Credit Risk Management of Commercial Banks in China

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Abstract. The banking sector has experienced significant growth since the reform and opening up and has also become aware of the transition from a single national banking system to the commercial banking system required by the market economy. However, the ability of China's commercial banks to develop further has been constrained by both internal and external forces. Due to the high non-performing assets and inadequate risk management in China's commercial banking sector, at the same time. It also hinders the development of the financial industry to some extent. Analyze the performance and factors that contribute to credit risk for China's commercial banks, as well as the current state of affairs and issues with credit risk management, in order to try and find a solution to the issue from the viewpoints of the financial system and credit management techniques. The main method used is to use theoretical analysis to discuss the problem of credit risk management, integrate theory with practice, and hope to provide reference for the improvement of bank credit risk management by systematically making in-depth and simple research on the credit risk situation of China's commercial banks.

Keywords: Credit risk management; commercial banks; corporate loans; regulatory authorities.

1. Introduction

Since the 90s of the 20th century, the size of banks has continued to expand. At the end of 2017, China's commercial banking assets amounted to $40 trillion, and by 2021, assets had grown to $4.5 billion, accounting for almost half of world GDP [1]. Therefore, security and stability of commercial banks are essential for economic development. Through lending to recover the principal and interest, after deducting costs to obtain profits. The profit of the credit business accounts for 80%-90% of the total turnover of the bank, so credit is the main means of profit of commercial banks [2]. However, under the influence of economic globalization and the outbreak of the epidemic, credit risk is on the rise. Serious bank losses and institutional failures are frequent.

Bank loans have always had a risk problem. For example, in July 2003, Shenzhen Development Bank branches in Beijing, Tianjin and Haikou issued a total of 700 million yuan in loans to Capital Network and Zhongcai State-owned Enterprise, which were suspected of unreasonable internal management procedures and borrower loan usage, resulting in a loss of 150 million yuan. In 2010, a bank issued a loan of 60 million yuan to Tongtong Gas Co., Ltd., but due to the poor operation of the gas company, it could not pay off the loan, resulting in bankruptcy of the enterprise and bank losses [3]. In addition, in 2019, the former chairman of Hengfeng Bank was involved in a case of corruption and bribery of 10.3 billion yuan, and there were similar cases, in 2020, the president of Baotou Bank was corrupt, resulting in the collapse of the bank [4]. All these show that the problem of commercial bank loans is a high risk and so far, there is no mature set of theory and technology for prevention, evaluation and control.

Although the topic of credit risk for commercial banks was brought up early on, market risk was not discussed alongside it until the Basel agreement. The Basel Committee on Bank Supervision established a set of three accords (Basel I, II, and III) that regulate banking in turn. In 2004, the Basel Banking Committee Supervision was officially published Basel II accord, which reflects the latest concepts in international banking regulation and the latest achievements in risk management [5]. Of particular interest is its new requirements for the measurement and management of operational risks in the international banking sector. The new capital agreement framework requires that the regulation of capital adequacy can more accurately reflect the risk status of bank operations, and provides banks and financial supervisory authorities with more alternative methods for measuring capital adequacy, so as to more accurately and timely reflect the actual risk level of banks' business activities and the level of capital they need to allocate, so as to promote the stable and healthy development of the financial system.

2. Financial Institutions

The non-performing loan ratio can be used to examine how commercial banks manage their credit risk. As Figure 1 shown, the non-performing loan ratio of commercial banks from June 2014 to June 2022. It is clearly show that the non-performing loan ratio has been increasing year by year from 1.25% at the end of 2014, and the highest is 1.86% at the end of 2019. Although the defective rate has decreased this year, the situation is still worrying.

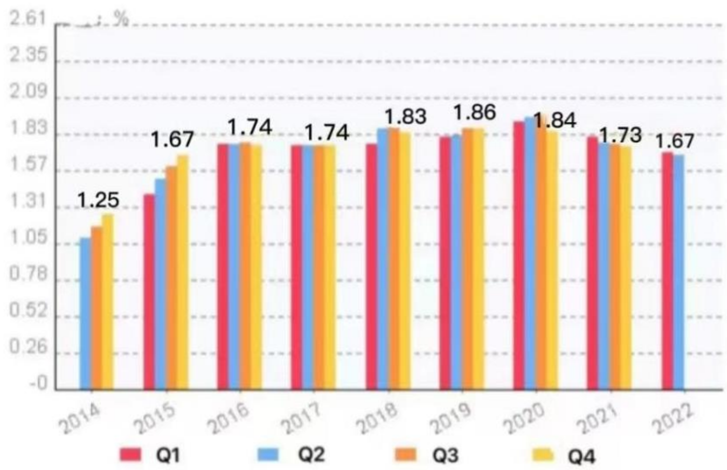

Fig. 1 The non-performing loan ratio of commercial banks [6]

The issue of loan risk management of commercial banks should be analyzed from three angles. The banking industry is the first. First off, there are flaws in the banking system, including an absence of pre-loan investigation and loan time review, as well as a lack of systematic quantitative analysis and the application of scientific models like the enterprise violation risk analysis model and the enterprise bankruptcy failure early warning model. It clearly shows in Table1, the regression values and Adj. R^2 values of the normal company sample are obviously higher than those of quasi-bankrupt companies, reflecting that the correlation between normal company market value and enterprise value is stronger than that of quasi-bankrupt companies [7]. In addition, it is also illustrated from the table1 that the regression Adj. R^2 of normal companies alone can reach 0.423, which is much higher than the regression Adj. R^2 of normal and quasi-bankrupt companies only 0.204. Through this regression model, banks can screen out companies that are going bankrupt to limit loans and prevent a situation where they cannot pay back money.

Table 1. Correlation of enterprise value and accounting surplus between a quasi-bankrupt company and a normal company

Quasi-bankrupt companies			Normal company			Mixed samples		
α	β	Adj.R^2	α	β	Adj.R^2	α	β	Adj.R^2
6.194	0.116	0.027	9.107	9.747	0.423	10.456	4.443	0.204

Because the vertical chain of credit business management of China's commercial banks is very long, and these components include: bank headquarters, first-level branches, second-level branches, and savings units. In addition, each branch has industry, department managers and subordinate credit staff. It is difficult to convey bank information effectively, and it is difficult to improve efficiency and quality significantly. So the possibility of non-performing loans increases significantly, and the profitability of banks also declines. Furthermore, because the head office has a principal-agent relationship with each branch, the principal is the legal person of the bank, and the agent is the president of each branch, the control over the branch is weakened by the legal person of the bank. At the same time, due to the psychological situation brought about by the excessive pursuit of personal interests, the resources invested in risk are also deviated, and there may also be some hidden illegal loans of the head office, resulting in an increase in the bank's loan risk and poor overall operation and management. At the same time, due to the bank's long entrusted agent chain, the head office cannot find and deal with the existing problems in time, which is likely to increase the loan risk. Besides, due to the centralized management mode of commercial bank credit at this stage, the implementation of centralized authority, the head office and the first and second level branches have the authority to approve loans, the head office and branches have obtained a large amount of loan funds, resulting in insufficient funds for grassroots banks, relying only on the absorption of deposits, the risk of loans is increased.

Secondly, the level of bank operation and management is not high and the risk prevention ability is not strong. commercial banks have always attached importance to business development, neglected risk control, and attached importance to loan placement and neglected loan management. For example, the excessive investment of money in 1984 was mainly the result of the resolution of the National Credit Planning Conference to reform the credit fund management system that year, which triggered various commercial banks to rush to lend [8]. Loan risk awareness is not strong, most of the loans are credit loans, and later, although the proportion of guaranteed loans is increasing, the effectiveness and safety of guaranteed loans are still very problematic. Credit management systems such as the "three checks" for loans are not sound or are implemented in a formality, and loan rights, responsibilities and interests are seriously disconnected, heavy loans are neglected management, heavy lending is light on collection, and heavy on deposits and loans are light; The overall quality of the credit team is not high, and some bank staff who hold the power to issue loans have poor professional quality, resulting in mistakes in loan decision-making or even loan fraud, or cannot effectively stop enterprises from evading debts.

3. Commercial Lenders

For loan companies, there are two reasons why they cannot repay on time. One reason is due to the epidemic, interest rates and other reasons, the company's funds are operating poorly. According to the poll, customers canceled around 20% of businesses as a result of the epidemic's effects; businesses with very few client cancellations accounted for about 20% of all cancellations, demonstrating the epidemic's pervasive effects. The most frequent cancellations occur in the hospitality, catering, and tourism sectors, along with numerous manufacturing and food production businesses. The revenue in companies is anticipated to decline by more than 50% in the first quarter of 2020, accounting for about 45%, with 24% of the enterprises anticipating a decline of 80%; In the first quarter, only 13% of businesses were able to continue growing. The proportion of the first quarter's significant revenue decline that was experienced by private businesses was significantly higher than that of state-owned businesses and businesses with foreign funding. The hotel, catering, tourism, intermediary services, building materials, and real estate industries all saw significant revenue declines. In addition, the epidemic affected individual industrial and commercial enterprises the most, with 67.5% impacted, followed by private enterprises with 54.1%, followed by local state-owned enterprises and foreign-funded enterprises, with 41.8% and 37.5% respectively [9]. From the above data, it is analyzed that the epidemic has caused serious losses to enterprises, resulting in the inability to repay loans.

Besides, the business itself is not operating properly and cannot pay off the loan on time. For instance, some businesses or projects don't conduct thorough feasibility studies, or the study's findings can't be implemented, but some leaders promise success, leading to poor decision-making. Low input-output rates, ineffective operating efficiency, and poor enterprise management. Because businesses carry significant social and other responsibilities and perform some policy-related duties, they borrow a lot of money that is then used for wasteful purposes. It shows from Figure2 between 2018 and 2020, their return on assets was 3.2 percentage points lower than that of private companies. Between 2012 and 2014, the gap was 5.3 percentage points. In addition, the gap narrowed to 2.8 percentage points in 2021. Data from May 2022 shows that the profitability of state-owned enterprises continues to catch up with private enterprises this year. However, this is also due to the improper operation of some enterprises, resulting in low production efficiency and low profits. Reasonable capital costs can be charged before taxable income, but when businesses heedlessly increase their debts and financial costs, leaving the operating profits of the business unable to support high financial costs, it is inevitable that losses and a decline in business performance will result. In the long run, if enterprises do not improve the problem of inefficient operation, then there is likely to be a risk that they will not be able to repay bank loans, further capital losses, and enterprises will be prone to bankruptcy.

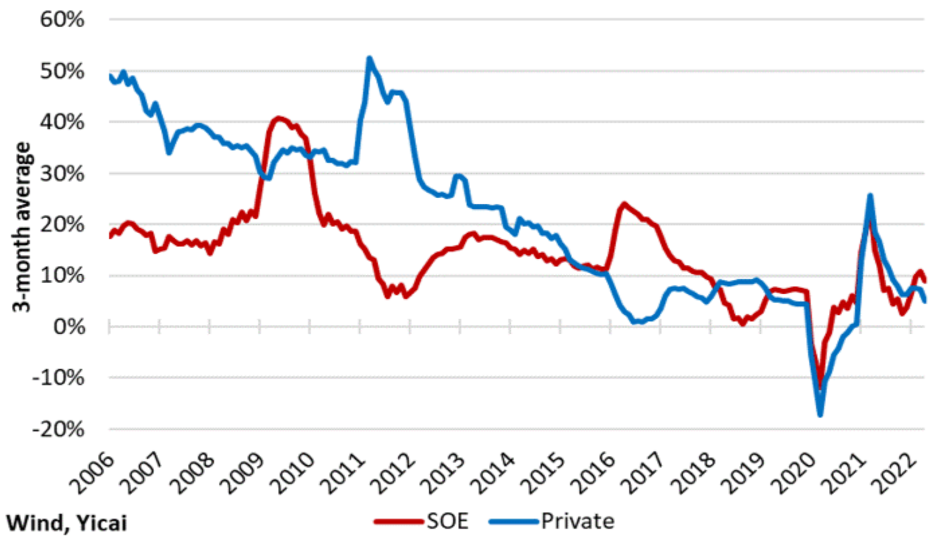

Fig. 2 Investment in fixed assets (YoY) [10]

4. Banking Regulators

Regulators play a crucial role as well. The China Insurance Regulatory Commission was founded on November 18, 1998, to carry out administrative tasks with the State Council's approval and to consistently monitor and administer the country's insurance market in line with laws and rules [11]. The China Banking Regulatory Commission was established in March 2003 to consistently oversee and manage banking financial institutions in order to maintain the banking sector's stability and legal operation. The two were combined by the government in 2018 to form the China Banking and Insurance Regulatory Commission, which expanded the scope of regulation.

The reason for the merger is mainly due to the two major ideas of risk prevention and strict supervision. First of all, the top management has put the prevention of financial risks in a more important position. In addition, from a market perspective, China's capital market includes foreign exchange market, bank credit market, money market and insurance market. After the stock market fluctuations in 2015 and the foreign exchange market fluctuations in 2016, in general, these two markets are based on stability, and corresponding institutional mechanisms have also been established. The banking market has been strictly rectified since last year, such as three, three, four self-inspection, there are more insurance chaos, and many measures have been taken recently. This is related to our system, banks are an important source of funds, and some funds flow into the insurance market due to regulatory arbitrage gaps and other reasons. Therefore, the merger of the CBRC and the CIRC can more standardize the whereabouts of funds in the long run, so that funds can return to the entity, and the insurance industry can also return to the insurance protection function.

The China Banking and Insurance Regulatory Commission is in charge of overseeing the operations and risk status of banking financial institutions from a distance. It also established a system for monitoring and managing information about these institutions' operations and risk levels. Then, Managers will take over or restructure the institutional structure of banking financial institutions that are experiencing or may experience a credit crisis, having a significant negative impact on the lawful rights and interests of depositors and other customers. Additionally, they investigate the personnel, accounts, and associated actors of banking financial institutions suspected of financial irregularities. Applications for the alleged transfer or concealment of unlawful cash must be frozen by the judicial authorities.

In addition, due to national policy support, the loan prime rate has gradually declined. The interest rate determined and announced by the People's Bank of China-approved National Interbank Lending Center. The actual loan interest rate issued by each bank may be determined by adding or subtracting points on the basis of the loan market quotation rate according to the borrower's credit situation, taking into account factors such as mortgage, term, interest rate fluctuation method and type. It is obviously illustrated from the Table2, from 2019 to 2022, LPR has been declining every year, whether it is a one-year rate or a five-year rate [12]. The data shows that from 2019 to 2022, the one-year interest rate has fallen from 4.19% to 3.69%, a full 0.5% reduction. Of course, the five-year interest rate has also been lowered from 4.83% to 4.47% now. The decline in LPR has actually brought more opportunities to loan companies, and for developers with tight capital chains, it can also alleviate financial pressure to a certain extent.

Table 2. Loan prime rate (LPR)

Date	One-year term	Five-year term
2019	4.19%	4.83%
2020	3.91%	4.68%
2021	3.85%	4.65%
2022	3.69%	4.47%

5. Conclusion

Overall, the issue of loan risk of commercial banks deserves attention in China. From the perspective of bank management, it is necessary to treat non-performing loans in layers, and the existing non-performing assets cannot be simply and thoroughly processed; instead, they should be meticulously classified, and actions should be made for various types and grades of non-performing assets according to local conditions and identify breakthroughs. Moreover, responsible personnel should also adjust the credit structure and increase the review process for non-performing assets. Marketing, evaluation, early warning, approval, and post-loan management of new loan customers should be increased. The management of various links such as recovery monitoring and intermediate business services ensures that the injected loans are safe and effective. Bank managers should establish incentive and restraint mechanisms to restrain people's behavior. Power and responsibility always accompany each other, build a loan marketing concept of market economy that emphasizes results and economy, accountability to others, level-by-level evaluation, and justifiable rewards and penalties Create and enhance a credit management and operation system.

To clients, state-owned enterprises may carry out the reform of the shareholding system. Establishing an enterprise operation mechanism that meets the needs of the market economy, issuing stocks to the public, using the proceeds to write off non-performing assets, and repaying bank loans can also enable enterprises to increase their capital and reduce their debt ratio. Government can conduct information and education activities on creditworthiness in business, banking, and society as a whole. Effective measures should be adopted to ensure that enterprises that undermine credit cannot borrow money, crack down on evasion of debts, and undermine credit. Serious acts of evading debts and relying on debts shall be handled in accordance with the law, and a momentum will be formed to deter those who intend to undermine credit. Finally, the government can learn from the U.S. approach to non-performing assets. Depending on the cause and extent of the problems arising from the loan, the bank renegotiates with the creditor on the terms of the commercial bank's loan, either reducing interest. To increase the project's potential worth and the commercial bank's priority settlement status, consider extending the loan term or adding guarantees and asset collateral. in a lawful manner. Commercial banks legally acquire ownership of loan collateral and use the revenues of asset auctions to cover loan losses.

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