

Research on Financial Risk Evaluation of Local Banks under the New Normal

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Abstract

Purpose: Based on the new normal, this paper uses the analytic hierarchy process to build the financial risk system of local banks, and discusses the financial risk management countermeasures.

Design/methodology/approach: Taking the new normal as the background, this paper uses the analytic hierarchy method to construct the financial risk system of local banks and discusses the countermeasures of financial risk management.

Findings: The results show that there are capital risk, asset quality risk, profitability risk and liquidity risk in local banks, among which liquidity risk and profitability risk have a great influence on local banks.

Practical implications: Combined with the financial risk situation and characteristics of local banks, risk management measures such as strengthening liquidity risk control, diversifying to improve profitability, improving risk internal control system, and improving capital adequacy were formulated.

Originality/value: Capital risk and asset quality risk are relatively small. Combined with local banks' operating characteristics and financial risks, this paper puts forward some risk management countermeasures, such as strengthening liquidity risk management and control, diversifying to improve profitability, perfecting risk internal control system and improving capital adequacy.

Keywords: AHP, Capital risk, risk management

Introduction

With the acceleration of economic globalization, financial development has also become global, and economic development has entered a new normal and guided the arrival of the new financial normal. After entering the new era, the new development concept includes the core concepts of innovation, integration, environmental protection, sharing and cooperation, which have formed many requirements for reform and development. Among them, China's banking industry has encountered many challenges and opportunities under the tide of development, of course, local banks are no exception (Tian Jianjun,2017). As the basic component of China's banking industry, local banks have an important influence on financial development, and they are also the important influencing factors of regional economic development and the development of cooperative units and companies. As a result, the development of local banks can effectively reflect the development of our national economy (Kaur G,2017). In the new financial normal era, there are still many development problems for local banks in China, such as small overall scale, lack of innovative management concepts, low level of risk management, imperfect management system, lack of experience in project development, etc. These problems have gradually emerged in recent years. The repeated increase in financial risks has brought a serious impact. To protect the interests of all parties, local banks need to use various ways to strengthen the prevention of financial risks and promote the financial security level (Ma

Li,2015). Therefore, the key problems in the current development process of local banks in China lie in how to effectively evaluate the actual financial risks, how to identify and prevent financial risks, how to strengthen financial risk management means, we must improve the ability to resolve financial risks as soon as possible.

Scholar Si Yeqing summed up the financial risks of local banks in China through research as follows: First, the accounting information was inaccurate, and effective financial accounting could not be carried out to obtain untrue results; Second, the internal management system is imperfect, the existing internal management systems cannot be effectively implemented, the coverage is incomplete, and the new risks of future development cannot be effectively dealt with; Third, the capital structure is unbalanced, the overall debt ratio is too high to match the property right reasonably. Through joint research with Li Xue and Wang Yuwei , it is found that the risks and benefits of local banks in China coexist in the process of development, among which the financial risks are the most significant, and their manifestations are uncertain. There are many uncertain factors in China's economic development environment, and people are not particularly sensitive to changes in objective conditions, and these changes have a great impact on the daily operation of banks, so irregular business development and an imperfect management system will lead to great financial risks. Liu Qian found that the interest rates of deposits and loans of commercial banks in cities are unbalanced. As a result, the profit rate of banks is very low and keeps declining, which is not conducive to sustainable development. However, city commercial banks play an important role in economic development, and insufficient profits will cause various economic risks, which is not conducive to overall economic development.

It can be seen that many domestic scholars have conducted in-depth research on the financial risks of local banks (Bian ongoing,2015), but these studies are not based on the new economic situation. The research is mainly aimed at the new normal of the banking industry caused by the new economic normal, and it is necessary to further strengthen the research and analysis on the financial risk management of local banks and master the development characteristics. To ensure the sustainable operation of local banks under the new normal, this paper studies the financial risks of local banks and their causes constructs the financial risk evaluation system of local banks and discusses the financial risk management countermeasures.

financial risks of local banks under the new normal

Capital risk

The bank's capital risk can be measured by the bank's capital situation, and the bank's overall risk resistance ability can be reflected by the proportion of various types of capital and capital reserves in the bank's operation. To strengthen risk management, China's financial supervision departments have strengthened the supervision of commercial banks, especially the overall capital, deposits and loans, etc. Through various financial indicators, we can effectively grasp the capital situation of commercial banks, while the capital risk of local banks continues to rise, and the situation is not optimistic.

According to the survey, local banks mainly replenish capital through profit retention. From 2014 to 2019, the data on the capital adequacy ratio of local banks kept rising, all higher than the national standard value, but compared with the overall average level of the banking industry, it could not be achieved. The capital core adequacy ratio of local banks is higher than the national standard value, but the development trend is gradually declining. The situation is not optimistic. In addition, due to the rapid increase in the scale of banking assets, the asset risks faced by local banks have further increased. Because the rapid growth of asset scale will lead to an insufficient capital adequacy ratio, and it is difficult to control the capital risk within

a safe range, there will be various risk points exposed, which will increase the probability of financial risks in the future development process.

Asset quality risk

One of the main businesses of local banks is the credit business, which is closely related to economic development. For example, from 2014 to 2019, the total amount of local non-performing loans of local banks has been increasing year by year, and the rate of non-performing assets has gradually increased, which shows that there are obvious deficiencies in loan quality control. Once local banks can't effectively deal with non-performing assets and have no risk management ability, in the future development process, they will face great financial risks. Therefore, at present, local banks in China have not established a perfect credit and financial risk management system, and there is no effective way for asset quality management, which leads to an increase in the proportion of non-performing loans during operation, so the probability of financial risks is high.

At the same time, with the development of the market economy and the support of national policies, local banks are facing increasing competitive pressure, especially in the non-credit business, which needs to be transformed and upgraded under the new normal to adapt to future development. Especially in recent years, to meet the needs of the times, the main businesses of banks have been expanded, especially in finance, retail, trade, market services and other aspects. However, the design of various financial products lacks innovation, and it is difficult to enhance competitiveness.

Profitability risk

One of the key parts of bank financial risk is profitability risk, which is mainly evaluated by financial indicators such as the net interest rate of total assets and return on net assets. Generally speaking, the return on total assets of local banks in China is analyzed in a three-year cycle, and the fluctuation range is very small, basically controlled within 1%, but there is still a big gap compared with the industry average. On the other hand, the ROE of local banks is gradually increasing, showing a steady development trend in the future, but there is still a big gap compared with the industry average.

Affected by the economic environment and the competition of Internet finance business, the interest rate is also market-oriented, which leads to the narrowing of the deposit-loan spread of local banks. At the same time, with the development of various emerging financial institutions and products, the business advantages of local banks are no longer, and various deposit-loan platforms, financial institutions, wealth management products, etc. have had a great impact on local banks. However, its market competitiveness has not improved, so a decline in revenue is inevitable. However, local banks currently rely too much on interest business, accounting for a huge part of the overall business income, for example, it reached more than 95% in 2019, so non-interest income has little impact on the overall business. In that condition, under the new normal, the development of local banks will inevitably need to make reasonable adjustments to the income sources of their main businesses, otherwise, the market challenges and security risks they will face will be unable to bear.

Liquidity risk

Liquidity risk is the main financial risk of most local banks, and the principles of local banks' management are stability, prudence and rationality. At present, while expanding and improving profits, all businesses need to consider the debt ratio of the business, and it is necessary to increase the scale and liquidity of funds. Then use the effective financial risk management system to control, so that the bank assets have a reasonable proportion.

According to the relevant statistics from 2014 to 2019, local banks have met the established requirements of the state in terms of capital liquidity ratio and deposit-loan ratio, but the status is not very stable, with great fluctuations in different stages; In addition, although the deposit-loan ratio has reached the standard, it is gradually declining and the development trend is not ideal. The liquidity ratio fluctuates continuously, the main reason is that local banks do not have a high level of liquidity management and strict management, so many debts will have an impact on liquidity.

Methodology

According to the above four aspects of capital risk, liquidity risk, asset quality risk and profit risk faced by local banks, to fully understand the scale of local banks' financial risk, this paper uses AHP to build a financial risk evaluation system and uses Delphi method to evaluate local banks' financial risk.

The financial risk evaluation system of local banks is complex, and its construction process needs comprehensive consideration, and can't be constructed by simply superimposing relevant evaluation indexes. To establish an effective evaluation index system, it is necessary to design it scientifically and reasonably. Through continuous improvement and optimization, the financial risk evaluation system of local banks can operate normally and bring benefits to users. Then, in the process of system design, formulation and establishment, it is necessary to strictly abide by the basic principles of scientificity, comprehensiveness, operability and simplification, so that the system can play its due role. Only by strictly observing the above basic principles of AHP, can the evaluation index system be differentiated hierarchically. According to the above principles, combined with the current situation of local banks' financial risks, this paper studies and divides the local financial risk evaluation system into the target layer, criterion layer and index layer as shown in Table 1, and makes a distinction analysis.

Table 1: Financial risk level evaluation system of local bank

Target layer a	Level b	Index c
Financial risk of local banks Evaluation system	Risk B1	Core capital adequacy ratio C11
		Capital adequacy ratio C12
		Asset-liability ratio C13
	Asset risk B2	Non-performing loan ratio C21
		Weighted risk asset ratio C22
		Provision coverage ratio C23
		Top ten customer loan ratio C24
	Profitability risk B3	Net interest rate of total assets C31
		Return on net assets C32
		Interest recovery C33
	Liquidity B4	Flow ratio C41
		Loan-to-deposit ratio C42
		Net lending ratio C43

To measure the influence degree of an evaluation index in the financial risk evaluation system, it is necessary to analyze its weight and define it with the corresponding numerical value. In this paper, the analytic hierarchy process (AHP) is also used. After building the financial risk evaluation system of local banks, the expert questionnaires are scored and the judgment matrix is established for pairwise comparison (shown in Table 2-6). Effective weight calculation is obtained through consistency check, and comprehensive weight is obtained through sorting and sorting, as shown in Table 2-7.

Table 2: A-Bi Judgment Ma

A	B1	B2	B3	B4	W
B1	1	1.1652	0.6478	0.2746	0.1491
B2	0.8582	1	0.6068	0.3063	0.1339
B3	1.5438	1.648	1	0.4319	0.2233
B4	3.6419	3.2647	2.3155	1	0.4937
CI=0.0387, RI=1.62, CR=0.0720<0.1					

Table 3: B1-C1i Judgment Matrix

B1	C11	C12	C13	W
C11	1	1.583	1.6921	0.4497
C12	0.6317	1	1.1034	0.2877
C13	0.591	0.9063	1	0.2626
CI=0.0437, RI=1.69, CR=0.0361<0.1				

Table 4: B2-C2i Judgment Matrix

B2	C21	C22	C23	C24	W
C21	1	3.4106	3.4398	1.9743	0.4629
C22	0.2932	1	1.2105	0.4665	0.1399
C23	0.2907	0.8261	1	0.4524	0.1211
C24	0.5065	2.1437	2.2104	1	0.2761
CI=0.0591, RI=1.58, CR=0.0843<0.1					

Table 5 B3-C3i Judgment Matrix

B3	C31	C32	C33	W
C31	1	1.2371	1.0143	0.359
C32	0.8083	1	0.9061	0.2998
C33	0.9859	1.1036	1	0.3412
CI=0.0467, RI=1.63, CR=0.0497<0.1				

Table 6: B4-C4i Judgment Matrix

B4	C41	C42	C43	W
C41	1	1.3772	3.2995	0.4704
C42	0.7261	1	3.0316	0.3943
C43	0.3031	0.3299	1	0.1353
CI=0.0528, RI=1.57, CR=0.0663<0.1				

Table 7: Comprehensive weight ranking of index layer

C41	C42	C31	C33	C11
0.2322	0.1947	0.0802	0.0762	0.0671
C32	C43	C21	C12	C13
0.0669	0.0668	0.0620	0.0429	0.0391
C24	C22	C23		
0.0370	0.0187	0.0162		

After the weight calculation of index system is completed, Delphi method is used to verify with experts to determine the nature of each index, and 11 important evaluation indexes of local bank risk evaluation system are obtained by recording and summarizing, which are consistent with the results obtained by the above-mentioned analytic hierarchy process. When evaluating the financial risk of local banks, use "Y" to identify important evaluation indicators. It is stipulated that local banks must meet the specific basic requirements of evaluation indexes to obtain financial risk qualification assessment; Marking other indicators with "O" and specifying the setting content of corresponding indicators for local banks can improve the financial risk. In this paper, the full score of 13 evaluation indexes is defined as 100 points, including 98% of important indexes and 2% of secondary indexes. Together, they form a score system. In addition, when calculating the financial risk score of local banks, it is necessary to comprehensively consider the influence of various indicators. If the indicators have a positive impact on the financial risk, they will be recorded as positive, otherwise, they will be extremely negative. After comprehensive calculation, the financial risk evaluation score can be obtained. The higher the score, the smaller the financial risk. The evaluation system does not strictly require the qualified scores of financial risks, only the basic requirements of important indicators are required, the specific values are not defined, and it has great freedom. However, it stipulates that the excellent scores should not be less than 90 points. The formula for calculating the score of each index item is $P_i = \text{total score} \times W_i$, where W_i is the weight value of each index item. Then, the formula is used to calculate the scores of each evaluation index of the evaluation system of local banks in this paper, and the specific data obtained are recorded (Table 8).

Table 8: Financial risk evaluation system of local banks

Level b	Index c	Option attribute	score
Risk B1	Core capital adequacy ratio C11	Y	7
	Capital adequacy ratio C12	Y	4
	Asset-liability ratio C13	Y	4
Asset risk B2	Non-performing loan ratio C21	Y	6
	Weighted risk asset ratio C22	O	1
	Provision coverage ratio C23	O	1
	Top ten customer loan ratio C24	Y	4
Profitability risk B3	Net interest rate of total assets C31	Y	8
	Return on net assets C32	Y	7
	Interest recovery C33	Y	8
Liquidity B4	Flow ratio C41	Y	23.5
	Loan-to-deposit ratio C42	Y	20
	Net lending ratio C43	Y	6.5

Through the above-mentioned analytic hierarchy process, it can be seen that the liquidity risk and profitability risk have the greatest influence on local financial risk under the new normal, followed by capital risk and asset quality risk. Among all the indicators, the key factors are the current ratio and loan-to-deposit ratio, accounting for 23.5 points and 20 points respectively. Because good liquidity can promote the sustainable development of local banks, forming a good promotion effect. Once a large number of customers collectively default and a large number of bad debts occur under special circumstances, if the bank cannot realize all kinds of existing assets quickly at the same time, there will be problems in the liquidity of assets, which will also lead to the failure of daily business, which will have an impact on operating income.

Financial risk management countermeasures of local banks under the new normal

Financial risk management is the key to the development of banks, and its main purpose is to promote profits through cost control. At present, China's economic development is in an important period of structural adjustment, speed reduction and quality improvement, and innovation awareness cultivation. In this stage, financial risks should be managed, to effectively avoid the losses caused by risks. Through the above analysis, this paper has formulated comprehensive financial risk management countermeasures, which can enhance the market competitiveness of local banks and help them cope with existing and future possible risks based on China's economic development form. The main contents are as follows:

Strengthen liquidity risk management and control

First of all, it is necessary to build an effective management system, formulate a management system for bank liquidity financial risks, standardize it with clear quota management, and then conduct regular liquidity risk assessments to promote the effective implementation of the system and obtain corresponding results through practical application, avoiding simply filling in data to calculate results. In the process of liquidity risk assessment, it is necessary to consider all kinds of influencing factors, conduct comprehensive and feasible tests on financial risks, and carry out them scientifically and reasonably, to improve the effectiveness of financial risk evaluation results and provide the basis for the optimization of the management system.

In addition, local banks can learn from foreign management and control experience, introduce scientific and advanced management tools, obtain relevant information through practical application, then make statistics, classification and analysis of liquidity-related data, use mathematical models to simulate, and then combine the development status and characteristics to build an index system to quantitatively analyze and manage liquidity financial risks. That is to say, in the process of liquidity financial risk management, information and data improvement are needed to improve the application effect.

Diversification to improve profitability

The profitability of a bank depends on many factors, including operating income, operating cost, etc., and operating income accounts for a large proportion, so it needs to be improved using business expansion, coverage improvement, etc. To enhance market competitiveness, it is necessary to innovate in various businesses, products and services. Local banks need to adjust the income model as soon as possible to reduce the proportion of interest income, to reduce the influence of the market environment and interest rate fluctuation on the overall income of banks and the probability of profitable financial risks.

In terms of the income model, it is necessary to improve profitability through diversified development. First, we can expand financial services based on the advantages of the Internet, so that all financial services, products and services can form information development. Local banks should increase cooperation with non-financial institutions and Internet platforms, so

that the advantages of all parties can be brought into full play, forming a win-win situation of cooperation. In addition, based on the support of national policies, local banks can effectively play the role of commercial banks, provide financial services such as capital loans and wealth management products for many enterprises, and extract high-quality customers through business development, to diversify profits and reduce financial risks.

Improve the risk internal control system

According to different banks, the internal environment of local banks will have many different situations, mainly reflected in personnel, institutions and other aspects, and there is a big gap between the overall level of local banks and listed commercial banks. To internal control system, the following aspects need to be done: first, to strengthen the internal control management, we should establish a correct internal control concept; Secondly, the internal control system involves all aspects of bank operation and management. According to the local banks' development characteristics, an application management system should be formulated to speed up the system improvement in key aspects such as bank policy formulation, personnel assessment and information collection. Finally, evaluate the internal control results and strengthen the internal audit, so that the internal control management can be fully implemented and double guarantees can be formed, promoting the application of results. Practically, we can build the internal audit system of banks, clarify the scope and methods of supervision and management, establish a high-level internal audit team, and improve the working ability of auditors and the effectiveness of evaluation results, thus promoting the sound of risk internal control system.

Improving capital adequacy

Local banks can respond to all kinds of emergencies by improving capital adequacy so that the liquidity of daily working capital can meet the requirements, and they can also increase profits to enhance market competitiveness. In addition, when faced with the financial risk of capital adequacy, it can be strengthened with protective control measures, and the capital adequacy ratio requirements can be met through effective evaluation of capital adequacy, control of the risk within a reasonable range; At the same time, effectively restrain capital, strengthen capital restraint on relevant credit contracts, risk assessment and performance appraisal during operation, and rationalize the scale and proportion of assets, to make effective use of assets, reduce asset risks and maintain the sustainable development of local banks.

Discussion and Conclusion

Economic globalization has brought about financial globalization, and the new economic normal has brought about the new financial normal. Taking local banks as the research object, this paper discusses the capital risk, asset quality risk, profitability risk and liquidity risk of local banks, and constructs a financial risk evaluation system according to the four major financial risks of local banks by using the analytic hierarchy process. Through the quantitative statistical analysis, it is found that liquidity risk and profitability risk have a great influence on local banks, while capital risk and asset quality risk are relatively small. Finally, according to the situation and characteristics of local banks' financial risks, the risk management countermeasures such as strengthening liquidity risk management and control, diversifying to improve profitability, perfecting risk internal control system and improving capital adequacy are formulated.

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