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Research on the Interaction Between Monetary Policy and Financial Asset Prices

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ABSTRACT

As the core tool of macroeconomic regulation, monetary policy is widely used around the world to promote economic growth, stabilize inflation, increase employment, and balance international payments. By combining theoretical analysis with empirical research, this paper systematically reviews the main theoretical and empirical findings on the relationship between monetary policy and financial asset prices at home and abroad, focusing on the mechanisms through which monetary policy influences financial asset prices, and analyzing the volatility of these prices through changes in market interest rates and exchange rates. This paper aims to reveal the intrinsic relationship between monetary policy and financial asset prices and their potential issues. Therefore, a vector autoregressive (VAR) model is constructed to analyze the dynamic, time-varying relationship among money supply, interest rates, and exchange rates. The research results show that an increase in money supply has a significant impact on interest rates and exchange rates, which in turn triggers changes in financial asset prices. Based on these conclusions, this paper proposes giving full play to the regulatory role of monetary policy, further deepening the market-oriented reform of interest rates, and optimizing the monetary policy transmission mechanism to enhance its positive impact on the financial market. This study provides new empirical evidence for understanding the relationship between monetary policy and financial asset prices and also offers useful theoretical insights and practical guidance for policymakers.

1. Introduction

In recent years, the volatility of the global economy and financial markets has increased significantly. The interactive relationship between monetary policy and financial asset prices has become the focus of attention for academia and policymakers. Especially after the global financial crisis in 2008 and the outbreak of the COVID-19 pandemic in 2020, in response to economic recession and financial market turmoil, according to the research of Echarte Fernández, Náñez Alonso *et al.,*[1], central banks around the world generally adopted unprecedented loose monetary policies, including large-scale asset purchases and ultra-low interest rate policies. These policy measures have not only had a profound impact on the real economy, but also significantly affected the prices of financial

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assets. For instance, the research by Ronkainen and Sorsa [2] shows that in the 2020, the Federal Reserve lowered the federal funds rate to nearly zero and initiated a large-scale quantitative easing policy. This move led to a rapid rebound in the US stock market in the short term and it reached a record high. Similarly, according to Hartmann's research [3], the European Central Bank and the Bank of Japan have also adopted similar easing policies, thereby promoting the prosperity of the bond market and the real estate market. However, there are still widespread disputes about the long-term effects and potential risks of these policies, such as asset bubbles and inflationary pressures. In China, the People's Bank of China has actively responded to the downward pressure on the economy by adjusting the money supply (M2) and interest rate levels. In 2021, there was a significant divergence between China's consumer price index (CPI) and the producer price index (PPI). According to the analysis of Collaku *et al.,* [4], at that time, the CPI remained relatively stable, while the PPI rose sharply due to the increase in global commodity prices. At the same time, the yield of China's 10-year treasury bonds rose at the beginning of 2021, reflecting the market's expectations of inflation and the tightening of monetary policy.

This study aims to explore the interaction between monetary policy and financial asset prices, and selects CPI, M2 and 10-year government bond yield as key variables. By analyzing the dynamic relationships between these variables, we hope to reveal the impact mechanism of monetary policy on financial asset prices and provide valuable references for policy makers. Specifically, this study will answer the following questions: How do changes in money supply and interest rate affect CPI and treasury bond yield? Do the interactions between these variables have time-varying characteristics? How to optimize monetary policy to balance economic growth and financial stability in the context of increasing global economic uncertainty?

By combining theoretical analysis and empirical research, this study will provide a new perspective for understanding the complex relationship between monetary policy and financial asset prices, and offer policy recommendations for addressing future economic challenges.

2. Literature review

2.1 The impact of monetary policy on financial asset prices

Monetary policy directly affects the conditions of the financial market and has a significant impact on the prices of financial assets through adjustments in interest rates and the money supply (such as M2). Kierans *et al.,* [5] pointed out when applying the "financial accelerator" theory for analysis that monetary policy would amplify the impact on asset prices and the economic cycle by changing the financing costs of enterprises and household. Loose policies lower interest rates, pushing up stock and bond prices, while tight policies have the opposite effect.

The research on quantitative easing policy has further enriched this field. Research by Kozlowski [6] indicates that the Fed's asset purchase program has significantly depressed the yield of long-term Treasury bonds and driven up the stock market. In China, monetary policy affects real estate and stock prices through liquidity channels. The research by Liu [7] further pointed out that the targeted reserve requirement by China has had differentiated impacts in asset prices in specific industries.

2.2 The feedback effect of financial asset prices on monetary policy

The fluctuation of financial asset prices has a reverse impact on monetary policy through wealth effects and balance sheet channels. The changes in asset prices are transmitted to the macroeconomy by influencing the consumption and investment decisions of households and enterprises. This mechanism has been explained in the research of Deng, Cheng *et al.,*[8]. For example, the prosperity of the stock and housing markets enhances household wealth and stimulates consumption, while the decline may trigger a recession.

In empirical research, fluctuations in real estate prices significantly affect the transmission of monetary policy in high debt economies [9]. The asset foam may force the central bank to adjust policies to deal with financial risks. In addition, the effectiveness of policy intervention after asset price collapse varies depending on differences in financial structure.

2.3 Interaction between CPI, M2 and treasury bond yield

According to Song's [10] research framework, the interaction among CPI, M2 and treasury bond yields is at the core of observing the effectiveness of monetary policy. Empirical research shows that the central bank should adjust interest rates based on inflation (CPI) and output gap. However, in recent years, the yield of treasury bond has become increasingly important as an indicator of market expectations. There is controversy over the relationship between M2 and CPI. The impact of money supply on CPI is relatively weak in low inflation environment [11], while financial innovation weakens M2's ability to predict inflation. As for the yield of treasury bond, it is highly sensitive to monetary policy signals, especially in periods of high uncertainty.

2.4 Related research in the context of China

In China, the relationship between monetary policy and financial asset prices is unique. Research by Gong, Xiong *et al.,* [12] has found that China's monetary policy has had a significant impact on real estate prices and the stock market by influencing bank credit and the shadow banking system. In addition, China's 10-year government bond yield is not only affected by domestic monetary policy, but also significantly affected by global financial market conditions, especially in the context of capital account opening. According to Tan, Tang *et al.,* [13] research, China's dual track interest rate system has weakened the efficiency of policy transmission and empirical analysis shows that the coordination of macro prudential policy and monetary policy is more effective in curbing the housing price foam. In addition, Wang, Tsai *et al.,* [14] pointed that under the background of RMB internationalization, the impact of external shocks on Chinese financial asset prices has significantly increased.

2.5 Literature review

The existing research on the interaction between monetary policy and financial asset prices is mainly based on the market environment of developed economies, forming a relatively mature theoretical framework and analytical methods. However, these studies have shown significant limitations in the unique economic and financial environment of China. Firstly, according to Zhang's analysis, mainstream Western theories such as the "financial accelerator" effect and Taylor's rule are rooted in a highly market-oriented interest rate system and relatively free capital flows. This premise is fundamentally different from the unique institutional features of China, such as the dual-track interest rate system and capital account controls. Secondly, existing research mostly focuses on the one-way relationship between a single asset class (such as the stock market or housing market) and monetary policy, lacking a systematic analysis of the two-way interaction mechanism between the prices of major financial assets such as stocks, bonds, and real estate and monetary policy. Furthermore, China's monetary policy operation combines both quantitative and price-based tools and is often implemented in conjunction with macro prudential policies. This policy combination effect has not been fully explored in existing literature. In addition, in recent years, China's financial marketization reform has continued to advance, with major reforms such as interest rate convergence and new asset management regulations causing structural changes in the transmission mechanism of monetary policy.

3. Research Design

3.1 Empirical Model

Based on literature review and China's monetary policy practice, this article uses a VAR model with intercept terms to analyze the interactive relationship between monetary policy and financial asset prices [15]. We define a three-dimensional time series vector $Y_t$as Eq. (1):

$$Y_t = \begin{bmatrix} M2_t \\ YIELD_t \\ CPI_t \end{bmatrix} \tag{1}$$

Where $M2_t$is year-over-year growth rate of M2 at time t; $YIELD_t$ is 10-year Government Bond Yield at time t; CPI_t is year-over-year growth rate of the CPI at time t.
A VAP(p) model for this system is expressed as Eq. (2):

$$Y_t = c + A_1Y_{t-1} + A_2Y_{t-2} + \ldots + A_pY_{t-p} + u_t \tag{2}$$

3.2 Variable selection explanation and descriptive statistics

3.2.1 Additional issuance of money supply

The money supply is an important economic indicator formulated and released by many central banks around the world. The significant increase in the issuance of currency is an attempt to stimulate economic activity, as more money supply means that consumers and businesses can more easily access funds. When these funds flow into the economic system, the increased money supply can help businesses more easily access funds for expanding production or investing in new projects[16]. This helps businesses grow and increase employment rates, thereby driving economic growth, and these funds will further affect financial asset prices.

3.2.2 Inflation rate

The inflation rate (usually measured by the annual rate of change of the Consumer Price Index (CPI)) is an important indicator for measuring the overall rate of price increase in a country's economy. Moderate inflation is often seen as a sign of healthy economic growth, as it reflects an increase in demand and economic activity. However, excessive inflation (hyperinflation) or insufficient inflation (deflation) can have a negative impact on the economy [17].

Moderate inflation has a relatively small impact on the bond market, but if inflation expectations rise, long-term bond yields may increase and bond prices may fall. High inflation is usually detrimental to the bond market, as it erodes the actual returns of bonds and investors demand higher nominal yields, leading to a decline in bond prices [18]. The relationship between inflation and financial asset prices is not unidirectional but rather involves complex interactions.

3.2.3 Long term bonds

Long term debt refers to debt instruments with a term exceeding one year, typically including long-term bonds, long-term loans, and other fixed income securities. Long term debt is an important component of the financial market, providing long-term financing channels for governments, enterprises, and financial institutions, as well as a relatively stable source of income for investors. The long-term debt yield is an important channel for the transmission of monetary policy. The central bank affects long-term interest rates by adjusting short-term interest rates, which in turn affects investment and consumption decisions [19].

Long term debt is an indispensable and important component of the financial market, with multiple functions such as financing, investment, and risk management [20]. Its price and yield are influenced by various factors such as interest rates, credit risk, and inflation expectations.

3.2.4 Variable selection

The specific indicators for VAR model variables are selected as follows. (1) M2 year-on-year growth rate. Selecting M2 as the monetary policy variable directly reflects the direction of central bank liquidity regulation. An increase in growth rate indicates loose monetary policy, while a decrease in growth rate implies tightening. And in the stage where interest rate liberalization is not fully realized, it remains an important intermediary target of China's monetary policy, and its changes directly affect market expectations. The data is sourced from the official website of the central bank. (2) 10-year government bond yield. The price of financial assets is an important target of monetary policy transmission. The yield of 10-year treasury bond reflects the price changes in the bond market, represents the long-term cost of capital in the market, and is the "anchor" of financial asset pricing. In the special context of China, the yield also contains dual information about policy interest rate guidance and market liquidity. The data is sourced from the official website of the stock exchange. (3) CPI year-on-year growth rate. The year-on-year growth rate of CPI directly measures the comprehensive changes in prices at the consumer end, reflecting changes in monetary purchasing power (usually 2% is the policy warning line). The year-on-year growth rate of CPI is selected as the macroeconomic variable indicator, and the indicator data is sourced from the official website of the National Bureau of Statistics (Table 1).

Table 1
Descriptive statistics of variables

Variable	Sample size	Mean value	standard deviation	Minimum value	Maximum value
M2 year-to-year growth	111	10.15766	1.719596	8.000000	14.00000
10-year government bond yield	111	3.1000420	0.371385	2.308400	3.937500
CPI year-to-year growth	111	1.692162	1.142014	0.800000	5.400000

3.3 VAR model related testing

3.3.1 Unit root inspection

The ADF test method can be used to test the unit root stationarity of variables [21]. If the original sequence data does not satisfy stationarity, it is necessary to find a suitable differential form. Through conducting a stationarity test on the variables, it was found that all variables were non-stationary data at the 5% significance level. First order differencing was performed on all variables, followed by another ADF stationarity test. The results are shown in Table 2.

Table2
ADF first-order difference unit root test

Variable	Test type	t-Statistic	5%Critical value	Prob.	Stationarity
CPI	Horizontal value（including intercept）	-2.567744	-3.451184	0.2958	Non-stationarity
DCPI	First-order difference（including intercept）	-9.981603	-3.451568	0.0000	stationarity
M2	Horizontal value（including intercept）	-1.694016	-3.451184	0.7475	Non-stationarity
DM2	First-order difference（including intercept）	-10.72855	-3.451568	0.0000	stationarity
YIELD	Horizontal value（including）	-2.254626	-3.451568	0.4546	Non-stationarity
DYIELD	First-order difference（including intercept）	-7.373907	-3.451568	0.0000	stationarity

According to Table 2, the first-order difference data of each variable passed the unit root test, indicating that all variables are stationary. At this point, we have obtained the latest VAR model as Eq (3):

$$Y_t = \begin{bmatrix} DM2_t \\ DYLELD_t \\ DCPI_t \end{bmatrix} \tag{3}$$

where $DM2_t = M2_t - M2_{t-1}$; $DYLELD_t = YLELD_t - YLELD_{t-1}$; $DCPI_t = CPI_t - CPI_{t-1}$.

3.3.2 Determination of the optimal lag order

From the unit root test, it can be found that the first-order differenced data of each variable is stationary [22]. Therefore, a VAR model is established using the differenced data to determine the lag order. The optimal lag order of the model is shown in Table 3.

Table 3
Results of optimal lag order for the model

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-59.70712	NA	0.000686	1.229551	1.306757*	1.260814
1	-44.51291	29.19672	0.000608	1.108096	1.416917	1.233148*
2	-30.74382	25.64831*	0.000554*	1.014585*	1.555020	1.233425
3	-27.17852	6.431514	0.000617	1.121148	1.893198	1.433777
4	-17.69521	16.54932	0.000613	1.111671	2.115337	1.518089
5	-10.54448	12.05808	0.000638	1.147931	2.383212	1.648139
6	-7.509954	4.938547	0.000721	1.264901	2.731798	1.858897

According to Table 3, based on the principles of LR, FPE, and AIC, it was found that the optimal lag period of the model is 2nd order, so the model expands into three equations of Eqs. (4)-(6):

$$DM2_t = c_1 + a_{11}^{(1)} DM2_{t-1} + a_{12}^{(1)} DYIELD_{t-1} + a_{13}^{(1)} DCPI_{t-1} + a_{11}^{(2)} DM2_{t-2} + a_{12}^{(2)} DYIELD_{t-2} + a_{13}^{(2)} DCPI_{t-2} + u_{1,t} \tag{4}$$

$$DYIELD_t = c_2 + a_{21}^{(1)} DM2_{t-1} + a_{22}^{(1)} DYIELD_{t-1} + a_{23}^{(1)} DCPI_{t-1} + a_{21}^{(2)} DM2_{t-2} + a_{22}^{(2)} DYIELD_{t-2} + a_{23}^{(2)} DCPI_{t-2} + u_{2,t} \tag{5}$$

$$DCPI_t = c_3 + a_{31}^{(1)} DM2_{t-1} + a_{32}^{(1)} DYIELD_{t-1} + a_{33}^{(1)} DCPI_{t-1} + a_{31}^{(2)} DM2_{t-2} + a_{32}^{(2)} DYIELD_{t-2} + a_{33}^{(2)} DCPI_{t-2} + u_{3,t} \tag{6}$$

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Where c represents the inherent trend in the rate of change of each variable. Coefficients a_{ij}^{k}, i denotes the dependent variable; j denotes the independent variable; k denotes the lag order. u_t represents the random shocks that model cannot explain, corresponding to monetary shocks, bond market shocks, and inflation market shocks, respectively.

3.3.3 Stability test of unit circle

Based on the judgment of the lag period in the previous text, the VAR model was determined. Next, the stability of the model will be tested, and the specific results are shown in Figure 1.

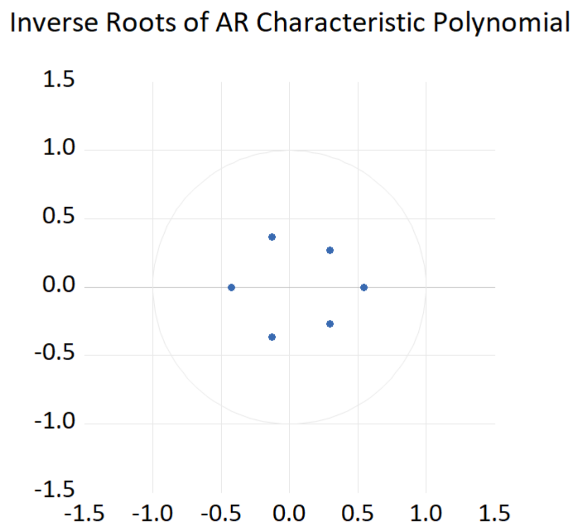

Fig. 1. Unit circle stability test results

As shown in Figure 1, all points are within the unit circle, indicating the stability of the model.

3.3.4 Residual normality test

Given the stability of the VAR model, a Jarque Bear test is conducted on it, and the test results are shown in Table 4.

Table 4
Jarque Bear Test Results

Component	Jarque-bear	df	Prob.
1	5.339366	2	0.0693
2	6.700930	2	0.0351
3	4.363381	2	0.1129
Joint	16.40368	6	0.0117

According to Table 4, for the Jarque Bear statistic, if the p-value is greater than the significance level (usually 0.05), the null hypothesis cannot be rejected, indicating that the residuals follow a normal distribution, which satisfies the basic assumption of the model.

3.3.5 Result analysis - Granger causality test

Interpretation of Granger causality test: If the p-value is less than the significance level (usually 0.05), reject the null hypothesis and consider X as the Granger cause of Y; If the p-value is greater than the significance level, the null hypothesis cannot be rejected as X is not a Granger cause of Y. From this, we can analyze the Granger causality among DCPI, DM2 and DYIELD.

As shown in Table 5, with DCPI as the dependent variable, the p-value of DM2 is 0.2778, which is greater than 0.05. The null hypothesis cannot be rejected, and it is believed that DM2 is not a Granger cause of DCPI; The p-value of DYIELD is 0.0133, which is less than 0.05, rejecting the null hypothesis and suggesting that DYIELD is a Granger cause of DCPI.

Table 5
Granger causality test using DCPI as the dependent variable

Excluded	Chi-sq	df	Prob.
DM2	2.561612	2	0.2778
DYIELD	8.642117	2	0.0133
ALL	9.867528	4	0.0427

Next, we will analyze DM2 as the dependent variable. According to Table 6, the p-value of DCPI is 0.1088, which is greater than 0.05. We cannot reject the null hypothesis and believe that DCPI is not the Granger cause of DM2; The p-value of DYIELD is 0.0486, which is less than 0.05, rejecting the null hypothesis and suggesting that DCPI is the Granger cause of DYIELD.

Table 6
Granger causality test with DM2 as the dependent variable

Excluded	Chi-sq	df	Prob.
DCPI	4.436689	2	0.1088
DYIELD	6.050088	2	0.0486
ALL	10.95367	4	0.0271

Finally, the DYIELDD is analyzed as a dependent variable. Table 7 shows that the p-value of DCPI is 0.2008, greater than 0.05. The original assumption cannot be rejected, and DCPI is not the Granger cause of DYIELD; The p-value of DM2 is 0.1766, greater than 0.05, which cannot reject the null hypothesis and suggests that M2 is not a Granger cause of DYIELD.

Table 7
Granger causality test using DYIELD as the dependent variable

Excluded	Chi-sq	df	Prob.
DCPI	3.210620	2	0.2008
DM2	3.468131	2	0.1766
ALL	6.980831	4	0.1369

3.3.6 Pulse response analysis

After confirming the existence of Granger causality between variables, we turned to using impulse response functions to characterize the dynamic process of this relationship. The impulse response diagram provides us with an intuitive observation perspective in Figure 2.

(1) The impact path of DCPI shock

(i) The impact on oneself

Usually, this response will have a significant positive response in the initial stage, followed by gradual attenuation. Here, the impact of DCPI on itself appears in the first 6 periods and has gradually converged to 0 since the 7th period. The short-term changes in CPI have inertia, that is, the current inflation will affect the inflation level in future periods. This inertia may stem from price stickiness or expected effects. Therefore, when dealing with inflation, monetary policy needs to consider the lag effect and take measures in advance to suppress the formation of inflation expectations [23].

(ii) The impact on DM2

The graph shows that DCPI's response to DM2 changes from positive to negative, and gradually converges to 0 from the 7th period, indicating that an increase in money supply may lead to inflation. The increase in money supply (M2) may lead to inflation in the short term (positive response), but in the long run, the increase in money supply may suppress inflation through economic growth or other channels (negative response).

(iii)Impact on DYIELD

The figure shows that DCPI changes from positive response to negative response to DM2, and gradually converges to 0 from the 7th period. Comparing the second and third figures, it can be seen that DCPI has a greater impact on DM2 than DCPI. The rise of government bond yield (DYIELD) may push up inflation in the short term (positive response), but in the long term, higher yields may inhibit economic activities, thus reducing inflation (negative response).

(2) The impact path of DM2 shock

(i) The impact on DCPI

The graph shows that DM2's response to DCPI changes from negative to positive, and gradually converges to 0 from the 7th period. The rise of inflation (DCPI) may suppress the money supply in the short term (negative response), but in the long run, inflation may prompt central banks to increase the money supply to support economic growth (positive response).

(ii) Impact on oneself

The figure shows the response of DM2 to its own impact. Usually, this response will have a significant positive response in the initial stage, followed by gradual attenuation. Here, the impact of DCPI on itself appears in the first 6 periods and has gradually converged to 0 since the 7th period. The change in money supply has inertia, that is, the current money supply will affect the money supply in future periods. The adjustment of monetary policy needs to consider lag effects and avoid overreaction.

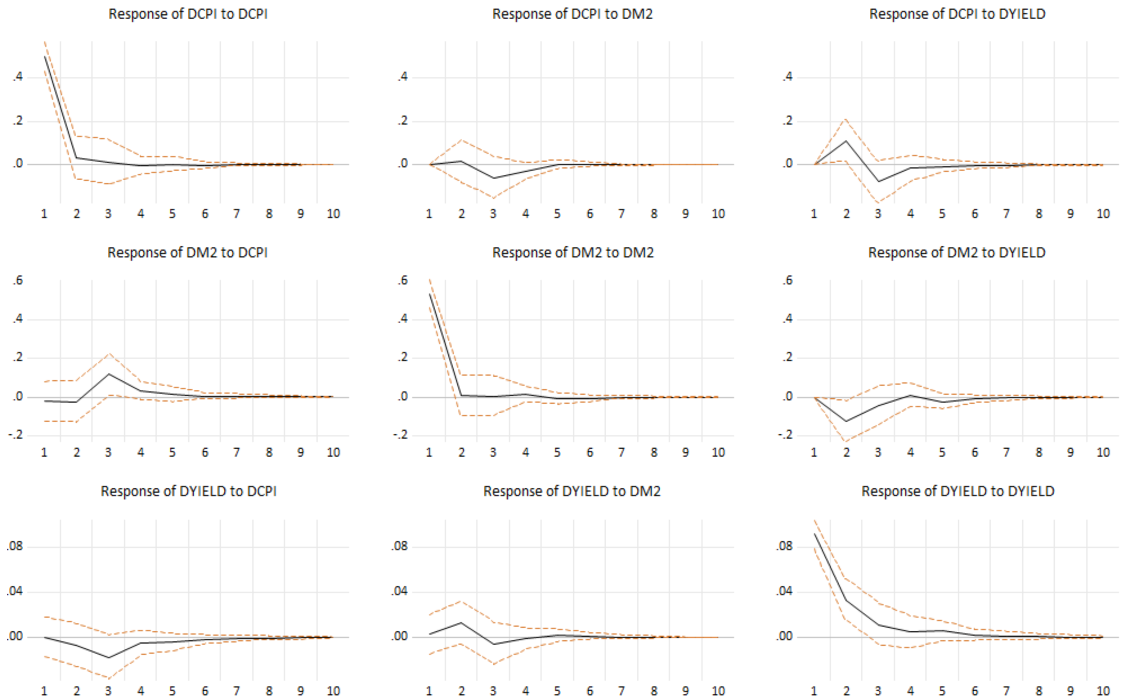

Fig. 2. Pulse Response Analysis Diagram

(iii) The impact on DYIELD

The graph shows that DM2 changes from negative response to positive response and then to negative response to DYIELD, and gradually converges to 0 from the 6th period. The rise in the yield of treasury bond may inhibit the money supply in the short term (negative response), but in the long term, a higher yield may attract capital inflows and increase the money supply (positive response).

(3) The Impact Path of DYIELD Shock

(i) The impact on DCPI

The graph shows that DYIELD has a negative response to DCPI and gradually converges to 0 from the 6th period. The rise of inflation may lead to the decline of real interest rate, thus inhibiting the yield of treasury bond (negative response). Interest rate policies need to pay attention to the impact of inflation on real interest rates and avoid real interest rates being too low.

(ii)The impact on DM2

The graph shows that DYIELD's response to DM2 changes from positive to negative, and gradually converges to 0 from the 6th period. The increase of money supply may push up the yield of treasury bond in the short term (positive response), but in the long term, the increase of money supply may inhibit the yield (negative response).

(iii) The impact on oneself

The figure shows the response of DYIELD to its own impact. Usually, this response will have a significant positive response in the initial stage, followed by gradual attenuation. Here, the impact of DYIELD on itself appears in the first 7 periods, and has gradually converged to 0 since the 8th period. The change of treasury bond yield has inertia, that is, the current yield will affect the future yield. The adjustment of interest rate policy needs to consider the lag effect and avoid overreaction.

4. Conclusion and Discussion

4.1 Conclusion

This paper selects the monthly time series data from 2015 to 2024 in China, and based on the VAR model, through the Granger causality test and impulse response function analysis, deeply discusses the dynamic relationship between the three variables DCPI, DM2 and DYIELD. The results show that there is a significant interaction and transmission mechanism between money supply, inflation rate and treasury bond yield. Specifically, changes in the money supply have a positive impact on the inflation rate in the short term, but their long-term effects tend to be suppressed; The adjustment of interest rates may push up inflation in the short term, but in the long run it will suppress economic activity, thereby reducing inflationary pressures. In addition, each variable exhibits significant inertia effects on its own impact, indicating that policy adjustments need to consider lag effects. This study provides important empirical evidence for understanding the interactive relationship between monetary policy and financial asset prices, and offers targeted recommendations for policy makers.

4.2 Policy recommendations

Based on the above conclusions, this article proposes the following policy recommendations:

Firstly, monetary policy should maintain flexibility, enhance foresight, and respond promptly to economic fluctuations and external shocks. Research has shown that the effects of money supply and interest rates on inflation have significant lagged effects, and policy effects take some time to manifest. Our country's economy is in a period of structural adjustment, and economic growth is facing downward pressure. Monetary policy needs to be planned in advance to avoid excessive tightening or loosening. By strengthening real-time monitoring of economic data and utilizing high-frequency data, policies can be adjusted in a timely manner. Moderate easing to support economic growth when inflationary pressures are low; When inflationary pressures rise, tighten in advance to avoid inflation getting out of control.

Second, when implementing loose monetary policy, we should pay attention to the balance between money supply and economic growth, and avoid excessive easing leading to inflation pressure or asset price foam. The increase in money supply may push up inflation in the short term, but in the long run, it may suppress inflation through economic growth. The growth rate of China's money supply remains stable, but the financing demand of the real economy is weak. Monetary policy needs to be precisely implemented to avoid idle funds. For example, structural tools such as targeted reserve requirement ratio cuts and refinancing can be used to guide funds towards the real economy, especially small and medium-sized enterprises and the field of technological innovation. We can also strengthen the regulation of the real estate market to prevent excessive capital from flowing into the real estate market and pushing up asset prices.

Thirdly, the adjustment of interest rate policy needs to balance the short-term and long-term impacts on inflation and economic growth, avoiding a one size fits all policy operation. An increase in interest rates may push up inflation in the short term, but it will suppress economic activity in the long term. The overall interest rate level in our country is relatively low, but the financing cost for enterprises is still high, and interest rate policies need to be more refined. Moderately reducing policy interest rates to lower corporate financing costs and support economic growth when inflationary pressures are low. When inflationary pressures rise, moderately tighten liquidity through open market operations and other means to avoid excessive impact on the economy caused by comprehensive interest rate hikes.

Fourthly, monetary policy should be coordinated and coordinated with fiscal policy and macroprudential policy to form a policy synergy and enhance the overall effectiveness of the policy. The impact of changes in money supply and interest rates on the economy and financial markets is complex, and a single policy tool is difficult to address multiple objectives. China is deepening its supply side structural reform, and the role of fiscal policy in stabilizing growth is becoming increasingly prominent. Monetary policy needs to be coordinated with fiscal policy. When fiscal policy is implemented, monetary policy provides moderate liquidity support to avoid rapid interest rate increases caused by fiscal expansion. Strengthen macro prudential management and prevent systemic financial risks, especially in the real estate market and local government debt sectors.

4.3 Limitations and Future Prospects

The research in this paper still has the following shortcomings: First, this paper uses the monthly data from 2015 to 2024. Although it covers a long period of time, it may still be unable to fully capture the impact of some structural changes or extreme events (such as the COVID-19 epidemic, the global economic recession, etc.). Secondly, this paper only selects three variables, namely CPI, M2 and 10-year treasury bond yield, and fails to cover more factors that may affect the relationship between monetary policy and financial asset prices (such as exchange rate, real estate market, stock market, etc.). Future research can introduce more variables to comprehensively analyze the interaction between monetary policy and financial asset prices. Furthermore, although VAR models can capture dynamic relationships between variables, their ability to characterize nonlinear relationships is limited. In the future, nonlinear models such as threshold VAR and Markov regime transition models can be considered to better describe the complex relationships of economic variables. The results of the impulse response function are sensitive to the variable order (Cholesky decomposition order). Finally, this article mainly focuses on the relationship between domestic economic variables, without fully considering the impact of external environments (such as global economic fluctuations, geopolitical risks, international trade frictions, etc.) on monetary policy and financial asset prices. Future research can introduce external variables (such as global commodity prices, Federal Reserve monetary policy, etc.) to analyze the transmission mechanism of external shocks on the domestic economy.

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Conflicts of Interest
The authors declare no conflicts of interest.

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