

RISK MANAGEMENT



The Bank is primarily subject to credit risk, liquidity risk, market risk and operational risk. The Bank's goals are to (i) identify, measure, assess, monitor and manage all significant risks on a timely basis; (ii) achieve the balance between risks and returns; (iii) improve its risk management framework to be more comprehensive and complete; (iv) further strengthen internal controls; and (v) continue to apply economic value added method to enhance its risk management level and capability.

The Bank's reforms of its risk management function in 2005 included the creation of the post of Chief Risk Officer and vertical reporting lines for risk management functions in pilot branches. Based on feedback from its pilot sub-branches, the Bank improved its risk management reform plan, which will be put into operation throughout the Bank in 2006.

CREDIT RISK MANAGEMENT

Credit risk is the risk that a borrower or counterparty fails to meet its obligations in accordance with agreed terms. The Bank is exposed to credit risk primarily through its loan portfolio, investment portfolio, guarantees and commitments, and other on- and off-balance sheet credit exposures. In order to manage the exposure to credit risk, the Bank has adopted standardised credit extension policies and procedures which are regularly reviewed and updated by the risk management department in conjunction with other relevant departments. The credit extension process for both corporate loans and personal loans can be broadly divided into three stages: (i) credit origination and analysis, (ii) credit approval, and (iii) fund disbursement and post-disbursement management.

Corporate loans

Credit origination and analysis

The first stage in the lending process includes:

- Credit risk rating by using CRREW
- Independent appraisal of collaterals
- Evaluation of the underlying project
- Production of an overall loan evaluation report

RISK MANAGEMENT

Credit approval

All credit extensions are required to be approved at a meeting organised by the credit approval department at the branch level in accordance with the required credit authorisation limit.

Each branch is subject to two types of credit authorisation limit: (i) the maximum total committed credit line to any single borrower and (ii) the maximum amount for any individual loan with a term of one year or more. Credit authorisation limits of tier-one branches are reviewed by head office at least once every year. Unless otherwise authorised by tier-one branches, tier-two and lower-level branches generally are permitted to approve only (i) draw-downs of previously approved credit facilities and (ii) fully secured loans.

Post-disbursement management

The relationship managers and risk managers are responsible for the on-going monitoring of loans to detect any signs of potential delinquency at an early stage and to facilitate prompt remedial action. The Bank focuses on the factors that might adversely affect the borrower's ability to repay and primarily gathers information from the borrowers and other sources, such as taxation authorities and on-site inspections. In addition, the risk management department conducts an overall assessment of the quality of the loan portfolio on a monthly basis and submits a report to management at a higher level. Any event which could significantly affect a borrower's ability to repay is required to be reported immediately. If signs of a possible loan delinquency are detected, the relationship managers are required to conduct an immediate review of the credit quality and repayment ability of the borrower concerned, and to take appropriate preventive measures, which may include on-site inspections, the enforcement of security interests or third-party guarantees, loan restructuring and loan collection, as applicable.

Loan classification

In determining the classification of the loan portfolio, the Bank applies a series of criteria that are derived from CBRC guidelines. These criteria are designed to assess the likelihood of repayment by the borrower and the collectibility of principal and interest on the loan. The loan classification criteria focus on a number of factors, to the extent applicable, including (i) the borrower's ability to repay the loan, based on such factors as the borrower's financial condition, profitability and cash flow; (ii) the borrower's repayment history; (iii) the borrower's willingness to repay; (iv) the net realisable value of any collateral; and (v) the prospect for support from any financially responsible guarantor. In applying these criteria, the Bank also takes into account the length of time for which payments of principal or interest on a loan are overdue and other factors in classifying the loans.

Loans are initially classified by the relationship manager, and subsequently reviewed by the risk management department, and confirmed by an inter-departmental team, with participation from the risk management department with the corresponding authorisation. Loan classification information is reported to the head office once every ten days.

Administration of non-performing assets

The special assets resolution ("SAR") department administers corporate NPLs. The SAR department seeks to maximise recovery of non-performing assets in a cost-effective manner. After non-performing assets are transferred to the SAR department, the relevant business department continues to share information regarding the non-performing assets and collaborates with the SAR department to determine the best recovery solution. The Bank writes off a loan classified as loss once the Bank has exhausted all means of collection and recovery and the circumstances surrounding the borrower meet the standards for write-offs.

RISK MANAGEMENT

established by the Bank. Loan write-offs must be approved by the relevant tier-one branch or the head office in line with the relevant authorisation limit. Even after the Bank has written off a loan, it generally continues to pursue recovery efforts.

Personal loans

Personal loan managers initiate the credit extension process by interviewing applicants and reviewing brief questionnaires completed by applicants. The Bank has adopted standardised credit approval procedures for personal loans and assesses applicants based on, among other things, their income, credit record and repayment ability. The Bank primarily relies on its credit evaluations as the basis for extending personal credit, but also considers credit information on individuals provided by the national credit information system recently implemented by the PBOC. Application information and credit recommendations formulated by personal loan managers are submitted to a dedicated credit approval officer for review and approval. Personal loans are generally granted at tier-two or lower level branches.



In monitoring personal loans, the Bank focuses on the borrower's repayment ability and changes in the value and quality of the collateral. After a loan becomes overdue, the Bank actively monitors the loan and begins collection efforts, including conducting on-site inspections. In classifying personal loans, the Bank performs a matrix analysis generally based on the number of overdue days and security type. Non-performing personal loans are administered by business departments and the SAR department. The procedures for administering non-performing personal loans are similar to those for corporate loans.

Credit risk management for treasury operations

Treasury operations are exposed to credit risk through investment activities and inter-bank lending activities. The Bank's RMB-denominated investment portfolio primarily consists of debt securities and receivables issued by the PRC government and other domestic issuers. The Bank's foreign currency-denominated investment portfolio primarily consists of investment-grade bonds. The Bank establishes credit ceilings on a counterparty and geographical region basis and reviews them annually.

Enhancements to credit risk management

The Bank has improved and will continue to improve its credit risk management. In accordance with the development and the characteristics of credit products and services, the Bank has revised its credit manual and issued new credit risk management policies and reengineered credit operation standards and procedures across the Bank. The new credit authorisation policy reflects our principles of risk based management and alignment of authorisation limits with management ability.

With respect to personal loans, the Bank has improved its ongoing risk monitoring ability through the introduction of an improved personal credit data base to the credit management information system ("CMIS"). The Bank has also enhanced its quality of controls on personal mortgage loans by strengthening its review procedures of borrowers' financial information, the value of collaterals, collection efforts, and management of collaterals.

RISK MANAGEMENT

In addition, the Bank is strengthening management of non-performing loans and repossessed assets through such measures as improving the co-ordination between the SAR department, the risk management department and other relevant departments; monitoring the loan classifications of restructured loans more closely and assessing the market value of collaterals and repossessed assets more regularly.

Credit risk management information technology

Based on CMIS, the Bank used both qualitative and quantitative measures to grade its corporate customers. At present the CRREW system is used to effectively monitor the quality of the Bank's corporate loan portfolio.

During the year, the Bank completed its phase one internal rating system and made positive progress in credit rating on corporate customers. The measurement of systemic risk by industry, geographical area and product was further refined, and delivery of client credit structure analysis and related statements was realised. The Bank also initiated efforts to build its personal credit rating scorecard system.

LIQUIDITY RISK MANAGEMENT

Liquidity risk is the risk of being unable to liquidate a position in a timely manner at a reasonable price to fund the Bank's obligations. The Bank is exposed to liquidity risk primarily in the funding of lending, trading and investment activities, as well as in the management of liquidity positions.

The Bank manages liquidity risk mainly by monitoring asset and liability maturities to ascertain its capability to meet all payment obligations, and to ensure compliance with relevant PRC regulations on liquidity management. The asset and liability management committee formulates policies on liquidity risk management and reviews liquidity risk management reports regularly. The asset and liability management department is responsible for managing liquidity risk, as well as monitoring the day-to-day management of its liquidity positions.

The Bank has a centralised liquidity management, with the head office acting as the central treasury to provide and accept excess funds to and from branches at an internal fund transfer price according to liquidity positions of the branches. The Bank has surplus deposit reserves with the PBOC and significant holdings in liquid assets such as debt securities held under repurchase agreements, PBOC bills and PRC government bonds, which the Bank may liquidate in the market to meet potential liquidity requirements.

RISK MANAGEMENT

	As at 31 December 2005						Total
	Overdue/ repayable on demand	Less than three months	Between three months and one year	Between one and five years (In millions of RMB)	More than five years	undated	
Assets							
Cash and balances with central banks	136,808	57,370	—	—	—	285,958	480,136
Amounts due from banks and non- bank financial institutions	11,379	136,422	42,031	276	—	—	190,108
Loans and advances to customers	71,195	332,389	783,035	657,218	551,476	—	2,395,313
Investments							
— Receivables	—	—	30,482	349,457	63,790	—	443,729
— Held-to-maturity debt securities	—	67,346	135,556	315,950	125,126	—	643,978
— Available-for-sale investments	—	17,932	138,310	76,353	79,464	11,672	323,731
— Debt securities at fair value through profit or loss	—	—	828	977	628	—	2,433
Other	2,948	10,161	8,295	12,149	508	72,253	106,314
Total Assets	222,330	621,620	1,138,537	1,412,380	820,992	369,883	4,585,742
Liabilities							
Amounts due to central banks	21	—	—	—	—	—	21
Amounts due to banks and non-bank financial institutions	85,860	50,229	27,814	621	—	—	164,524
Deposits from customers	2,226,495	583,304	904,671	277,301	14,275	—	4,006,046
Certificates of deposit issued	—	420	2,018	2,991	—	—	5,429
Others	28,204	16,474	21,063	11,697	4,700	—	82,138
Subordinated bonds issued	—	—	—	—	39,907	—	39,907
Total liabilities	2,340,580	650,427	955,566	292,610	58,882	—	4,298,065
2005 Long/(short) position	(2,118,250)	(28,807)	182,971	1,119,770	762,110	369,883	287,677
2004 Long/(short) position	(2,118,896)	84,400	239,280	987,298	666,638	336,831	195,551

In 2005, the total long position increased by RMB 92,126 million to RMB 287,677 million. The RMB liquidity ratio was 59.1% and increased by 7.7 percentage points compared to that of 2004; the foreign currency liquidity ratio was 108.7%, an increase of 37.5 percentage points. All liquidity ratios comply with CBRC requirements.

RISK MANAGEMENT

MARKET RISK MANAGEMENT

Market risk is the risk of loss in on- and off-balance sheet positions arising from movements in market prices, including variables such as interest and exchange rates, and equity and commodity prices. As the PRC government gradually liberalises interest rates and exchange rates, and complex derivative financial products and foreign currency transactions become more widely used in the Mainland China, the Bank will be subject to increasing market risk.

In order to centralise market risk management, the Bank has implemented uniform market risk management policies and procedures, and improved its fund transfer pricing (FTP), data management and information management systems. The risk management department is responsible for formulating market risk management policies and overseeing their implementation. The asset and liability management department is responsible for developing procedures to identify, assess, measure and control the Bank's market risks, and formulating and implementing market risk management policies.

The primary tools used in measuring and analysing market risk on bank accounts and trading accounts include but are not limited to value-at-risk (VAR), gap analysis, sensitivity analysis, and stress testing. Business departments have established procedures for regular reporting on market risk management, as well as crisis reporting when large market risk events are encountered. Departments also perform quarterly reviews and analysis on the implementation of risk management policies and investment strategies so as to provide senior management with timely information.

Interest rate risk management

Interest rate risk is the exposure of a bank's financial condition to adverse movements in interest rates. The Bank's primary source of interest rate risk is mismatches in the maturity or repricing periods of the banking portfolio. Maturity mismatches may cause net interest income to be affected by changes in the prevailing level of interest rates. The Bank has begun to measure its exposure to fluctuations in interest rates using gap analysis, which provides a static view of the repricing characteristics of assets and liabilities. The Bank also performs stress testing and scenario analysis on the trading accounts and bank accounts and selected portfolios within them. In addition, the Bank performs duration analysis on debt instruments in investment portfolio to assess the potential price volatility of a bond by measuring its sensitivity to interest rate fluctuations.

RISK MANAGEMENT

	As at 31 December 2005					
	Total	Non-interest bearing	Less than three months (In millions of RMB)	Between three months and one year	Between one and five years	More than five years
Assets						
Cash and balances with central banks	480,136	28,413	451,723	—	—	—
Amounts due from banks and non-bank financial institutions	190,108	—	147,801	42,031	276	—
Loans and advances to customers	2,395,313	86	1,028,552	1,312,723	38,971	14,981
Investments	1,413,871	11,672	140,108	420,801	621,237	220,053
Other	106,314	106,314	—	—	—	—
Total Assets	4,585,742	146,485	1,768,184	1,775,555	660,484	235,034
Liabilities						
Amounts due to central banks	21	—	21	—	—	—
Amounts due to banks and non-bank financial institutions	164,524	—	136,089	27,814	621	—
Deposits from customers	4,006,046	40,789	2,770,313	905,529	276,616	12,799
Certificates of deposit issued	5,429	—	4,198	527	704	—
Other	82,138	82,138	—	—	—	—
Subordinated bonds issued	39,907	—	—	9,915	29,992	—
Total liabilities	4,298,065	122,927	2,910,621	943,785	307,933	12,799
Net gap in 2005	287,677	23,558	(1,142,437)	831,770	352,551	222,235
Accumulated net gap in 2005			(1,142,437)	(310,667)	41,884	264,119
Net gap in 2004	195,551	53,124	(1,222,802)	881,076	296,711	187,442
Accumulated net gap in 2004			(1,222,802)	(341,726)	(45,015)	142,427

As at 31 December 2005, the accumulated negative interest rate sensitive gap stood at RMB 310,667 million for all assets and liabilities within one year, with the largest negative gap being that of the less than 3 months period category as interest rate sensitive demand deposits accounted for 54.5% of total deposits from customers. The negative gap narrowed by RMB 31,059 million compared to that at the end of 2004 because the time deposit balance increased while the demand deposit balance as a percentage of total deposit fell by 3.5 percentage points compared to the end of 2004, reflecting a lessened impact on our interest margin should the interest rates rise again. This is a result of rising interest rates since 2004, and the fact that since 2005 the PBOC has allowed corporates to place funds on time deposit for over one year. The accumulated positive gap over one year as at 31 December 2005 increased compared to 31 December 2004 as more resources were allocated to long term investments in response to the reduction of interest rates on surplus deposit reserves with the PBOC, and there was increased demand for long term fixed rate loans.

RISK MANAGEMENT

A periodic interest rate risk reporting mechanism has currently been set up by the Bank, and an interest rate risk and pricing monitoring system has been formed. In 2005, the Bank established a new system for management to review the Bank's liquidity position and interest risk exposure, whereby more accurate information is available more quickly. Since there is a lack of effective tools to manage interest rate risks in RMB money markets, the Bank mainly manages interest rate risk by adjusting transaction volumes and maturity profile.

Foreign exchange risk management

Foreign exchange risk is the exposure of a bank's financial and capital position to adverse movements in exchange rates. The Bank is exposed to exchange rate risk because it holds loans, deposits, securities and financial derivatives that are denominated in currencies other than the RMB. In 2005, the PBOC introduced a series of measures to reform the RMB exchange rate, and as a result the RMB is no longer pegged to the US dollar but subject to a managed floating rate system. Given that there was increasing volatility of the RMB rate range, the Bank was therefore subject to greater exchange rate risk. In order to mitigate the exchange rate risk in the foreign currency transactions on behalf of its customers and on its own account, the Bank in each currency sought to match the amounts and periods of lending and borrowing on a currency-by-currency basis. In addition, the Bank hedges the open foreign currency positions by entering into currency spot and forward contracts.

The Bank has entered into an option contract with Huijin to hedge the foreign exchange risk arising from the capital of US\$22.5 billion received from Huijin on 30 December 2003. For other assets denominated in foreign currencies, the Bank mainly uses swaps to contain the exposure arising from RMB-US\$ exchange rate fluctuation.

The Bank is engaged mainly in options, forwards and swaps to reduce its interest rate and exchange rate risks. Specifically, there are foreign exchange options, debt securities options, foreign exchange forwards, foreign exchange swaps and interest rate swaps, as well as derivatives with a combination of the above products.

OPERATIONAL RISK MANAGEMENT

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The Bank's operating units are responsible for assessing their operational risk and implementing related risk management policies and procedures. The risk management department regularly conducts reviews to evaluate the compliance by various departments with the Bank's policies and procedures.

Reporting and monitoring of non-compliance

The Bank has established internal reporting procedures for employee misconduct that adversely affects its business. Under the internal reporting system, data relating to incidents of employee misconduct must be reported to the head office on a periodic basis, and serious cases must be reported to the head office within 24 hours of their discovery. In addition, the Bank is required to report serious cases of employee misconduct to the CBRC.

For the year ended 31 December 2005, 63 criminal offences committed by the Bank's employees were reported to the head office, involving a total amount of RMB 199.32 million. Of these, 17 involved an amount of RMB 1 million or more. These incidents of employee misconduct included, among other things, theft, embezzlement or misappropriation of customers' funds; mishandling of customer deposits and settlement of payment transactions; improper credit extensions; improper accounting; fraud; and acceptance

RISK MANAGEMENT

of bribes. Some of these incidents indicated potential internal control weaknesses at certain branches. Nonetheless, these incidents have not, individually or in the aggregate, had a material adverse effect on the Bank's business, financial condition or results of operations.

During the year, economic and non-economic penalties were imposed on the Bank by the PBOC, CBRC, State Administration of Foreign Exchange ("SAFE") and their affiliated bodies for violations of regulations relating to account management, foreign exchange management, education savings, housing loans and filing of anti-money laundering reports. There were 172 economic penalties totalling RMB 8.9 million. The Bank believes that these economic and non-economic penalties do not pose a material threat to its operations and performance.

The Bank continues to focus on improving its internal controls and training given to employees. The Bank also imposes severe penalties in cases of non-compliance with policies and procedures. In 2005, the Bank took the following key initiatives:

- Creation of a market and operational risk management sub-department within the risk management department, with responsibility for management of operational risks, and the development of related policies and processes across the Bank to facilitate the strategic development of the Bank.
- Provision of legal assistance and consultancy services to our business operation by legal affairs department.
- Establishment of an independent compliance department, responsible for compliance with applicable laws and regulations, and the Bank's own policies and procedures.
- Introduction of operational checks and balances among departments and job positions, and a system of centralised job appointments and rotation for key management positions.
- Implementation of policies and procedures to hold officers accountable for the misconduct of employees under their supervision.
- Backup of data from critical data processing systems to reduce operational risk resulting from information technology system failure. The Bank is now in the process of developing a computer disaster recovery centre for the automatic backup of operational data.
- Commencement of collection and analysis of internal operational risk loss data in preparation for the establishment of a database of operational risk loss.

RISK MANAGEMENT

INTERNAL AUDIT

The internal audit department is responsible for auditing and evaluating the internal controls of the business operations, risk profiles and economic accountability of key managers, and proposing improvements to risk management and internal control. Internal audit covers every aspect of financial, operating and management activities.

In 2005, as part of the efforts to increase the independence and authority of the internal audit department, the Bank has introduced a vertical internal audit structure under which the internal audit department reports directly to the board of directors and the audit committee, the president and the board of supervisors. Remuneration, performance appraisal evaluation, and promotion of internal audit personnel across the Bank are determined centrally at the head office. Internal audit departments at branch level have been restructured so as to simplify the reporting line and improve the efficiency.

Internal audit adopts a risk based audit approach. The major areas audited by internal audit during 2005 were major business operations, key procedures in corporate customer deposits, guarantees and commitments, authorisation controls, bank card business, data concentration systems, non-credit assets, head office foreign exchange operations, accountability of management during the tenure, and overseas entities.