

The Impact of China's Shadow Banking on Systemic Financial Risks

Jin Liu*

University of Sydney (USYD), Sydney, NSW 2006, Australia

**Corresponding author: Liu011223@gmail.com*

Keywords: China's shadow banking; systemic financial risk; risk transmission process; governance options

Abstract: As a credit intermediary system that is free from supervision, shadow banking has the characteristics of low transparency, high leverage, and a single source of funds. Its operating risks can be transmitted throughout society and cause systemic financial risks. This article starts from the two aspects of "shadow banking" and "systemic financial risk", firstly, it will analyze the causes of China's shadow banking, and show the development status and risks of China's shadow banking; Secondly, the research will analyze the transmission route of the impact of shadow banking on systemic financial risks; finally, it will propose relevant governance opinions to promote the stable development of the financial system.

1. The development and risks of shadow banking in China

1.1 The background and development of shadow banking in China

Shadow banking emerged in the 1960s and 1970s when European and American countries experienced a disintermediation credit crisis, and then the United States carried out a series of financial innovations to break through interest rate controls, such as asset securitization [5], and deregulated the control of the financial sector. This had led to the development of many financial services and financial institutions with the characteristics of shadow banking. Because of different perspectives, scholars and institutions have different ways to define shadow banking.

The People's Bank of China (PBOC) has tried to consider the specifics of its "national circumstances" by defining "China's shadow banking as a credit intermediary involving entities and activities outside the conventional banking system" to provide "liquidity and credit conversion" and "may" become a source of "systemic risk or regulatory arbitrage" [2].

The reasons for the emergence and rapid development of China's shadow banking are as follows:

a. From the perspective of demand, the distribution of China's commercial bank loan is unbalanced, SMEs and local governments have greater financing needs, SMEs have difficulty in the financing, and financial repression prompts shadow banks to fill the financing gap.

b. From the perspective of supply, with the growth of residents' wealth, there is a strong demand for capital preservation and appreciation, and the pressure of deposit disintermediation is increasing. The generation of wealth management products provides an important source of funds for shadow banking.

c. From the perspective of regulation, banking regulatory arbitrage activities have spawned off-balance sheets and channel shadow banking businesses. The Chinese government's regulatory system for shadow banking is imperfect, and shadow banking can take advantage of regulatory loopholes to develop new arbitrage businesses.

d. From perspective of policy, China's financial innovation, the rapid development of financial technology, and over-stimulation of real estate had led to a decline in the rate of return of the real economy, Funds are divorced from reality and aggravate the shadow banking bubble.

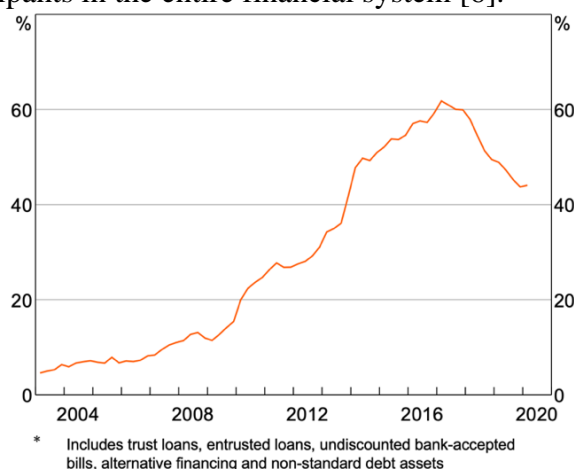
1.2 The development status of China's shadow banking

1.2.1 The total scale of funds is large

According to CBRC's work report, RMB loans increased by 19.77 trillion-yuan, accounting for 68.88% of the social financing scale. Most of the new loans came from shadow banks and were large in scale. As of the end of 2019, China's broad shadow banking scale was 84.80 trillion-yuan, accounting for 86% of GDP in 2019, and equivalent to 29% of total assets of the banking industry during the same period [1].

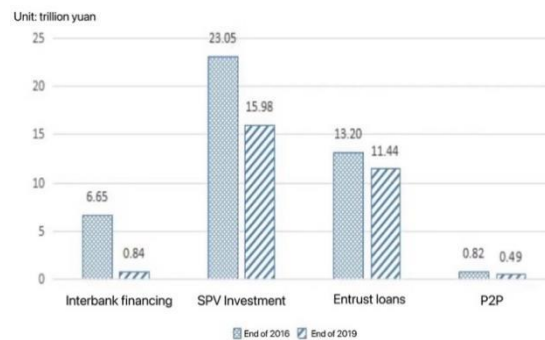
1.2.2 Tighter controls by the Chinese government

In recent years, due to the rapid expansion of shadow banking, China's financial system had potential safety hazards, so the Chinese government had begun to supervise shadow banking. As shown in Figure 1, the percentage of shadow banking in GDP has been declined from 2016 to 2020, mainly due to the decreased in the balance of bank wealth management products and asset management plans of non-bank financial institutions. According to the regulatory requirements, banks' off-balance sheet wealth management products need to be included in the PBC's macro-prudential assessment system, which reduced the proportion of wealth management products in shadow banking assets (Figure 2). It had a good effect on reducing the interconnection and fragility of the financial system. This also reduced regulatory arbitrage and potential liquidity risks and improves the ability to monitor the expansion rate of off-balance sheet credit. The China Banking and Insurance Regulatory Commission issued new asset management regulations to restrict trust companies' channel business, conduct special inspections on shadow banking business, and tighten supervision, and the subsequent declined in shadow financing activities had a wide impact on China's financial system and participants in the entire financial system [6].



Sources: CEIC Data; RBA; WIND Information

Figure 1: China-Shadow Finance per cent of nominal GDP



Sources: CBRC; PBC; Home of Online Loans

Figure 2: Changes in high-risk business

1.3 Risk Performance of China's Shadow Bank

1.3.1 High leverage

In 2019, China's macro leverage ratio was 249%, of which the corporate sector's leverage ratio was 150%, and the overall level was relatively high [1]. Shadow bank is not limited by the capital of traditional commercial banks. It can use financial leverage to raise debt to make capital leverage higher and make extensive use of derivative product transactions to obtain high returns with the help of high leverage [11]. This kind of risk market transactions cannot be dispersed. The interest rate risk and credit risk of the traditional banking industry will also accumulate in the financial system. The high leverage caused by shadow banking not only increase the debt and interest burden on social and economic activities, but also reduce the efficiency of capital turnover and use.

1.3.2 Credit risk

Shadow banking is free from financial supervision, its information transparency is low, and credit risks are difficult to detect during its business operations. Shadow banking credit risk is highly contagious and has a domino effect [8]. Shadow banking credit risk is highly contagious and has a domino effect. Once a debtor defaults in the financial market, under the background of asymmetric information, other debtors will regard it as credit risk, which will lead to a large number of default events. China's financial regulators have not yet established a sound credit risk transfer mechanism for shadow banks. At the same time, shadow banking strongly supports local government investment and financing platform projects with long construction periods and low efficiency, and there are potential credit risks. Once housing prices fall sharply, credit default events will increase substantially, which may lead to serious financial risks.

1.3.3 Imperfect supervision

Most shadow banks are engaged in financial business with high-risk preferences and complex product structure design. Unlike commercial banks, they are not constrained by capital adequacy ratio, deposit insurance system, and deposit reserve system, and are not protected by the deposit insurance system. So, they can take advantage of regulatory loopholes to carry out arbitrage. For example, the online lending platform is not subject to strict capital supervision requirements, and the qualification review of both investment and financing parties is not strict, which leads to low barriers to entry in these industries and a generally imperfect information disclosure system. Some banks, micro-loans, and other businesses have achieved the same functions as bank deposits, but they are not subject to the same supervision.

2. The influence mechanism and transmission process of shadow banking on China's systemic financial risks

With the richer business forms of shadow banking, financial institutions will form a network relationship based on the transaction chain. On the one hand, the risk of one financial institution will quickly spread to other financial institutions, and spread to the whole industry, causing the accumulation of financial risks; On the other hand, when a financial bubble causes financial risks, it will quickly cause financial crises in many industries through the transaction chain, resulting in the occurrence of systemic financial risks.

2.1 Affecting systemic financial risks through monetary policy

To avoid supervision, the shadow banking system packages loans in various forms, increases loan channels and bridge institutions, modifies accounting treatment, and so on, which seriously affected the authenticity of quantitative monetary instruments (such as loan amounts from financial institutions). Then, this situation could lead to inaccurate judgment on the macro-economy and insufficient regulation. Shadow banking business in China has various forms, but all of them belong to the credit-related business. Shadow banks "off-balance sheet" these loans in various ways and do not include them in the accounting of financial institutions' loan amounts, which challenges the effectiveness of monetary policy tools. In addition, the scale of social financing is a good supplementary index to observe the money supply in China, which plays an important auxiliary role in the choice of monetary policy [4]. However, the scale of social financing only includes undiscounted bank acceptance bills, entrusted loans, and trust loans, which lack accurate calculation of "quasi-loan" business [10]. In addition, the continuous innovation of products by non-financial institutions such as trust companies to achieve financing and profit pursuit has led to the reduction of controlled funds, which affects the deposit amount of banks and the reduction of statutory deposit reserve; The reason for the existence of excess deposit reserves is to mobilize the temporary demand of capital suppliers. The abundance of shadow banking business and the advantage of liquidity make the excess deposit reserve of commercial banks no longer important. These factors lead to an increase in China's money multiplier and an increase in the credit supply in the macroeconomic market. In a word, the shadow banking system makes many loans not included in the monitoring indicators, which seriously affects the authenticity of liquidity, weakens the effectiveness of monetary policy tools, and further increases the difficulty for the central bank to observe and regulate the financial system through monetary policy tools.

In addition, monetary policy conducts the implementation effect of monetary policy through the change of financial asset price, monetary quantity, and credit quantity [9]. Shadow banks mostly adopt credit chain business forms, and more and more abundant products are excessive credit expansion, which will not be affected when the economy runs smoothly. However, when encountering economic fluctuations, the impact of the credit chain will lead to greater deviation of products that are not within the scope of supervision, which will affect the central bank's regulation of money quantity. The increasing complexity of the shadow banking system, the opaque transactions and the absence of supervision will increase the uncertainty of the implementation and effect of monetary policy.

2.2 Affecting systemic financial risks through a leverage ratio

With the continuous expansion of shadow banking and the particularity of its business activities, the emergence and diffusion of systemic financial risks have intensified. Most of the shadow banks in China are attached to traditional commercial banks, which is a transformation and supplement to

their basic business. The main reason for the emergence of Chinese shadow banking is that it evades regulation and escapes from the inherent financial supervision system, and its "special" operation mode makes the leverage ratio higher. The main operation modes of China's shadow banking are "interbank certificates of deposit", "interbank wealth management" and "outsourcing investment". Under this complex business cross-product interoperability mode, maturity mismatch and credit risk are relatively strong, and the financial macro leverage ratio is enhanced. The application of credit expansion and maturity mismatch in the network of various financial institutions will increase the leverage ratio step by step, and finally, affect the operation of the whole macroeconomy under the amplification of financial accelerators [7].

2.3 Affecting systemic financial risks through market behavior

After the local crisis of shadow banking breaks out, the institutions in the trading chain will take the lead in selling the corresponding products, which will send a negative signal, and the rapid accumulation of investors' risk aversion will cause the withdrawal of funds, resulting in abnormal market volatility [12]. Due to the existence of information asymmetry and fragility in the financial system, local behaviors will be amplified, which will have a serious impact on other investors and markets. The business in shadow banking involves corporations, commercial banks, and non-financial institutions. If a trade goes wrong, the balance of funds in the market will be disrupted and the market will fluctuate. Market volatility will affect investors' information, which will lead to a large amount of capital outflow in the money market and capital market, resulting in systematic risk.

3. Governance suggestions to reduce the systemic financial risks of shadow banking

3.1 To strengthen the self-management of financial institutions

3.1.1 To strengthen and improve the shadow banking information disclosure mechanism

Effective disclosure and management of financial market information can improve the operational efficiency of financial markets and reduce financial market risks. From these perspectives: To improve the regulatory transparency of banking supervision department, and establish key risk indicators for shadow banking to regularly assess risks; To establish a statistical information disclosure mechanism of shadow banking risk and scale, improve the timeliness of major information disclosure, and timely detect the existence of financial markets; To increase the disclosure and supervision of financial information, especially the information disclosure of innovative financial products; To improve the ability of supervisors, conduct regular training and assessment, and improve the risk early warning ability of supervisors.

3.1.2 To Increase transparency of information

Financial institutions can increase the transparency of shadow banking by disclosing information and reducing the degree of information asymmetry between the two sides of the transaction. Through information disclosure, financial institutions can restrain speculation and market manipulation, and prevent financial derivatives market risks. At the same time, relevant data can be released regularly to build an effective information communication platform, to avoid the systemic risks that may be caused by shadow banking.

3.2 To improve the supervision system of financial institutions

3.2.1 To expand the scope of shadow banking supervision and improving the supervision system

China's shadow banking supervision has the problem of ambiguous scope and a lagging supervision system [3]. First, the scope of supervision should be expanded, and all shadow banking businesses and products should be included in the supervision system. By implementing differentiated supervision on different forms of shadow banking, the effectiveness and pertinence of supervision can be improved. In addition, it is necessary to introduce laws and regulations that conform to the characteristics of mixed operation and diversified development of China's shadow banking as soon as possible, to reduce the regulatory arbitrage risk of shadow banking, and to standardize the operation behavior of shadow banking.

3.2.2 To strengthen the joint supervision of the shadow banking system and improve the risk isolation mechanism

The expansion of shadow banking has resulted in the formation of close business connections in the financial system, resulting in higher transmission risks. Therefore, it is necessary for all financial regulatory agencies to jointly build a monitoring system, for timely information transmission and sharing. Also, joint supervision of the shadow banking system can effectively reduce the occurrence and contagion of shadow banking risks. In addition, the risk isolation mechanism should be established to prevent shadow banking risks from spreading to the traditional financial system and prevent cross-infection of risks.

3.2.3 To promote differentiated supervision of shadow banking business

With the rapid development of shadow banking, its business and product forms are gradually diversified and have different characteristics. Therefore, the supervision of shadow banking should be transformed from institutional supervision to business supervision, which should start from the shadow banking business, and carry out classified and differentiated supervision according to the characteristics of different businesses.

References

- [1] Chinese Government Research Bureau. (2020). *China Banking and Insurance Regulatory Commission Working Paper 2020 Issue 9. China Banking and Insurance Regulatory Commission*. <http://www.cbirc.gov.cn/cn/view/pages/ItemDetail.html?docId=947343&itemId=934&generaltype=0>
- [2] Elliott, D., Kroeber, A., & Qiao, Y. (2015). *Shadow banking in China: A primer. Economic Studies at Bookings*, 3(2015), 1-7.
- [3] Liu, J. L., & Ma, Q. (2021). *Empirical study on the impact of shadow banking on systemic financial risk in China -- Based on provincial panel data from 2013 to 2020 [J]*. *Journal of Social Sciences of Jilin University*, 2021, 61 (6): 107-115. <https://doi.org/10.15939/j.jujss.2021.06.jj2>
- [4] Maxwell, S., & Grace, T. (2020). *Shadow Financing in China. RESERVE BANK OF AUSTRALIA*. <https://www.rba.gov.au/publications/bulletin/2020/dec/shadow-financing-in-china.html>
- [5] Pan, H. J., & Fan, H. (2021). "The Stability of Banking System with Shadow Banking on Different Interbank Network Structures". *Discrete Dynamics in Nature and Society*, vol. 2021, 15, Article 6650327. <https://doi.org/10.1155/2021/6650327>
- [6] Zhang, Q. J., Chen, S., & Jin, Y. (2020). *The impact of off-balance-sheet regulations on bank risk-taking: Evidence from China. Research in international business and finance*, 54, 101297. <https://doi.org/10.1016/j.ribaf.2020.101297>
- [7] Reserve Bank of Australia. (n.d.). *The Transmission of Monetary Policy*. <https://www.rba.gov.au/education/resources/explainers/the-transmission-of-monetary-policy.html>
- [8] National Institution for Finance Development Chinese Academy of Social Sciences, Institute of Economics Chinese Academy of Social Sciences, & Social Sciences Academic Press. (2022). *Financial Supervision Blue Book: China*

Financial Supervision Report (2022). Social Sciences Academic Press.

[9] Li, Q., & Shen, X. (2014). *Problems existing in China's shadow banking and its regulatory measures. Shang (26), 2014(26):162-162.*

[10] Zou, Y. (2017). *The main features and risks of shadow banking. China State Information Center. <http://www.sic.gov.cn/news/455/8607.htm?from=timeline>*

[11] Sheng, S. (2014). *The scale of social financing consists of four major parts and ten sub-items. The State Council Information Office of the People's Republic of China. <http://www.scio.gov.cn/xwfbh/xwbfbh/wqfbh/2014/20140115/zy30172/Document/1360070/1360070.htm>*

[12] Li, X. Q., & Sun, T. (2016). *The Impact of Shadow Banking on the Effectiveness of my country's Monetary Policy. Research on Financial Issues, Article: 1000176X (2016) 01004907*