Risk Management

The Bank continued to improve its risk management system in line with the Group's strategies. Facing a challenging and complex external environment, the Bank intensified efforts to improve its comprehensive risk management system, further refined and upgraded the system in terms of governance structure, management mechanism, management process, management tools and management foundations, thus ensuring the sustainable and robust operation of the Group. Anticipating how risk management will develop over the next three to five years, the Bank formulated the Group's 14th Five-Year risk management plan, which comprehensively charts a blueprint for the Group's risk management development, including proposed actions and measures. In addition, it further implemented Basel III and international interest rate benchmark reform, and continued to enhance its refined risk management capability. The Bank also improved the risk management system for its comprehensive operation subsidiaries and continuously strengthened risk management requirements for its overseas institutions. It also improved mechanisms for pandemic response and major risk reporting, and ensured business continuity. Furthermore, the Bank accelerated the digital transformation of risk management, proactively established an online "toolbox" for business models and a "safety valve" for risk evaluation, and advanced the building of a multi-tiered smart risk control and early warning system, thus increasing the levels of its smart risk management. It remained constantly mindful of worst-case scenarios and conducted in-depth investigation of the major potential risks arising from varying aspects of its institutions, businesses, products and customers. It also took an active role in carrying out special campaigns on risk culture, as a way to continuously improve the risk awareness of all employees.

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 more 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 continued to push forward the construction of the industrial policy system, improved the management scheme for its asset portfolios, and formulated industry guidelines for credit granting, so as to optimise its credit structure. In line with the 14th Five-Year Plan of the country and that of the Bank, as well as the requirements for the development of the "Eight Priorities in Delivering Financial Services", the Bank highlighted the four segments of scientific and technological innovation, expanding domestic demand, regional coordination and infrastructure construction. It also focused on the ten pillars of strategic emerging industries, new infrastructure, advanced manufacturing, digital economy, people's livelihood consumption, modern services, rural revitalisation, new urbanisation, traditional infrastructure and traditional manufacturing.

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 risk, 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 focus regions, and strengthened the window guidance, inspection and post-assessment of its business lines. In addition, it constantly identified, measured and monitored large exposures in line with related large exposure management requirements.

In terms of corporate banking, the Bank further strengthened risk identification, control and mitigation in key fields, strictly controlled the outstanding amount and use of loans through limit management, and prevented and mitigated risk associated with 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 improved its personal credit approval mechanism, strengthened authorisation management, and refined approver management. It set strict access standards, enhanced process monitoring and prevented the risks of excessive credit and cross-spreading of risks while supporting the development of its personal credit business.

The Bank stepped up efforts in the mitigation of NPAs. It continued to adopt the centralised and tiered management of NPA projects, reinforced the supervision of key regions and key projects, and improved the quality and efficiency of disposal. 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, applied the pilot regulatory policy on NPA transfer, and increased the securitisation of non-performing personal and bank card assets, in a bid to improve asset quality and prevent and resolve financial risks.

The Bank scientifically measured and managed the quality of its credit assets in accordance with the *Guidelines for Loan Credit Risk Classification*. As at 30 June 2021, the Group's NPLs[4] totalled RMB200.348 billion, a decrease of RMB6.925 billion compared with the prior year-end. The NPL ratio was 1.30%, down 0.16 percentage point compared with the prior year-end. The Group's allowance for impairment losses on loans and advances was RMB369.168 billion, an increase of RMB0.549 billion compared with the prior year-end. The coverage ratio of allowance for loan impairment losses to NPLs was 184.26%.

[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 2021		As at 31 December 2020	
	Amount	**% of total**	Amount	% of total
Group				
Pass	**14,945,790**	**97.17%**	13,711,518	96.67%
Special-mention	**235,350**	**1.53%**	264,594	1.87%
Substandard	**90,403**	**0.59%**	125,118	0.88%
Doubtful	**28,086**	**0.18%**	33,823	0.24%
Loss	**81,859**	**0.53%**	48,332	0.34%
Total	**15,381,488**	**100.00%**	14,183,385	100.00%
NPLs	**200,348**	**1.30%**	207,273	1.46%
Chinese mainland				
Pass	**12,031,613**	**96.97%**	11,089,055	96.41%
Special-mention	**197,254**	**1.59%**	222,751	1.94%
Substandard	**79,139**	**0.64%**	115,873	1.01%
Doubtful	**23,083**	**0.18%**	31,078	0.27%
Loss	**76,860**	**0.62%**	43,034	0.37%
Total	**12,407,949**	**100.00%**	11,501,791	100.00%
NPLs	**179,082**	**1.44%**	189,985	1.65%

Migration Ratio

Unit: %

Items	For the six-month period ended 30 June 2021	2020	2019
Pass	**0.53**	1.21	1.40
Special-mention	**16.92**	32.66	21.45
Substandard	**51.94**	24.68	40.86
Doubtful	**21.76**	28.62	18.76

In accordance with IFRS 9, the Bank assesses expected credit losses (ECL) with forward-looking information and makes relevant allowances. In particular, it makes allowance for assets classified as Stage 1 and assets classified as Stage 2 and Stage 3 according to the ECL over the next 12 months and the ECL over the entire lifetime of the asset, respectively. As at 30 June 2021, the Group's Stage 1, Stage 2 and Stage 3 loans totalled RMB14,865.529 billion, RMB311.446 billion and RMB200.348 billion respectively, accounting for 96.67%, 2.03% and 1.30% of total loans. In the first half of 2021, the Group's impairment losses on loans amounted to RMB47.750 billion, a decrease of RMB12.978 billion compared with the same period of the prior year. Credit cost accounted for 0.65%, a decrease of 0.25 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 classifications, 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 2021**	As at 31 December 2020	As at 31 December 2019
Loan concentration ratio of the largest single borrower	≤10	**2.6**	2.8	3.2
Loan concentration ratio of the ten largest borrowers	≤50	**14.3**	13.9	14.5

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 ten largest borrowers ÷ net regulatory capital.

The following table shows the ten largest individual borrowers as at 30 June 2021.

Unit: RMB million, except percentages

	Industry	Related parties or not	Outstanding loans	% of total loans
Customer A	Transportation, storage and postal services	No	65,684	0.43%
Customer B	Manufacturing	No	42,050	0.27%
Customer C	Transportation, storage and postal services	No	40,610	0.26%
Customer D	Commerce and services	No	40,346	0.26%
Customer E	Transportation, storage and postal services	No	36,053	0.23%
Customer F	Production and supply of electricity, heating, gas and water	No	36,000	0.23%
Customer G	Transportation, storage and postal services	No	32,058	0.21%
Customer H	Manufacturing	No	22,643	0.15%
Customer I	Transportation, storage and postal services	No	22,602	0.15%
Customer J	Real estate	No	22,000	0.14%

Market Risk Management

In response to changes in the market environment, the Bank continued to refine its market risk management system in order to effectively control its market risk.

The Bank enhanced the quality and efficiency of its market risk management by improving its market risk management mechanism, optimising the Group's market risk limit system and strengthening the risk control of the first and second lines of defence. It continued to improve its market judgement and analysis and made its risk management more proactive and forward-looking. It streamlined counterparty credit risk management processes and conducted more forward-looking management and control. It improved its market risk measurement models and refined its risk management standards. Please refer to Note IV.2 to the Condensed Consolidated Interim Financial Statements for detailed information regarding market risk.

The Bank continued to strengthen the risk control of its securities investments, enhanced the early warning monitoring of bond defaults in the domestic bond market and the tracking of the China USD bond market, and improved its post-investment monitoring and warning capabilities, thus continuously consolidating the quality of its bond investment business. It also further strengthened the Group's coordinated management of the risks arising from its securities investment and asset management businesses.

In terms of exchange rate risk management, the Bank sought to achieve currency matching between fund source and applications. It controlled its foreign exchange exposure through currency conversion and hedging, thus maintaining its exchange rate risk at a reasonable level.

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 maximise shareholder value.

The Bank assessed IRRBB mainly through analysis of interest rate repricing gaps, made timely adjustments to the structure of its assets and liabilities, and optimised the internal and external pricing strategy 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 Bank 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. It enhanced liquidity risk management at the Bank 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, upgraded the early warning system for liquidity risk, and strengthened the management of high-quality liquid assets, 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 2021, 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 domestic regulatory authorities):

Unit: %

Indicator		Regulatory standard	**As at 30 June 2021**	As at 31 December 2020	As at 31 December 2019
Liquidity ratio	RMB	≥25	**48.6**	54.5	54.6
	Foreign currency	≥25	**66.6**	58.6	60.4

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, and dealt appropriately with reputational events, thus effectively protecting its brand reputation. In addition, the Bank continued to roll out reputational risk management 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 while emphasising early risk warning and prevention, thus improving the Group's level of operational compliance.

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 assessment of risk management and internal control, as well as for identifying, measuring, monitoring and controlling risks. They lead 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 its 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. Focusing on the implementation of national policies, regulatory requirements and the Group's strategies, the Bank concentrated its efforts on the main responsibilities of audit supervision, closely monitored material potential risks and weak links, and carried out audit inspections as scheduled. The Bank attached equal importance to problem revelation and rectification supervision. It further improved its rectification supervision mechanism for audit findings, strengthened the tracking, inspection and prioritised supervision of audit findings rectification, and promoted the application of audit results and the improvement of rectification quality and efficiency. The Bank also deepened audit system reform, continued to enhance audit team building, promoted IT applications in audit, and further reinforced the use of IT-based audit approaches in audit.

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, processes and systems, 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 its internal control and case prevention. The Bank also focused on the rectification of issues and 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, and 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 relevant accounting laws and regulations. As such, its accounting basis was solidified and the level of standardisation and refinement of its financial accounting management was further improved. The Bank has endeavoured to implement, access and evaluate sound accounting standards and establish a long-term accounting management mechanism. It continuously strengthened the high-quality management of its accounting information so as to ensure internal control effectiveness 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 2021, the Bank successfully prevented 77 external cases involving RMB50.9228 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, and further standardised its operational risk reporting mechanism, thus continuously improving its risk management measures. The Bank enhanced its IT system support capabilities by optimising its operational risk management information system. It strengthened its business continuity management system, optimised its operating mechanism, enhanced its business continuity policies, and performed business impact analysis. The Bank also refined contingency plans, carried out business continuity 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 operation and sustainable development of the Group. It strengthened its antimoney-laundering (AML) and sanction compliance management mechanism, optimised AML resource allocation, and deepened monitoring and management. It further enhanced its system and model building and improved system functionality. The Bank continuously strengthened the establishment of a robust management framework for overseas compliance, improved its compliance risk assessment programme, refined relevant management policies, and enhanced the compliance management capabilities of its overseas institutions. It improved its 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 strengthened its internal transaction management procedures and implemented internal transaction monitoring and reporting. It also improved its connected transaction monitoring system and internal transaction management system, and thereby enhanced IT applications in compliance management.

Country Risk Management

The Group incorporates country risk into its comprehensive risk management system in strict compliance with regulatory requirements. It manages and controls country risk through a series of management instruments, including country risk ratings, country risk limits, statistical measurement and monitoring of country risk exposures and provisioning of allowances, etc. In the first half of 2021, the Bank continued to strengthen country risk management in strict compliance with regulatory requirements and in line with its business development needs. It performed an annual review of country risk ratings and limits, and enhanced the monitoring and reporting of country risk exposures. For potentially high-risk countries and regions, it issued risk prompts in a timely manner and adopted a differentiated management approach. The Group's net exposure to country risks was mainly concentrated on countries and regions that have low and relatively low risk ratings, and its overall country risk remained at a reasonable level.

Capital Management

The Bank thoroughly applied the concepts of capital constraint and value creation, and improved its economic capital budgeting and assessment mechanism. It actively reinforced the construction of its capital management system and continuously refined its overall capital management. It also continually optimised its on- and off-balance sheet asset structure and strived to improve the endogenous capacity of its capital base. The Bank also seized market opportunities to advance its external capital replenishment. In the first half of 2021, it successfully issued RMB50.0 billion of undated capital bonds and RMB25.0 billion of tier 2 capital bonds, and redeemed RMB28.0 billion of domestic preference shares. As at 30 June 2021, the Group's capital adequacy ratio stood at 15.61%, reaching a relatively high level.

Capital Adequacy Ratios

As at 30 June 2021, the capital adequacy ratios 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 2021**	As at 31 December 2020	**As at 30 June 2021**	As at 31 December 2020
Net common equity tier 1 capital	**1,748,114**	1,704,778	**1,474,957**	1,441,977
Net tier 1 capital	**2,058,220**	1,992,621	**1,774,468**	1,719,467
Net capital	**2,526,199**	2,451,055	**2,225,969**	2,162,054
Common equity tier 1 capital adequacy ratio	**10.80%**	11.28%	**10.68%**	10.99%
Tier 1 capital adequacy ratio	**12.72%**	13.19%	**12.84%**	13.10%
Capital adequacy ratio	**15.61%**	16.22%	**16.11%**	16.47%

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

Leverage Ratio

As at 30 June 2021, 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 2021**	As at 31 December 2020
Net tier 1 capital	**2,058,220**	1,992,621
Adjusted on- and off-balance sheet assets	**27,861,068**	25,880,515
Leverage ratio	**7.39%**	7.70%

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