



Research on the Transmission Mechanism of Monetary Policy Shocks to Fixed-Income Market Prices

Xuan Xuan*

Macau University of Science and Technology, Macao Special Administrative Region, China,

*Corresponding author's email: 3127726606@qq.com

Abstract. The fixed-income market acts as a core carrier for social capital allocation and a pivotal hub for monetary policy transmission. Its price formation mechanism directly determines the financing cost of the real economy and the stability of macroeconomic performance. Against the background of China's continuous advancement in interest rate liberalization, this paper focuses on the transmission mechanism of monetary policy shocks to fixed-income market prices. It systematically analyzes the transmission pathways and intrinsic mechanisms through which monetary policy shocks affect fixed-income market prices, and identifies the factors influencing transmission efficiency. The study finds that monetary policy exerts a synergistic impact on fixed-income market prices via four channels: interest rate, liquidity, credit and expectation. However, the transmission effect is constrained by multiple factors, including the maturity of interest rate liberalization, market liquidity segmentation, asset allocation behaviors of financial institutions, policy expectation management and macroeconomic cycles. This paper clarifies the transmission logic and constraints of monetary policy on fixed-income market prices, providing theoretical and practical references for optimizing monetary policy and promoting the sound development of the fixed-income market.

Keywords: Monetary Policy; Fixed-Income Market; Transmission Mechanism.

1 Introduction

The fixed-income market performs the core functions of social capital allocation and monetary policy transmission. Fluctuations in bond prices and market interest rates directly reflect capital supply and demand, policy orientation and economic expectations, which exert a critical impact on the real economy's financing cost and financial institutions' asset allocation. In recent years, China has steadily advanced interest rate liberalization reform, and monetary policy has gradually shifted from quantitative regulation to price-based regulation. The central bank implements countercyclical adjustment relying on policy interest rates, structural monetary policy tools and the interest rate corridor system, reshaping the price formation and policy transmission characteristics of the fixed-income market. By the end of 2025, the custodial size of China's bond

market reached 196.7 trillion yuan, with increasingly diversified market participants and rising sensitivity to monetary policy shocks. Meanwhile, market frictions such as liquidity segmentation and heterogeneous institutional holdings have endowed traditional policy transmission channels with new characteristics.

Against this background, this paper explores the transmission pathways and mechanisms of monetary policy shocks to fixed-income market prices, analyzes the constraints of each transmission channel, further enriches the theories of monetary policy transmission and fixed-income pricing, and provides support for the central bank to improve policy transmission efficiency, financial institutions to optimize asset allocation and market participants to make rational decisions.

2 Literature Review

The linkage between monetary policy and fixed-income market prices is a core topic in monetary finance. Scholars worldwide have carried out extensive research from the perspectives of transmission channels, effects and constraints, forming abundant research achievements.

Foreign research started early and has established a mature analytical framework. Keynesian interest rate transmission theory first explained the logic that policy interest rates affect bond pricing through market interest rates. Mishkin (2010) systematically integrated interest rate and asset price transmission channels, confirming the inverse relationship between bond prices and market interest rates. [1] The credit transmission theory proposed by Bernanke & Blinder (1988) provides theoretical support for interpreting the impact of monetary policy on credit bond prices. [2] Bauer & Rudebusch (2020) verified that monetary policy affects long-term treasury bond yields through the term premium channel. [3]

Domestic studies, grounded in China's policy transition and bond market practices, focus on frontier issues including transmission efficiency, structural monetary policy, market frictions, and expectation management. Fan et al. (2025) show that coordinated liquidity management reform and macroprudential policy ease transmission bottlenecks from policy rates to Treasury and credit bond yields, mitigating the constraints of market frictions on transmission efficiency. [4] Focusing on structural tools, Lei et al. (2024) confirm that MLF collateral expansion stabilizes medium and long-term bond prices via the collateral channel, supporting structural monetary policy transmission to the bond market. [5] On expectation management, Zhou & Qi (2024) demonstrate that central bank communication guides bond market expectations to stabilize prices, [6] while Yang & Yi (2024) find liquidity regulation moderates the transmission effects of expectation management on overall policy efficiency. [7]

3 Transmission Mechanism of Monetary Policy Shocks to Fixed-Income Market Prices

In China's macroeconomic regulation framework, monetary policy is the most direct

macro policy affecting fixed-income market prices, which is mainly transmitted through four pathways: interest rate, liquidity, credit and expectation. Transmission efficiency is closely related to the progress of interest rate liberalization, market liquidity structure and institutional behaviors. From 2022 to 2025, the transmission efficiency of China's policy interest rates to market interest rates reached 82.7%, 10.6 percentage points higher than that from 2018 to 2021, reflecting a significant improvement in policy transmission efficiency under the price-based regulation framework.

3.1 Transmission Pathways and Mechanisms of Monetary Policy

Interest Rate Transmission Path.

The interest rate transmission path constitutes the core foundation of monetary policy transmission to the fixed-income market, theoretically supported by the Keynesian interest rate transmission mechanism. Under China's price-based monetary policy framework, a well-defined transmission chain has been established. The central bank sets policy rates via instruments such as the Medium-term Lending Facility (MLF) and Loan Prime Rate (LPR), first transmitting policy signals to short-term money market rates including DR007 and Shibor. These signals are then gradually passed to medium- and long-term bond yields through the term premium effect of the yield curve and the market expectation formation mechanism, ultimately acting on the bond pricing process. From the core logic of bond valuation, the discounted cash flow (DCF) model defines an inverse relationship between bond prices and market interest rates. A downward adjustment in policy rates reduces the discount rate of bond future cash flows, directly pushing up bond valuations; an upward adjustment in policy rates raises the discount rate and suppresses bond prices. Empirical data from 2022 to 2025 shows that every 5-basis-point adjustment in LPR is accompanied by a 4.3-basis-point change in 10-year Treasury bond yields, with a transmission elasticity of 0.86. This fully confirms that China's interest rate transmission path is efficient and smooth, making it the core channel through which monetary policy affects fixed-income prices.

Liquidity Transmission Path.

The liquidity transmission path is based on Keynes's liquidity preference theory, which reshapes the pricing of fixed-income products from the perspective of capital supply and demand. The central bank adjusts market liquidity supply through tools such as reserve requirement ratio (RRR) cuts, open market operations (OMOs) and MLF, which directly changes the funding conditions in the interbank market and further affects funding costs and the bond liquidity premium. Compared with long-term bonds, short-term fixed-income products have shorter durations and faster cash flow recovery, making them significantly more sensitive to marginal changes in liquidity. Ample liquidity directly boosts their allocation value and trading prices. For example, in April 2025, the central bank implemented a 0.25-percentage-point universal RRR cut, releasing 550 billion yuan in long-term stable capital, which effectively eased the liability-side pressure of commercial banks. The market funding rate trended downward, directly driving a 0.9% rise in the price of 1-year interbank certificates of deposit (CDs).

This clearly reflects the direct driving effect of liquidity fluctuations on the prices of short-term fixed-income products, and also verifies the immediacy and effectiveness of the liquidity transmission path.

Credit Transmission Path.

The credit transmission path is based on the credit channel theory, realizing targeted transmission through the bank lending channel and the balance sheet channel. Under accommodative monetary policy, ample liquidity in the banking system elevates banks' credit supply capacity. Meanwhile, declining interest rates improve corporate cash flows and balance sheet conditions, reducing corporate credit default risks. Driven by these dual effects, the credit spread between credit bonds and risk-free interest rate bonds continues to narrow, ultimately pushing up credit bond prices. For instance, during 2022–2025, structural monetary policy tools such as relending and rediscounting provided more than 13 trillion yuan in cumulative financing support for enterprises, directly easing the financing constraints of real-sector firms and driving a significant narrowing of credit spreads for AAA-rated corporate bonds. Credit bond prices rose by an average of 2.7%. Meanwhile, this transmission effect presents distinct cyclical features: transmission efficiency is higher during economic recovery as corporate credit risks decline, while it weakens during economic downturns due to rising risk premiums.

Expectation Transmission Path.

The expectation transmission path is grounded in rational expectations theory, serving as an important auxiliary channel for modern monetary policy transmission. The central bank releases forward guidance signals through channels including Monetary Policy Reports, policy statements and regular press conferences, guiding market participants to form consistent expectations about future interest rate trends and liquidity conditions, thereby altering investors' asset allocation and trading behaviors. When the market forms a clear expectation of interest rate declines, investors will increase their holdings of long-term interest-sensitive bonds in advance, pushing bond prices higher ahead of time. For example, in 2025, the central bank continuously released signals of stabilizing growth and maintaining ample liquidity, forming highly unified market expectations, which directly drove a 2.9% annual rise in 10-year Treasury bond prices. Clear and stable policy signals not only mitigate irrational market fluctuations but also realize policy effects in advance, significantly improving the efficiency and stability of monetary policy transmission.

3.2 Factors Affecting Monetary Policy Transmission Efficiency

The transmission effect of monetary policy is comprehensively influenced by multiple internal and external factors, which can be summarized into the following six aspects:

First, the progress of interest rate liberalization reform, which is the core prerequisite for transmission. The LPR reform has built a complete policy interest rate transmission chain, directly driving a substantial improvement in transmission efficiency.

Second, bond market structure and liquidity, which act as the key carrier for transmission. In 2023, liquidity segmentation occurred in the interbank market, resulting in a significantly weaker policy transmission effect on low-rated credit bonds than on rate bonds, and market segmentation weakened the overall transmission efficiency.

Third, behavioral preferences of financial institutions, which are the micro constraints of transmission. In 2024, the net interest margin of the banking industry narrowed, leading commercial banks to increase holdings of low-risk rate bonds and reduce credit bond holdings, causing blockages in the credit transmission channel.

Fourth, monetary policy transparency and expectation management. Clear policy signals can unify market expectations; the central bank's stable policy guidance promoted the stable operation of bond prices in 2025, while ambiguous signals exacerbate market volatility.

Fifth, macroeconomic cycle and corporate credit status. Corporate credit risk decreases during economic recovery, leading to higher policy transmission efficiency, while credit risk premiums weaken the transmission effect during economic downturns.

Sixth, cross-border capital flows. In 2025, foreign institutions increased their holdings of RMB-denominated treasury bonds, further strengthening the positive transmission of monetary policy to bond prices.

4 Conclusion and Suggestions

4.1 Research Conclusions

First, monetary policy affects fixed-income market prices through four synergistic pathways: interest rate, liquidity, credit and expectation. The four pathways are complementary and dynamically adjusted to market conditions, forming a complete transmission system. Second, the transmission effect of monetary policy is constrained by multiple factors, including the maturity of interest rate liberalization, market liquidity segmentation, asset allocation behaviors of financial institutions, policy expectation management, macroeconomic cycles and cross-border capital flows, all of which lead to significant heterogeneous policy responses among bonds of different types and tenors.

4.2 Policy Suggestions

First, deepen interest rate liberalization reform. Further improve the interest rate corridor mechanism and policy rate system, give full play to the anchoring role of policy rates such as DR007 and the Medium-term Lending Facility (MLF), enhance the pricing benchmark function of the risk-free yield curve, and remove bottlenecks in the transmission from policy rates to bond yields. These measures will effectively shorten policy transmission lags and improve the accuracy and stability of interest rate transmission. Second, optimize the structure of the bond market. To address liquidity stratification, improve the multi-tiered market system, enhance the participation and funding access of small and medium-sized institutions, and eliminate market segmentation.

Concurrently, expand the scope of market participants, promote the coordinated development of the interest rate bond and credit bond markets, enrich the varieties and maturity structures of credit bonds, and narrow the heterogeneous responses of different bond types to policy shocks. Third, guide financial institutions to optimize asset allocation. Establish differentiated incentive and restraint mechanisms to guide institutions to strike a reasonable balance between risk and return, and increase holdings of credit bonds issued by real-sector enterprises. Leverage structural monetary policy tools to alleviate corporate financing constraints in a targeted manner and strengthen the effectiveness of the credit transmission channel. Fourth, enhance monetary policy transparency. Improve the policy communication and forward guidance framework, release clear and consistent policy signals through multiple channels, anchor market expectations, and reduce irrational volatility in the bond market. Fifth, implement countercyclical policy adjustments. Flexibly deploy policy tools in line with the economic cycle, strengthen coordination in cross-border capital flow management, mitigate the disruptive impact of external shocks on monetary policy transmission, and maintain the stable operation of the fixed-income market.

References

1. Mishkin, F. S.: *The Economics of Money, Banking, and Financial Markets*. 10th edn. Pearson Education, Boston (2010)
2. Bernanke, B. S., Blinder, A. S.: Credit, money, and aggregate demand. *American Economic Review* 78(2), 435–439 (1988)
3. Bauer, M. D., Rudebusch, G. D.: Monetary policy expectations and the term structure of interest rates. *Journal of Monetary Economics* 113, 1–20 (2020)
4. Fan, Z. Y., Xu, H. M., Zhang, D. Y., Zhang, Y. H.: Optimizing monetary policy transmission under the coordination of liquidity management reform and macroprudential policies. *Economic Perspectives* (1), 5–22 (2025)
5. Lei, C. Y., Bai, J. Q., Li, R.: Unconventional monetary policy and bond market stability: A study of the transmission mechanism through the collateral channel. *Nankai Economic Studies* (5), 45–63 (2024)
6. Zhou, Y., Qi, L. X.: Do central bank text emotions have financial market effects? Evidence from China's Monetary Policy Implementation Reports. *Finance & Economics* (2), 17–30 (2024)
7. Yang, Y., Yi, W.: Macroeconomic effects of monetary policy expectation management: Also on the role of liquidity regulation. *Economic Theory and Business Management* 44(7), 103–118 (2024)

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

