A Novel Financial Risk Identification and Management Method of Commercial Bank with Emerging Technology

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Abstract. Chinese financial market environment has also undergone a series of changes. How banks can identify and effectively prevent and control financial risks has become the focus of their research. For this reason, this paper makes a careful study on the management ideas of bank financial risk, first introduce the relevant content and characteristics of bank risk identification and management, explaining the new requirements and challenges brought about by the bank's financial risk management under the current background, and focus on analyzing the relatively representative issues in the financial risk management of banks in various regions, finally, it puts forward the strategies and improvement ideas on how to improve the quality and efficiency of bank risk management.

Keywords: bank financial risk management.

1. Introduction

The new normalcy of economy is a definition of economics, which mainly refers to the sustainable development and stable growth of the economy based on the symmetrical state of the economic structure. However, under the background of the new economic normalcy, the speed of economic development has gradually shifted from high-speed improvement to high-quality development and medium-to-high-speed growth, under the ensuing economic downturn, for banks, the era of huge profit margins and stable development has gradually passed, changes in the market and the overall situation have made banking, finance, economic development and management face more risks and challenges under the new economic normalcy, such as the implementation risk of bank financial development strategy, financial liquidity risk, credit risk and financial and economic market risk under the new economic normalcy[1-3].

Due to the accumulation of bank financial risks, the current healthy and sustainable development of bank finance has been greatly affected. Banks need to continuously increase the integration and use of real economy management tools and new technology tools such as big data and the Internet, and increase the emphasis on related research, so as to fundamentally enhance the bank's management and control of financial risks, maintain financial market security, and reduce financial risks probability of generation[4].

2. Overview and characteristics of bank risk management in the context of economic downturn

2.1. Relevant contents of bank risk management in economic downturn

At the present, the main content of bank risk management under the new economic normalcy covers the risks existing in operational behavior and the risks existing in the credit business opened by banks, and its management work also involves the management and response to different bank risks various advanced information technologies and big data technologies that are required for the improvement of various capabilities and advanced risk analysis, data collection, processing and analysis, and combined with the new characteristics of various economic new normalcy, thus the content of bank financial risk can be summarized as the following aspects[5-6].
First, due to various risks caused by changes in the bank's internal environment. Since the beginning of this century, the overall social and economic growth of China has undergone great changes, both from the perspective of economic entities and growth methods, especially the trend of diversification has become more and more obvious, due to the influence of traditional concepts and internal management models, many commercial banks still adopt the old management methods for their internal environment construction and control, and have not updated them in time, resulting in relatively weak efficiency, quality and effectiveness in response, and have gradually it cannot effectively meet the challenges and actual needs of bank operations and management under the background of the current economic new normal, at the same time, because the bank's internal business philosophy and profit model have not been upgraded and transformed in a timely manner, its internal environment is becoming more and more complicated, and it is impossible to form a more comprehensive financial system, a good internal environment will also generate many new types of risks[7-8].

As far as the internal environment of bank is concerned, the goal requirements for the establishment and operation of various business projects of the bank need to change from "focusing on operating interests" to "providing customers with higher quality, high efficiency and high-quality services as the core", and build a modern, high-quality and efficient business service system to provide mature, fast and safe services, and take it as the internal demand for updating and upgrading the development model of bank and the specific goal of future management work[9]. Therefore, while focusing on the goal of maximizing economic benefits, the decision-makers of bank and management also need to scientifically analyze how to design a development method that is more in line with the bank's development goals, so as to realize the balance between the bank's internal management system and risk prevention and control mechanism, the high-quality construction and the setting of high-efficiency goals can effectively alleviate the internal contradictions caused by various factors, so as to meet the specific requirements of the bank's internal operation and development[10].

Second, attach importance to the update, adjustment and upgrading of the bank's existing management system and execution model, which is also the fundamental basis for improving financial risk management level of the bank. At the present, the control targets for loan-related interest rates proposed by the governments of various regions in China have gradually weakened. At the same time, the marketization of relevant interest rates in banking financial services has become more and more obvious, in order to achieve the goal of balance between revenue and expenditure, it is necessary to actively analyze the actual situation of the current market environment changes, make reasonable and effective adjustments to the economic management model based on the research results, and then formulate a highly targeted and effective response to the production and operation. risks, and formulate more credit business projects that can cater to SMEs, broaden the financing channels of SMEs, formulate more diversified methods and strategies that meet the actual financial needs of SMEs, and improve the science of SME financial business response strategies Sex and flexibility.

Third, the external environmental risks of bank caused by market changes. As modern social and economic development gradually tends to high-quality and stable development, the transformation of national consumption structure triggered by it has become one of the important factors that generate various types of external risks faced by banks, however, due to the current dynamic changes in the external environment of banks, especially the intensification of financial market policies and foreign competition, the sources of economic growth momentum in the domestic financial market, as well as the specific structural methods, applications, and income distribution models have undergone tremendous changes. It is an integral part of our country's economic environment. Therefore, the state of the banking economy also needs to be changed along with the changes in the financial market, which has changed the financial environment and made it present some new characteristics, from the perspective of the market environment, the current economic activity in the market is on the rise, and the entry of the international market also makes the financial industry companies face fierce market competition, the advantages of some banks in the market are gradually shrinking, if enterprises in the
industry want to improve their market competitiveness, maintain a profitable situation and achieve sustainable development, they need to strengthen research on new profit methods and find more innovation paths that meet their own development needs, from the perspective of market users, the number of bank users has always been able to maintain a relatively stable upward trend, and at the same time, user’s demand for financial products, financial services, and various financial business handling services of banks has also shown a trend of substantial growth the new changes in all these markets will inevitably provide more and stronger new momentum for economic development, but at the same time it will also bring some new financial risk factors and new requirements, which will intensify the potential financial risks of banks to a certain extent probability and will gradually increase.

2.2. Characteristics of Bank Financial Risks under the New Economic Normalcy

2.2.1 The macro-economy continued to decline, and financial credit risks gradually intensified

(1) Banks have produced a large number of non-performing loans, and they have shown an obvious continuous growth and rising trend. The balance of non-performing loans of commercial banks across the country continues to increase, and the amount of non-performing loans in many regions is gradually increasing, and it will last for a long time.

(2) The scope of credit risk design of financial banks continues to spread, and at the same time, the speed of risk spread is accelerating. Non-performing loans are concentrated and exposed in multiple regions, and the scope continues to expand.

(3) The risks of loans on various financing platforms in the financial market are becoming increasingly prominent and gradually intensified, for now, the state has put forward stricter regulatory requirements for the development of loan business related to financing platforms in various financial markets, and the control has continued to increase. however, due to the fact that some financing platforms in the financial market have different concepts and standards defined by government regulatory agencies, especially some content requirements are different, which also provides convenient conditions for the rapid growth of various types of financing, and some of the funds mainly from banking institutions.

(4) As the real estate market begins to show a downward trend, financial risks in the real estate market have become one of the types of risks that banks must pay attention to in the new era, since most real estate has officially entered the inventory stage, the heat in the real estate market has begun to turn from hot to cold, credit risk incidents of some small and medium-sized real estate companies began to break out more and more frequently. Some real estate companies were temporarily unable to quickly realize the withdrawal of funds, which caused them to face bankruptcy or had to file for bankruptcy due to their inability to repay their loan debts on schedule, in front of them, banks often face the risk of not being able to realize the collateral.

(5) At the present, a considerable part of the cost of upgrading and adjusting the industrial structure of some industries is likely to be borne by banks, if it fails to meet the market requirements, it is easy to be eliminated by the industry, and some financial business and loan projects cannot be recovered in time, which makes the risks borne by banks continue to increase.

2.2.2 The process of interest rate liberalization continues to accelerate, which often leads to greater liquidity risks

The difficulty of capital supply and demand management in the current financial market is increasing day by day, although a series of encouraging policy measures have been adopted in some regions, the results have been minimal. In some regions, due to proper methods, banking institutions can still maintain a relatively good and stable situation, the amount of deposits is absorbed, and its growth trend is still relatively stable, however, it must be mentioned that the difficulty of risk management and control in the basic part of banking institutions has continued to increase, especially the increase in risk threats has become more and more obvious, for example, some other capital markets that can absorb The main body began to gradually threaten the sound development of the
In addition, although the demand for loans in the real economy in various regions still maintains a certain momentum, the real economy is affected by the e-commerce market after all, and the main source of its loans is banks, the overly dispersed real economy makes its business management difficult. Keep growing.

2.2.3 The spread of external environmental risks has intensified, and there are many hidden dangers in reputational risks

(1) Some microfinance companies and financing guarantee companies have shown blowout development, which has caused a great impact on bank loan business, but there is a very close relationship between them and banks, which means that such financial companies the development time is short and the start is late, on the whole, the management and operation model is not mature, so it is easier to generate a variety of diversified risks, once a risk occurs, it will inevitably be related to the bank and gradually move towards the bank environmental penetration.

(2) In recent years, under the wide application of information technology and big data technology, some emergencies and industry demonstration behaviors in banks have also begun to spread in a certain range, which will inevitably seriously affect the reputation and market of some banks reputation, and some small and medium-sized banking institutions lack experience in effectively responding to such incidents, especially lacking mature coping strategies and effective emergency management mechanisms, once immature handling methods are adopted, banks will naturally be seriously damaged reputation, thus increasing the incidence and harm of reputation risk.

3. Specific requirements for bank financial risk management in the context of economic downturn

3.1. A higher level of systematization of bank information management is required

From the perspective of systematization, banks need to continuously expand their sources and channels of data collection so that they are no longer limited to a single source of financial information, and they need to pay attention to the accurate collection of relevant dynamic data such as bank accounts and capital flows. It also requires banks to actively transform the form of data, starting from traditional structural forms to non-structural forms such as images. Therefore, banks are required to be able to flexibly use quantitative techniques to conduct accurate analysis of relevant data information, make scientific arrangements and objective evaluations of relevant business records of bank users, and come up with customer credit conclusions, so as to ensure that banks can identify and manage comprehensively in an accurate and timely manner. system risk.

3.2. Banks are required to achieve precise and refined information management

In the process of management, upgrading and maintenance of related data information technology, if banks want to achieve higher goals at a lower cost, they must realize the precision and refinement of information data management technology. For example, cloud computing big data technology and other tools are used to collect and organize relevant data information. In addition, banks should not limit information management to repeated processing and storage, but should use intelligent tools and big data information processing techniques to improve information management and technical maintenance.

3.3. It is necessary to use new technologies to improve the professional level of the service system

Against the backdrop of changes in the economic new normalcy environment and the application of various advanced information technology and big data technology, the requirements of banks in terms of service systems have also begun to continuously improve. Generally speaking, banks are required to have a higher level of specialization, which requires banks to accurately identify possible
risks and achieve comprehensive management and control, and requires banks to combine management systems with service standards to ensure the unity of management and services.

In the context of the current era, the service support system presented by the bank must have relatively smooth and close communication, and must ensure the connection between various system levels, and the technical capabilities of relevant staff must be more comprehensive. In addition, banks are also required to have a comprehensive and detailed understanding of the market environment, so as to ensure better and faster collection of customer-related information and data.

4. Bank financial risk management under the new economic normalcy

4.1. Pay attention to the reasonable adjustment of the bank's business direction

If the banking industry wants to improve its risk management capabilities, it must pay attention to the upgrading and adjustment of the risk management mechanism and the stability of the economic foundation, the following points must be paid attention to in the practice process.

First, it is necessary to strengthen the improvement and optimization of financial risk management-related systems and coping mechanisms. It is necessary to combine the characteristics of various businesses of the bank, especially for the possible risk points that may exist or arise, to use the subsidiary and branch system, the monopoly system and the business department system, and focus on improving the effectiveness of financial risk management and control, so that significantly reduce the incidence of financial risks and reduce the scope of infection and transfer.

Second, formulate differentiated risk prevention and emergency response plans. For the relatively weak parts of financial services, as well as some areas where financial services are difficult and risky, it is necessary to increase risk prevention and control, invest more technology and funds, rationally allocate resources and maximize utilization, and make them Apply to the weak link, and use "good steel to the blade".

Finally, focus on regular upgrades of the bank's risk warning system and security protection system. It is necessary to ensure the accurate collection and safe storage of data related to user privacy information, and continuously improve the level of prevention of information network vulnerability risks.

4.2. Actively implement risk management and control in business activities based on actual development

On the one hand, the banking structures in each region need to actively formulate economic activity plans that meet their own actual development needs according to the changing trends and actual development trends of the financial markets in their regions, and according to the characteristics of possible or existing risks, and strictly carry out various Supervise the conduct of each business to ensure that its execution is in line with the expected goals and requirements, at the same time, it is necessary to follow the development mechanisms and cyclical laws of different economic markets in various regions to formulate more diversified business risk early warning programs and risk management plans that are in line with their own development reality, management plan, but this also requires the relevant staff of the bank to accurately grasp the access conditions, strictly carry out loan review and supervision, and mortgage guarantee and other work content, through careful research and data processing and analysis, and then realize effective risk compensation reduce.

On the other hand, it is necessary to pay attention to effectively strengthening the capital control of banks, in particular, it is necessary to pay attention to the market development under the new economic normal, and the frequency of market fluctuations usually shows a relatively high but stable range. Therefore, it is necessary to scientifically and rationally optimize resource allocation, which is also a key point for banks to participate in market competition and improve their competitiveness, in particular, it should be noted that the strength or weakness of asset-liability management directly affects changes in the interest rate market. In addition, banks also need to adopt the concept of refined
management, comprehensively carry out accurate identification and timely response to financial risks according to the specific conditions of daily operation activities and various management tasks, realize effective management and control of financial risks, and focus on improving bank work, staff awareness of service and innovation and safety awareness.

Most of the financial business needs to be realized by relevant staff and technical personnel, therefore, it is necessary to pay attention to the training and improvement of the professional ability of bank staff, so as to ensure that the bank can obtain relevant data information comprehensively, timely and quickly, and improve the service quality of the bank and reduce the probability of risks arising from operational errors.

4.3. Establish a sound data management database and optimize the data evaluation system

At the present, if my country's banking institutions want to improve the level of financial risk management, they need to use the advantages of modern advanced information technology, big data technology, and cloud computing technology to establish a relatively complete bank data management database, and to be able to use the database to implement risk management systems, to sort out and share all the data in the bank, the bank can fully mobilize the enthusiasm of employees for risk management and control by promoting the establishment of information databases, after clarifying the relevant responsibilities of each department for risk management, it is also necessary to focus on strengthening the coordination between departments and the speed of information sharing, break the boundaries between departments in the traditional working mode, so that the data information that the bank can master can be integrated and connected through internal communication. In addition, banks can also study and analyze the source of financial risks through the relationship between various business positions and financial products, so as to accurately identify hidden risks and formulate effective prevention and control measures in a timely manner.

In terms of data-supported evaluation system optimization, it is mainly combined with the relevant management work done by banks when they conduct credit evaluations on users, due to the lack of necessary user information data as a basic support in the traditional work development process, most banks need to rely on work, the experience and intuition of personnel to carry out credit rating. Therefore, banks need to optimize the relevant evaluation system of data support as soon as possible, and further improve the ability to analyze and mine user credit data information on this basis, so as to reduce the probability of credit risk.

In addition, bank decision-makers also pay attention to the reference value of user credit, they must be able to accurately screen out valuable data and establish a scientific credit evaluation system to monitor bank risks in real time. Then banks should also accelerate the organic integration of credit loan-related data platforms and internal functions of the bank, this will not only effectively improve the level of bank credit risk management and control, but also audit and manage related risk businesses to the improvement of the risk warning mechanism with bank users as the core.

4.4. Improve the implementation of financial risk supervision

In order to improve the management level of financial risks, banks must not only establish a scientific and sound financial risk early warning mechanism, identification mechanism, and response mechanism, but also improve their ability to supervise financial risks.

On the one hand, through careful study of relevant macro-regulatory policies and measures, relevant parties, various departments and staff must actively learn lessons from them, and refine and sort out more comprehensive and complete supervision and management rules, in this process, both can ensure the simplification and clarity of all relevant policies, and must also ensure the comprehensiveness and completeness of the content of each rule.

On the other hand, from the perspective of the implementation and execution of banking regulatory powers, it is necessary to ensure the transparency of the supervision and management process imposed, to clarify the various powers and responsibilities, and to focus on the actual implementation
process of various supervision and management tasks the degree of fit and degree of refinement in
the process is reasonable and compliant with the implementation process.
In addition, if the bank has established a correct management model and formulates a method that
is conducive to its own development based on its own reality, it needs to match it with a supervision
and management mechanism, and it must also improve its execution to truly implement various
regulatory measures. In practice, it is necessary to ensure that all formulated supervision and
management systems, risk warning and response mechanisms are effectively implemented.

Bank financial risk management, on the one hand, directly affects the overall economic benefits
of the bank, and on the other hand, it is also related to the economic benefits and property safety of
bank users, which is of great value. Therefore, in the favorable policies issued by the country and
various regions, it is necessary to continuously optimize its own regulatory rules to make the overall
rules of the bank more scientific and reasonable. In addition, from the perspective of the bank itself,
it is necessary to truly decentralize the power of supervision, establish a professional department,
make the power more transparent, and ensure that each employee can clearly understand their own
responsibilities and rights, thereby reducing the probability of financial risks.

5. Conclusion

To sum up, under the background of the new economic normalcy, the financial market has
undergone tremendous changes, which also makes banks face many challenges in the new market
environment and the new economic normalcy. In particular, financial risk management directly
determines the role of banks in the economy. Whether sustainable and healthy development can be
achieved under the background of the new normalcy. Therefore, banks need to establish a relatively
sound and scientific comprehensive risk management system that can adapt to the bank’s own
development as soon as possible, make full use of relevant risk management tools and advanced data
analysis technology, form a scientific and sound financial risk management system, and ensure that
banks can efficiently identify and Monitor many different potential and apparent risks. In addition,
one of the core contents of financial risk management is to ensure the symmetry of information in the
financial field. This requires banks to use big data technology to collect detailed market information,
identify valuable information and data, form a data management database, and rely on data support.
The optimization and improvement of the evaluation system will enhance the bank's identification
and early warning of financial risks. At the same time, the bank should also pay attention to the
improvement and training of staff management awareness and risk prevention and control awareness,
so as to improve the strength and effectiveness financial risk management of the bank as a whole
overall effect.

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