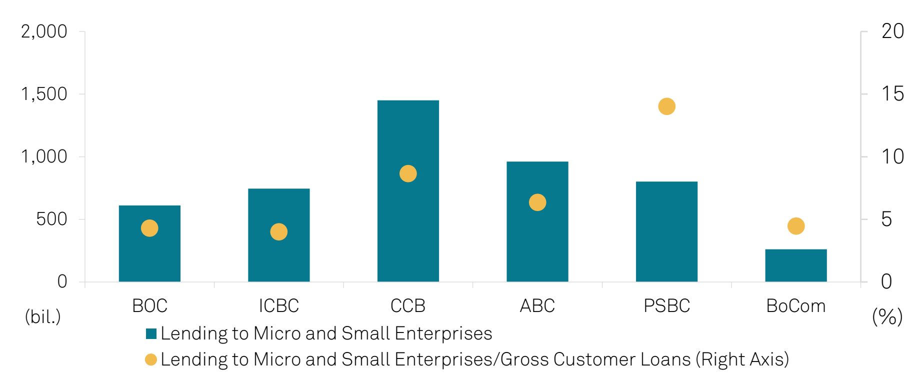
Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

Credit risk related to BOC's exposure to MSEs is controllable. BOC has rapidly increased its lending to MSEs in accordance with the government requirement of increasing MSE loans by at least 40% in 2020. For 2021, the government has set a new target of increasing MSE loans by at least 30%. As of the end of 2020, BOC's loans to MSEs were 611.7 billion RMB, up by 48% compared to the end of 2019, and accounting for 4.3% of its gross loan portfolio. BOC gave forbearance measures to loans worth over 140 billion RMB to medium-sized enterprises, MSEs, and other companies that needed relief during the pandemic. As forbearance measures gradually phase out during 2021, we expect this portfolio to experience asset quality pressure. However, as this portfolio is very small, accounting for 1% of the bank's gross loan book, we expect its impact on the bank's overall asset quality to be controllable.

Chart 17

BOC's MSE Exposure Is Comparable to That of Its Peers

Peer Comparison: Lending to MSEs as of End of 2020



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

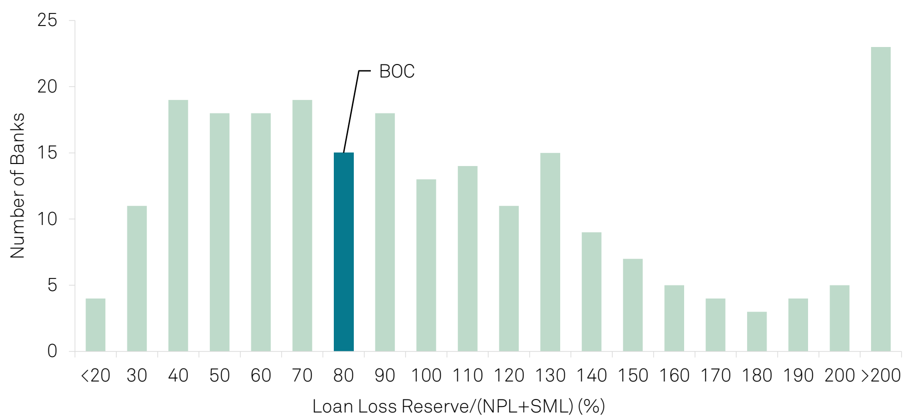
We expect BOC's retail loan book to maintain stable asset quality performance. As of the end of 2020, mortgages continued to account for around 79% of its domestic retail loan book. Thanks to good granularity of the bank's mortgage portfolio and its conservative underwriting standards, we expect BOC's mortgage loan book to maintain very good asset quality performance. Meanwhile, the NPL ratio of its credit card business, which represents around 9% of its retail loan book, has seen a moderate increase. The impaired loan ratio of its credit card business was 2.5% as of the end of 2020, 28 bps higher compared to the end of 2019.

BOC has adequate NPL coverage from its reserves, but we expect provisioning pressure to continue in 2021. As of the end of 2020, its NPL reserve coverage ratio was 177.84%, dropping by 5 percentage points from the end of 2019. Its NPL and SML reserve coverage was 78.12%, up 8.4 percentage points compared to the end of 2019.

Chart 18

BOC's Reserve Coverage for NPL and SML Is Consistent With The Industry Average

Industry Distribution: Loan Loss Reserve/(NPL+SML) of Major Banks in China as of End of 2020

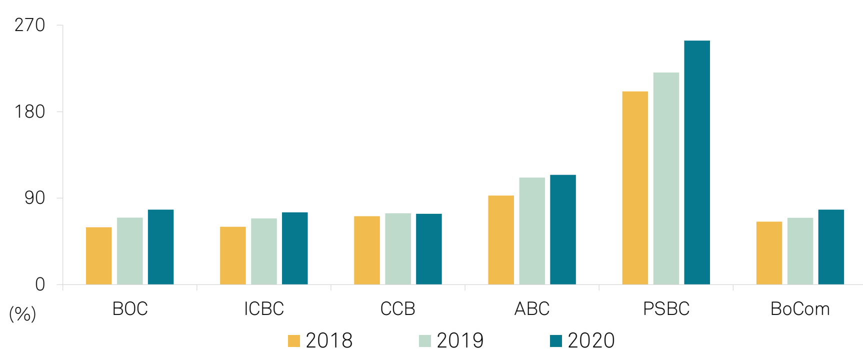


Source: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

Chart 19

BOC's Reserve Buffer Is Comparable to Its Mega Bank Peers

Peer Comparison: Loan Loss Reserve/(NPL+SML)



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

We expect the credit risk of BOC's investment portfolio to remain controllable despite the increasing default risk in the domestic bond market. As of the end of 2020, about 76% of the bank's investment portfolio was bonds issued by central and regional governments, the central bank and policy banks.

Table 8

BOC -- Risk Position

(%)	2017	2018	2019	2020	2021.03
Non-performing loan ratio	1.45	1.42	1.37	1.46	1.30
(Non- performing loans + special mention loans) /gross customer loans	4.36	4.32	3.59	3.33	Not available
Overdue loans/gross customer loans	1.86	1.86	1.24	1.26	Not available
Loan loss reserves/gross customer loans	2.31	2.57	2.49	2.59	Not available
Reserve coverage ratio	159.18	181.97	182.86	177.84	189.88
Loan loss reserves/ (non-performing loans + special mention loans)	53.05	59.65	69.71	78.12	Not available

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

Table 9

Peer Comparison -- Risk Position

(2018-2020 three-year average) (%)	BOC	Peer Group				
		Max	Min	Average	Asset-weighted average	Median
Non-performing loan ratio	**1.42**	1.55	0.87	1.39	1.44	1.50
(Non-performing loans + special mention loans) /gross customer loans	**3.74**	4.38	1.48	3.52	3.79	3.80
Overdue loans/gross customer loans	**1.46**	1.70	0.94	1.39	1.41	1.46
Loan loss reserves /gross customer loans	**2.55**	4.05	2.51	3.07	3.11	3.00
Reserve coverage ratio	**180.89**	381.43	162.92	232.37	221.92	200.90
Loan loss reserves/ (non-performing loans + special mention loans)	**69.16**	225.29	68.12	102.12	90.30	72.04

Note: The peer group includes the six state-owned mega banks.

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

Funding and Liquidity

Similar to its mega bank peers, BOC has a very stable funding structure thanks to its large and sticky corporate and retail deposit bases in China. It funds the majority of its business with customer deposits. As of the end of 2020, 76% of its liabilities were customer deposits, and its use of wholesale funding represented about 20% of its total liabilities. It has a balanced deposit structure. As of the end of 2020, 45% of its deposits were retail deposits; in addition, 49% of its deposits were low-cost demand deposits.

BOC has a very good liquidity profile. In the fourth quarter of 2020, the bank's average daily liquidity coverage ratio was 139.79%, much higher than the minimum regulatory requirement of 100%.

As a state-owned mega bank, in our view, BOC also benefits from the phenomenon of "flight to quality" when general market confidence in the domestic banking sector weakens. Therefore, we believe BOC and its mega bank peers have a stronger and more stable funding and liquidity profile than smaller banks which are more vulnerable to swings in market confidence.

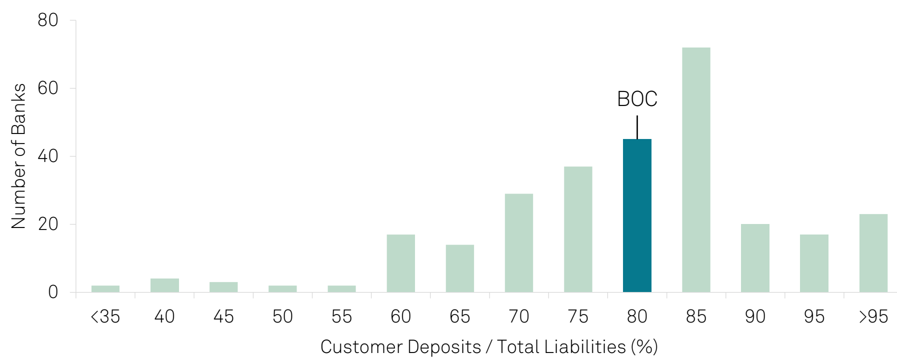
Similar to other mega banks, BOC has very stable and large deposit base across the country and benefits from "flight to quality" when market liquidity tightens.

Therefore, we apply a two-notch uplift for its funding and liquidity.

Chart 20

BOC Funds the Majority of Its Business With Customer Deposits

Industry Distribution: Customer Deposits/Total Liabilities of Major Banks in China as of End of 2020

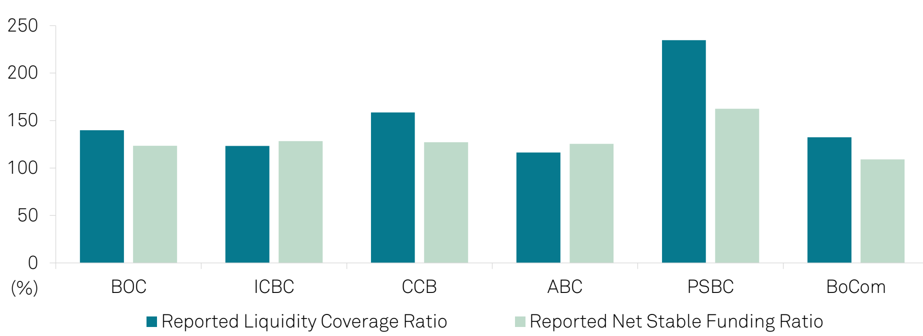


Sources: Public information of banks, collected and adjusted by S&P Global (China) Ratings.

Chart 21

Similar to Its Peers, BOC Has Good Liquidity Ratios

Peer Comparison: Liquidity Related Ratios as of End of 2020



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

Table 10

BOC – Funding and Liquidity

(%)	2017	2018	2019	2020	2021.03
Customer loans/customer deposits	79.78	79.41	82.62	84.22	83.63
Customer deposits/total liabilities	76.34	76.16	76.07	75.90	75.74
Wholesale funding/total liabilities	19.46	20.71	20.53	20.14	20.74
Retail deposits/customer deposits	42.69	43.15	44.19	44.97	Not available
Liquidity coverage ratio	117.41	139.66	136.36	139.79	133.30
Net stable funding ratio	N.A.	125.60	124.46	123.50	Not available

Note: Wholesale funding=borrowing from central government + borrowing and deposits from other financial institutions+ financial assets sold for repurchase + transactional monetary liabilities + bonds payable.

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

Table 11

Peer Comparison -- Funding and Liquidity

(2018-2020 three-year average) (%)	BOC	Peer Group				
		Max	**Min**	**Average**	**Asset-weighted average**	**Median**
Customer loans /customer deposits	**82.09**	86.55	52.72	74.45	75.39	77.04
Customer deposits /total liabilities	**76.04**	96.24	66.54	80.76	80.85	81.07
Wholesale funding /total liabilities	**20.46**	31.22	2.84	16.91	16.64	16.59
Retail deposits /customer deposits	**44.10**	87.41	32.09	52.52	50.68	46.93
Liquidity coverage ratio	**138.60**	231.22	121.68	148.28	140.85	131.27

Note: The peer group includes the six state-owned mega banks.

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

BOC is assigned an SACP of aa_{spc}, five notches higher than its anchor of bbb+. Its SACP reflects its very strong business franchise and very good funding and liquidity profile.

Issuer Credit Rating

External Support

As the fourth largest bank, BOC is of critical importance to the central government.

The extremely high likelihood of government support results in a two-notch uplift from its SACP of aa_{spc} and we assign it an ICR of AAA_{spc}.

In our opinion, as the fourth largest commercial bank in China by asset size, BOC is of critical importance to the central government for its role in maintaining the country's financial stability. Together with other state-owned mega banks, BOC is of critical importance to the government in its execution of major economic and financial policy initiatives.

BOC has close ties with the central government. As of the end of 2020, the central government held about 64% of the bank's shares through Central Huijin Investment Ltd. We view the government's stake in mega banks as strategic and long-term. In addition, the central government also effectively appoints or nominates the majority of the bank's board of directors and senior management.

Overall, we believe that the likelihood of BOC receiving extraordinary government support is extremely high, and we assign an ICR of AAA_{spc} to BOC, representing a two-notch uplift from its SACP of aa_{spc}.

Appendix 1: Key Financial Data

BOC -- Key Financial Data

	2017	2018	2019	2020	2021.03
Business Position					
Total assets (bil)	19,467.42	21,267.28	22,769.74	24,402.66	25,834.29
Gross customer loans (bil)	10,896.56	11,819.27	13,068.79	14,216.48	14,977.94
Customer deposits (bil)	13,657.92	14,883.60	15,817.55	16,879.17	17,910.57
Total equity (bil)	1,576.68	1,725.40	1,976.70	2,162.84	2,186.71
Operating income (bil)	483.28	504.11	549.18	565.53	157.86
Net income (bil)	184.99	192.44	201.89	205.10	57.31
Total assets/total assets of China's commercial banking industry (%)	9.89	10.13	9.51	9.18	9.36
Customer loans/total loans of China's commercial banking industry (%)	11.14	10.70	10.08	9.68	9.69
Customer deposits/total deposits of China's commercial banking industry (%)	8.07	8.15	7.98	7.73	7.88
Capital and Earnings					
Reported regulatory capital adequacy ratio (%)	14.19	14.97	15.59	16.22	15.71
Reported regulatory Tier-1 capital adequacy ratio (%)	12.02	12.27	12.79	13.19	12.77
Reported net interest margin (%)	1.84	1.95	1.89	1.85	1.78
Cost-to-income ratio (%)	28.34	28.09	28.00	26.73	23.39
Asset provisioning/pre-provision operating profits (%)	28.40	30.29	29.05	32.68	31.06
Loan provisioning/average gross customer loans (%)	0.81	0.95	0.79	0.76	Not applicable
Return on average assets (%)	0.98	0.94	0.92	0.87	Not applicable
Reported return on equity (%)	12.24	12.06	11.45	10.61	12.17
Risk Position					
Non-performing loan ratio (%)	1.45	1.42	1.37	1.46	1.30
(Non-performing loans + special mention loans) /gross customer loans (%)	4.36	4.32	3.59	3.33	Not available
Overdue loans/gross customer loans (%)	1.86	1.86	1.24	1.26	Not available
Loan loss reserve/gross customer loans (%)	2.31	2.57	2.49	2.59	Not available
Reserve coverage ratio (%)	159.18	181.97	182.86	177.84	189.88
Loan loss reserve/ (non-performing loans + special mention loans) (%)	53.05	59.65	69.71	78.12	Not available
Funding and Liquidity					
Customer loans/customer deposits (%)	79.78	79.41	82.62	84.22	83.63
Customer deposits/total liabilities (%)	76.34	76.16	76.07	75.90	75.74
Wholesale funding /total liabilities (%)	19.46	20.71	20.53	20.14	20.74
Retail deposits/customer deposits (%)	42.69	43.15	44.19	44.97	Not available
Liquidity coverage ratio (%)	117.41	139.66	136.36	139.79	133.30

Note 1: In our view, BOC has a clear business model and sound financial management. We haven't conducted any material adjustments to its financial data.

Note 2: BOC's annual financial reports from 2016 to 2020 were audited by Ernst & Young Hua Ming (LLP).

Note 3: Return on average assets = net income / [(total assets at the beginning of the year + total assets as of the end of the year)/2].

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

Appendix 2: Peer Comparison

Peer Comparison

(2018-2020 three-year average)	BOC	Peer Group				
		Max	Min	Average	Asset-weighted average	Median
Business Position						
Total assets (bil)	**22,813.23**	30,384.68	10,044.80	20,683.24	23,586.27	23,855.41
Gross customer loans (bil)	**13,034.84**	16,935.18	4,989.10	11,485.71	13,218.35	13,247.17
Customer deposits (bil)	**15,860.11**	23,173.77	6,157.85	15,362.95	17,514.99	17,278.38
Total equity (bil)	**1,954.98**	2,648.80	564.37	1,686.15	1,965.18	1,951.70
Operating income (bil)	**539.61**	837.29	230.44	536.12	617.55	583.77
Net income (bil)	**199.81**	309.92	59.25	187.17	220.97	205.23
Capital and Earnings						
Reported regulatory capital adequacy ratio (%)	**15.59**	17.26	13.72	15.61	15.97	15.77
Reported regulatory Tier-1 capital adequacy ratio (%)	**12.75**	14.44	11.20	12.93	13.22	12.70
Net interest margin adjusted by S&P Global (China) Ratings (%)	**1.80**	2.44	1.49	2.03	2.06	2.13
Cost-to-income ratio (%)	**27.61**	56.95	23.16	31.90	29.02	28.06
Asset provisioning/pre-provision operating profits (%)	**30.67**	46.46	30.67	36.12	34.63	35.02
Loan provisioning/average gross customer loans (%)	**0.83**	1.06	0.83	0.99	0.99	1.01
Return on average assets (%)	**0.91**	1.09	0.59	0.89	0.94	0.90
Return on average equity (%)	**10.82**	12.69	10.19	11.53	11.76	11.54
Risk Position						
Non-performing loan ratio (%)	**1.42**	1.55	0.87	1.39	1.44	1.50
(Non-performing loans + special mention loans)/gross customer loans (%)	**3.74**	4.38	1.48	3.52	3.79	3.80
Overdue loans/gross customer loans (%)	**1.46**	1.70	0.94	1.39	1.41	1.46
Loan loss reserves/gross customer loans (%)	**2.55**	4.05	2.51	3.07	3.11	3.00
Reserve coverage ratio (%)	**180.89**	381.43	162.92	232.37	221.92	200.90
Loan loss reserve/ (non-performing loans + special mention loans) (%)	**69.16**	225.29	68.12	102.12	90.30	72.04
Funding and Liquidity						
Customer loans/customer deposits (%)	**82.09**	86.55	52.72	74.45	75.39	77.04
Customer deposits/total liabilities (%)	**76.04**	96.24	66.54	80.76	80.85	81.07
Wholesale funding/total liabilities (%)	**20.46**	31.22	2.84	16.91	16.64	16.59
Retail deposits/customer deposits (%)	**44.10**	87.41	32.09	52.52	50.68	46.93
Liquidity coverage ratio (%)	**138.60**	231.22	121.68	148.28	140.85	131.27

Note 1: In this report, we have chosen the five other state-owned mega banks as the peers of BOC for peer comparison purpose. The weights for the asset-weighted average calculation are the three-year average of total assets of these six banks from 2018 to 2020. Therefore, the weights of BOC, ICBC, CCB, ABC, PSBC and BoCom are 18.38%, 24.48%, 20.63%, 20.06%, 8.35% and 8.09% respectively.

Note 2: Net interest margin adjusted by S&P Global (China) Ratings (%) = Net Interest Income / [(total interest-bearing assets at the beginning of the year + total interest - bearing assets as of the end of the year)/2].

Note 3: Return on average assets = net income / [(total assets at the beginning of the year + total assets as of the end of the year)/2].

Note 4: Return on average equity = net income / [(total equity at the beginning of the year + total equity as of the end of the year)/2].

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

Appendix 3: Rating History of BOC by S&P Global (China) Ratings

Issuer Credit Ratings

Rating Type	Ratings	Outlook	Rating Date	Analysts	Related Reports
Initial Rating	AAA_{spc}	Stable	2021-7-15	Longtai Chen, Xiaochen Luan, Zheng Li	Current Report

Note: these ratings are conducted based on S&P Global (China) Ratings Financial Institutions Methodology, and no quantitative model is used.