

# Monetary Policy and Bank Risk-taking

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**Abstract:** As the process of global financial integration deepens, the relationship between bank risk-taking and monetary policy has become increasingly close. In recent years, financial markets have been highly volatile and banking risks have become increasingly prominent. Against this background, the relationship between monetary policy and bank risk-taking in China is studied through both theoretical and empirical evidence, and corresponding policy recommendations are put forward. In addition, the role mechanism of monetary policy affecting bank risk is deeply explored through the theoretical aspect of monetary policy and bank risk capacity bearing, and the theoretical basis for the formulation of related policies is provided. Therefore, it explores the impact of bank risk on the transmission mechanism of monetary policy from the theory, and further improves the theory of monetary policy transmission to enhance the effectiveness and stability of monetary policy. The article analyzes and discusses the impact of monetary policy on bank risk-taking capacity, to provide a reference for the development of the financial industry.

Keywords: monetary policy, bank risk-taking, impacts

### 1. Introduction

The central issue and objective of monetary policy and bank risk-taking is to examine its impact on bank risk behavior and, in turn, to provide insights into its mechanism of action. To deepen the understanding of this issue, it is necessary to explore the connection between monetary policy and bank risk from two perspectives. At the same time, through the combination of theoretical analysis and international experience, effective policy recommendations are provided to enhance the effectiveness and stability of China's monetary policy and reduce the impact of bank risk on the financial system.

# 2. Overview of monetary policy and bank risk-taking theory

#### 2.1 Overview of monetary policy theory

The theoretical overview of monetary policy is an important basis for monetary policy and bank risk-taking. The impact of monetary policy on the size of bank credit and risk appetite is mainly manifested in three aspects: interest rates, money supply, and deposit reserves. For example, cutting interest rates can promote investment and consumption, increasing money supply can reduce the cost of funds, and increasing the deposit reserve ratio can control credit risk. The adjustment of monetary policy tools will not only affect the credit risk of banks but also affect the stability of the entire financial system, which in turn affects the development of the economy. Therefore, a comprehensive understanding of the theory of monetary policy is of great significance to the relationship between monetary policy and bank risk.

#### 2.2 Overview of bank risk-taking theory

An overview of bank risk-taking theory shows that banks inevitably face various risks in the course of their business, such as credit risk, market risk, operational risk, and so on. Therefore, it is of great practical significance to find out how to effectively prevent and resolve the major challenges that China's banking industry faces. This requires that banks need to carry out effective risk-taking on them. Bank risk-taking points out that when carrying out risk-taking, it is necessary to focus on the trade-off between risk and reward to achieve a reasonable degree of risk-taking, so as to ensure the long-term and stable development of the bank. At the same time, the risk-taking of banks in China is also affected by the external environment, such as monetary policy, regulatory policy, and market competition.

Both theoretical and empirical studies have shown that monetary policy has a significant impact on the risk-taking behavior of banks. For example, in the case of loose monetary policy, banks are more likely to receive funds, which in turn expands loan disbursements, which in turn raises the level of credit risk-taking by banks. Conversely, when monetary policy is tight, it leads to a smaller amount of credit available to banks, credit allocation becomes less, and credit risk declines. Therefore, changes in monetary policy have a significant impact on the risk-taking behavior of banks.[1]

#### 2.3 the relevance of monetary policy to bank risk-taking

In China, the relationship between monetary policy and bank risk-taking has been a focus of academic attention. Monetary policy has a certain impact on banks' risk-taking through a variety of ways, such as interest rates and money supply. Changes in these factors will affect banks' credit and market risks, thereby affecting the stability of the entire financial system. For example, loosening monetary policy can reduce banks' liquidity costs, expand lending, and increase credit risk. In contrast, when monetary policy is tightened, banks' cost of funds rises, credit lines fall, and credit risk is reduced. In addition, monetary policy can also have some impact on banks' risk-taking through its effect on market risk, and thus on their risk-taking. For example, with relaxed monetary policy, the greater the volatility of asset prices, the more risky the market will be and the more willing banks will be to take risks. Conversely, with a tight monetary policy, there is less volatility in asset prices, which reduces the risk in the market and hence the willingness of banks to take risks.

Therefore, the empirical results provide a basis for the next study of the impact of monetary policy on bank risk. On this basis, appropriate samples are selected and econometric models are used to conduct empirical research on China's monetary policy and banks' risk-taking. For example, a variety of analytical tools, such as the panel data model and vector autoregressive model, are used to conduct a systematic study on how various monetary policy tools affect banks' risk-taking ability.

In terms of policy, banks' risk-taking capacity needs to be assessed and countermeasures formulated accordingly. For example, in the process of formulating monetary policy, due consideration should be given to its risk-bearing capacity for banks, which should be neither relaxed nor too tight. On this basis, the supervision and risk-taking of the banking sector should also be strengthened in order to enhance the banks' ability to resist risks.[2]

### 3. Impact of monetary policy on bank risk-taking

#### 3.1 Impact of monetary policy on bank credit risk

How to effectively prevent and resolve bank credit risk is of great significance. The impact of monetary policy on bank credit risk is multifaceted. For example, if banks practice tightening, then market interest rates will rise, thus increasing their borrowing costs, causing a credit crisis and increasing their credit risk. Monetary policy easing, on the other hand, will lead to a decline in market interest rates, thereby promoting the real economy, increasing the demand for credit, and reducing banks' credit risk.

The analytical model also confirms that monetary policy acts on bank credit risk through direct effects. For example, credit risk is evaluated through the response to the credit market in different monetary policy contexts. In addition, the empirical analysis also shows that the effect of monetary policy on bank credit risk has a lag, so its effect generally becomes apparent only after a period of time. Therefore, the role of monetary policy on bank credit risk cannot be ignored. Therefore, when formulating monetary policy, China needs to comprehensively analyze its effect on bank credit risk and propose corresponding countermeasures accordingly.

#### 3.2 Impact of monetary policy on bank market risk

In monetary policy, the role of monetary policy on bank risk cannot be ignored. Monetary policy affects the assets and liabilities of banks by influencing the supply and demand for funds in financial markets. Under an easy monetary policy, banks can expand the size of their loans, but the level of credit will fall, which leads to an increase in market risk. In the case of the financial crisis in the United States, the Federal Reserve's monetary easing led to an oversupply of housing, soaring housing prices, and a massive placement of subprime housing by banks. However, as interest rates continued to rise and the housing market cooled, a large number of borrowers were unable to repay their loans, exposing banks to significant risk-taking. As can be seen from this, the impact of monetary policy on the market for bank risk is significant.[3]

# 4. Impact of bank risk-taking on monetary policy

#### 4.1 the impact of bank risk-taking on the effectiveness of monetary policy

The effectiveness of monetary policy is largely determined by the effect it produces after its implementation. On the one hand, monetary policy regulates the macroeconomy in a variety of ways, such as through interest rates, money supply, etc., and the risk-taking behavior of banks will in turn have a direct impact on the transmission and implementation of monetary policy; policy uncertainty will cause a change in the willingness of banks to take risks, which in turn will affect the effect of monetary policy. For example, if banks are unwilling to take risks under a tight monetary policy, then the credit market will tighten, thus making the policy effect of regulating the economy weaker. Therefore, when formulating monetary policy,

banks' risk-taking needs to be fully considered and countermeasures taken accordingly.

#### 4.2 Impact of bank risk-taking on the stability of monetary policy

In China, the impact of monetary policy on bank risk is more complex. Monetary policy has a certain impact on banks' credit behavior, equity ratio, and risk-taking ability. Changes in banks' risk appetite will also have a direct impact on the stability of monetary policy, and thus studying the mechanism of the role of bank risk on the stability of monetary policy is crucial to the formulation of effective monetary policy and the prevention of financial risks.

There are two perspectives on how monetary policy affects bank risk. First, monetary policy adjustments will have a direct impact on the size of the bank's loans and the level of interest rates, which in turn will affect the bank's credit risk; for example, if the bank has implemented a loose monetary policy, it will lower the market interest rate and reduce the bank's lending rate, which will stimulate the demand for loans by enterprises, which will increase the bank's credit risk. Secondly, changes in monetary policy will also have an impact on the bank's equity ratio, which in turn will have an impact on the bank's capital risk.

The impact of bank risk-taking on monetary stability is mainly reflected in two aspects. First, the degree of risk-taking by banks affects the transmission of monetary policy; for example, when the degree of risk-taking by banks increases, it will be easier for enterprises to obtain loans, which will stimulate investment and spending and thus boost economic growth. However, if the bank's degree of risk decreases, it will make it more difficult for enterprises to get loans, which will inhibit investment and spending, thus adversely affecting the development of the economy. Secondly, the risk level of banks has a certain impact on the effect of the implementation of monetary policy. When the risk level of banks is too high, it will result in an over-expansion of credit, which will cause inflation; if the risk of banks is too low, it will result in a downturn in credit, and ultimately in an economic depression.

Therefore, the risk profile of banks needs to be closely monitored in order to ensure the stability of monetary policy. On the one hand, banks can regulate their monetary policy instruments in such a way as to have some impact on the level of bank risk. For example, banks can influence the credit risk of banks by regulating interest rates; by regulating the ratio of legal reserves, they can have an impact on the ratio of bank equity. On the other hand, banks can also reduce their risk by strengthening financial supervision, for example, through strict supervision of bank equity and liquidity ratios.[4]

### 5. Policy recommendations

First, the intrinsic link between monetary policy and bank risk is emphasized and relevant policy recommendations are made. For example, banks should take full account of their risky behavior and adjust monetary policy tools and parameters promptly to guide their risk performance. Based on the above analysis, it is proposed that regulators should strengthen the supervision of banks' risk-taking and build effective risk early warning and isolation mechanisms in order to promote the stability and healthy development of the financial system.

Therefore, an in-depth study of the mechanism and path of monetary policy to regulate bank risks is of great significance in promoting the healthy development of China's economy. The effectiveness and feasibility of the policy recommendations are verified by constructing theoretical models and combining relevant data and case studies. Meanwhile, successful international practices and experiences should also be drawn upon to further improve and perfect China's monetary and banking regulatory system. The relationship among monetary policy, bank regulatory policy, and financial market plays a crucial role in the implementation of monetary policy. At the same time, it is necessary to strengthen the publicity and training of the policy, improve the effectiveness and quality of its implementation, and ensure that the policy is implemented and effective.

#### 6. Conclusion

In summary, the article further investigates the impact of monetary policy on bank risk-taking. First, more advanced theoretical models, including dynamic panel and systematic GMM, are used to portray more precisely the intrinsic connection between monetary policy and bank risk-taking. Second, more detailed and comprehensive data need to be collected to comprehensively analyze the risk effects of various monetary policies on various types of banks. Finally, combined with international practice and experience, it provides a theoretical basis for China's monetary policy and bank risk-taking.

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