

Shadow Banking and Policy Uncertainty

Yifan Zhang¹, Chao Pan²

¹Shandong Vocational and Technical University of International Studies, Rizhao, Shandong, 276826, China

²Southwestern University of Finance and Economics, Chengdu, Sichuan, 610000, China

fang.zhouer@hotmail.com

Keywords: Central bank, Shadow banking, Policy uncertainty, Expected management

Abstract: In recent years, policy uncertainty tends to rise with the slowdown of China's economic growth, the inadequate transmission channels of monetary policy make the effectiveness of non-banking financial institutions decline, resulting in the expansion of the scale of non-banking financial institutions. With the introduction of new regulations on capital management, regulatory authorities continue to strengthen the supervision of non-banking financial institutions, while reducing systemic risks.

1. Introduction

Since 2016, with the advancement of China's financial deleveraging process, in order to improve the coordination efficiency among regulatory agencies, better reduce social financing costs, improve the transmission effect of monetary policy to the real economy, and more effectively prevent systemic financial risks, financial regulators have established a macro Prudential assessment system (MPA), and cooperated with financial deleveraging through monetary policy tools. Cheng, shadow banking has become the top priority of financial supervision. It has continuously issued regulatory policies to comprehensively regulate and tighten credit and non-standard businesses, strictly controlled off balance sheet businesses of commercial banks, and restricted the "extensive" expansion of non credit financing channels, which has led to the shrinking pressure on the shadow banking system with continuous and high growth in the past few years. The purpose is to eliminate commercial banks and shadow through strong supervision. The risk contagion among sub banks, after the shadow bank and the commercial bank's assets and liabilities are highly related, the asset status of the shadow bank will directly affect its default probability and then affect the asset status of the commercial bank, further make the risk transmit from the shadow bank risk to the commercial bank, and finally cause the generation and accumulation of systematic risk. Commercial banks are the leading part of our financial system and the main channel of monetary policy. The other purpose of strong supervision over shadow banks is to dredge the channel of monetary policy transmission and give full play to the financial intermediary role that commercial banks should have. In the past, the radical monetary policy and the expansion of commercial banks' off balance sheet business led to the excessive investment of bank funds into the housing market and the stock market, indirectly It has promoted the process of virtual economy and leverage.

2. Shadow Banking and Financing Scale of the Whole Society

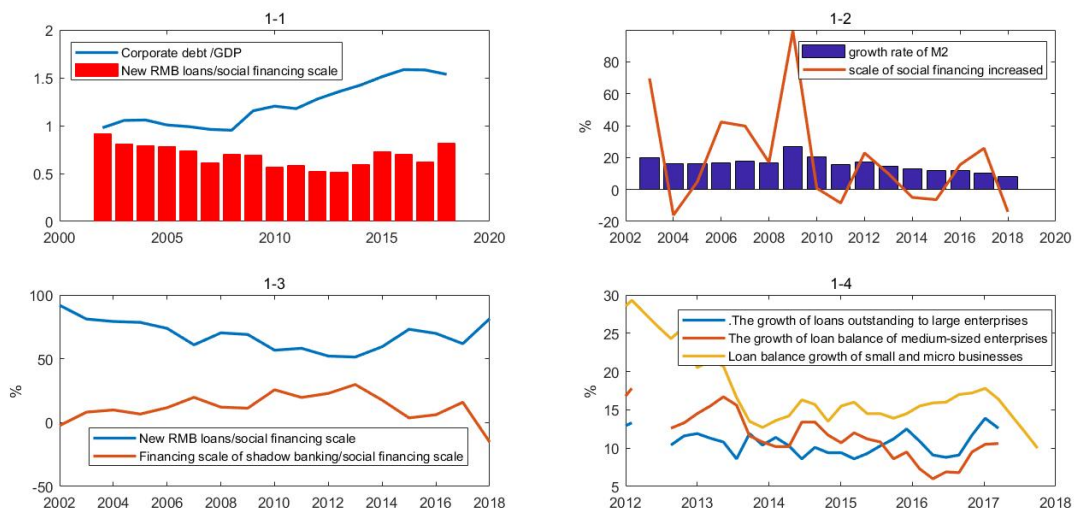
It can be seen that the debt level of China's enterprise sector has been on the rise until 2017 (Figure 1-1), especially in the context of China's slowing economic growth, so deleveraging is particularly urgent and important. However, if the process of deleveraging is too fast and causes enterprises to sell assets to repay debts, asset prices will continue to decline, and deflation will further increase the debt burden of enterprises, The deterioration of the balance sheet of enterprises is likely to lead to the systemic economic risk of "debt deflation", which makes commercial banks contract credit, reduce the scale of on balance sheet loans and increase the scale of off balance sheet

businesses. The mismatch of credit resources makes deleveraging increase the future systemic risk level. It can be seen that the leverage ratio of the enterprise sector in China has been increasing from 2009 to 2016, however, the proportion of new RMB loans in the scale of social financing has been declining year by year (Figure 1-1). One of the reasons is the constant expansion of off balance sheet business of commercial banks, which has a crowding out effect on RMB loans. A large proportion of corporate sector debt is obtained through shadow bank financing. Since a large proportion of the liabilities of shadow banks in China come from commercial banks, the liabilities of shadow banks are highly related to the assets of commercial banks, thus forming a risk contagion mechanism between commercial banks and shadow banks. At the same time, it can be seen that the growth rate of M2, the debtor of financial system, has been relatively stable in recent years, but the scale of social financing as the asset side has increased. The rapid decline or even a large decline (Figure 1-2) has a certain impact on the liquidity of market funds, while the scale of social financing represents the total amount of funds obtained by the real economy from the financial system in a certain period of time. This phenomenon shows that the stimulus of monetary policy to the real economy is becoming weaker and weaker, and a large amount of money supply only stagnates in the financial market and “idles” to form financial leverage, without entering the real economy to form the capital to expand reproduction. Strengthening macro Prudential management can reduce systemic financial risks, but also to a certain extent inhibit the growth of social financing scale, which may lead banks, especially small and medium-sized banks, into Liquidity Dilemma, which may be transmitted to bond market, stock market and even real estate market in a very short time.

Commercial banks play a major role in the operation of the shadow banking system. In reality, commercial banks not only undertake the functions of selling and managing shadow banking products on a commission basis. Moreover, some of its off balance sheet businesses are shadow banks themselves, especially when the real economy is weak, due to the increase of enterprise default rate and the decrease of credit scale, commercial banks are faced with higher opportunity costs. They often indirectly finance enterprises through “blood transfusion” to obtain high returns. Commercial banks become the actual capital suppliers of shadow banking system, which is different from that of other countries the funds of foreign non-bank financial institutions come from investors, and a large part of the funds of shadow banks in China come from the fact that the essence of commercial banks is “the shadow of banks”. Commercial banks bypass financial supervision through trust loans, entrusted loans, asset management projects of securities institutions, money market funds and other channels, and transfer deposit and loan business to off balance sheet to realize arbitrage. These channel businesses are risk isolation in name, but in fact, they are still commercial banks' rigid cashing and underpaying risks. (Tao Zha, 2016) it is considered that the growth of shadow banking has damaged the effectiveness of monetary policy to the banking system. However, under the conditions of unbalanced market development, single financing channels and relatively short financial instruments, the shadow banking system has filled the gap of formal finance objectively, and has broken through the financial regulatory constraints and accumulated the risk of financial bubbles through the specific shadow banking product innovation. The business relationship between commercial banks and non bank financial institutions has formed a complex network structure with close relationship between shadow banks and commercial banks. The “domino effect” in series among financial institutions has become a channel for risk transmission and spread, which indirectly constitutes the internal vulnerability of the financial system.

When economy downward, commercial Banks tend to shrink the credit scale, reverse promoted the commercial bank loan asset expansion, shadow banking showed a counter-cyclical characteristics, (Tao Zha, 2018), at the same time, because our country implement countercyclical macroeconomic regulation and control, expanding the monetary policy of central bank monetary easing, but the commercial bank risk factors tend to consider the real economy and reluctant to lend, again to stimulate the transfer of the commercial Banks to shadow banking assets, shadow Banks and commercial Banks on the assets formed by “water bed effect” (Figure. 1-3), Stop money into the real economy, severely weakened the effectiveness of monetary policy, therefore strengthen to shadow banking regulation, to dredge the credit transmission channels, improve the effectiveness of

monetary policy, but our country has been the problem of liquidity in the virtual economy idling, profit-driven nature lies in the capital, have been chasing in the real estate market and stock market led the virtual economy of the high rate of return, this will make the same size limit the effectiveness of monetary policy, especially in the current to leverage and stability under the background of the lever, the biggest effect is difficult to directly to the commercial bank financing is given priority to with private economy of micro, small and medium enterprises, From Figure 1-4 is obvious in recent years, small micro enterprise loan growth decline rapidly, so you need prudent monetary policy to provide structural to leverage appropriate macro financial and economic environment, adhere to the overall stability of lever and structural coordination in order to leverage, if go to leverage dynamics of large commercial Banks dominance not flow to the entity economy lead to small and medium-sized enterprises of direct financing in debt crisis, deleveraging will cause damage to the real economy, Clear from Figure 1-4 small micro enterprise loan growth declines rapidly in recent years, so you need prudent monetary policy to provide structural to leverage appropriate macro financial and economic environment, adhere to the overall stability of lever and structural coordination in order to leverage, if efforts to leverage large commercial Banks dominance not flow to the entity economy lead to small and medium-sized enterprises of direct financing of a debt crisis, deleveraging will cause damage to the real economy, although deleveraging can alleviate the cost burden of small and medium-sized enterprises, at the same time also can affect the public's expectations for future fiscal and monetary policy, To make investment and financing decisions affecting the future of enterprises and increase the uncertainty of the impact of policies on the real economy.



Note: The data is from the Wind macro database, which is collated by the author.

Fig.1 Overview of Shadow Banking and Financing Scale of the Whole Society

3. Economic Policy Uncertainty and Entrepreneurial Confidence

After the outbreak of the financial crisis, shadow Banks has to be more attention to the influence of systemic risk, especially with interest rates at zero lower bound, the fed is expected to manage the new form of prospective Guidance (Forward Guidance), the fed expected management policies to reduce the market because of the inconsistent to raise interest rates expected cause of economic fluctuations, suppresses the unnecessary risk, essence is a promise for the central bank expected management rules, the expected management for future inflation and interest rate policy to guide market expectations, target market expectations and the central bank forecast, instead of the traditional monetary policy to improve the current output gap, Monetary policy inclination, helps to reduce the uncertainty factors of market volatility, make more close to the market's expectations of future trends, this for our country implement monetary policy with a nature of expectation management has very important significance, monetary policy in our country is in transition from

quantitative regulation to price regulation is the transition stage, the shadow banking scale effect makes quantitative monetary policy effectiveness is decreased, but the price type of benchmark interest rate monetary policy cannot fully reflect short-term money market supply and demand of funds, poor channels cause interest rates transmission mechanism, China's monetary market interest rate volatility increases significantly. According to the hypothesis of the term structure of interest rates, long-term interest rate is equal to the expected short-term interest rate risk premium, so the policy of the central bank pledged to keep interest rates steady, the longer will reduce uncertainty factors and the corresponding risk premium, the greater the influence of monetary policy on long-term interest rates, and long-term interest rates are the key factors influencing the enterprise investment decision making, and implementation is given priority to with prospective expectations of management can be stable interest rates and risk premium, ultimately achieve the goal of stable enterprise expected, highlighting the importance of strengthening communication and public policy transparency. Lee and Becker (2015) compared the interest rate fluctuations of US Treasury bonds in 2008-14 and 2000-08, and believed that the expectation management policy was effective. At present, China's central bank primarily through open market operations to ensure market liquidity and stability, so the central bank can strengthen the guide of market expectations, thereby helping to enhance the control of the medium and long-term interest rates, reduce market volatility and promote financial market stability, in normal times guided by oral open to irregular period accurate state dependent expected management gradually transition, can be avoided by promising to bring reputation, with the constant deepening of interest rate marketization in our country and the rise of policy uncertainty (Figure 2-1), large systemically important financial institutions in our country, A close correlation between shadow Banks and commercial Banks and irreplaceability is higher, the financial markets fault-tolerant rate is low, once certain types of institutions are in trouble, will weaken confidence in the market in a short time intensifying market panic, destabilize the financial system, money shortage in June, 2013 incident, the central bank did not inject liquidity nor for the future operation timely disclosure exacerbated the market panic, which in turn cause market turmoil, nearly causing systemic risk events, expected management can more effectively guide financial institutions to help the central bank's expectations of the policy rate path, And with the macro-prudential policy framework to effectively curb the “herd effect” and “animal spirits” of speculators in the financial market.

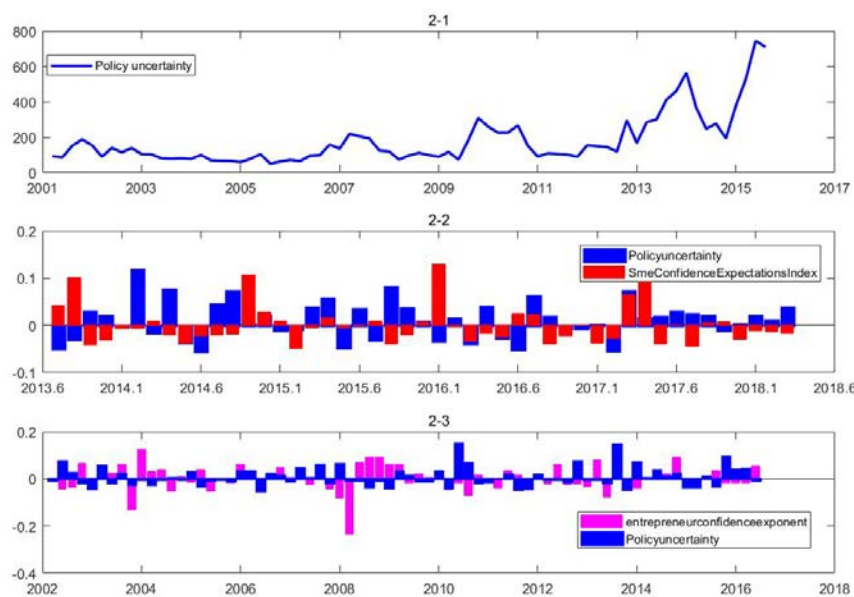


Fig.2 Economic Policy Uncertainty and Entrepreneurial Confidence

Note: entrepreneurs confidence index change rate units (%), other (%), small and medium-sized business confidence index (expected) derived from standard chartered bank (China),

<https://www.sc.com/cn/business-sme/smei-report/>. Entrepreneurs confidence index from the Wind macro database, China economic policy uncertainty index from the federal reserve bank of st. Louis website, <https://fred.stlouisfed.org/series/CHIEPUINDXM>.^①

Our country central bank monetary policy is more inclined to discretion rather than commitment rules, policy itself by increasing uncertainty affect the real economy enterprises expectations, in turn, to the enterprise investment and financing have indirect inhibition and periodic characteristics show the inverse (Figure 2-2, 2-3), Ilut&Schneider (2014) introducing confidence and uncertainty medium-sized DSGE model, found that loss of confidence of productive forces as “unrealized” bad news, the confidence of the change over time become the main source of business cycle fluctuations. Smes are more likely to face the imperfect credit market, and their cash flow is more correlated to fixed asset investment than large enterprises, so they are particularly sensitive to macroeconomic turbulence (Rondi, Laura, et al, 1993; Mark Gertler&Simon Gilchrist, 1994; Oliner S&Rudebusch G, 1996), and the big enterprises and state-owned enterprises can get direct financing through the capital market or government's recessive guarantee, its response to the credit markets are not sensitive, policy uncertainty increased financial institutions can lead to shrink their balance sheets, thereby deepening financial friction degree, and in the economic situation when facing pressure under the financial accelerator will magnify the effect, can be seen from the entrepreneurs confidence index from 2008 to 2010 the obvious characteristic, after the financial crisis under the “four trillion” stimulus rate have an obvious jump. Through the cost of capital and capital marginal rate of return channel transmission, uncertainty of economic policy in the period of economic recession will rise in a larger extent, increasing the cost of funds for business investment inhibition, especially in the financial policy uncertainty under friction through financial markets further enlarge this inhibition, financial policy uncertainty under friction will significantly improve the external finance premium, make the enterprise investment decision-making for policy more sensitive and careful, when have a higher risk of default, policy uncertainty for the output of the negative impact is more obvious. Lucas Husted et al (2019) by constructing monetary policy uncertainty index found that monetary policy uncertainty by real option and financial friction resulting in a decline in the investment of the corporate sustainability, investment irreversibility and the negative impact of financial constraints can be magnified MPU, the rise of policy uncertainty will reduce the return on assets (Brogaard et al, 2015), on the basis of the current monetary policy implementation management, makes the central bank's policy intentions become more clear, reduce the uncertainty of future policy direction and to reduce the risk premium, So as to effectively alleviate the problem of high social financing costs. Through stabilize public expectations can make the enterprise investment decisions have relatively clear plan for the future, thus reduce caused by all kinds of uncertainty factors impact the risk of excessive dependence on the shadow banking, can improve enterprise financing and stable social financing scale, alleviate financial friction reducing effect of “water bed” enhance the effectiveness of monetary policy.

4. Conclusion

In order to cope with the impact of shadow banking on the traditional banking system and mitigate the expected impact of policy uncertainty on entrepreneurs , Central Banks should strengthen communication with financial markets to better manage expectations, Current central bank communication policy measures such as the quarterly monetary policy report, the central bank's quarterly meeting, financial stability development council meeting, etc., these open expected guidelines have been able to guide the public expectations but still lack of long-term mechanism,

^① The Uncertainty index of China's economic policies has been continuously updated since January 1995. Baker et al. (2013) counted the number of SCMP reports that met the requirements each month, then divided it by the number of all SCMP reports in that month, and standardized the index in January 1995 to 100. Standard chartered bank, China's small and medium-sized enterprises (smes) confidence is based on a dispersion index produced by small and medium-sized enterprise research results, and measure the confidence of the national more than 500 small businesses in the home, by enterprise management present situation, the expectations for the future, as well as the enterprise credit three dimensions, to the survival and development of small and medium-sized enterprises in China is real-time and effective comprehensive evaluation and dynamic observation of continuous research.

first of all, the central bank can try the expected management during the period, can be avoided by the policy of economic uncertainty and a change credit losses, in the economic stability improves the management level of the central bank forecast, increase central bank policy credibility credibility actively guide public expectations, with the improvement of the bank credit, can play better in the future in extraordinary times monetary policy effect, Enhance the public expect quick recovery business investment confidence, thus reduces the “flood irrigation” unexpected impact for the economic impact of “rise”, in order to reduce the risk of systemic economic level, at the same time cooperate macro-prudential assessment system, careful financial deleveraging process can effectively reduce the level of systemic financial risk, through the harmonious collocation of monetary policy and macro-prudential policy uncertainty and risk impact for the financial markets and the macroeconomic impact, the central bank should conform to the principle of market economy at the same time with the expected future management decision-making system. To ensure the independence of the central bank in the implementation of monetary policies and the power to use monetary policy tools, the regulatory authorities should establish a regulatory framework combining macro-control and micro-regulatory policies, accurately grasp the degree of deleveraging, and prevent the spread of financial risks among departments.

References

- [1] Baker, S, Bloom, N. Davis, S. and Wang,X, “A Measure of Economic Policy Uncertainty for China”, Working Paper, University of Chicago,2013.
- [2] Brogaard, Jonathan and Andrew Detzel, “The Asset Pricing Implications of Government Economic Policy Uncertainty”, Social Science Electronic Publishing, 61(1), pp.3-18, 2015.
- [3] Chang C., K. Chen, D. Waggoner, and T. Zha, “Trends and Cycles in China's Macroeconomy “, NBER Macroeconomics Annual Vol 30, pp. 1~84, University of Chicago Press, 2016.
- [4] Chen Kaiji,Ren, Jue and Zha, Tao ,”The Nexus of Monetary Policy and Shadow Banking in China”, American Economic Review , 108(12), pp.3891-3936,2018.
- [5] Fabio Milani and John Treadwell, “The Effects of Monetary Policy “News” and “Surprises””,44(8), Journal of Money, Credit and Banking, 44(8), pp.1667-1692,2012.
- [6] Gali J. Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework, Princeton: Princeton University Press, 2015.
- [7] Gilchrist G S. Monetary Policy, “Business Cycles, and the Behavior of Small Manufacturing Firms”. The Quarterly Journal of Economics, 109(2), pp.309-340, 1994.
- [8] Ilut, Cosmin and Martin Schneider, “Ambiguous Business Cycles”, American Economic Review, 104(8), pp.2368~2399,2014.
- [9] Laura Rondi , Brian Sack , Fabio Schiantarell and Alessandro Sembenelli, “Firm's financial and real responses to business cycle shocks and monetary tightening: evidence for large and small Italian companies”, Ceris Working Paper,1993.
- [10] Leeper, E.M., M. Plante, and N. Traum, “Dynamics of Fiscal Financing in the United States” , Journal of Econometrics, 156(2), pp.304-321,2010.
- [11] L. Husted, J. Rogers and B. Sun, “Monetary policy uncertainty”, Journal of Monetary Economics, <https://doi.org/10.1016/j.jmoneco.2019.07.009>.