

## Analysis of Factors Affecting the Yield of Financial Bonds of Commercial Banks

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### Abstract

Along with the progress of marketization of interest rate in our country, our country macroeconomic volatility increases gradually, economic policy enforcement, banking regulatory efforts deepening, inter-bank bond market volatility is complex, the commercial bank financial bonds as a member of the inter-bank bond market, the factors affecting the yield fluctuation is gradually attention. Therefore, this paper explores the factors of the yield of financial bonds of commercial banks, and puts forward corresponding suggestions from the stakeholders of financial bonds of commercial banks.

### Keywords

**Commercial Bank; Financial Bonds; Yield; Factors Affecting.**

### 1. Introduction

In recent years, with the development and expansion of China's bond market, the issuance of bonds has increasingly become an important means of financing for enterprises, and the inter-bank bond market has made great progress in terms of issuance and issuance varieties. In 2021, 53.1 trillion yuan of bonds will be issued in the inter-bank bond market, including 6.7 trillion yuan of national bonds, 7.5 trillion yuan of local government bonds, 9.6 trillion yuan of financial bonds, 14.8 trillion yuan of corporate credit bonds, 881.53 billion yuan of credit asset-backed securities and 21.8 trillion yuan of interbank certificates of deposit. It can be seen that commercial bank bonds are gradually becoming an important means of financing commercial banks.

**Table 1.** Treasury yields at the end of 2021

Treasury yields at the end of 2021	One year	Threeyears	five years	seven years	ten years
	2.24%	2.46%	2.61%	2.78%	2.78%
Compared to the same period in 2020	-23bp	-36bp	-34bp	-39bp	-36bp

As shown in the above table, the yield of National debt at the end of 2021 shows an overall decline compared with the same period in 2020. In addition, the total index of China national Debt at the end of 2021 closed at 206.6, up 11.4 compared with the same period in 2020. The Index closed at 121.5, up 2.5 from the same period in 2020. In December 2021, the monthly weighted average inter-bank lending rate was 2.02%, up 72 basis points from the same period in 2020. The monthly weighted average rate for interbank repos was 2.09 per cent, up 73 basis points from the same period in 2020. The above data shows that in 2021, China's bond yield overall shock down. With the acceleration of China's interest rate liberalization process, the volatility of China's macro economy has gradually increased, the fluctuation range of various economic indicators has significantly increased, the implementation of economic policies and

supervision and management of the banking industry have also been strengthened and deepened, and the risks faced by the inter-bank bond market have become increasingly complex. The factors influencing the yield of the inter-bank bond market are not limited to a single aspect, but will be the result of the combined influence of multiple factors. Therefore, it is of great significance to study the factors influencing the yield of financial bonds of commercial banks for all parties involved in the bond market to make investment decisions and promote the healthy development of the bond market.

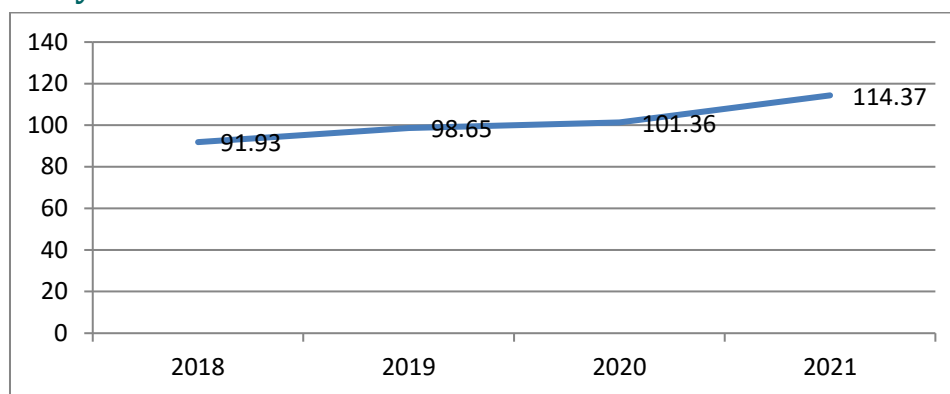
## 2. The Basic Meaning of Bond Yield

Under normal circumstances, bond yield refers to the coupon rate of the bond, that is, the financing rate at which the bond issuer issues bonds to raise funds from the market. During the duration of the bond, the bond issuer will pay bond interest to bond investors according to the established coupon rate and the frequency of interest payment. However, due to the different motivations of each investor in the bond market, the bond buying date and selling date are different, so the yield rate of bond holding period and bond maturity rate can be used to further represent the possible income of investors investing in bonds.

Generally speaking, for financial bonds issued by commercial banks, the main type of bonds is interest-paying bonds with fixed interest rate. Generally, the frequency of bond interest payment is annual interest payment, so the cash flow is fixed during the holding period, and the bond price mainly affects the hold-to-maturity yield of bonds. Bond prices are affected by a combination of factors.

## 3. Factors Affecting the Yield of Financial Bonds of Commercial Banks

### 3.1. Monetary Policies



**Figure 1.** Change of China's GDP from 2018 to 2021 (unit: trillion Yuan)

As shown in Figure 1, China's GDP showed a steady upward trend from 2018 to 2021, and the Central bank gradually relaxed its monetary policy. The central bank lowered the reserve requirement ratio and interest rates six times in 2020 and four times in 2021, deliberately guiding the market interest rate downward, reducing the financing interest rate of the real economy, and further promoting the macroeconomic recovery.

When the central bank implements the expansionary monetary policy, it releases monetary funds to the society, firstly through the increase of base money, and further promotes the monetary growth through the increase of credit supply by commercial banks and the monetary multiplier effect. Therefore, in the short term, the interest rates of money market and credit market will fall rapidly, which will drive down the yield of various financial assets and increase their prices. The increase of asset prices in the hands of financial asset holders represents the increase of wealth held, which leads to consumption and investment demand, and the

reinvestment of increased wealth, driving the price changes of various financial assets until a new equilibrium is formed. After obtaining the funds released by the Central bank, commercial banks will adjust the current asset structure, mainly by increasing credit issuance and investment in various financial assets. All kinds of financial assets include all kinds of bonds, increase investment, that is, the demand for bonds increases, thus the price rises, the yield falls. When monetary policy changes, people will measure whether the growth of money supply matches the growth of nominal income. If they match, the economy will grow stably. If the growth of money supply is greater than that of nominal income, excess money will be generated, which will lead to social price growth and inflation. The reverse leads to deflation.

### 3.2. Macro Economy

Generally speaking, when the economy is in the period of expansion and prosperity, the operating profit of enterprises will rise, the return on capital will continue to rise, social wealth will accumulate in large quantities, and the demand for return on bond investment will also rise, thus pushing bond prices down and yields up. In addition, economic trends have an impact on people's expectations. When the macroeconomic indicators are good, people expect the return on assets will increase in the future, thus increasing investment, bond yield will rise accordingly.

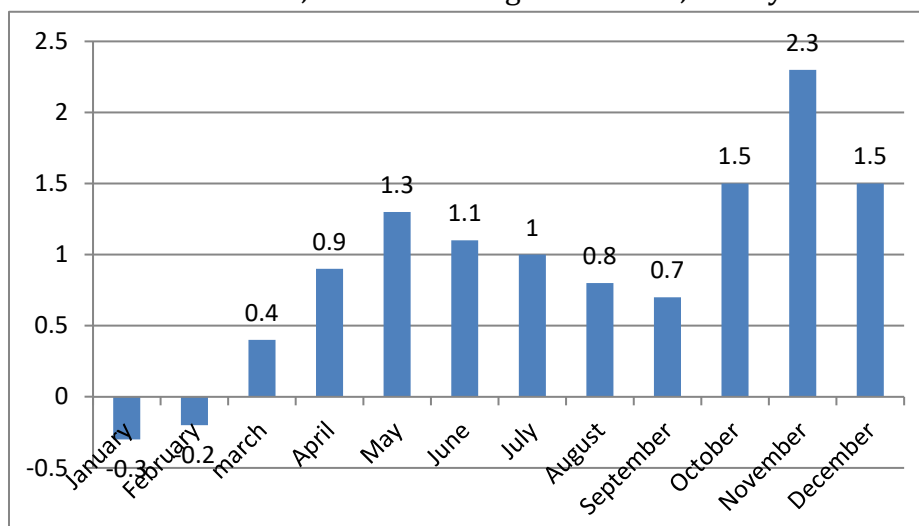


Figure 2. Inflation rate in 2021

When the nominal interest rate remains unchanged, rising inflation rate means declining real interest rate. Therefore, bond yield is positively correlated with inflation. As shown in Figure 2, the inflation rate is constantly changing. When the inflation rate rises, bond investors require bond yields to rise synchronously to ensure their actual purchasing power is not harmed, that is, bond prices will fall. Although inflation can affect the real purchasing power of residents, it is not completely negative. Maintaining a moderate inflation rate is conducive to steady economic growth. When inflation continues to develop and has a great negative impact, the government will reduce the money supply by adopting tight fiscal and monetary policies. On the one hand, the wealth of investors decreases and the demand for bond investment decreases. On the other hand, investors continued to withdraw investment funds as their confidence in the future operation of enterprises declined. As a result, bond prices fall and yields rise.

### 3.3. Other Factors

When the RMB continues to appreciate, that is, the exchange rate continues to decline, the central bank will continue to purchase foreign currencies in the foreign exchange market to increase the RMB money supply and maintain the stability of the exchange rate. However, the increase of money supply will bring about the increase of domestic social wealth, and the demand for bond investment will rise, thus the bond price will rise, and the yield will fall. Such

a move would tighten the supply of yuan and reduce the amount of currency held by bond investors, leading to lower demand for bonds, lower prices and higher yields.

Commercial banks issue financial bonds and invest in financial bonds mainly through the inter-bank market to conduct capital transactions, the financial situation of commercial banks to issue financial bonds and invest in financial bonds has a greater impact. If the supply of capital market is tight, the investment demand of financial bond investors will decrease, and the demand for financial bonds will decrease, and the bond price will decrease and the yield will increase.

## **4. Suggestions for Changes in the Yield of Financial Bonds of Commercial Banks**

### **4.1. Suggestions for Investors in Financial Bonds of Commercial Banks**

Under the circumstances of tightening monetary policy, improving macroeconomic trend, rising RMB exchange rate and rising interest rate in inter-bank fund market, the yield of financial bonds of China's commercial banks will rise, and investors in financial bonds of commercial banks will have investment opportunities. Conversely, when continued easing monetary policy and macro economy recession, the RMB exchange rate decline, the inter-bank money market interest rates fell, the our country commercial bank financial bond yields would decline trend, commercial bank financial bond investors can sell holdings of commercial bank financial bonds at this time, access to capital gains.

In addition, the exchange rate is the most influential factor on the yield of financial bonds of commercial banks, which is also related to the gradual relaxation of exchange rate control in China in recent years. Participants in the bond market are more diversified, and various interest rates in the bond market are more market-oriented. When the exchange rate continues to fall, it indicates that the net inflow of funds drives the increase of supply and demand to the bond market, thus lowering the bond yield. In the long run, as the money supply continues to increase, inflation rises, pushing bond yields higher. Therefore, for financial bond investors of commercial banks, to obtain better bond yields, various factors should be considered comprehensively.

### **4.2. Suggestions for Issuers of Financial Bonds of Commercial Banks**

As for the issuers of financial bonds of commercial banks, they should choose the appropriate issuing time and reduce the financing cost as far as possible by integrating the factors of all parties in the market under the condition that the management of assets and liabilities structure allows. For the control of issuing time point, it is necessary to take comprehensive consideration of monetary policy, macroeconomy, foreign exchange market and capital market. Among them, the fluctuation of monetary policy and capital market has a greater effect on bonds with shorter maturities, while the fluctuation of macroeconomy and foreign exchange market has a more significant effect on bonds with longer maturities.

If commercial Banks according to the current level of assets and liabilities of itself, its proposed period shorter commercial bank financial bonds, should mainly consider the current monetary policy and capital market situation, if the central bank to loosen monetary policy, the interbank money market interest rates at a low level, is the commercial Banks to issue short-term debt is a good time. If banks plan to issue commercial bank financial bonds with a longer maturity, they should mainly consider the current macroeconomic and foreign exchange market trends. If the macroeconomic indicators show signs of recession and the exchange rate declines, it is a better time for commercial banks to issue long-term bonds.

### 4.3. Suggestions for Financial Bond Market Supervisors of Commercial Banks

At present, the transaction of financial bonds of China's commercial banks is not active, most investors hold the bonds until maturity, and rarely trade before the maturity of the bonds. With the fluctuation of the yield of financial bonds of commercial banks, investors also bear the risk of higher interest rate fluctuations, resulting in greater demand for hedging. But at present our country commercial Banks are the most active groups, city commercial Banks have less derivatives trading business qualification, and in the process of daily bond trading, bear a greater risk of interest rate market, the lack of means of hedging, especially when interest rates in the upswing, some commercial Banks even much larger bonds under pressure. At present, our country for the city commercial bank to apply for the requirement of a qualification of derivatives trading and large commercial Banks are consistent, some requirements for most of the city commercial bank is difficult to achieve, can consider stratification are suggested to create derivatives trading qualification examination and approval system, according to the different kinds of commercial Banks to set different qualification requirements. For small urban commercial banks, qualification requirements and approval procedures should be set based on their needs for hedging and smoothing interest rate fluctuation risks, so as to enrich the participants and activity of the derivatives trading market.

## 5. Conclusion

Based on the basic meaning of bond yield, this paper analyzes the influencing factors of commercial banks' financial bond yield, including monetary policy, macroeconomic and other factors. Through the research, we hope to promote the healthy operation of financial bond market and the steady development of commercial banks.

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