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Research on Green Bond Issuance and Financial Risk of Real Estate Companies

-- A Case Study of Xuhui Group

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Abstract

In recent years, real estate enterprises are facing the macro situation of tightening financing constraints. For colleagues whose traditional financing channels have been impacted, green bond, as a new financing method, is quietly rising. Taking Xuhui Group, the real estate enterprise with the largest scale of green bond issuance in China, as an example, this paper studies its 5 trillion green priority notes issued in 2021, discusses the benefits brought to the Group by this issuance from the perspective of interest rate, term and solvency, and believes that this issuance has successfully reduced financial risks. Finally, it summarizes the risk points contained in the issuance process, hoping to provide experience and reference for other real estate enterprises.

Keywords

Green Bonds; Financial Risk; Xuhui Group.

1. Introduction

In recent years, as ESG (Environment, Society and Governance) investment has gradually become the mainstream trend of global investment, as an important part of ESG, green bonds have been highly recognized by global market participants (Yang Yang, 2022). In the context of achieving the goal of "carbon peaking and carbon neutralization", China's green finance policies have been issued and the support has been continuously strengthened, and the effect of the policies has been widely concerned. Green credit policy and green bond support policy are the focus of China's current green finance policy and play an important role in supporting China's green development (Chen Guojin, 2021). By the end of 2020, the cumulative issuance scale of China's green bonds has exceeded 1.1 trillion yuan, ranking among the top in the world and playing a crucial role in promoting the green transformation of the economy. Specifically, green financial bonds are evenly distributed in environmental protection, pollution control, energy conservation and emission reduction, clean transportation, etc. Environmental protection, climate change adaptation and pollution control account for a relatively high proportion. This has a good guidance for promoting the transformation of economic structure and transforming the development mode (Li Yongkun, 2017). At the same time, as an important tool for financing low-carbon economic transformation, green bonds also help to improve the company's value, drive up the stock market price, help institutions cope with market risks and reduce their own financial risks (Wang Ran, 2021). In recent years, the scale of green bonds in China has been expanding. In 2021, China's domestic green bond issuance increased significantly, with a year-on-year increase of 106.82%.

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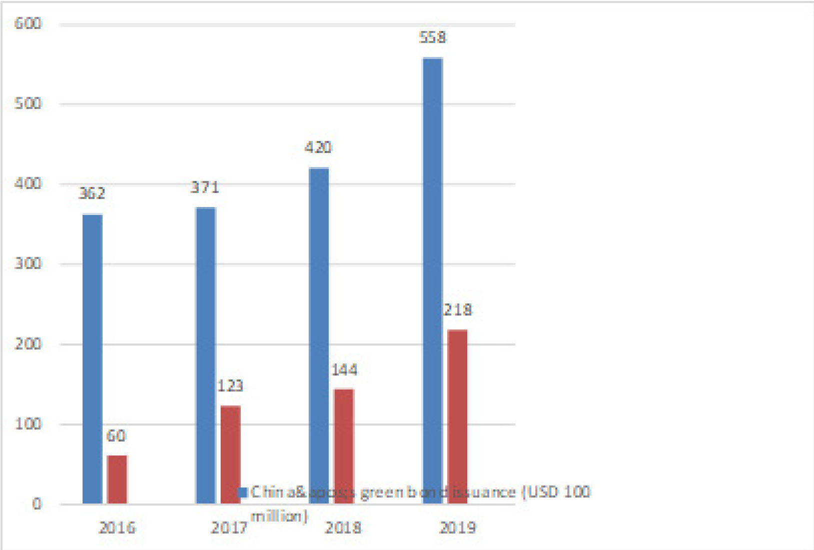

Fig 1. Scale and quantity of green bond issuance in China
Data source: wind database

With the development of China's green bond market, the academic research and literature on the impact of China's green bond development are also constantly enriched. Compared with the traditional fixed income market, the stock market, the foreign exchange market and other types of financial markets, the green bond market, as a new type of financial market, will be inextricably linked with other markets. Gao Yang (2021) found that the green bond market and the traditional fixed income market, including Treasury bonds, high-yield corporate bonds and corporate bonds, have the most significant risk spillover effect. The risk spillover effect with stock market and foreign exchange market is weak. The emergence of the green bond market has also led to an upsurge of "green bonds" in the financial market. Flammer and Caroline (2020) described the characteristics of the "green bond fever" in recent years, studied the financial and environmental performance of companies after issuing green bonds, and found that the stock market has a positive response to the announcement of green bond issuance.Green bonds are also effective in improving the company's environmental footprint. It can also be seen from this that the emergence of green bonds also has a certain impact on the internal development of enterprises.

Wang Qian (2021) compared green bonds with traditional bonds, analyzed the impact of green bonds on corporate value based on the mixed cross-sectional data of 40 listed companies that issued green bonds from 2016 to 2021, and found that there was a positive correlation between the issuance of green bonds and corporate value. The greater the proportion of green bond financing in the total bond financing, the more helpful it was to enhance corporate value. On the other hand, green bonds have also contributed to the frequent "short-term financing and long-term investment" of enterprises in recent years. Ningjinhui (2021) found that green bonds restrain the mismatch of investment and financing terms of enterprises by easing financing constraints. Moreover, compared with state-owned enterprises, large enterprises, enterprises with high credit rating and non polluting enterprises, the green bonds issued by non-state-owned enterprises, small enterprises, enterprises with low credit rating and high polluting enterprises have a more significant inhibitory effect on the mismatch of investment and financing terms.

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2. Data Analysis

The emergence of green bonds has indeed brought new life to enterprises, which can not only improve the company's value, but also reduce their own financial risks. However, most of the existing literatures analyze the impact of green bonds on the market or enterprises from the overall perspective, and do not consider studying green bonds from the Perspective of a single company. Although some literatures involve a single enterprise, the selected enterprises are not representative. It does not involve quantitative data analysis and is deficient. In view of these, this paper selects Xuhui holding Group, one of the leading enterprises in the real estate industry, to analyze the impact of green bonds on the enterprise from the perspective of interest rate, maturity and solvency based on its financial data and green bond related data in recent ten years. At the same time, for its $500million green priority notes issued in 2021, this paper discusses the benefits brought to the Group by this issuance, and summarizes the risk points contained in the issuance process. It can provide experience and reference for other real estate enterprises.

As a real estate enterprise, Xuhui Group has greater financial leverage than other enterprises. Because real estate enterprises are capital intensive enterprises, they need a lot of money to buy land and build houses, so they rely heavily on bank loans, debt financing and equity financing. In recent years, affected by the external environment, the economic downturn has been serious. The state has tightened its regulation and control policies on real estate, which makes real estate enterprises prone to financing difficulties and capital chain breaks.

As can be seen from the figure, the year-on-year growth rate of China's real estate development loan balance in 2021 was 0.83%, and the year-on-year growth rates in 2020, 2019 and 2018 were 8.27%, 7.94% and 45.57% respectively. Compared with previous years, the growth rate in 2021 will slow down considerably. The year-on-year growth rate of real estate trust balance in 2021 was -22%. The year-on-year growth rates in 2020, 2019 and 2018 were 14.15%, -18.58% and 29.95% respectively. Compared with 2020 and 2018, 2021 even showed negative growth. This shows that the overall risk of the real estate industry is increasing. China has introduced a number of regulatory measures to tighten the liquidity of the real estate market, which has a significant impact on the real estate industry. At the same time, commercial banks further optimized the allocation of credit resources and reduced the amount of loans to real estate enterprises. This in turn makes the real estate financing burden heavier. The real estate industry will face multiple tests of scale reduction and risk control in traditional financing, and the total business scale will be tightened.

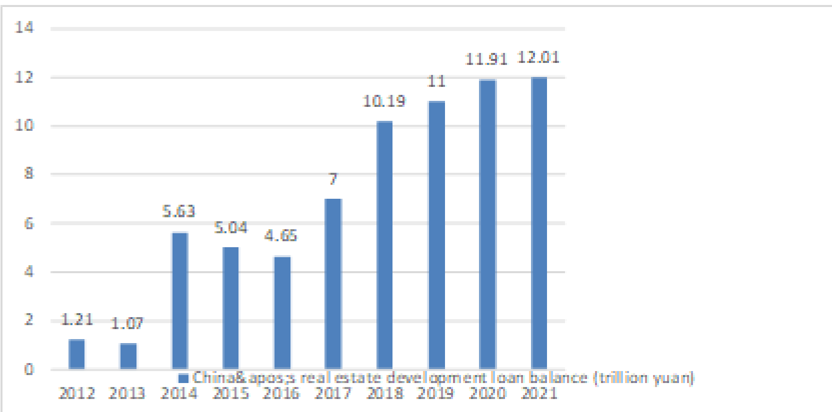

Fig 2. Real estate development loan balance
Data source: wind database

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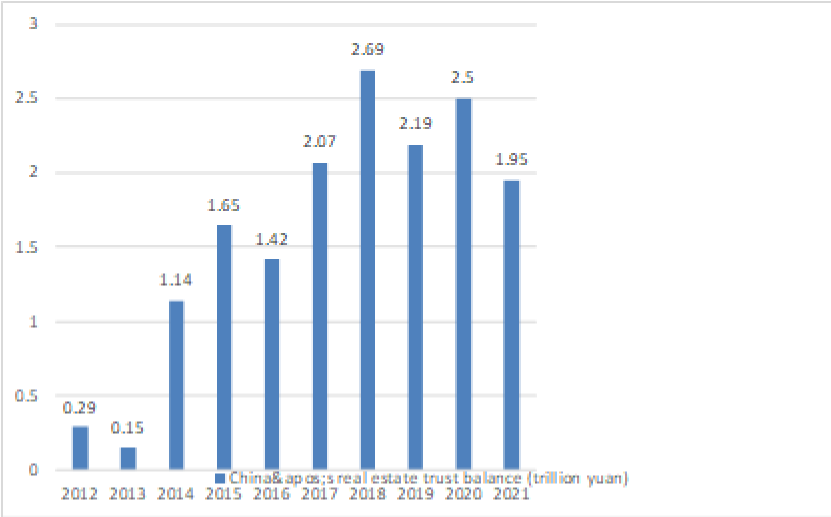

Fig 3. Real estate trust balance in China
Data source: wind database

Under this background, broadening the company's financing channels, reducing the risk of financial leverage and strengthening the efficiency of capital turnover have become the wind guide for the development of the real estate industry. At the same time, as the second largest carrier of green finance in China, the scale of green bonds is second only to green credit. In January 2016, Shanghai Pudong Development Bank issued the first green financial bond in China, marking the official start of China's green bond issuance. Green bond refers to any bond instrument that specifically uses the proceeds to fund or refinance green projects that meet the specified conditions. Compared with ordinary bonds, green bonds are special in four aspects: the purpose of bond raised funds, the evaluation and selection procedures of green projects, the tracking management of raised funds, and the requirement to issue relevant annual reports. The following two tables are the specific details of the green bonds issued by Xuhui Group.

Table 1. Basic terms of the first issuance of green bonds

Bond name	Green priority note of Xuhui holding (Group) Co., Ltd		
Bond code	40316	Listing place	Hong Kong Stock Exchange
Bond type	Green dollar debt	Value date	July 20, 2020
Name of issuer	Xuhui holding (Group) Co., Ltd	Bond term	5.25 years
Issue date	July 13th, 2020	Issue price	99.968% of the principal
Issuance scale	US $300million	Rating agencies	Fitch International
Nominal interest rate	5.95%	Entity / debt rating	Ba3/BB
face value	$1000	Third party certification body	Sustainalytics
Interest accrual method	Interest at fixed interest rate	Purpose of raised funds	Refinance its existing debt

Source: sorted out according to the green bond issuance announcement issued by the company on july14,2020

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Table 2. Basic terms of green bonds issued for the second time

Bond name	Additional green priority note of Xuhui Holdings (Group) Co., Ltd		
Bond code	40316	Listing place	Hong Kong Stock Exchange
Bond type	Green dollar debt	Value date	July 20, 2020
Name of issuer	Xuhui holding (Group) Co., Ltd	Bond term	5.25 years
Issue date	July 29, 2020	Issue price	100.75% of the principal plus accrued interest from July 20, 2020 to August 5, 2020
Issuance scale	US $200million	Rating agencies	Fitch International
Nominal interest rate	5.95%	Entity / debt rating	Ba3/BB
face value	$1000	Third party certification body	Sustainalytics
Interest accrual method	Interest at fixed interest rate	Purpose of raised funds	Refinance its existing debt

Source: sorted out according to the green bond issuance announcement issued by the company on july14,2020

For listed companies, issuing green bonds can effectively reduce the company's financing costs, improve the company's financial situation and reduce the risk level.

(1) Reduce financing costs

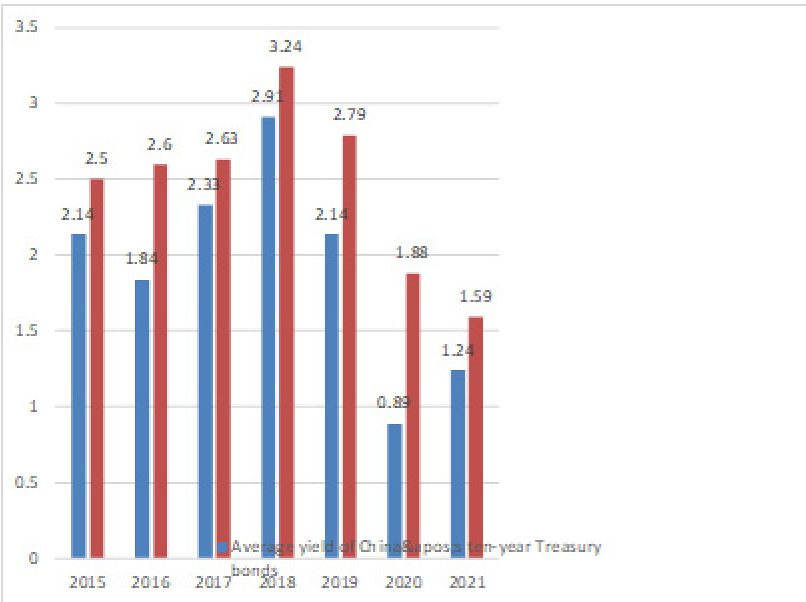

Fig 4. Average yield and maximum yield of ten-year Treasury bonds
Data source: statistical data released by the people's Bank of China

We take the annual yield of ten-year Treasury bonds as the comparison standard. The interest rate of green bonds issued by Xuhui is generally higher than the yield of ten-year Treasury bonds. At the same time, compared with the bank loan interest rate, the green bond interest rate is slightly higher. However, considering the current government regulation measures faced by China's real estate industry, such as strictly restricting the property pre-sale and price limit, tightening the purchase qualification, tightening the housing loan policy and raising the mortgage interest rate, restricting the bank credit line, etc. Therefore, the traditional financing

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channels of real estate companies will be blocked and it will be difficult to obtain funds from conventional financing channels such as banks and trusts. Therefore, green bonds with a slightly higher interest rate than bank loans can be accepted by real estate enterprises. By issuing green bonds, the real estate industry has broadened financing channels, enabling real estate enterprises to improve their own capital chain and reduce financing costs when facing adverse market conditions.

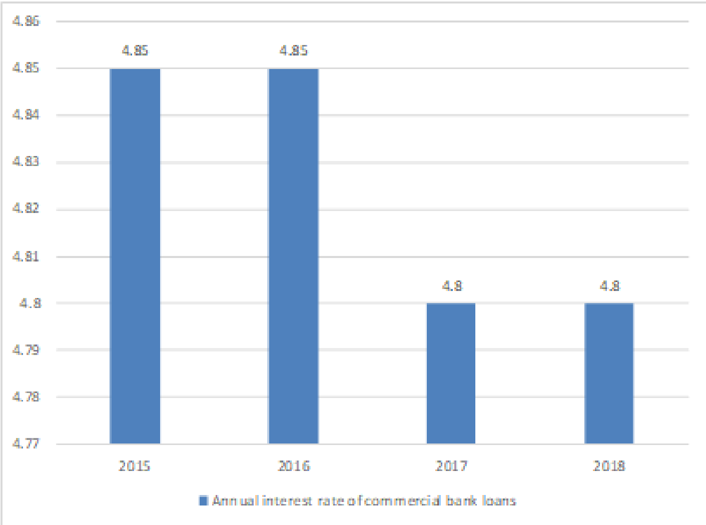

Fig 5. Annual interest rate of commercial bank loans

Data source: statistical data released by the people's Bank of China

(2) Improve the company's financial situation and reduce the risk level

On the one hand, the issuance of green bonds provides new financing channels for real estate companies, on the other hand, it also changes the company's assets and liabilities. At the same time, it has a good effect on the company to improve capital utilization and capital chain due to the maturity of bonds .

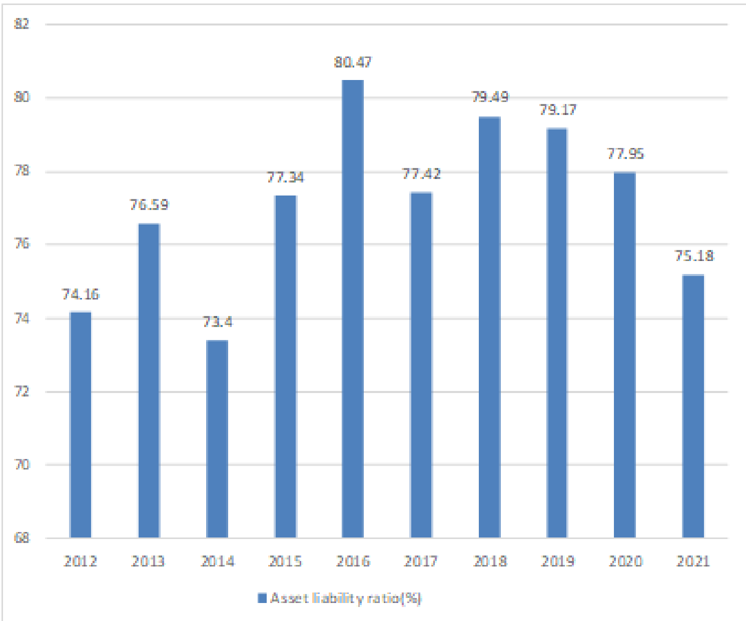

Fig 6. Asset liability ratio from 2012 to 2021

Data source: annual financial report of Xuhui Group

From the balance sheet of Xuhui Group from 2012 to 2021, we can see the green bonds issued by the company in 2021. Under the current policy guidance, the company's asset liability ratio will be reduced from 77.95% in 2020 to 75.18% in 2021. Although the reduction of the overall debt ratio may be related to the loose monetary policy in 2021, there is no doubt that green bonds have played a good role in improving the asset status of real estate companies.

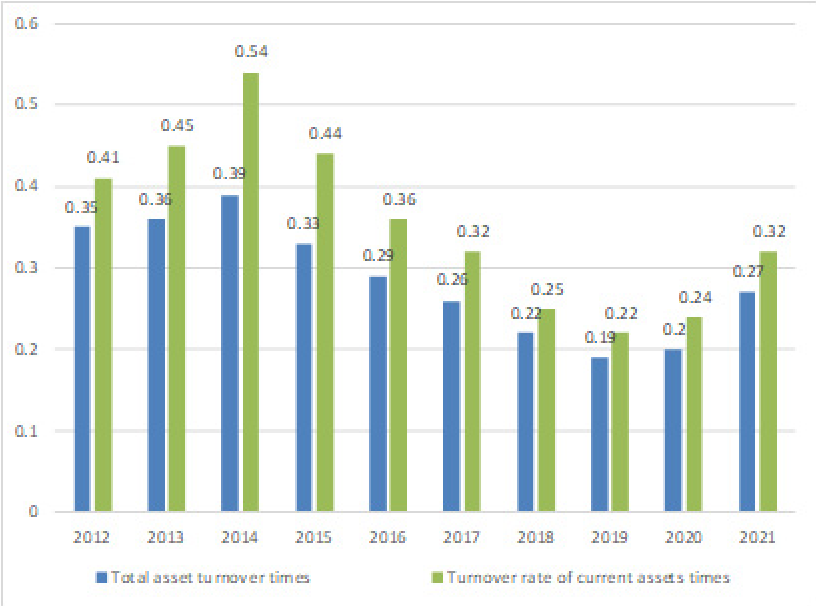

Fig 7. Total asset turnover and current asset turnover from 2012 to 2021
Data source: annual financial report of Xuhui Group

From the company's operating conditions, after Xuhui Group issued green bonds, the company's total asset turnover and current asset turnover increased from 0.2 and 0.24 in 2020 to 0.27 and 0.32 in 2021. In particular, the turnover rate of current assets increased by 33.3%. This shows that the company's operating capacity has been improved, and is higher than the industry average.

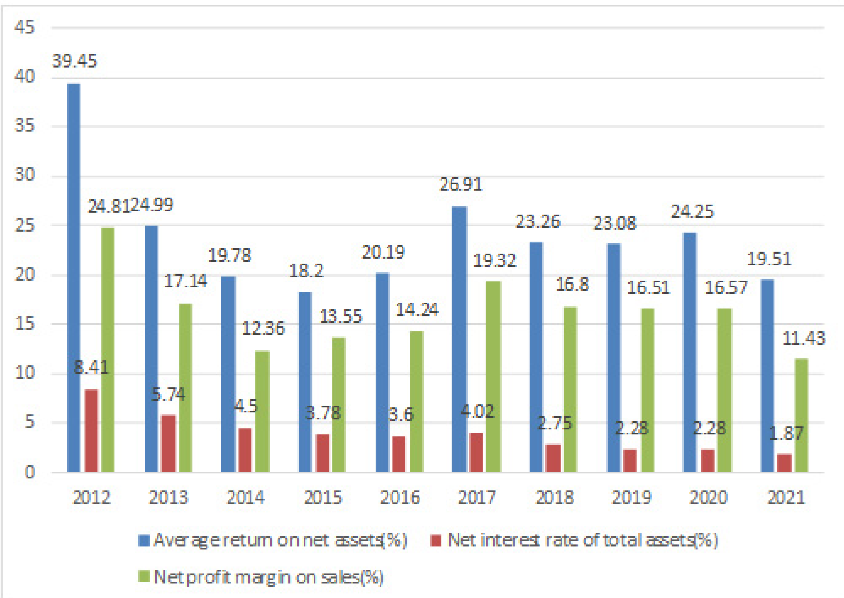

Fig 8. Profitability from 2012 to 2021
Data source: annual financial report of Xuhui Group

From the perspective of the company's profitability, from 2012 to 2021, the company's average return on net assets, net interest rate of total assets and net interest rate of sales decreased year by year. The three indicators also show a downward trend from 2020 to 2021. This shows that in the current market environment, the improvement of financing and financial situation can not provide effective help to the marketing of real estate companies.

3. Conclusion

As a real estate development enterprise listed in Hong Kong, Xuhui holding Group has maintained a rapid development trend in recent years. In the current market environment, the support of regional policies and corporate strategies has greatly promoted the issuance of green bonds of Xuhui holding Group. In particular, the relevant departments in Hong Kong have launched a series of policies and measures for the green bond market. It provides a good environment and follow-up guarantee for the company to issue green bonds. The cost of issuing green bonds by Xuhui holding Group includes interest rate cost, certification and evaluation cost, and fund management cost. Compared with the yield of treasury bonds, bank loans and green bonds issued by companies, green bonds have obvious cost advantages. Xuhui holding Group can generate many benefits by issuing green bonds. First, by issuing green bonds, companies can increase the proportion of long-term liabilities. They can chang the overall asset liability structure of the company to reduce financing costs and financial expenses. Second, as a refinancing arrangement, the issuance of green bonds will help broaden financing channels, relieve the company's debt repayment pressure and improve its capital situation. Third, issuing green bonds can reduce the use of the company's cash flow, increase the liquidity of the company's overall capital and improve the company's overall operation level. Fourth, the company invests the funds raised by green bonds into qualified green projects, which can meet the capital needs of green projects and generate good social and environmental benefits. We will further promote energy conservation and emission reduction in China.

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