# How to Sustain Chinese Bond Market Transactions Under the Influence of Covid-19

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**Abstract.** This article writes based on the background of COVID-19. Although COVID-19 is a kind of pandemic, it has already impacted China in many aspects through limiting the normal operation of Chinese society. The negative influence brought by COVID-19 which influence the normal operation of Chinese economy should be minimized as soon as possible to sustain the Chinese economy. To achieve this goal, sustaining the Chinese capital market is very essential. To achieve the above objective, this paper analyzes one important part of the Chinese capital market, the Chinese bond market, to find out the underlying relationship between the Chinese bond market and COVID-19. After getting this particular relationship, Chinese investors can get some useful recommendations on how to reduce and control the bad influence of COVID-19 as a pandemic on Chinese bond value. In addition, those useful recommendations can also be used in other parts of the Chinese economy because each part of the Chinese capital market has some similarities and relationships. Also, some close relationships exist in the Chinese capital market which means that each sector of the Chinese economy influences others. What's more, each participant in the Chinese economy plays a very important role in managing and sustaining the Chinese bond market. Both financial managers and government play some essential roles in managing and controlling the transaction of Chinese bond market. In summary, the bad influence of COVID-19 on the Chinese bond market are useful to learn from, and then the above acknowledgment from the Chinese bond market can help sustain the stability of the Chinese bond market and the Chinese capital and even the whole Chinese economy. Financial participants of the Chinese bond market can also use those recommendations to protect their investment value from the influence of COVID-19.

**Keywords:** Chinese bond market; COVID-19; green bond; anti-pandemic bond; government bond.

## 1. Introduction

The Chinese economy has been influenced by COVID-19 largely. Many small and medium companies can’t sustain their daily business operations because of the government’s anti-pandemic policy. Therefore, some bond issuers (small and medium) can’t repay the bond at maturity. Also, the Chinese bond market can not sustain its origianl transactions. The Chinese bond market which is a part of the Chinese economy is very important to Chinese companies which are the main sources of the development of the Chinese economy. It is highly urgent to sustain normal transactions in the Chinese bond market because the bond market as a major kind of debt plays a very important role in providing cash flow to small and medium companies. To achieve this objective, Chinese bond market participants such as the government, bond investors, and financial managers should find out the relationship between Chinese bond transactions and COVID-19. It is helpful and useful to learn from the situation of the Chinese bond market which has been influenced by COVID-19 largely. The appearance of COVID-19 decreased Chinese bond investors' investment confidence and then reduces the Chinese bond transaction volume. This situation is negative to the stabilization of the Chinese bond market and the whole Chinese economy. Although most Chinese bonds have been negatively impacted by the pandemic, some types of bonds and some types of financial choices showed their excellent risk-defending abilities. These financial choices are suitable purchases for bond investors under the influence of COVID-19. Except for the bond investors and issuers, government monetary policy and financial managers are also very important in the Chinese bond market under the influence of COVID-19. Chinese monetary policy also contributed a lot to sustaining Chinese bond transactions under the influence of COVID-19. Sometimes, financial managers are also useful to help bond investors select special bonds. All the above factors have played an obvious role in sustaining the stabilization of the Chinese bond market. In summary, paying attention to what has happened in the Chinese bond market is useful to defend against the future impact of COVID-19. All in all, learning from the past is helpful to find out some useful recommendations which are helpful to sustain and even boast the Chinese bond transaction volume under the influence of COVID-19.

COVID-19, a pandemic that happened for almost three years, has a closed relationship with the bond market. It influenced investors' preference of investing (confidence), and then that influence impacted the choice of the investors. As a result, the bond market changed a lot with the influence of the abrupt pandemic. The impact of COVID-19 is continuous. Liu compared the economic performances of America and China at the same time and researched that the Chinese financial market has already been influenced by COVID-19 a lot and that influence happened in many areas [1]. The above influence can be explained in many aspects. First, the systematic risk was increasing with COVID-19. Systematic risk is a major kind of risk that always exist in bond transaction. The investor has already changed accordingly, Cai et al have found that investors started to change their choices of investing. Many bond investors choose to quit the Chinese bond market. Second, with the impact of COVID-19 and the consequent fluctuation in the financial market, investors started to choose certain bonds with stable characteristics, for example, the Treasury bond [2]. Third, Yi et al. researched that the COVID-19 pandemic has posted some negative influences on financial efficiency, by controlling variables [3]. Forth, Balli and Hoxha have found that the green bond in China has even gained a growth rate with the background of the influence of COVID-19 [4]. In summary, different bonds achieved different influences from the influence of the pandemic. X Yi et al who used the event study method and econometric models have already found out that the impact of COVID-19 on the green bond can be concluded as a kind of periodic influence [5]. Bond investors who choose to purchase a bond with strong abilities to repay can reduce the negative influence of COVID-19. Under the influence of COVID-19, this kind of bond performed very well and gain many more bond investors' investments. Besides, these influences have not appeared in other types of bonds. In summary the influence of COVID-19 impact different bond differently. What's more, the influence of COVID-19 was also irregular because each sector of the bond market has achieved different influences. Xu Weijia et al researched that the price of the bond has not been impacted by COVID-19, but the market fluctuation is large [6]. Although this pandemic has influenced all the Chinese financial markets, the influences that happen in each market are very different. At the same time, some changes also happens in other financial markets such as stock market, Long et al. have stated that some similar changes caused by COVID-19 happened in both the Chinese bond market and the Chiese stock market [7]. Besides, Fang et al have researched that different fluctuations happened in different countries such as China and America, using the state-dependent local projection method [8]. The different influences of COVID-19 in different countries happened in each country because the monetary policy of each country was different. Liu et al also concluded by using the Wavelet analysis that Chinese policy played an important role in mitigating the negative influence happened in Chinese bond market [9]. Apeldoorn and Graadd analyzed the differences between the US government and the Chinese government and then found out that the government in each country plays an important role in controlling and managing the capital market [10]. The Chinese government published many monetary policies to sustain and protect the Chinese economy so the Chinese bond market have fluctuated but it recovered in consequent years. The negative pandemic influence on the Chinese bond market is controllable.

This article's main objective is to learn from the past transaction circumstances of three major types of Chinese bonds to conclude some useful recommendations which are useful to protect the value of the Chinese bond under the influence of COVID-19. With the above useful information, Chinese bond investors can mitigate financial risks correlated with the bond they invested in. In this article, the writer concludes on both the negative and the positive aspects of choosing three types of Chinese bonds under the influence of COVID-19. And then the writer compares the issuing situation of these three major Chinese bonds. Then concludes each type of bond's characteristic. After the above comparisons, some other factors which influence the issuing of Chinese bonds can be found out also. Some bonds which have a strong ability to defend against the negative influence of COVID -19 can be found. With the above information and some adoptions, Chinese bond investors may be confident to invest in Chinese bonds. Besides, the Chinese government can also use these features to publish some useful monetary policies.

## 2. The circumstance of Chinese bond market

The Chinese bond market has experienced various influences which mainly led to the decrease in bond investors' investment willingness. Except for the bond investors, Chinese government monetary policy, financial managers, and bond issuers have been influenced largely. Almost every part of the bond markets has to change their financial choices to sustain their normal transactions.

### 2.1 Influence on green bonds

Different bonds have been impacted by the pandemic differently. Although many bonds have been negatively influenced by COVID-19, some bonds have showed their excellent abilities in risk-avoiding ability. For example, the green bond is comparatively stable. Although the issuing condition of green bonds has been negatively influenced by the pandemic, that influence is highly limited. China is a major green bond issuing country, accounting for almost 39% of the world [11] which proves that the Chinese green bond is a mature capital market. All features adhered to the green bond prove that it is a comparatively stable bond investment.

### 2.2 Influence on monetary policy

Except for the above influence on each type of bond, the pandemic also lessens the power of the original monetary policy. It can be explained that all those traditional monetary policies lose their original power in managing the Chinese economy [12]. The conventional monetary policeis haven’t considered the existence of the risks brought by COVID-19 so the power of those conventional policies lost power. If the Chinese government wants to sustain the original bond market transaction volume, it highly needs to adopt its monetary policies. Besides, the Chinese government should also use stronger and stricter methods to manage transactions of Chinese bonds. To sum up, all those traditional monetary policies are not as useful as before. To help the Chinese bond market adjust to the pandemic, the Chinese government should not only reinforce its monetary policy but also used some pointed monetary policies [12].

## 3. Why do these changes happen under COVID-19?

This article uses three types of bond to explain why COVID-19 has influenced the Chinese bond market. Each bond shows a certain type of influence brought by COVID-19.

### 3.1 The features of investing in Chinese government bonds

With the abrupt outbreak of COVID-19, the Chinese bond market started to fluctuate, losing several investors in the bond market and reducing the government bond’s ability to avoid financial risks [13]. The above phenomenon means that Chinese government bonds started to lose attractiveness to some bond investors since the outbreak of COVID-19.

According to figure one, the yield of 10-year Chinese government bond yield has shown two obvious tendencies. The first is that the highest bond yield has almost decreased to a 0.5% yield rate. In addition, the 10-year bond yield has shown a decreasing trend from the beginning of COVID-19.

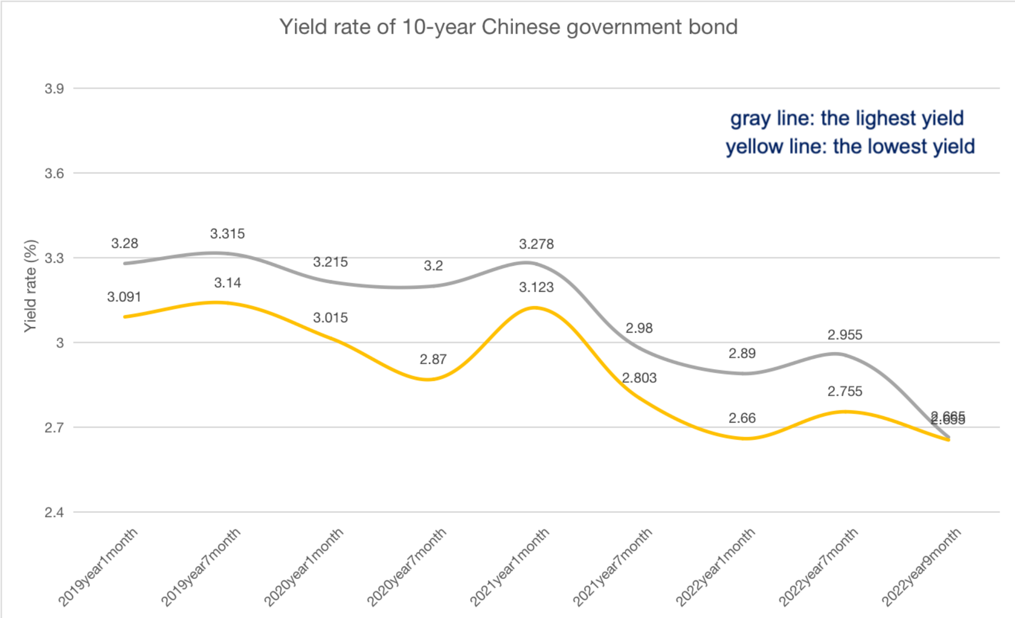

**Fig. 1** Yield rate of 10-year Chinese government bond

According to Liu, the Chinese government bond can not sustain its investment attractiveness to investors whilst COVID-19 remains present in society [14]. However, this situation cannot wholly explain the Chinese bond investors' attitudes towards the Chinese government bond market since the beginning of COVID-19. Although single choosing the government bond may not be stable, some other financial choices including the government bond were useful to sustain the value of the bond investment. For example, investing in the Chinese capital market, which includes the Chinese government bonds markets and the stock market, could be a good way to avoid a significant risk, as posed by COVID-19, because the combination of these two financial assets can increase the diversification of an investment, and as a consequence, this diversification can reduce the risk of losing an investments' value [15]. This investment option can at least partly explain why the Chinese government's bonds are still selected by some Chinese investors. The asset portfolio with high diversification ability helps investors reduce the risks through the development of their portfolio diversification [16]. For this reason, some investors will still choose Chinese government bonds as their preferred investment option. In summary and based on the findings of Huang, W. et al. [15], the Chinese government bonds as a solo financial asset may not attract some investors because only investing in the government bonds may increase the risk of the investment. However, in reality, some other financial choices may help reduce the risk of losing capital interest under the influence of COVID-19.

### 3.2 The features of investing in Chinese anti-pandemic bonds

From 2021 to 2022, the anti-pandemic bond is favored by Chinese bond buyers for its characteristic of avoiding the risk of the pandemic with the help of the Chinese preferential government policy [16]. The Chinese anti-pandemic bond is a certain bond issued by the Chinese government to defect financial risk caused by COVID-19. At the same time, the Chinese government's preferential policies for the anti-pandemic bond largely cut down the uncertainty along with the pandemic, reduce the cost of investing in bonds, and even enhance the confidence of the bond buyers in the continuous COVID-19 background [17]. Many positive features along with the anti-pandemic bond are very obvious under the influence of COVID-19. Therefore, based on the behavior of anti-pandemic in the last two years, the anti-pandemic bond has earned many Chinese bond investors' preference and then provided cash flow for many anti-pandemic bond issuers since the beginning of the COVID-19[17]. In summary, the anti-pandemic bond is a useful financial tool to maintain the operation of the Chinese bond market which provides money for the bond issuers [18].

However, in reality, the positive effect of the anti-pandemic bond can not be attained sometimes since the profit from issuing the anti-pandemic bonds has an intimate relationship with the severity of COVID-19 which fluctuates and is hard to predict [15]. So it is impossible to invest in the anti-pandemic bond to avoid all kinds of risks brought by COVID-19, even though the anti-pandemic bond has reduced some risks correlated with the pandemic in the last two years [18]. In summary, choosing one anti-pandemic bond is not useful for avoiding all the risks brought by COVID-19 even though it is created to defend against the risk brought by COVID-19.

### 3.3 The features of investing in Chinese green bonds

Except for the above two bonds, the Chinese green bond is also a usful financial bond which canbe used to defend against varous risks [19]. What's more, many countries have noticed the importance of environmental protection. The chinese green bond market has many choices. The green bond based on environmental thought can earn many investors' attention. Additionally, with the diversification ability of the green bond, green bond investors may avoid risks and uncertainties brought by COVID-19 by choosing the green bond as a part of the investment portfolio [20]. For example, bond investors can choose to purchase green bonds and other asset securities. However, the above benefits are highly limited for two reasons. On the one hand, although green bond plays an essential role in alleviating pandemic risk since the beginning of COVID-19, the green bond transaction is limited because this kind of bond can just be issued by issuers who participate in environmental protection projects [20]. On the other hand, it is hard to construct one asset portfolio because only a professional financial manager can analyze and choose a portfolio accurately. Bond investors have to pay much more money and time to wait. The unpredictable severity of COVID-19 also put more uncertainties on a bond investment. In summary, the benefit of investing in green bonds can just be achieved by a limited amount of bond investors [20]. In summary, although the green bond has a strong ability to defend against financial risk even under the influence of COVID-19, it still has some drawbacks for bond investors.

## 4. Investment recommendations

After analyzing issuing situation of three major Chinese bonds, some bond issuing features under COVID-19 can be concluded. Then some useful bond investment recommendations can also be summarized. Bond investors shouldn't lose their confidence in investing in a bond, there are still some useful financial bond choices reducing the risks brought about by COVID-19.

### 4.1 How to deal with those unpredictable risks

Based on the above analysis, it is easy to conclude that the Chinese bond market has experienced some large fluctuations. To sustain the value of the bond investment, bond investors should adjust their investment choice accordingly. Bond investors should choose certain types of bonds that have the ability to risk-defending under the influence of COVID-19. Government had better publish some new monetary policies. Besides, for bond investors, choosing to construct some asset portfolios is also useful to mitigate the risks brought by COVID-19.

#### 4.1.1 Investing in certain bonds is a good financial choice in China

After comparing with other types of bonds, investing in the green bond and anti-pandemic bonds are good financial choices in China for three reasons. First, the Chinese government always support the development of green bond. In China. Under the influence of COVID-19, the green bond has shown its excellent diversification ability [19]. The monetary policy helps bond investors sustain the bond market under the influence of COVID-19. Therefore, if the severity of COVID-19 is high, Chinese bond investors can select an anti-pandemic bond. If the severity of COVID-19 is slight, bond investors can choose some other types of bonds such as the green bond and government bond.

#### 4.1.2 Constructing a portfolio with different bonds

Although it is hard to predict and control the influence of COVID-19 on the Chinese bond market, bond investors can avoid the risk of losing value by choosing bonds more carefully and then matching them with other assets to construct one financial portfolio. Constructing an investment portfolio is also helpful to sustain the investment value. Portfolios always have a stronger diversification ability than one single bond investment. The diversification helps Chinese bond investors increase the bond investment's risk-avoiding ability.

### 4.2 The relationship among the financial market

COVID-19 influenced the Chinese economy largely. can learn from the Chinese bond market Both the Chinese bond market and the Chinese stock market have experienced similar risks and they have some underlying relationships with each other. Firstly, with the conclusion from analyzing the Chinese bond market, it can be highly recommended that the stock market should also be supported by monetary policy. For example, the anti-pandemic bond performed well. The stock market can also design some types of stocks with the same feature. Secondly, the stock market should also issue some stocks pointed at dealing with risks brought by the pandemic. In the bond market, the bond correlated with the ideology of "green" and "anti-pandemic" is stable. Therefore, the Chinese stock market can also issue stocks with similar features. Thirdly, financial managers can do some deep analysis to select some special financial assets to construct some financial portfolios. A portfolio with the feature of diversification can avoid some financial risks also.

## 5. Conclusion

This article concluded with some useful financial recommendations on how to sustain the value of the bond transaction through learning from the past years' Chinese bond market. It can be easily found that monetary policy plays an important role in sustaining the Chinese bond market. Besides, if bond investors want to sustain their investment value with the influence of COVID-19, they should also take care of the type of bond and choose some special types of bonds. In addition, choosing a financial asset portfolio is also a good way to defend against the risk of influencing by COVID-19. In summary, the Chinese bond investors can still invest in the Chinese bond market although they may face some risks of losing invesment value because some bond financia choices are helpful for Chinese bond investors reduce those risks brought by COVID-19.

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