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# *China's Bond Market: The Current Situation, Problems, and Countermeasures*

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***Abstract:*** It is undeniable that the bond market plays a key role in the social economy as a whole. Economic development and the state of the bond market often reflect the state of the country's financial markets. Bond markets in China have developed rapidly and have a large financing capacity. In recent years, however, the volatility of the bonds in China has gradually increased due to epidemics, policies and funds, etc. The bond market has undergone a drastic adjustment. This paper describes the current bond market situation in China, analyzes the problems, and proposes solutions for the market. The main problems are the credit risks in bond rating and the impact of political risks on bond market. This paper provides advice on credit risk from the perspective of creating a credit environment, improving data quality, and strengthening regulation. This study has a positive impact on China's bond market's development.

***Keywords:*** bond market, China, credit risks, political risks

## 1. Introduction

Economic growth relies heavily on the development of finance. It is expected that the growth rates for the per capita GDP and the total factor productivity will continue to climb over the next few years [1]. When bond markets mitigate financial market failures such as asymmetric information, indivisibility, transaction costs, or an inability to enforce financial contracts, they can stimulate long-term economic growth and domestic welfare [2]. The bond market plays an important role in ensuring economic and financial stability. Governments and banks meet their growing budgets for political participation through the bond market, which also meets their capital and regulatory requirements. Besides, bond markets can serve as benchmarks for market rates, optimize the allocation of resources [3], and diversify the risk of the financial system effectively [2]. Thus, bond markets are critical to the efficient operation of capital markets.

A number of studies have studied on the bond market. In the paper of Lin et al, they analyze the causal effect of financial constraints on innovation in relation to breaking the rigid payment system in Chinese bond markets as a shock to financial constraints. Bond holders with low credit ratings are facing severe financial constraints since the government has broken rigid payments. According to their findings, financial constraints support corporate innovation on the bright side. Firms' innovation outputs have been positively impacted by breaking the rigid payment in the Chinese bond market [4]. Furthermore, there have been numerous studies conducted regarding bond market liquidity. For example, Panagiotou and Jiang Panagiotou and Jiang analyze the liquidity co-movements of government bonds issued by ten major economies during the last seven years. Liquidity spreads and depths across and within countries and maturities show strong evidence of commonality [5]. Similarly, market participants and policymakers are increasingly concerned with the impact of economic policies on the liquidity of stock market. Dash and his colleagues show a causal link between stock market liquidity and monthly data from seven countries. According to their findings, liquidity on the stock market is causally correlated with policy uncertainty. By using liquidity, market participants and policymakers can manage market conditions [6]. Additionally, implicit government guarantees are examined in many studies. According to Walker's paper, the yield spreads on Chinese corporate bonds are affected by implicit government guarantees. In order to issue corporate bonds via government platforms, a government guarantee must be attached. As a result, the spread between the bond rate and the coupon rate is reduced. Compared to corporate bonds, municipal bonds have lower yield spreads. The spread between municipal bonds and private enterprise bonds has significantly narrowed due to Chinese policy changes. In China's developing corporate bond market, implicit government guarantees have a significant impact, according to the authors. Since the policy adjustments that have been made have reduced the effectiveness and utilization of such guarantees, the market for corporate bonds has become increasingly market oriented as a result of policy adjustments [7]. Furthermore, Paul and Reddy study the impact of U.S. quantitative easing on Indian government bond yields. To lower long-term interest rates, the United States announced "Operation Twist" in 2011. The impact has been greater in emerging markets (including India). A key goal of the Reserve Bank of India (RBI) is to ensure complete transparency in the market. It will improve bond price discovery for corporate and government bonds. Central Bank of India introduces products that encourage investors to participate in the bond market. However, Indian bond markets have spillover effects, with negative consequences. The RBI's monetary policy autonomy has partially disappeared due to asset mispricing in bond markets [8]. Based on the above literature review, we conclude that the bond market during the post epidemic period is unique, however there are few studies analyze on this aspect of the market.

Therefore, this paper focuses on the bond market in China. The first step is to analyze the current situation of China's bond market. Based on its current state, this paper identifies its problems. Afterwards, it outlines the corresponding measures and suggestions that can be taken to counteract the problem.

## 2. Current Situation

China has had a growing bond market for the last few years, with the interbank bond market making up the majority of China's bond market, and the number of bond categories has been increasing as well. The current operation of the bond market, in terms of the scale of issuance of different types, is dominated by government and financial bonds, followed by the scale of corporate credit bonds, and finally by international agency bonds and central bank notes. Bond financing is the second most important social financing method for the entire year of 2020, and its proportion in the social financing scale continues to rise.

There are two main types of bonds: interest rate bonds and credit bonds. The interest rate bonds are those that carry the credit of the state or government, primarily national bonds, local government bonds, central bank notes, policy bank bonds, and the other types are credit bonds, including financial bonds, corporate bonds, corporate bonds, short and medium-term financing, etc. By now, China's bond issuance scale ranks second in the world after roughly ten years of issuance. The Chinese bond market issued RMB 61.9 trillion of bonds in 2022, including RMB 56.0 trillion of interbank bonds, an increase of 5.4% over the same period last year, and RMB 5.8 trillion of exchange bonds. Treasury bonds were issued in 2022 for RMB 9.6 trillion, local government bonds for RMB 7.4 trillion, financial bonds for RMB 9.8 trillion, corporate credit bonds for RMB 13.8 trillion, credit asset-backed securities for RMB 334.54 billion, and interbank certificates of deposit for RMB 20.5 trillion.

The majority of investors are concentrated in public funds, large state-owned commercial banks, securities companies, etc [9]. A total of 49.7% of non-financial corporate debt financing transactions in 2022 were financed by the top 50 investors; 83.1% of transactions were financed by the top 200 investors. In the Chinese bond market, there are three major categories of fixed income securities: government bonds, financial bonds, and corporate bonds. The Ministry of Finance issues government bonds using fiscal revenues. Chinese government bonds are one of the most important financial products on the Chinese financial market and one of the main tools used by PBC to implement monetary policy. The purpose of financial bonds is to raise funds for financial institutions. Since financial institutions are highly creditworthy, financial bonds typically have a maturity of one year or more in specific economic activities. It is always necessary for financial institutions to obtain the central bank's consent before issuing financial bonds. In recent years, professional banks have issued financial bonds as a means of raising capital. Regulatory and legal procedures must be followed when issuing corporate bonds. In addition, they require repayment within a specific time frame after issuance. Generally, corporate bonds are liquid, transferable, and whose issuer promises to repay the principal and pay interest on a predetermined date; they are also less risky than stocks because they are not directly tied to performance. They also have a fixed interest rate, can earn interest regularly, and can also earn a price difference in circulation. They have a more stable return because they have a fixed interest rate, earn interest regularly, and can also earn a price difference.

Data from the Bank of China (Figure 1) describes an outstanding volume of the Chinese bond market from 2016 to 2020 to compare the trend of the bond market through time. From approximately \$1.6 trillion in 2006 to over \$15.5 trillion in 2020, the volume of bonds increased. The volume quantity is growing at an annual pace of about 16.5%, which is faster than China's GDP growth rate over the same time period. Additionally, the range of issuers has expanded. While the share of corporate issuance climbed from less than 10% to 25%, the government's part in bond financing fell from 56% to less than 40%. However, the indicator in figure 2 displays the total amount of outstanding local currency bonds during the 2020 to 2023, classified into corporate and government bonds. We could easily see that the market is dominated by government bonds, which are increasing annually. In March 2020, the size of local currency bond market (Figure 2) in China is around \$12463.59 billion. One year later, in 2021, the total bond market is \$18755.19 billion. In this year, the total currency bond market is about \$18956.68 billion. The bond market growth rate between these three years of approximately 52%. In the past seven years, bonds have shown an upward trend.

China’s bond market has been thriving, and default risks have been successfully mitigated. The overall bond market in China still has a large amount of growth potential, both in terms of its issuance and its trading, which necessitates a more active involvement for international issuers and investors.

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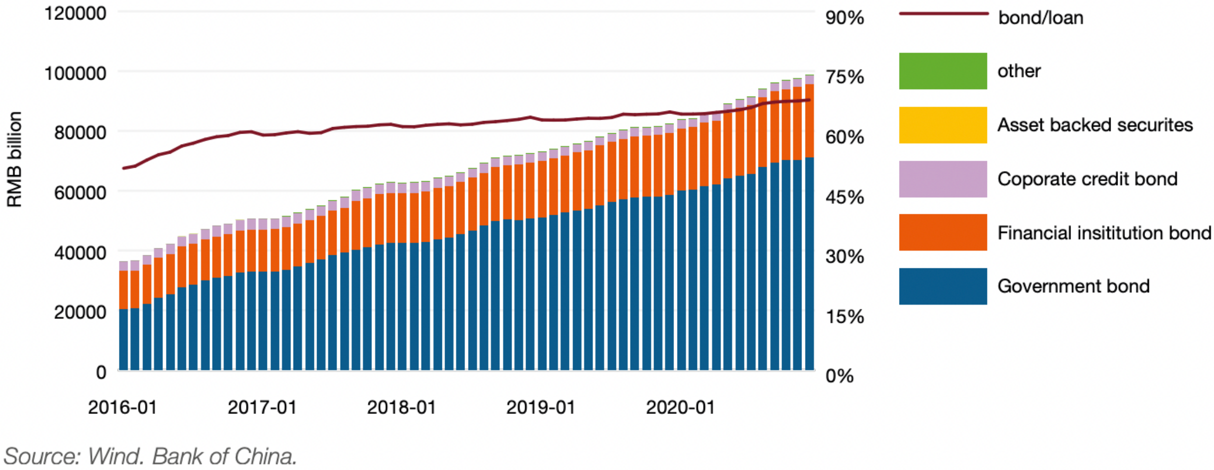


Figure 1: Outstanding volume of Chinese bond market.

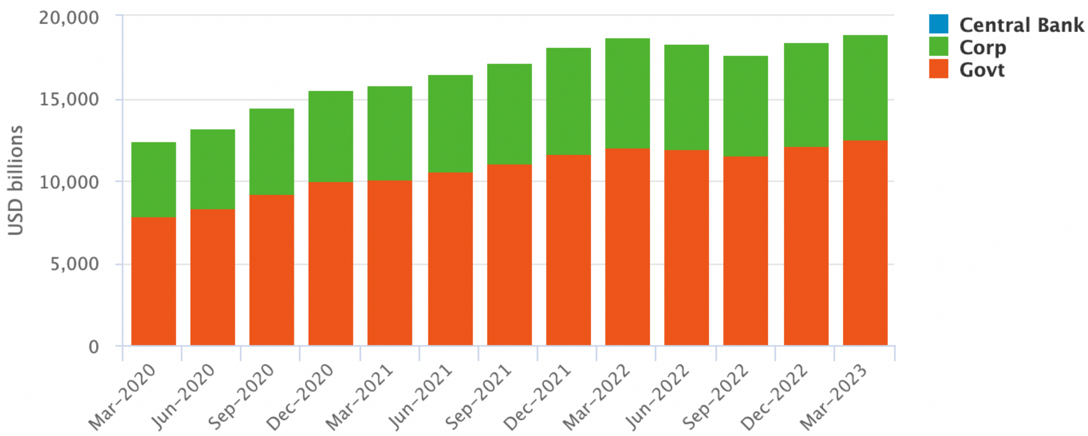


Figure 2: Size of local currency bond market.

## 3. Existing Problems

There are many issues with China's bond market, which is still inmature and not resolved. For instance, bond issuance is unregulated and interest rates have not yet been marketed. In the following sections, we will analyze these problems and suggest possible countermeasures.

### 3.1. Credit Risk

The credit risk reflected in bond ratings is one of the characteristics of bonds [10]. The Chinese bond market is currently experiencing some credit rating issues. There are three main problems: rating credit environment, data issues, and regulation issues.

Lack of favorable market environment. There is a lack of a favorable market environment for the development of the rating industry. The construction of China's credit system is just beginning, and no legal regulations have been introduced concerning information disclosure. Some bond rating agencies have difficulty obtaining adequate information about enterprises from government departments, including the departments of commerce, taxation, and courts. Furthermore, rating agencies cannot compare and verify the credit information provided by enterprises, so rating results are limited in their objectivity and accuracy. Besides, since China's bond market is still immature, bond issuance and interest rates have not yet been marketed, it is difficult to establish a genuine

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market demand for bond credit ratings. It is difficult for credit ratings to fully reveal risks when bond issuers are large state-owned enterprises or local government projects, or to give full credit merits and demerits to the rating process. Bond ratings take a relatively short time because there are not enough samples, and rating agencies cannot verify the accuracy of rating results by using statistical data like default rates and spread tests or disclose their own rating performance to society.

Lack of data and regulation. In the bond market, there is lack of specific data to analyze. Some of the reports contain obsolete information on enterprise operations, industry and bank credit, as indicated by the Interbank Traders Association's revision of the rating report and tracking rating report. Additionally, the analysis of the economy of the enterprise's location and the financial situation of the enterprise's location is insufficiently comprehensive. Additionally, the bond market lacks default data. China has had a long-term 'zero default' phenomenon on its bond market [10]. China’s bond market still has a low default rate despite bond defaults gradually becoming the norm after the first default in 2014. There will be no more than 0.5% of defaulted bond balances in the Chinese bond market from 2014-2021, much lower than the 1.12%-2.15% in international bond markets [10].

Lack of regulation. The last problem with the credit risk is regulation issues. A number of Chinese agencies endorse the use of credit rating agencies' ratings results in the issuance regulations of corporate bonds, interbank bonds, and exchange bonds, including the Development and Reform Commission, the People's Bank of China, and the Securities Regulatory Commission. Nevertheless, the three departments endorse different rating agencies, and the philosophy, content, and strength of regulation differ significantly. It will be difficult to form strong constraints on rating agencies as a result of the lack of unified and coordinated regulation, such as for corporate bonds that can be distributed across markets. In addition, rating systems also face regulatory challenges. Ratings are mandatory for corporate bonds eligible for public offering, but usually only one rating is required. NAFMII requires commercial papers and medium-term notes issuers to be rated AA- or higher on the interbank market. Except for property sector issuers, exchange-traded corporate bonds issued to retail and qualified investors generally require an AAA rating. Ratings are no longer required for corporate bonds issued to qualified investors. Additionally, the National Development and Reform Commission (NDRC) has created a rating requirement for enterprise bonds. In order to qualify for a guarantee, the LGFV must have a debt-to-assets ratio of 65% or higher. Enterprise bonds issued by AAA-rated issuers with ratios less than 85% and AA+ rated issuers with ratios less than 80% do not require a guarantee. As required by the regulatory framework, ratings are issued only for the very highest rated categories. Without further loosening of regulatory restrictions, as long as regulatory restrictions remain in place, bonds are unlikely to be eligible for a broader range of credit categories.

### 3.2. Political Risks

China has a state-dominated economic system due to its unique political system. It is easy to observe political connections in China due to the close interaction between local governments and enterprises within their jurisdiction [10]. In China, Local officials in China are appointed top-down and in an opaque manner [10]. Thus, there are some problems and pitfalls associated with the bond market due to the opaque system of appointing officials in China and the turnover of officials over the years.

Uncertainty of bond market. Bond markets can be unpredictable when officials change. It is difficult for companies to determine the support style and future policy direction of new government officials when there is a change of officials, so companies choose to wait and see to avoid potential risks, which increases corporate cash volatility and adversely affects business and investment behavior in general. Therefore, corporate performance declines, resulting in an increased risk of default. Besides, stock and bond markets are more volatile because investors cannot predict future earnings. The higher the risk premium demanded by investors, the more financial institutions tend to refuse to lend, which increases the cost of external financing for companies, amplifying financial

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market frictions and corporate defaults. Bond market default risks can be magnified by these factors, which can give firms and investors more uncertainty. Investing less and operating less efficiently might be a result of uncertainty about official turnover, while holding more cash and responding more effectively to shocks would be the result of prudent incentives and forward-looking attitudes.

Negatively impact of political connection. An enterprise's political connection to the government will negatively affect the bond market. An official with a long tenure has an easier time building close political ties and gaining substantial support [10]. Former officials' tenure may have a significant impact on corporate bond defaults when political connections are involved. Since it is difficult to build strong political relationships between officials and corporations within a short period of time, local officials usually require some time to investigate to build interpersonal networks and to go through the appropriate procedures in order to complete the allocation of corresponding substantive policy and resource allocation decisions. Accordingly, firms in regions with longer tenures should be more impacted by official turnover if it is primarily driven by political relationships. Similarly, different types of enterprises are dependent on political relationships in different ways. Changes in politics are less relevant to SOEs because there are administrative affiliations and ownership relationships [11]. In contrast, non-SOEs are to a greater extent dependent on local governments, so when uncertainty about the turnover of officials increases, they may gain a greater influence than SOEs [10]. Besides, bond defaults are more pronounced in places with poorer business environments and less transparent governments. Local government relationships become increasingly important as companies move to areas with poorer business environments. There is a possibility that the impact of political turnover on companies and bond defaults may be greater in areas with a poorer business environment when there is political turnover. For example, Southeast Chinese companies deal with local governments on average 52 days a year, while Northeast, Southwest, and Northwest China companies deal with local governments on average 60 days. There is a much better business environment in the southeast compared to other regions, according to the report.

A turnover of officials may have a less dramatic effect on the bond market at times when the Chinese government is ready to respond to changes. There is a high turnover of local officials during the Communist Party of China's Congress and the People's Congress, which is known as "two sessions". During this period, government turnover is more predictable and easier for firms to deal with in advance. To avoid political fallout, outgoing local officials will postpone defaults by debt-issuing firms as long as possible. The impact of official turnover on the bond market is reduced by these two strategies.

## 4. Countermeasures

There are some countermeasures that the government sector can take in order to address these issues.

### 4.1. Reduce Credit Risks

Create stable credit environment. Ensure a stable credit environment by establishing a series of regulations and laws. Monitoring and evaluation organizations can be established by the government to evaluate the appraisal industry and to provide information about companies to reputable appraisers so they can conduct accurate and objective appraisals.

Enhance the quality of data. For rating agencies to make accurate assessments, enterprises and banks need to update their industry data in a timely manner based on the data they have available. As a result of Chinese corporate bond issuance in recent years being much higher than other bond issuances, the default rate has been much lower than other bond issuances. In addition, the project's revenue has a certain guarantee for repayment and the issuance of corporate bonds is unified by the development and reform department, which is more regulated.

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Enhance the regulation of rating agencies. Regulatory policies for credit rating agencies are not yet standardized. Rating agencies must be regulated by a set of laws and regulations that will enhance ratings agencies' legal standing and have a positive impact on their development. In this way, relevant conflicts between various regulatory bodies can be avoided, and the scope of regulatory action can be maximized.

## 4.2. Reduce Political Risks

Reduce market's uncertainty. Government should strengthen market stability in order to resolve the bond market's uncertainty.

Increasing market transparency is the first step. This measure aims to increase market transparency by allowing the government and the public to monitor bond issues. The purpose of this is to keep the bond market stable and to allow companies to predict future policy directions during periods of changing officials. According to this policy, the government is required to expand the scope of information to be disclosed, establish a regulatory authority to oversee the disclosure of information in a uniform manner, and strictly review the disclosure department to ensure that it is in compliance with the law.

Reverse the negative effect of political connections. Bond markets are heavily influenced by political connections because local enterprises are unable to confirm tax incentives, industrial support policies, implicit subsidies, and other preferential policies. During these times, enterprises' coping strategies can only cushion short-term liquidity risks. Furthermore, companies have to pay higher adjustment costs when they want to innovate or adapt to new policies, which also takes more time. To form close and quick political ties, government officials should work in their hometowns whenever possible. When new officials work in their hometowns, there is a significant impact on talent flow and an increased likelihood of providing immediate relief to defaulters.

# 5. Conclusion

Undoubtedly, the bond market plays a significant role in economic stability and plays an important role in financing, resource allocation, and risk diversification. Although China's economy is growing rapidly, it also faces problems on the bond market. Based on the study of China's bond market, credit risks and political risks are identified as the two main problems. These two problems are addressed in this paper with relevant solutions and suggestions. Chinese bond market credit rating issues are currently affecting the Chinese financial system. Additionally, China's unique economic system affects bond development. The paper suggests reducing market uncertainty and political connections in order to resolve this issue. As a result, this research is beneficial to the development of the bond market in China.

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