



China's Monetary Policy Framework

——Analysis based on Monetary Policy Report

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Abstract. In recent years, the intermediate target of China's monetary policy has gradually shifted from quantity based to price based, which is also reflected in the People's Bank of China (PBC)'s 2024 Q2 Monetary Policy Implementation Report. In the report, the PBC mentioned the need to reform the pricing mechanism of LPR, which means decoupling LPR from MLF interest rates and gradually linking it to the 7-day reverse repo rate. In order to explore the reasons for the reform, this article first reviews the discussions on monetary policy in the literature, sorts out the transmission path framework of China's monetary policy, and finally summarizes the reasons and directions for the reform of the PBC. In short, the PBC is gradually forming a price based monetary policy target, which is also an important aspect of China's reform.

Keywords: Monetary policy transmission ; Reform; Interest Rate

1 Introduction

1.1 Quantitative Monetary Policy and Interest Rate Monetary Policy

There are two main types of monetary policy rules. One is the quantitative monetary policy rule, which refers to the central bank regulating the macro economy by manipulating the total amount of base money based on the theory of monetary quantity. Classic theories include the Friedman single rule and the McCallum rule. Another type is the price based monetary policy rule, which refers to the central bank

adjusting short-term interest rates to achieve potential output or inflation targets, mainly represented by the "Taylor rule".

Compared with quantity based tools, the biggest advantage of price based tools is transparency, which means that price based tools can better transmit information related to government behavior to the market (Calvo and Vegh, 1999; Fan, 2023). Another advantage is contractility, where price based tools can better control inflation and make contractionary measures endogenous (Alesina and Barro, 2000). However, due to constraints such as and imperfect financial market structure, China's price based tools may not be able to fully and effectively exert their regulatory capabilities (Ma, 2011). As far as China's monetary policy practice, since 1998, the People's Bank of China has always followed the quantitative monetary policy led by M2. Although the interest rate regulation policy has increased in terms of both the types of tools and the frequency of operation in recent years, it is undeniable that China has not yet formed a sufficiently smooth interest rate transmission mechanism. Purely Taylor Rule can't reflect the reality of China's monetary policy. In fact, China implements a monetary policy that balances quantity and price (Zheng, 2022).

1.2 Formation of LPR in China

LPR was come up by PBC in August 2019. Its core is that LPR anchors the medium-term lending facility (MLF) interest rate. In the short term, LPR reform aims to reduce the implicit lower limit of loan interest rate and the bank's coordinated pricing behavior. In the long term, the main goal of LPR reform is to promote interest rate marketization. Admittedly, the LPR reform has its breakthrough aspects, mainly reducing the impact of the loan benchmark interest rate with strong planning color on the loan market interest rate, and introducing the transmission mechanism of the market-oriented interest rate system on the loan market interest rate, which is a useful attempt to solve the problem of dual track interest rate system (Guo, 2020; Xu et al., 2020; Xu & Liu, 2024). In this regard, the People's Bank of China issued the supplement of China's Monetary Policy Implementation Report in September 2020, which featured the LPR reform and proposed to improve the transmission efficiency of monetary policy, promote interest rate marketization and other reform achievements. However, it should also be noted that the LPR reform still has its limitations. Intuitively, LPR anchors the MLF interest rate, and there is still a certain gap between the MLF interest rate and the money market and bond market interest

rates (Peng, 2020). Therefore, the fundamental issue of the dual track interest rate system has not yet been addressed, and the merging of deposit interest rates has not yet broken the ice. There is distortion in the transmission of deposit interest rates to loan interest rates, and there is still no substantial progress in interest rate marketization. In this context, the Monetary Policy Implementation Report of the People's Bank of China for the second quarter of 2024 further clarifies that LPR should gradually decouple from MLF interest rates and promote interest rate liberalization.

2 Discussion

2.1 Monetary Policy Tools

China's monetary policy tools mainly include quantity based policy tools and price based policy tools. Quantitative tools mainly refer to adjusting market liquidity through reserve ratio. Price based tools include OMO, standing lending facilities (SLF), and MLF, which in turn affect money market interest rates and loan market quoted rates (LPR).

Overall, China's reserve requirement ratio has shown a trend of first continuously increasing and then continuously decreasing. From 2002 to 2011, with the rapid growth of China's economy and the continuation of the dual surplus pattern, a large amount of foreign exchange funds flowed into China, resulting in a huge amount of foreign exchange reserves after settlement, causing a passive rise in China's base currency and promoting the growth rate of M2. However, it also weakened the independence of monetary policy. In order to recover the huge amount of foreign exchange reserves, an important approach is to continuously increase the statutory reserve requirement ratio, freeze excess base currency, and solve the problem of excess liquidity. The highest statutory reserve requirement ratio has reached over 20%. After 2012, China's economic growth continued to decline, requiring a moderately loose monetary policy for countercyclical regulation. The PBC thus gradually reducing the required reserve ratio and releasing the previously frozen base currency (Liu, 2024).

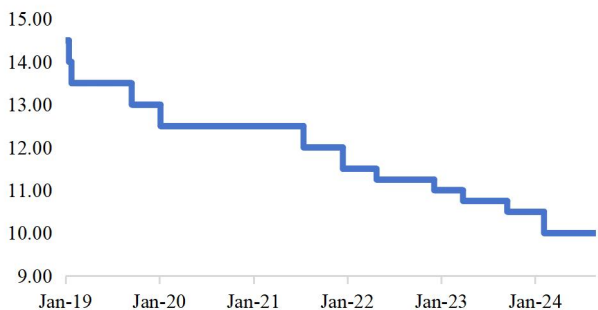


Fig. 1. Reserve Requirement Rate

Open Market Operation (OMO) is a major monetary policy tool of the PBC to regulate market liquidity and affect money supply and market interest rates. OMO can affects economic activity, such as reducing inflation by tightening liquidity during economic overheating, and stimulating investment and demand by releasing liquidity during economic downturns. The operational methods of OMO include forward repurchase, reverse repurchase, spot trading, and issuance of central bank notes. Essentially, the central bank directly participates in the purchase of treasury bond and central bank bills in the market and regulates the interest rate in the inter-bank market.

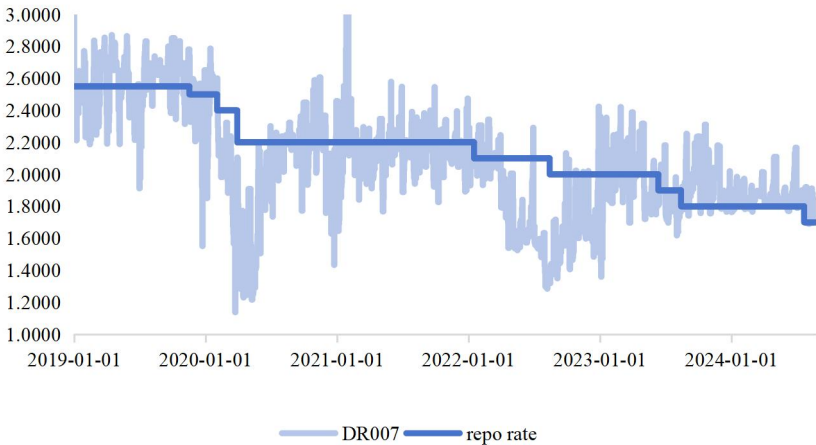


Fig. 2. Repo rate v.s. DR007 rate

SLF, as a way for PBC to provide short-term liquidity to the interbank market, has become the upper limit of interbank interest rates. SLF rate together with the excess reserve requirement ratio, forms an interest rate corridor. On the other hand, the central bank provides medium liquidity to the financial system through MLF operations, conducting MLF operations in mid month before July 2024. At the same time, the LPR is anchored to the Medium-term Lending Facility (MLF), with the central bank using the MLF rate as a policy rate to influence the LPR quotation. This serves as the benchmark rate for the credit market and directly impacts loan interest rates. Thus, the MLF rate has become a key component in the transmission of interest rates in China.

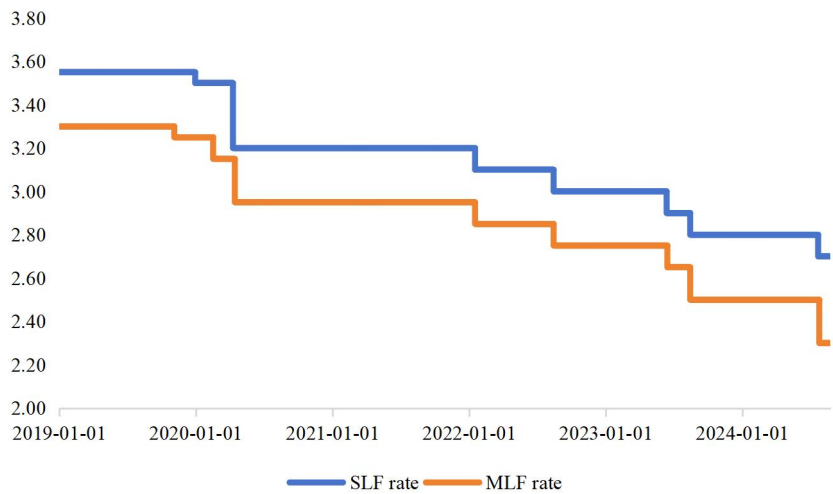


Fig. 3. SLF rate v.s. MLF rate

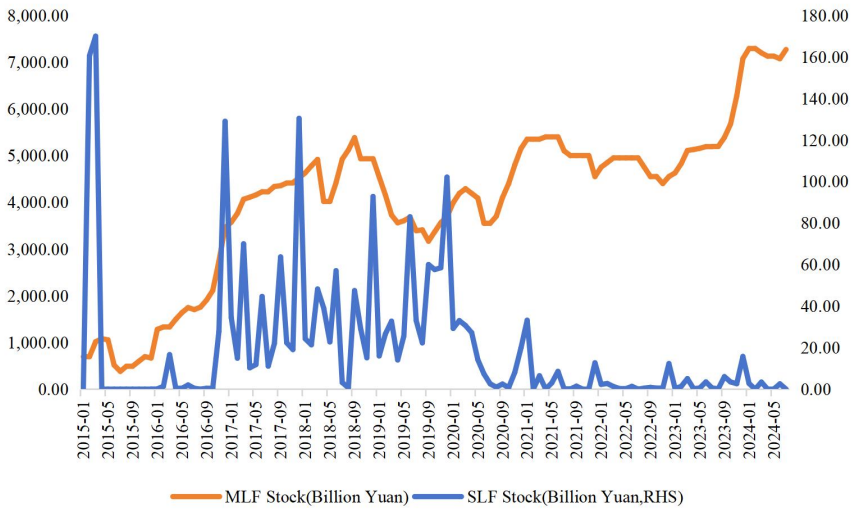


Fig. 4. SLF stock v.s. MLF stock

The Loan Prime Rate (LPR) refers to the rate calculated and published by the National Interbank Funding Center, authorized by the People's Bank of China (PBOC). It is based on the lending rates that each quoting bank offers to its premium clients and is formed by adding a spread to the open market operation rate. The actual lending rate of each bank can be determined by adjusting the LPR according to the borrower's credit standing and taking into consideration factors such as collateral, loan term, interest rate fluctuation mechanism, and type of loan.

The LPR quoting banks currently consist of 20 commercial banks. These banks must submit their quotes to the National Interbank Funding Center by 9:00 a.m. on the 20th of each month (postponed if on a holiday), using the method of adding a spread to the open market operation rate (primarily the MLF rate). The National Interbank Funding Center calculates the LPR by taking the arithmetic average of the quotes after removing the highest and lowest values. Currently, the LPR includes two maturities: one-year and over five-year terms.

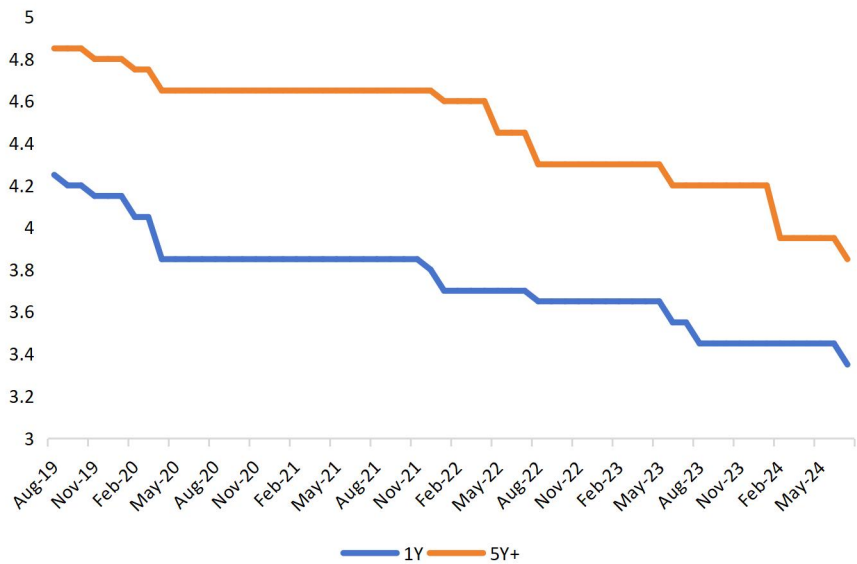


Fig. 5. LPR rate

2.2 Monetary Policy Transmission

After the central bank determines the ultimate goal and direction of monetary policy regulation, it influences the operational objectives through appropriate monetary policy tools based on the actual situation. In terms of quantity, whether through refinancing, reserve requirement ratio cuts, open market operations, or MLF, it can directly affect the liquidity level of the banking system. In terms of price, the open market operating interest rate (such as reverse repo) can affect the benchmark interest rate in the goods market, MLF interest rate can affect LPR, and the change of interest rate in the money market and credit market can be transmitted to the yield of treasury bond bonds. As shown in Figure 6, on the one hand, the central bank can influence interbank market interest rates through open market operations, thereby affecting money market interest rates. On the other hand, monthly MLF operations can affect LPR and thus impact real economy loan interest rates. The transmission from operational rate to intermediary rate and ultimate rate mainly includes two channels. One is the monetary channel on the debt side, also known as the interest rate channel. The central bank affects the debt cost of financial institutions through monetary policy, which in turn affects the actual interest rate levels in different markets and

ultimately transmits to the economic system. The second is the credit channel between the asset side and the financial market side. The central bank influences the credit availability of economic entities through monetary policy, and ultimately transmits it to the economic system. At present, China's monetary policy transmission is mainly through the credit channel (Sun Wei and Zhang Nan, 2020). Further, the transmission of operational targets to intermediary targets in China is often effective in different financial markets. The benchmark interest rate of the money market, such as DR007, can effectively affect the interest rate of the money market. The pricing of the loan interest rate by commercial banks is also basically based on LPR. The yield of treasury bond can effectively affect the interest rate of the bond market. However, the transmission between different markets is blocked, leading to the existence of benchmark interest rates in many different markets. Reform needs to be further promoted in the future (Yi Gang, 2021). The transmission from intermediary targets to ultimate targets is also relatively smooth, and the speed of money supply growth and changes in market interest rates reflect the tightness of monetary policy, which can then be used for countercyclical regulation of the economy.

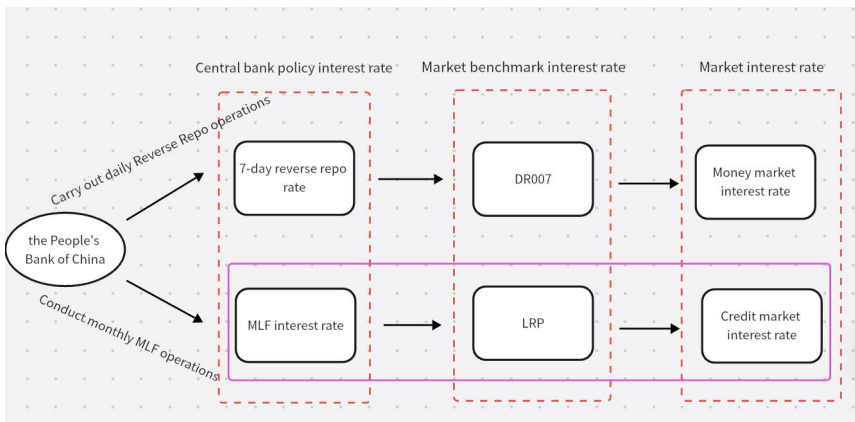


Fig. 6. The transmission path of China's monetary policy

2.3 Current Adjustment of China's Monetary Policy Framework

Currently, the monetary policy framework of the PBC is gradually shifting from quantity-based regulation to price-based regulation. As quantitative indicators are

gradually weakened, the smooth transmission of policy rates becomes a key focus in the transformation of the monetary policy framework. On July 22, 2024, the PBC announced the adjustment of the 7-day reverse repo bidding mechanism to a fixed rate and volume-based bidding, formally establishing the main policy rate under the price-based monetary policy regulation framework. The LPR reported on the same day responded swiftly, adjusting in line with the 7-day reverse repo rate, indicating that the LPR quotation is increasingly referencing the central bank's short-term policy rates. The transmission relationship between short-term and long-term rates is becoming clearer (Ma Meiruo, 2024).

Prior to the MLF operation, the LPR quotation indicated a decoupling from the original medium-term policy rate (MLF) and a shift toward referencing the central bank's short-term policy rates. The transmission relationship between short-term and long-term rates is gradually becoming clearer. As shown in Figure 6, the LPR will no longer be linked to the MLF but will be directly tied to the 7-day reverse repo rate, with the central bank influencing long-term rates by adjusting short-term rates.

At the same time, in the monetary policy implementation report released by the PBC on August 9, adjustments to the monetary policy operation framework were emphasized. The reform of monetary policy regulation methods pointed out in the report includes, firstly, the shift of monetary policy regulation methods from quantity based to price based. Secondly, clarify the policy interest rate status of OMO, construct an interest rate corridor around OMO, increase temporary positive and negative repurchase operations, refine liquidity management, and reduce the role of MLF. Thirdly, LPR is linked to OMO interest rates to improve the quality of quotations. In the past, some quotation banks reported LPR that was too high, which to some extent affected the quality of quotations. In the future, LPR will be linked to the 7-day reverse repo operation interest rate, and the market will be adjusted accordingly to the transmission relationship between short and long interest rates. Regarding the reasons for the LPR reform, the Governor of the People's Bank of China has revealed that "some quoting banks have quoted excessively high rates, resulting in a significant deviation between their highest quality customer loan interest rates, which has to some extent affected the quality of their quotes". Previously, the basis for LPR quotations was MLF. Currently, the policy interest rate attribute of MLF has been downplayed, and the central bank's policy intention is to gradually decouple LPR quotations from MLF interest rates and tilt more towards the actual most favorable customer interest rate.

3 Conclusions

In the 2024 Q2 Monetary Policy Implementation Report of the PBC, it proposed to deepen the reform of the interest rate system and further promote the marketization of interest rates. Since China gradually withdrew from the benchmark interest rate of deposits and loans in 2015, it has realized the interest rate marketization in name, which is embodied in that the central bank determines the policy interest rate through open market operation, thereby affecting the inter-bank market interest rate and treasury bond interest rate. At the same time, MLF operations affect the funding costs of financial institutions, guide their LPR quotes, and ultimately affect the loan interest rates of enterprises and residents.

However, in the actual operation process, due to the fact that the MLF interest rate is directly determined by the central bank, it often adopts a fixed interest rate and quantity bidding form, which leads to an imperfect market-oriented pricing mechanism for LPR. At the same time, some quote banks have lower quality quotes, which cannot reflect the true financing costs of the optimal loan customers very well. Therefore, the central bank has decided to carry out reforms in the area of LPR formation. Decoupling the LPR from the MLF rate and linking it to the short-term reverse repo rate formed by the central bank's open market operations. In this way, the central bank can regulate the bond market and real economy loan interest rates by adjusting short-term policy interest rates. This is also quite similar to the monetary policy framework of mainstream countries.

In the future, China will further improve the market-oriented interest rate formation, regulation, and transmission mechanism, enhance the quality of LPR quotations, and better support the development of the real economy.

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