Original Research Article

Monetary policy, interbank network mechanisms, and commercial bank risk-taking amplification effect

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Abstract: Studying the impact of monetary policy on the risk-taking of commercial banks and how interbank networks play a role in the influence of monetary policy on commercial bank risk-taking is of great significance, which can provide reference for the implementation of monetary policy and the improvement of risk management capabilities of commercial banks in China.

This article proposes the following countermeasures and suggestions to both commercial banks and the central bank: the Chinese government should pay attention to the phenomenon of increased risk contagion caused by loose monetary policy, especially the amplification effect of interbank network mechanisms, and avoid underestimating the role of monetary policy in promoting the level of bank risk contagion; We should focus on banks with high correlation, and commercial banks need to pay attention to the risk superposition effect caused by micro level correlation when preventing their own risk contagion, in order to reduce the risk contagion of related banks to themselves; Regulatory authorities should implement differentiated regulatory measures for different banks to enhance regulatory effectiveness and balance financial stability and efficiency.

Keywords: Monetary policy; Related network; Risk-taking of commercial banks

1. Introduction

Monetary policy is an important policy tool in macroeconomic regulation and plays a crucial role in the operation of the economy. In recent years, in order to enhance the quality and efficiency of financial services to the real economy, the People's Bank of China has introduced a series of measures such as reserve requirement ratio cuts and interest rate cuts to promote financial services to the real economy. This indicates that monetary policy is an important means for the central bank to regulate the economy. Commercial banks dominate the entire financial institution system in China, and their stable operation plays an important role in preventing and resolving systemic risks in our country. Therefore, paying attention to the risk-taking of commercial banks is of great significance for our country to firmly hold the bottom line of preventing systemic risks from occurring.

2. The development status of monetary policy and risk bearing of commercial banks

2.1. Current situation of monetary policy

Under the planned economic system, the People's Bank of China concurrently assumes the dual functions of the central bank and commercial banks. Money, credit and finance are subordinate and subordinate in economic life. Although there are problems of this nature in fact, monetary policy does not play a significant role in economic development, so it will not become an independent policy. During the period from 1987 to 1991, China's monetary policy remained primarily aimed at anti inflation, but adopted a hard landing style of regulation. The central bank adopts mandatory measures to adjust the loan structure and other relatively tough macroeconomic control operations. The overall direction of monetary policy focuses on tightening, which suppresses overall demand. Since 2017, China has adhered to a prudent monetary policy, ensuring that the liquidity of the banking system is at a reasonable level and regulating the leverage ratio of the financial system reasonably on the basis of strengthening financial regulation and reducing leverage ratio.

2.2. Current situation of risk bearing in commercial banks

The overall trend of non-performing loans in commercial banks in China from 2010 to 2023 is to first decrease, then increase, and then decrease again. It roughly went through three stages: the first was a slight decline from 2010 to 2012, during which the non-performing loan balance dropped to a minimum of 433.6 billion yuan in 2010, reflecting the pressure still existing in China's economic operation and the continued impact of the financial crisis on commercial banks. The steady upward phase from 2013 to 2019 followed, indicating that with the economic recovery, banks' risk appetite has increased and credit business management has relatively relaxed, leading to an increase in the risk bearing level of the banking industry in recent years. The last is the slow decline stage from 2019 to 2023. This stage is affected by the COVID-19 epidemic, and China's economy is under great downward pressure. With the development of China's banking industry, the business activities of commercial banks are becoming increasingly standardized, and their post loan management capabilities have also been improved. At the same time, the strengthening of financial regulation ensures that the off balance sheet assets and business risks of commercial banks can be effectively monitored. Against the backdrop of implementing deleveraging and prudent monetary policies, the systemic risks faced by the industry have been reduced, and the overall risk resistance and compensation capabilities have been further enhanced. Through a series of effective financial regulation and policy support, the non-performing loan ratio of China's banking industry has still achieved a slight decrease, specifically to 1.71% in 2022.

3. Countermeasures and suggestions

3.1. The central bank should enhance the pre consideration of monetary policy

The ultimate goal of the central bank's implementation of monetary policy is to stabilize prices, achieve full employment, promote economic growth, and balance international payments. When the central bank implements a loose monetary policy, interest rates decrease, which may prompt banks to seek higher yielding but higher risk assets in a low interest rate environment, thereby increasing bank risk-taking. Therefore, the Chinese government should pay attention to the phenomenon of increased bank risk contagion caused by loose monetary policy, especially the amplification effect of interbank network mechanisms, and avoid underestimating the role of monetary policy in promoting the level of bank risk contagion.

Firstly, considering the impact of monetary policy on the risk-taking of commercial banks, the central bank should reasonably evaluate the necessity of policy implementation and consider the foresight and timeliness of monetary policy operations before formulating monetary policy. When implementing loose monetary policy, the central bank adopts a dual strategy of reducing reserve requirement ratios and interest rates, as well as flexible use of open market operations to ensure sufficient liquidity. At this time, the central bank should also pay attention to the impact of monetary policy on the risk-taking of commercial banks and the importance of financial market stability for the long-term healthy development of the economy.

Secondly, it is necessary to incorporate the risk-taking of commercial banks into the framework of monetary policy formulation, avoid loose monetary policy from triggering excessive risk-taking behavior of banks, achieve the goal of stable growth and risk prevention of monetary policy, and promote stable economic growth.

3.2. Focus on commercial banks with high correlation

Considering the amplification effect of the interbank network on the impact of monetary policy on commercial banks' risk-taking, commercial banks need to construct a risk prevention and control system for related party transactions from multiple dimensions such as governance structure, risk identification, credit management, and information disclosure, balancing business expansion and risk control.

Firstly, it is necessary to improve corporate governance and internal control mechanisms, optimize organizational structure and processes, establish a dedicated related party transaction management office, clarify the division of responsibilities among the board of directors, supervisory board, and risk management department, ensure the independence of related party transaction approval, monitoring, disclosure, and other processes, design a hierarchical management structure, and achieve cross departmental collaboration. Establish a risk isolation system to ensure strict separation of related party transactions from other businesses in terms of accounts, funds, accounting, etc., to prevent the transfer of benefits.

Secondly, it is necessary to strengthen the identification and dynamic monitoring of related parties, accurately identify implicit related relationships, use big data technology to mine implicit related information such as customer equity structure, actual controllers, and family relationships, establish a dynamically updated related party database, conduct penetrating reviews of group customers, and pay attention to complex related networks formed through cross shareholding, fund pools, and other methods.

Thirdly, it is necessary to optimize credit management and risk isolation system, strictly review the effectiveness of guarantees provided by affiliated enterprises, avoid high-risk behaviors such as subsidiaries providing guarantees and mutual guarantees for the parent company, and prioritize the selection of guarantee entities with stronger strength than the borrower. Set industry, regional, and amount limits for related party transactions to prevent excessive risk concentration, require related customers to disclose all related party transaction information, and add restrictive clauses in loan contracts.

3.3. Implement differentiated regulatory measures

Differentiated regulation refers to financial regulatory agencies formulating classified regulatory policies based on the risk characteristics, scale, business complexity, and market influence of commercial banks to balance risk prevention and financial innovation, clarify the classification standards of differentiated regulation, and improve regulatory efficiency. The following are differentiated regulatory measures for different types of commercial banks.

The first is differentiated regulation based on the type of commercial bank. Systemically important banks require higher capital buffers, such as increasing the core tier one capital adequacy ratio, to enhance their risk resistance capabilities and provide strong capital guarantees for their business growth and sustainable development. They need stricter liquidity indicators, such as liquidity coverage ratio and net stable funding ratio, that are higher than industry standards. At the same time, they need to limit the scale of high-risk interbank business and control the proportion of interbank liabilities. Small and medium-sized banks should reduce regulatory costs, provide liquidity support through tools such as refinancing and special bonds to supplement capital, strictly control the absorption of deposits and loan disbursement from other regions, focus on localized services, emphasize local business compliance, reduce capital consumption of complex businesses, and simplify liquidity indicators.

The second is differentiated supervision based on risk levels. High risk banks need to strengthen intervention measures, limit dividends and executive compensation, suspend new business approvals, enforce capital replenishment plans, require the introduction of strategic investors or promote mergers and reorganizations, increase inspection frequency, conduct on-site inspections every quarter, and focus on monitoring non-performing loan ratios and liquidity gaps. Stable banks should prioritize piloting innovative businesses, reducing reserve requirements, and releasing more loanable funds.

The third is differentiated supervision based on business areas. For commercial banks whose business areas are inclusive finance and green finance, the risk weight should be reduced. The risk weight of inclusive small and micro loans should be lowered from 75% to 50%, and banks should be encouraged to increase their investment. Special assessment bonus points will be given to commercial banks, and banks that meet the green loan growth rate standards will receive MPA (Macro Prudential Assessment) bonus points and priority for obtaining refinancing quotas. For commercial banks whose business areas are real estate and interbank business, strict control is imposed on high-risk areas. For banks with excessive concentration of real estate loans (such as some joint-stock banks), the scale of new housing loans is restricted. Banks with interbank liabilities accounting for more than one-third need to make additional provisions for liquidity reserves.

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