Risk Management

The Bank endeavoured to comply with regulatory requirements for preventing and mitigating material risks, continued to improve its risk management system in line with the Group's strategies, and further enhanced its comprehensive risk management. It improved its contingency plan and re-examined and updated the Group's risk appetite, thereby constantly making its risk management reporting more forward-looking. It kept improving the effectiveness of the Group's consolidated risk management and control so as to support its comprehensive development. Meanwhile, the Bank continued to refine its risk measurement model and pushed forward the development and maintenance of online models for inclusive finance. It promoted the development of advanced capital management approaches, and deepened the application of advanced approaches. In addition, the Bank intensified efforts in intelligent scenario development and the application of risk data, and strengthened its risk data governance. It also strictly followed regulatory requirements in order to enhance accountability for remediation and hold fast to the bottom line for risk compliance.

Credit Risk Management

Closely monitoring changes in macroeconomic and financial conditions, the Bank pushed forward the optimisation of its credit structure, further improved its credit risk management policies, strengthened credit asset quality management and took a proactive and forward-looking stance on risk management.

The Bank continuously adjusted and optimised its credit structure. With the aim of advancing strategic implementation and balancing risk, capital and return, it improved the management plans for its credit portfolios. In line with national industrial policy orientation, the Bank intensified its support to the real economy, bolstered the improvement of weak links in infrastructure, and supported new infrastructure and new urbanisation initiatives and major projects such as transportation and water conservation projects, boosting the high-quality development of the manufacturing industry. It also enacted guidelines for industry-focused lending and continued to push forward the building of an industrial policy system so as to optimise its credit structure.

Taking a customer-centric approach, the Bank further strengthened its unified credit granting management and enhanced full-scope centralised credit risk management. It continuously improved its long-acting credit management mechanism and asset quality monitoring system, strengthened the control of customer concentration, and further raised the effectiveness of potential risk identification, control and mitigation. The Bank enhanced the supervision of risk analysis and asset quality control in key regions, and strengthened window guidance on all business lines. In addition, it constantly identified, measured and monitored large exposures in line with management requirements.

In terms of corporate banking, the Bank further strengthened risk identification and control in key fields, and proactively reduced and exited credit relationships in such fields. It strictly controlled the outstanding amount and use of loans through limit management, and prevented and mitigated risk from overcapacity industries. In addition, it implemented the government's macro-control policies and regulatory measures in the real estate sector so as to strengthen the risk management of real estate loans. In terms of personal banking, the Bank reinforced the management of credit granting approval, imposed stricter access standards, strengthened monitoring throughout the whole process, and prevented the risk of excessive credit and cross-infection while supporting the development of its personal credit business. It also strengthened risk control over key products and regions.

The Bank strengthened country risk management. It performed an annual review of country risk ratings and implemented limit management and control of country risk exposures. It collected statistics, monitored, analysed and reported its exposures on a regular basis, and made timely assessments of the impact of material country risk events. In addition, it re-examined country risk by considering the impact of COVID-19 and other factors, issued risk prompts in a timely manner and adopted differentiated management of potentially high-risk and sensitive countries and regions. The Bank's net exposure to country risk mainly concentrated on countries and regions that have relatively low ratings, and its overall country risk remained at a reasonable level.

The Bank further stepped up the collection of NPAs. It continued to adopt centralised and tiered management of NPA projects. It reinforced the supervision and management of key regions and key projects, in order to continuously improve the quality and efficiency of disposals. The Bank proactively explored the application of "Internet Plus" in NPA collection, and diversified its disposal channels. In addition, it enhanced the application of write-off and debt-for-equity swaps to consolidate asset quality and prevent and defuse financial risks.

The Bank reasonably measured and managed the quality of its credit assets based on the *Guidelines for Loan Credit Risk Classification*. As at 30 June 2020, the Group's NPLs[4] totalled RMB198.382 billion, an increase of RMB20.147 billion compared with the prior year-end. The NPL ratio was 1.42%, up by 0.05 percentage point compared with the prior year-end. The Group's allowance for loan impairment losses amounted to RMB369.912 billion, an increase of RMB43.989 billion compared with the prior year-end. The coverage ratio of allowance for loan impairment losses to NPLs was 186.46%.

4 Total loans and advances to customers in "Risk Management — Credit Risk Management" section are exclusive of accrued interest.

Five-category Loan Classification

Unit: RMB million, except percentages

Items	As at 30 June 2020 Amount	As at 30 June 2020 % of total	As at 31 December 2019 Amount	As at 31 December 2019 % of total
Group				
Pass	**13,530,868**	**96.64%**	12,566,640	96.41%
Special-mention	**271,507**	**1.94%**	289,314	2.22%
Substandard	**108,492**	**0.78%**	77,459	0.59%
Doubtful	**37,014**	**0.26%**	51,804	0.40%
Loss	**52,876**	**0.38%**	48,972	0.38%
Total	**14,000,757**	**100.00%**	13,034,189	100.00%
NPLs	**198,382**	**1.42%**	178,235	1.37%
Chinese mainland				
Pass	**10,563,554**	**96.18%**	9,885,045	95.95%
Special-mention	**238,568**	**2.17%**	247,412	2.40%
Substandard	**96,410**	**0.88%**	72,611	0.70%
Doubtful	**35,339**	**0.32%**	50,334	0.49%
Loss	**49,634**	**0.45%**	47,006	0.46%
Total	**10,983,505**	**100.00%**	10,302,408	100.00%
NPLs	**181,383**	**1.65%**	169,951	1.65%

Migration Ratio

Unit: %

Items	For the six-month period ended 30 June 2020	2019	2018
Pass	**0.53**	1.40	2.20
Special-mention	**16.51**	21.45	23.70
Substandard	**15.52**	40.86	51.89
Doubtful	**24.46**	18.76	33.57

In accordance with IFRS 9, the Bank assesses expected credit losses (ECL) with forward-looking information and makes relevant allowances. In particular, it makes allowances for assets classified as stage 1 and assets classified as stage 2 and stage 3 according to the ECL over 12 months and the ECL over the entire lifetime of the asset, respectively. As at 30 June 2020, the Group's stage 1, stage 2 and stage 3 loans totalled RMB13,484.743 billion, RMB313.568 billion and RMB198.382 billion respectively, accounting for 96.34%, 2.24% and 1.42% of total loans. In the first half of 2020, the Group's impairment losses on loans amounted to RMB60.728 billion, an increase of RMB25.007 billion compared with the same period of the prior year. Credit cost accounted for 0.90%, an increase of 0.31 percentage point compared with the same period of the prior year. Please refer to Notes III.16 and IV.1 to the Condensed Consolidated Interim Financial Information for detailed information regarding loan classification, the classification of ECL stages and allowance for loan impairment losses.

The Bank continued to focus on controlling borrower concentration risk and was in compliance with regulatory requirements on borrower concentration.

Unit: %

Indicators	Regulatory Standard	**As at 30 June 2020**	As at 31 December 2019	As at 31 December 2018
Loan concentration ratio of the largest single borrower	≤10	**3.1**	3.2	3.6
Loan concentration ratio of the ten largest borrowers	≤50	**14.7**	14.5	15.3

Notes:

1 Loan concentration ratio of the largest single borrower = total outstanding loans to the largest single borrower ÷ net regulatory capital.

2 Loan concentration ratio of the ten largest borrowers = total outstanding loans to the top ten borrowers ÷ net regulatory capital.

The following table shows the top ten individual borrowers as at 30 June 2020.

Unit: RMB million, except percentages

	Industry	Related Parties or not	Outstanding loans	% of total loans
Customer A	Manufacturing	No	70,873	0.51%
Customer B	Transportation, storage and postal services	No	59,341	0.42%
Customer C	Commerce and services	No	37,020	0.26%
Customer D	Transportation, storage and postal services	No	36,607	0.26%
Customer E	Transportation, storage and postal services	No	32,284	0.23%
Customer F	Real estate	No	22,000	0.16%
Customer G	Transportation, storage and postal services	No	21,351	0.15%
Customer H	Commerce and services	No	20,185	0.14%
Customer I	Commerce and services	No	19,193	0.14%
Customer J	Production and supply of electricity, heating, gas and water	No	19,036	0.14%

Market Risk Management

In response to changes in the market environment, the Bank continued to enhance its market risk management.

The Bank improved the Group's market risk management system, and refined the Group's risk limit system by re-examining and adjusting the Group's market risk limit in response to changes in operations and the market. Paying close attention to regulatory dynamics and development trends in financial markets, the Bank strengthened its forward-looking research, judgment and monitoring regarding market risks, thus bolstering its risk warning and mitigation capabilities. It continuously advanced the improvement of its market risk data mart system and upgraded system operation efficiency, so as to enhance the accuracy of risk measurement and improve its ability to quantify risk. Please refer to Note IV.2 to the Condensed Consolidated Interim Financial Information for detailed information regarding market risk.

The Bank tracked fluctuations in domestic and overseas financial markets, strengthened risk management of the Group's bond investments, paid constant attention to changes in the risks of key fields and adjusted its control strategies accordingly. Actively coping with changes in domestic and overseas markets, the Bank strengthened control of bond asset quality during the COVID-19 pandemic and continued to bolster its efforts in the routine monitoring and screening of risky bonds, thus ensuring stable bond investment.

In terms of exchange rate risk management, the Bank sought to achieve currency matching between fund source and application, and managed exchange rate risk through timely currency exchange and hedging, thus effectively controlling its foreign exchange exposure.

Management of Interest Rate Risk in the Banking Book

Based on the principles of matching, comprehensiveness and prudence, the Bank strengthened the management of interest rate risk in the banking book (IRRBB). The Bank's IRRBB management strategy is to control risks within an acceptable level by considering factors such as the Bank's risk appetite and risk profile, as well as macroeconomic and market conditions, so as to achieve a reasonable balance between risk and return, and thus maximise shareholder value.

The Bank assessed the interest rate risk in the banking book mainly through analysis of interest rate repricing gaps, and made timely adjustments to the structure of its assets and liabilities or implemented risk hedging based on changes in the market situation.

Liquidity Risk Management

The Bank endeavoured to develop a sound liquidity risk management system with the aim of effectively identifying, measuring, monitoring and controlling liquidity risk at the institution and Group level, including that of branches, subsidiaries and business lines, thus ensuring that liquidity demand is met in a timely manner and at a reasonable cost.

Adhering to an appropriate balance of safety, liquidity and profitability, and following regulatory requirements, the Bank improved its liquidity risk management in a forward-looking and effective manner. The Bank enhanced liquidity risk management at the institution and Group level, including that of branches, subsidiaries and business lines. It formulated sound liquidity risk management policies and contingency plans, periodically re-examined liquidity risk limits and upgraded the early warning system for liquidity risk in a timely manner, in order to strike an appropriate balance between risk and return. In addition, the Bank regularly improved its liquidity stress-testing scheme and performed stress tests on a quarterly basis. The test results indicated that the Bank had adequate payment ability to cope with distressed scenarios.

As at 30 June 2020, the Bank's liquidity risk indicator met regulatory requirements. The Group's liquidity ratio is shown in the table below (in accordance with the relevant provisions of regulatory authorities in the Chinese mainland):

Unit: %

Indicator		Regulatory standard	**As at 30 June 2020**	As at 31 December 2019	As at 31 December 2018
Liquidity ratio	RMB	≥25	**53.9**	54.6	58.7
	Foreign currency	≥25	**58.2**	60.4	54.8

Reputational Risk Management

The Bank earnestly implemented regulatory requirements on reputational risk management, continued to enhance its reputational risk management system and mechanism and strengthened the consolidated management of reputational risk, so as to enhance its overall reputational risk management capabilities. It attached great importance to the investigation and pre-warning of potential reputational risk factors, strengthened public opinion monitoring, continued to conduct reputational risk identification, assessment and reporting, established a coordination mechanism between reputational risk management departments and liable departments, and dealt appropriately with reputational risk events, thus effectively protecting its brand reputation. In addition, the Bank continued to roll out reputational risk training so as to enhance employees' awareness and foster a culture of reputational risk management.

Internal Control and Operational Risk Management

Internal Control

The Board of Directors, senior management and their special committees earnestly performed their duties regarding internal control and supervision, emphasised early risk warning and prevention, and thus improved the Group's level of compliance operation.

The Bank continued to adopt the "Three Lines of Defence" mechanism for internal control. The first line of defence consists of business departments and all banking outlets. They are the owners of, and are accountable for, local risks and controls. They undertake self-directed risk control and management functions in the course of their business operations, including formulating and implementing policies, conducting business examination, reporting control deficiencies and organising rectifications.

The internal control and risk management departments of the Bank's institutions at all levels form the second line of defence. They are responsible for the overall planning, implementing, examining and assessing of risk management and internal control, as well as for identifying, measuring, monitoring and controlling risks. They led the first line of defence to enhance its use of the Group's operational risk monitoring and analysis platform, and are responsible for handling employee violations and management accountability. Through regular monitoring of material risks, the Bank identified and mitigated risks in a timely manner and promoted the optimisation of business processes and systems.

The third line of defence rests in the audit department of the Bank. The audit department is responsible for performing internal audits of the Bank's internal control and risk management in respect of its adequacy and effectiveness. The Bank continued to push forward the reform of its human resource management system for the audit line, and further intensified the vertical management of its audit function. It enhanced audit team building, pushed forward the construction of IT applications in audit, reinforced the use of IT-based audit approaches, continuously conducted audit circulatory monitoring, and pushed forward the implementation of the audit working mechanism for identifying and revealing material risks. Taking an issue-oriented approach, the Bank focused on comprehensive audits of its institutions and special audits of its businesses. It strengthened audits and inspections of high-risk institutions and businesses, as well as those fields prioritised by the Group and of special concern to regulators. The audit department concentrated its attention on systemic, trending, emerging and important issues, so as to practically perform its internal audit function. It promoted the rectification of audit findings, and clarified the primary responsible parties for the rectification. Meanwhile, it deepened the application of audit results, and urged timely and effective rectification of issues, so as to continually improve the Bank's internal governance and control mechanism.

The Bank devoted great efforts to internal control and case prevention management, consolidated the liabilities of primary responsible parties and took multiple control measures. It consistently improved internal control rules, process and system, stepped up efforts in the building of its internal control inspection team and organised bank-wide risk screening, thereby improving the quality and efficiency of internal control and case prevention. The Bank also focused on the remediation of issues or findings, raised employees' compliance awareness and fostered an internal control compliance culture.

The Bank continued to implement the *Basic Standard for Enterprise Internal Control* and its supporting guidelines, adhering to the primary goal of ensuring the effectiveness of its internal control over financial reporting and the accuracy of financial information. It also constantly improved non-financial internal control. The Bank earnestly implemented the *Guidelines for Internal Control of Commercial Banks* by following the basic principles of "complete coverage, checks and balances, prudence and correspondence", so as to promote internal control governance and an organisational structure characterised by a reasonable delegation of work, well-defined responsibilities and clear reporting lines.

The Bank established and implemented a systematic financial accounting policy framework in accordance with applicable accounting standards and rules. As a result, its accounting basis was solidified and the level of standardisation and refinement of its financial accounting management was further improved. It endeavoured to establish a long-term mechanism of accounting fundamentals, and pushed forward the implementation and assessment of robust accounting standards. It continuously strengthened the quality management of its accounting information, so as to ensure the effectiveness of internal control over financial reporting. The financial statements of the Bank were prepared in accordance with the applicable accounting standards and related accounting regulations, and the financial position, operational performance and cash flows of the Bank were fairly presented in all material respects.

Focusing on fraud risk prevention and control, the Bank proactively identified, assessed, controlled and mitigated risks. In the first half of 2020, the Bank successfully prevented 110 external cases involving RMB8.896 million.

Operational Risk Management

The Bank continuously improved its operational risk management system. It promoted the application of operational risk management tools, including Risk and Control Assessment (RACA), Key Risk Indicators (KRI) and Loss Data Collection (LDC), etc., to identify, assess and monitor operational risk, thus continuously improving its risk management measures. The Bank enhanced its IT-system support capability by optimising its operational risk management information system. It strengthened its business continuity management system, optimised its operating mechanism to enhance operational sustainability, carried out disaster recovery drills, proactively addressed the COVID-19 pandemic and improved the Group's business continuity capacity.

Compliance Management

The Bank continuously improved its compliance risk governance mechanism and management process to ensure the stable development and sustainable operation of the Group. It strengthened its anti-money-laundering (AML) and sanction compliance policies and procedures, optimised AML resource allocation, deepened AML efforts and strengthened sanction compliance monitoring and management. It intensified system and model building and improved system functionality. It endeavoured to build a proactive, forward-looking and robust management framework for overseas compliance through a compliance risk assessment programme. It improved the AML and sanction compliance training management mechanism and conducted various forms of compliance training, so as to enhance all employees' compliance awareness and abilities.

The Bank enhanced the management of its connected transactions and internal transactions. It improved the management of connected parties and consolidated the foundation of its connected transaction management. It strengthened the routine monitoring and examination of connected transactions and strictly controlled their risks. In addition, it continuously implemented internal transaction monitoring and reporting, thereby improving the quality and efficiency of its internal transaction management.

Capital Management

The Bank thoroughly applied the concepts of capital constraint and value creation, continually optimised its assessment on capital budget implementation, and actively reinforced the construction of its capital management system, so as to continuously refine its overall capital management, lead the optimisation of its business structure, and improve its value creation capabilities. It also seized the market opportunity to accelerate its external capital replenishment. In the first half of 2020, it successfully issued USD2.82 billion of offshore preference shares and RMB40.0 billion of undated capital bonds. As at 30 June 2020, the Group's capital adequacy ratio was 15.42%, reaching a relatively high level.

Capital Adequacy Ratios

As at 30 June 2020, the capital adequacy ratios separately calculated in accordance with the *Capital Rules for Commercial Banks (Provisional)* are listed below:

Unit: RMB million, except percentages

	Group		Bank	
Items	**As at 30 June 2020**	As at 31 December 2019	**As at 30 June 2020**	As at 31 December 2019
Net common equity tier 1 capital	**1,640,569**	1,596,378	**1,361,016**	1,346,623
Net tier 1 capital	**1,910,664**	1,806,435	**1,620,480**	1,546,517
Net capital	**2,298,846**	2,201,278	**1,994,511**	1,927,188
Common equity tier 1 capital adequacy ratio	**11.01%**	11.30%	**10.55%**	10.99%
Tier 1 capital adequacy ratio	**12.82%**	12.79%	**12.56%**	12.62%
Capital adequacy ratio	**15.42%**	15.59%	**15.46%**	15.72%

Please refer to Note IV.5 to the Condensed Consolidated Interim Financial Information and Supplementary Information II.5 to the Interim Financial Information for detailed information.

Leverage Ratio

As at 30 June 2020, the leverage ratio calculated in accordance with the *Administrative Measures for the Leverage Ratio of Commercial Banks (Revised)* and the *Capital Rules for Commercial Banks (Provisional)* is listed below:

Unit: RMB million, except percentages

Items	**As at 30 June 2020**	As at 31 December 2019
Net tier 1 capital	**1,910,664**	1,806,435
Adjusted on- and off-balance sheet assets	**25,687,399**	24,303,201
Leverage ratio	**7.44%**	7.43%

Please refer to Supplementary Information II.6 to the Interim Financial Information for detailed information.