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Motivation, Dilemma and Countermeasures of Foreign Bond Financing of Real Estate Enterprises: Based on Perspective of Financial Internationalization

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Abstract: Several real estate enterprises in China (hereinafter referred to as housing enterprises) rely on overseas financing to meet their financing needs, but it is fraught with challenges such as high financing costs. Premised on the internationalization of finance, combined with the background of "staying and not speculating" and establishing a long-term mechanism for real estate market, based on the investigation of the financing motives of real estate enterprises, combined with a large amount of data, the present study examines the current situation and predicament of overseas financing of housing enterprises. It proposes four feasible countermeasures to promote sustainable development of real estate enterprises overseas financing including building a special financing system to reduce the cost, expanding various financing channels, strengthening the supervision of overseas bond financing, and reducing the loss devaluation of RMB internally and externally.

Key words: Real estate enterprise; Overseas bond financing, countermeasures; Financial Internationalization; Financing costs

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1 Introduction

Economic globalization is constantly evolving over tim e. Internationalization of finance is in the process of development. In financial internationalization, a country's economic activities transcend national borders, include global operations, seek cooperation, mainly in the internationalization of financial markets, financial transactions, such as internationalization, especially the internationalization of financial transactions(Yang and Liang 2019). Various types of financial institutions, investors, and enterprises participate in financial Transactions. Financial transactions are rich in tools and active trading activities. International financial dependence of countries continue to improve and the speed and mode of the process differences are often affected by philosophy, regional trends, and the impact of political environmental. (Kose et al. 2005) For example, in the macro background of China's "housing does not speculate", the real estate financial sector is strictly regulated. The existing financing channels find it difficult to obtain financing quota, resulting in housing enterprises not being able to meet the financing needs. Under the internationalization of financial transactions, the scope of financial transactions has expanded, trading technology is becoming increasingly perfect, and the channel role of international securities market is significant. Therefore, many housing enterprises take advantages from financial internationalization, opening up new financing channels through cross-border flow of funds and financing of foreign bonds (especially U.S. dollar bonds) to alleviate the domestic capital demand.

In practice, China's housing enterprises participate

in cross-border exchanges and cooperation between financial institutions and financial business to meet the financing needs, avoid falling into the dilemma of broken capital chain, accelerate the development of domestic real estate projects, as well as to face the cost of financing, financing use restrictions, and the loss of RMB depreciation and other issues. Therefore, it is relevant to examine the plight of foreign bond financing of Chinese housing enterprises and how to deal with them.

2 Literature Review

Here are some of the results of the study on overseas bond financing of housing enterprises provided by researchers in various countries as following.

2.1 The Problems and Risks of the Financing of Foreign Funds of Housing Enterprises

The relationship between default periods and sovereign state debt was studied by Jie Luo and Cheng Wang . Their research provides a reference for examining the relationship between the default of foreign debt and the debt ratio of Chinese housing enterprises(Luo and Wang 2018). Ma Yanming and Liu Tingbing (Ma and Liu 2018) found that the default ratio of nonfinancial enterprise debt financing instruments on China's bond market default bonds 2014 to 2017 accounted for 83.3%. Eisele et al. (2017) found that the introduction of SME bond financing increases the financing costs of SMEs. Chen (2017) observed that in domestic housing financing, the cost of overseas financing is affected by increase in the U.S. dollar interest rate. In the study of the value of listed companies in the manufacturing industry, Li and Chen (2017) believed that the rational use of foreign exchange derivatives to hedge exchange rate risk enhanced the value of enterprises. This provides insights to the housing enterprises to deal with exchange rate fluctuations. Yan (2016) highlighted that China's housing enterprises should exist at home and abroad market for the corresponding adjustment of financing structure and scale. Liu and Yue (2016) claimed that domestic housing enterprises are facing the risk of RMB depreciation and the decline of domestic risk asset prices. Huang (2016) believed that the financing of low- and medium-rated housing enterprises in the bond market is unstable and vulnerable to the market systemic risk interference.

China Index Research Institute (2016) research data showed that, in the case of increasing the difficulty of overseas financing, the cost of financing domestic housing enterprises has been significantly higher. The risks and costs of foreign bond financing of housing enterprises have attracted academic attention, especially some systemic risks. Clark and Judge (2009) found that different types of risk hedging instruments (e.g., forwards, options, swaps, and foreign currency debt) had different safe-haven effects, resulting in a value premium of 11-34%. It is revealed that housing enterprises should choose a hedging tool suitable for the real situation of enterprises. Bartram and Bodnar (2007) concluded that the use of financial or financial hedging instruments by firms could effectively mitigate the long-term impact of exchange rate fluctuations on the value of enterprises, which is similar to the conclusion by Clark and Judge.

2.2 Research on the Financing Method and Currency of Foreign Bonds of Housing Enterprises

Gao (2019) proposed that foreign financing is one of the effective ways to resolve financing difficulties and institutional limitations under the condition that the financing is blocked in the enterprise. Hu (2019) found that the U.S. dollar accounted for the bulk of foreign debt currencies issued by nonfinancial enterprises. In studying the risk of offshore investment projects, Jae-II and Eul-Bum (2018) proposed that the use of mezzanine financing with option sesame products could be used not only for overseas steel investments, but also for other industries. Zhang(2018) The small and medium-sized housing enterprises should change the existing financing structure, actively explore the financing channel innovation, and build brand characteristics. Jiang and Du (2018) and Hu hold the same view. Gao and Guo (2018) found that bond financing is one of the most important financing methods of offshore financing of housing enterprises. Pang (2018) claimed that it is one of the best options for issuing bonds abroad, and a similar study by Gao Yujia was also found. In general, it can be observed that foreign bonds of housing enterprises have become the consensus. Su (2011) recommended three ways of personal entrusted loans, trust financing, and asset securitization after studying 10 common financing models. At present, asset securitization still has some operating space. These financing methods have some validity, but they must be applied to different financing environments. Doidge and Karolyi (2004) found that, based on the Tobin Q value, cross-border financing significantly reduced the cost of financing for enterprises.

2.3 Study of the Financial Supervision of the Financing of Foreign Bonds of Housing Enterprises

Li (2019) found that the relevant departments need to further strengthen the supervision and control of the risk pressure of foreign debt in Chinese real estate, which can improve the record registration management system of foreign debt and the early redemption of bonds. Ren (2019) had similar views to that of Hu and He (2019), who believed that the real estate stock bond market requires further monitoring and troubleshooting. Gao (2018) believed that if housing enterprises have largescale overseas debt default, systemic financial risks may spread to the whole country or even the world, and therefore it is necessary to should strengthen the management of foreign bonds of housing enterprises.

2.4 Study of the Factors and Effects of the Issuance of Bonds by Enterprises

Fan (2019) believed that the scale of cross-border capital flows and the size of foreign debt of enterprises and financial institutions are expanding rapidly. Aslan and Kumar (2018) found that the forced sale of bonds had a significant negative impact on the company's investment activities. In China, on the other hand, the issuance of highinterest dollar bonds by housing companies has raised the cost of financing them. Gabrieli et al. (2018) found that almost all of the official interest rate changes over the past decade have been driven by policy goals focused on the housing market. Shi (2018) proposed Vanke's overseas capital operation, such that Vanke expanded its business and visibility. Zhao (2018) proposed that in the process of issuing U.S. dollar bonds, the most important factors are the credit rating of the issuer and the benchmark interest rate of U.S. Treasury bonds. In contrast to the studies by Aslan and Kumar (2018), Jose Maria Maria Serena

Garralda (2016) argued that companies are issuing offshore bonds as the cost of external financing falls. Yao (2014) found that China's real estate financing methods by the macro-controlling of the great impact of the bank loan financing increased; therefore enterprises must increase the proportion of self-financing.

2.5 Behavior Preference Study of Investors' Buying Bonds

Beracha et al. (2019) considered securities traded in the U.S. market are one of the most efficient and transparent markets in the world. Broner et al. (2013) found that international investors generally regarded bonds issued by companies in emerging economies to be high risk, and that they are more demanding in terms of risk and premium. Similarly, Barr and Priestley (2004) studied the conditions and constraints of issuance of offshore bonds in emerging market, in which enterprises in the region tend to issue offshore bonds of a shorter term and a higher risk premium. It can be seen that enterprises in different types of areas receive different levels of attention by investors.

This literature review showed that although researchers focus more on the problems and risks of foreign bond financing of housing enterprises, financing methods and currencies, financial supervision, the impact of corporate bond issuance, etc., and provide reference and ideas for future research, it is insufficient. First, a few scholars have studied the promotion factors or necessity of foreign bond financing of housing enterprises, but lack in-depth exploration of these factors or necessity, such as causes of the capitalintensive real estate industry. In addition, the latest trends in the real estate sector have been ignored, such as land-level development and abolition of the pre-sale system of commercial housing. These systems have a significant impact on housing financing. Second, the analysis of the scale of financing is mostly superficial and does not consider domestic and foreign debt and comparison of financing amount, and debt development trend analysis. In addition, there is lack of research om the regulatory gap in the financing of foreign bonds of housing enterprises. Third, with regard to addressing the plight of foreign bond financing of housing enterprises, studies have focused mainly from the regulatory perspective and rarely from that of housing enterprises. In addition, the existing research lacked reproducible countermeasures. Finally, there are few studies on the financing of foreign bonds of housing enterprises. Therefore, based on extant literature, the present study further complements and develops the lack of foreign bond financing for housing enterprises to promote sustainable development of the foreign bond financing of housing enterprises. In a follow-up study, first, the motivation of the overseas bond financing of Chinese housing enterprises is clarified, and under the specific motivation, the housing enterprises choose the financing of foreign bonds. Second, based on the housing enterprises choice of financing of foreign bonds, the difficulties of financing are examined. Third, based on the existing dilemma, targeted countermeasures are examined. Finally, the present study and literature review propose some prospects.

3 The Motivation of the Financing of Foreign Bonds of Chinese Housing Enterprises

The motivation of the financing of foreign bonds of Chinese housing enterprises refers to the factors that promote the financing of Chinese housing enterprises through financing offshore bonds. This is examined by first analyzing the industry characteristics and clarifying the characteristics of industry financing. Second, the study further examines the domestic capital market supply and demand situation and the degree of satisfaction for housing financing. Finally, based on the fact that the domestic capital market cannot fully meet the financing needs of Chinese housing enterprises, the conditions and advantages of foreign bond financing are analyzed.

3.1 Distinctive Features of the Real Estate Industry

The real estate industry is capital-intensive and policyoriented. Therefore, housing enterprises should also pay attention to the source of funds, costs, deadlines, and policy changes and trends in the operation. In real estate development, costs are dominated by land use rights transfer and construction installation project costs in excess of 80%. (In the general real estate development, the two proportions meet the above standards. However, with China's real estate development into the stock era, many real estate enterprises became involved in land-level development, especially in Beijing, Shanghai, Guangzhou, Shenzhen, and other first-tier cities as representatives. In land-level development, land expropriation and relocation compensation fees become an important cost component, which is determined by the development cycle and difficulty of the first-level projects.) of the total development cost. The transfer of land use right is an important source of revenue for the local government. An analysis of the contribution of the land use right transfer to local government's fiscal revenue would reveal that there is a clear trend of land finance. Figure 1 shows that local government revenue (including general public budget revenue and government fund budget revenue only) will be RMB1693.485 billion by 2018. The local government revenue generally includes four items: general public budget income, government fund budget income, state-owned capital operating budget income, and social insurance fund budget income. General public budget income is an important index to measure a city's fiscal revenue. The income from the transfer of land use rights is included in the budget income of the government fund. At present, the state-owned capital operating budget income accounts for about 1% of local government revenue, while the budget income of the social security fund belongs to the special fund. Therefore, the general public budget income and the government fund budget income are the main source of income for the local government, the study also measures the local income from land use rights transfer is RMB659.6 billion, accounting for 38.44%. It can be seen that the real estate industry is capital-intensive and local governments strongly depend on land finance. In terms of regulation and control policies, the tone of the real estate market in 2019 is "stabilizing house prices" and curbing the practice of increasing prices. In areas where housing price income is relatively high, supply is lesser than the amount of net population inflow, and the inventory of land is promoted from the supply side of real estate to ensure "stable house prices." Meanwhile, the city's policy of not taking systemic financial risks as the bottom line is maintained. In this context, housing enterprises need to carefully carry out urban entry research and analysis of regional real estate market supply and demand situation as well as orderly expansion of new markets. In addition, the policy of eliminating the pre-sale system of commercial housing has already be enforced in several places and had a fundamental impact on the existing commercial housing pre-sale system, challenging the financing, use of funds, and operational capacity of housing enterprises.

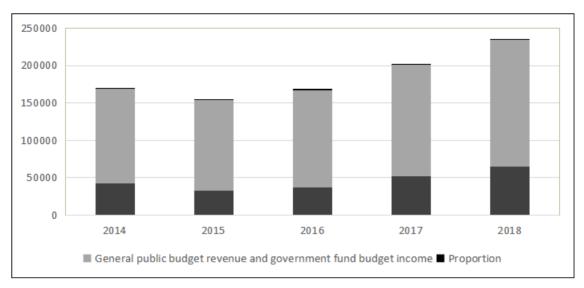


Figure 1. Income from land use rights transfer funds and general public budget income and government fund budget income for 2014–2018.Source: Website of the Ministry of Finance of the People's Republic of China

Time	Institutions	Content	
2/25	Central bank	The Central Bank's Financial Market Working Conference proposed to strengthen the prudent management of real estate finance and implement the long-term mechanism of stable and healthy development of the real estate market.	
3/4	BANK CIRC	The Notice on Further Enhancing the Quality and Effectiveness of Financial Services for Small Micro- enterprises in 2019' requires that the loan funds of small micro-enterprises be diverted to areas of regulation and control such as real estate.	
4/17	BANK CIRC	The official website issued pointed out that to strengthen financial supervision, continue to curb the real estate bubble, control the rapid growth of residential leverage.	
5/10	Central bank	In 2019, we will adhere to the continuity and stability of real estate financial policies, and increase financial support and regulation of the housing rental market.	
5/17	BANK CIRC	The Notice on the Implementation of the Work of "Consolidating the Results of The Consolidation of Disorders to Promote Compliance Construction" states that funds from inside and outside the review table will be used directly or disguised for land transfer financing, and that the qualifications of housing enterprises will not be strictly examined, and that financing for "four certificates" of incomplete real estate development projects will be provided in violation of the law.	
7/6	BANK CIRC	Interview some real estate trust business growth too fast, too large increment of trust companies.	
7/12	NDRC	The Notice of the Office of the National Development and Reform Commission on the Requirements for the Registration of Applications for the Issuance of Foreign Debt by Real Estate Enterprises clearly states that the issuance of foreign debt by real estate enterprises can only be used to replace medium- and long-term foreign debt due within the next year, and that the purpose of funds should be clarified in the prospectus. (Office of the National Development and Reform Commission 2019)	
7/31	Central bank	The supervision and risk warning of the financing behavior of large housing enterprises with high leverage.	
8	BANK CIRC	All kinds of illegal and illegal acts that will transfer funds into the real estate industry by misappropriation and diversion will be severely investigated and punished.	

Source: Publishing unit official website and public information collation

3.2 Domestic Capital Market Cannot Meet the Financing Needs of Housing Enterprises

In the central "housing does not speculate" regulatory background, the capital market flow to the real estate sector of funds is strictly restricted and regulated, and housing enterprises have strong financing needs. The current domestic capital market cannot meet the financing needs of housing enterprises. By establishing long-term mechanism of real estate market regulation, the financial regulation and control policies in the real estate sector are frequently issued. In early 2019, there are more than 10 financial regulatory policies directly related to the real estate sector, covering the use of funds, sources, investment areas, application conditions, among others, multilevel restrictions on financing in the real estate sector, increasing the difficulty of domestic financing (Table 1). According to the data of 95 typical housing enterprises in 2019, the issuance of domestic bonds in the first half of 2019 amounted to RMB140.2 billion, while the maturity of bonds in the first half of 2019 reached RMB210.8 billion, which is 1.5 times the size of domestic bond issuance. The size of domestic issuance does not cover maturing bonds. The internationalization of financial transactions facilitates financing of foreign bonds of Chinese housing enterprises, and many housing enterprises use the overseas capital market to meet their financing needs.

3.3 Foreign Bond Financing Has Multiple Advantages

Under the internationalization of financial transactions, capital generates cross-border flows, and housing enterprises use offshore capital markets to finance, further covering the financing gap. In addition, foreign bond financing has multiple advantages. First, the entry threshold is lowered. When housing enterprises issued bonds in China, there existed a regulatory mechanism for the modern governance structure of enterprises, financial indicators, scale, and other strict restrictions. Currently, several housing enterprises cannot get funds through China's bank loans, trusts, and other means, and even some housing enterprises even resort to private lending. The conditions for issuing bonds offshore are relaxed, and the disclosure of information and financial indicators of enterprises are reviewed during the issuance audit. For example, the U.S.

Securities and Futures Commission stipulates a few conditions in the issue of debt audit on the operating conditions and corporate information disclosure. Second, policy risks are low. China's real estate market control situation is serious, overseas industrial policies and financial policies are not directed against the real estate industry. Third, the cost of foreign debt issuance time is reduced. When issuing bonds are approved, it usually takes more than 3 months in China, and there are cases where it is not approved, while overseas bonds are generally appoved within 2 months, which is of great significance to the housing enterprises that are under pressure to repay the debt.

4 Current Situation of Foreign Bond Financing for Chinese Housing Enterprises

4.1 The Size of The Financing

The scale of foreign bond financing of housing enterprises is affected by factors such as financing mode, enterprise size, and financial situation, and the current foreign bond financing method mainly follows the issuance of U.S. dollar bonds abroad. Figure 2 shows that the financing scale of overseas bonds of real estate enterprises was kept at a low and stable level, no more than 40 billion yuan. By the first quarter of 2017, the scope of financing had grown rapidly, exceeding 60 billion yuan, and by the first quarter of 2019 it had exceeded 150 billion yuan, with a quarterly geometric average growth rate of 67.70%. In absolute terms for the first quarter of 2019, it increased by more than 14 times compared to the first quarter of 2016. The main reason for the rapid growth is that since 2017, China's property market has been tight, the real estate financial market regulation has been strengthened, China's financing channels are limited, and the conditions for foreign debt issuance are slack, and more housing enterprises with the help of foreign dollar bonds are able to meet the financing needs. On the other hand, from the data of 95 typical housing enterprises in the first half of 2019, the total amount of bonds issued in the first half of 2019 was 288.3 billion yuan(For comparison purposes, the U.S. dollars and Hong Kong dollars that appear here and after the text are converted to RMB, and the exchange rate is as of August 1, 2019, with U.S.\$1 s 6.8811

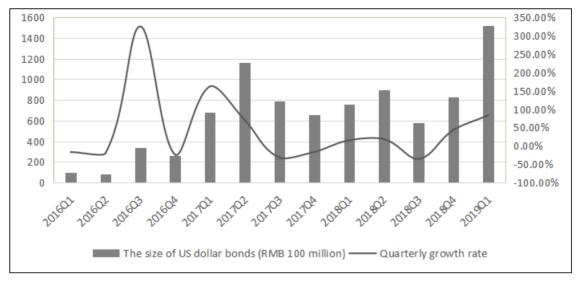
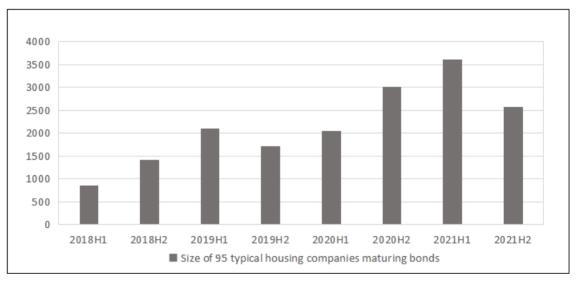
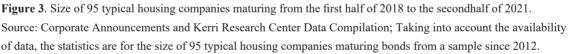


Figure 2. Scale and growth rate of foreign dollar bonds issued by housing enterprises in the first quarter of 2016–2019; Source: According to the Central Government Bond Registration and Settlement Co., Ltd. and Henyep Research Data.





RMB and HK\$1.8789. In addition, without special instructions, the data shown are derived from 95 typical housing enterprises). Of these, domestic debt issuance was RMB140.2 billion. As shown in Figure 3, the bonds maturing in the first half of 2019 amounted to 210.8 billion yuan, and the debt outstanding could not be repaid by issuing domestic debt alone. In the second half of 2020 to the first half of 2021, all maturities will exceed Rmb300bn, and the size of the debt service will expand further. It can be seen that the overseas debt issuance of housing enterprises "borrowing new compensation for the old" will remain stable.

4.2 Methods of Financing

Currently, China's housing enterprises offshore bond financing is mainly through issuing U.S. dollar bonds. There are two models of direct and indirect bond issuance, mainly indirect bond issuance. There are four specific methods for indirect bond issuance. First, the agreement must be made. In this way, domestic real estate enterprises issue bonds with the help of overseas subsidiaries, enter into Keep well Agreement and equity purchase commitment letters with overseas subsidiaries and investors, and the overseas subsidiaries issue bonds to international investors and repay the principal and

interest as agreed. Domestic real estate enterprises need to provide cash support and purchase bonds in case of default. Second, third-party guarantee must be ensured. This approach applies to small and mediumsized domestic housing enterprises, characterized by the introduction of third parties to provide letters of credit for the issuers, and the cancellation of the maintenance agreement and equity acquisition commitments. Third, the method is similar to how red chips are distributed. This applies to housing companies with listed subsidiaries abroad, but very few companies meet the requirements. Fourth, the domestic housing enterprises direct guarantee mode. The company can obtain a higher credit rating and increase investor recognition, but cross-border guarantees are regulated by the State Administration of Foreign Exchange and require application and approval. Of the four approaches mentioned earlier, the first two are more common. In addition, the listing of the Stock Exchange of Hong Kong has also become an option for financing housing enterprises, of which nine have successfully listed from 2018 to August 2019(Fuyi International is listed on the Hong Kong Stock Exchange through a shell, so it does not do statistics).

4.3 The Need for Financing

At present, there is a strong need for foreign bond financing of housing enterprises. First, the real estate industry is capital-intensive, from the initial payment of land transfer payments, to the late project development and payment of taxes, all of these activities need sound cash flow support. If the capital chain breaks, on the one hand, housing enterprises will find it difficult to promote project development and meet the normal production and business activities (Jiang 2019); on the other hand, to avoid investors' risk, housing enterprises cannot raise funds from the capital market. Second, China's real estate market as a whole has slackened, housing enterprises rate of return on sales is low, and it is difficult to promote rolling development of the high turnover model. However, the abolition of the pre-sale system of commercial housing would revolutionize the existing real estate development model. In addition, the survival space of housing enterprises is compressed, in the competition of nonclass, many capital-chain-fragile small and medium-sized housing enterprises were merged and acquired. From the perspective of the land market,

"land king" (the most expensive land or land with the highest unit price) appeared frequently, local land market was in short supply along with rising cost of land. Third, there is limited domestic financing. According to typical housing enterprise data monitored by Kerri, the amount of domestic financing in the first half of 2019 was only 140.2 billion yuan, while the amount of debt due by housing enterprises in the first half of 2019 amounted to 210.8 billion yuan, covering only 66.5% of the debt. Therefore, it is essential to expand the financing channels of foreign bonds. Finally, the maturity of bonds is high. Currently, the funds that China's housing companies can receive can pay off debts due in 2019 but the bonds expected to mature by 2020 and will exceed 500 billion yuan. It is a test of the capital operation and cash flow management capabilities of housing companies.

5 The Dilemma of Foreign Bond Financing of Chinese Housing Enterprises

5.1 Increased Cost of Financing

From the existing scale and mode of financing, many housing enterprises need to meet the financing needs through the overseas capital market and show a significant growth trend despite the impact of the factors that increase costs. In recent years, with regard to the bond financing costs, the difference between domestic bonds and foreign bondswas basically stable. However, this year, the cost of foreign issuance of bonds is high. As shown in Figure 4, the annual financing difference between the two is 1.73%, 0.88%, 1.16%, 1.28%, with the difference being less than 2% in terms of the financing costs of domestic and foreign bonds from 2015 to 2018, respectively. The difference between domestic and foreign financing appears to be nonsignificant. By mid- 2019, the cost of financing offshore bonds will reach 8.34%, 1.68 times that of domestic financing. In addition, the net profit margin of investment projects in the third- and fourth-tier cities is not less than 10%, and if the financing cost of foreign bonds is 8.34%, the proportion of net profit ratio is as high as 83.4%. For small and medium-sized housing enterprises, the cost of financing will erode a larger proportion of the net profit. Judging from the recent early redemption of foreign bonds, Xuhui, Zhongjun, and other seven housing enterprises redeemed bonds of more than 13.762 billion yuan to avoid losses of highcost bonds. Given the recent coupon rate of foreign bond issues, some housing companies have exceeded redemption of bonds by 15%. In July, Taiyu Group issued a total of 2,752 million yuan worth of U.S. dollar bonds through its overseas subsidiaries for a threeyear period with an annual coupon of 15% (Table 2). In addition, local home buyers issued an annual interest rate of 15.5%. In February 2019, the 2.408 billion yuan worth of bonds, the issuance of high-interest bonds and the debt situation of housing enterprises have a certain relationship, which is reflected in China's severe financing situation, more housing enterprises are meeting the financing needs with the help of overseas capital markets, especially small and medium-sized housing enterprises in the foreign capital market by raising the coupon rate, to attract foreign investors to subscribe, to meet the urgent financing needs, and largely to change the real estate market in terms of the supply and demand relationship of the meta-bond market.

Table 3. Recent issuance of high-interest bonds in U.S. dollars

Redemption time	Company	Redemption amount	Redemption rate
2019.07.10	Tai He	27.52	15.00%
2019.06.28	Sunshine 100 China	13.76	11.50%
2019.06.26	Hongyang Real Estate	17.20	10.50%
2019.06.25	Jia Zhaoye	20.64	11.50%
2019.06.12	Zhengrong Real Estate	13.76	10.25%
2019.06.06	South China City Holdings	4.13	11.88%

Data source: Enterprise announcements.

5.2 Limited Use of Financing

As described earlier on the financing needs, we can see that the overseas financing of housing enterprises is imperative, while the foreign maturity bonds of housing enterprises to maintain a high level of operation has

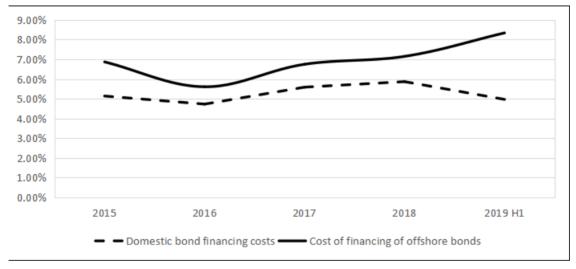


Figure 4. Housing debt financing costs from 2015 to the first half of 2019. Source: Obtained from the announcement of various enterprises

Table 2. Recent redemptions of high-intereqst UU.S. dollar bonds.¹

Redemption time	Company	Redemption amount	Redemption rate
2019.08.12	Zhong Jun	24.08	10.00%
2019.08.11	Jia Zhaoye	11.01	12.00%
2019.08.05	Xu Hui	17.20	7.75%
2019.07.08	Tianyu Real Estate	2.06	10.00%
2019.06.19	Rong Xin	4.47	8.25%

Data source: Enterprise announcements; The data in the table have been converted from US dollars to RMB.

become a factor that triggers systemic financial risks. In the near term, the use of foreign debt issuance by housing enterprises has been severely restricted by regulatory authorities. From the perspective of the regulation policies in the real estate finance sector in the first half of 2019, the regulators will regulate the real estate financing from the aspects of capital use, source, place, application conditions and so on. On July 12, 2019, the National Development and Reform Commission issued a document stating that the issuance of foreign debt by housing enterprises can only be used to replace medium- and long-term foreign debt due within the next year, and that the purpose of the funds should be specified in documents such as the prospectus. It can be seen that "foreign debt issuance can only repay foreign debt," cut off the housing enterprises with the help of overseas debt to solve the domestic shortage of funds, which is related to some housing enterprises in the land market having aggressive access to land resources, contrary to the "housing does not speculate" regulatory spirit. In addition, the scale of foreign debt issuance by housing enterprises is high, and China's regulatory authorities have noted the management of foreign debt issuance by Chinese housing enterprises. In the aegis of China's bottom line of keeping systemic financial risks from erupting, the point of explosion of risk may be spread from abroad to China, as in the case of the 2015 Crisis. Once large-scale housing enterprises default on foreign debt, it will first be transmitted to China's banking industry, trust, and then to the real estate industry-related industries, governments at all levels, home buyers, and this may lead to systemic financial risks, endangering the country's financial and economic security. Therefore, the regulatory level strictly controls the financing use of foreign debt issuance by

housing enterprises.

5.3 Lack of Financing Regulation

It can be seen from the earlier explanation of the financing method that the current foreign bond financing currency of housing enterprises are mostly U.S. dollar bonds. Unlike the strict supervision system of domestic bonds, the supervision of foreign bonds needs to be further improved. First, the management of the subject of foreign debt issuance needs to be improved. At present, China's regulatory level for the management of foreign issuers is relatively loose, many small and medium-sized housing enterprises can use the way of foreign debt issuance financing, which will expand the future debt-servicing risk. In addition to China, the U.S. Securities and Futures Commission, for example, in the issuance of debt audit only to the operating conditions and corporate information disclosure to give certain conditions. Second, there is a regulatory gap. At present, for housing enterprises, the management of foreign debt issuance is mainly the responsibility of the foreign exchange bureau and the National Development and Reform Commission, of which the foreign exchange bureau is responsible for shortterm external debt management (i.e., less than 1 year) and part of the medium- and long-term debt (crossborder guarantees, etc.). The National Development and Reform Commission (NDRC) is responsible for medium- and long-term external debt, the two types of debt attributable to the same kind of external debt is managed by different departments. In addition, the short-term external debt of housing enterprises does not fall under the jurisdiction of the NDRC and is not under the control of the full-caliber financing model of the foreign exchange bureau, creating a regulatory vacuum. Finally, the management of foreign debt issuance lacks a database. The debt issuance data of housing enterprises outside the country lack special statistics and research, and it is not possible to further analyze the scale, characteristics, and structure of debt, which is not conducive to further management of the regulatory level.

5.4 Loss of RMB Depreciation

The method of overseas financing by housing enterprises is bound to be affected by fluctuations in international exchange rate, and the decrease of RMB against U.S. dollar causes the depreciation of RMB, and the financing cost of foreign debt issuance by housing enterprises is raised in disguise, causing substantial losses to the housing enterprises. Taking the U.S. dollar bonds issued abroad as an example, exchange rate fluctuations are divided into two kinds: the depreciation of the RMB and the appreciation of the RMB. Assuming the devaluation of the yuan, Chinese housing enterprises will spend more money in guise of repaying maturing bonds denominated in dollars, thus increasing the cost of financing foreign bonds of housing enterprises, which will affect the actual value of capital finance held by enterprises (Luo 2017). On the other hand, it reduces the cost of financing foreign bonds of housing enterprises. From the first half of 2019, the yuan's value against the U.S. dollar was 0.17% from 6.8632 at the end of 2018 to 6.8747 on June 28. For individual housing enterprises, the small yuan depreciation losses are limited, but from China's housing enterprises in the overall scale of foreign debt issuance, the loss cannot be underestimated. The size of China's foreign bonds stock has exceeded a trillion; therefore, small changes in exchange rate will lead to greater losses, the RMB for each depreciation of one percentage point, the financing costs of issuing U.S. dollar bonds will rise by one

percentage point (Yang 2018)^[40]. In addition, many of the current issue of dollar bonds for 3–5 years, and some for 5–10 years, the repayment of such dollar bonds will face unpredictable exchange rate changes, and exchange rate movements are objective, and the conversion of different currencies and maturity misalignment is difficult to avoid. Chinese housing enterprises will use more offshore debt issuance to finance before the peak period of debt repayment, but at present they lack the necessary response to exchange rate fluctuations.

6 Countermeasures to the Financing Dilemma of Foreign Bonds of Chinese Housing Enterprises

According to the above-aforementioned research, we can find that China's housing enterprises offshore bond financing is facing various problems, on the basis of indepth study of these problems, to give targeted cracking countermeasures, that is, to create a unique financing system to reduce costs, expand a variety of financing channels, and strengthen the supervision of foreign bond financing, internal and external, to reduce the loss of RMB depreciation (Figure 5)

6.1 Create a Unique Financing System to Reduce Costs

One of the main reasons for the difference in financing cost is the difference in exposure under various financing modes and the costs and costs associated with obtaining funds (Xue 2018). Chinese housing enterprises can adopt multiple avenues to reduce the cost of financing from both internal and external aspects. The external approach is as follows: first, with foreign housing enterprises to develop real estate projects and financing. Gain high rating from rating agencies with the credit and local advantages of our partners, improve investor recognition and reduce financing costs. Vanke's partnership with local developer Iron Liongate in San Francisco to develop real estate projects can help increase the success rate of financing and reduce funding costs. The second approach is with the domestic state-owned enterprises background cooperation and development. The housing enterprises with the background of the stateowned enterprises are oversubscribed by investors in the overseas capital market, and the bond evaluation level is high. For example, CNOOC's 10-year U.S. dollar bond issue on July 8, 2019 is only 3.45% of the coupon. Third, take a stake in domestic and foreign

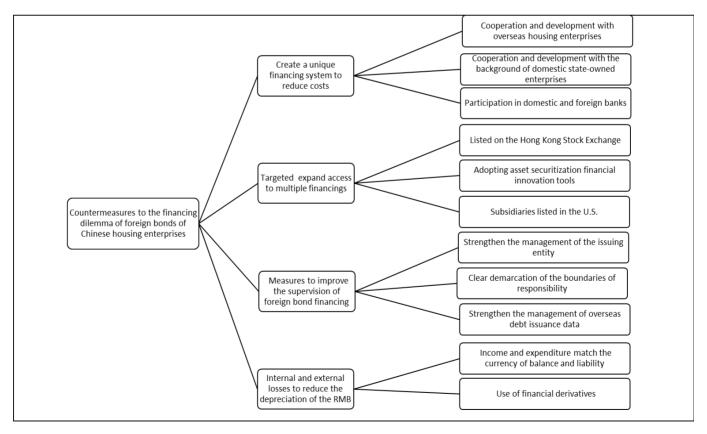


Figure 5. Countermeasure System of Foreign Bond Financing Dilemma of Chinese Housing Enterprises. Source: Drawn by authors

banks. Access to bank credit support is facilitated by participating banks. In China, there are already some housing companies in the bank, for example, large housing enterprises Evergrande's stake in Shengjing Bank, and becoming a controlling shareholder. Small and medium-sized housing enterprises are taking a stake in Zhengzhou Bank to build a multi-ecological circle of housing enterprises. The internal approach is, first, speed up the return of sales, with the use of ring-level marketing, marketing APP (such as the Phoenix Pass and Evergrande Hengfang Tong) to promote commercial housing sales, and accelerate sales rebates. Second, choose the strength distributors and construction enterprises, scientific arrangement of payment rhythm, to ensure that cash flow is stable, sustainable, and healthy, and third, reduce the debt ratio. One of the most important reasons for the high-interest rate of foreign debt issuance is that the debt ratio is too high; some housing enterprises have exceeded 100%, need to study the city to enter, control the pace of expansion, and deal with some project equity; fourth, speed up the turnover of funds-"High turnover of core non-projects with high turnover but high turnover of funds" to improve the efficiency of the use of funds.

6.2 Expand Access to Multiple Financings

At present, the use of foreign debt financing of housing enterprises is strictly limited, but there are other financing channels that do not strictly limit the use of funds. First, it will be financed through the listing of the Hong Kong Stock Exchange. The listing conditions of the Hong Kong Stock Exchange are much lower than that of the domestic main board listing, and the Hong Kong Stock Exchange can further finance the listing of corporate bonds and other means, and the funds obtained are autonomous. In addition, property services companies can also be separated to register on the Hong Kong Stock Exchange. Many domestic housing enterprises and property enterprises are related, spin-off listing can do large enterprise scale up, meet the financing needs, and improve the corporate governance structure. Prior to July 1, 2017, there were five property services companies listed on the Hong Kong Stock Exchange, with IPOs raising an average of \$615 million. In terms of the use of asset securitization financial innovation tools, China's regulatory authorities have recently restricted financing channels such as trust stake and bank credit, but asset securitization also has some operating space, even if other capital markets listed or enterprises have not been

listed, they can use asset securitization for financing. Some asset securitization financial innovation tools can also be operated, such as rental housing, and property fees, such as the development of asset securitization business. In the field of rental housing, especially longterm rental apartments, it falls within the scope of policy support (Liu 2018), which is different from other assets that are directly regulated. Since 2019, Huafa and Lanshi have raised RMB1,548 million and RMB1,068 million, respectively, through securitization of leased assets. In 2018, the securitization financing scale of the leased assets of the park reached 10 billion yuan, and the storage rack approval and installment mechanism was adopted, with an initial issue rate of 1.717 billion yuan and an issue rate of only 5.75%. Finally, the subsidiary is listed in the United States and other places. Comprehensive strength of housing enterprises to China's subsidiaries outside China as the main body, in the United States, Singapore, and other places listed, access to capital market support.

6.3 Strengthen the Supervision of Offshore Bond Financing

First, strengthen the management of the issuing entity. The regulatory level shall, from the qualification level, financial position, brand value and performance status of the issuing entity, manage the overseas issuance of bonds by the housing enterprises, guide the housing enterprises to strengthen the research of the international capital market, reasonably control the debt ratio, and optimize the currency structure of the foreign issuing bonds. Second, clearly delineate the boundaries of responsibility. The NDRC, the central bank and the foreign exchange bureau divide the boundary of responsibility, especially the short-term foreign debt of housing enterprises into the jurisdiction of the NDRC, strengthen the expansion of the full-caliber cross-border financing management model, and create a "borrowing, use, also" full-process management, full-chain monitoring system. The NDRC focuses on the issuance of foreign debt and the postissuance management of foreign debt, the central bank takes the macro-management of the full-caliber crossborder financing of foreign debt as its core, and the foreign exchange bureau strengthens the flow of foreign debt funds, the dynamic management of repayment, and the subsequent monitoring of the

matter, but shall reach and implement the principle of unified supervision (Tan et al. 2018). Finally, strengthen the management of overseas debt issuance data. Through cross-border cooperation, the statistics of overseas institutions are used to make up for the lack of domestic statistics, and the total amount, structure, maturity, and interest rate of the foreign debt of housing enterprises are analyzed. It is required that Chinese housing enterprises disclose their foreign debt status, strengthen the disclosure of information, provide reference for the risk-averse foreign debt issuance of housing enterprises and cross-border macroprudential management at the national level, and give fully play the role of capital market services to the real economy and promote economic transformation (Li 2018). Consider the changes in the balance of payments, promote the orderly issuance of bonds by Chinese housing enterprises, and guard against systemic financial risks.

6.4 Internal and External Losses to Reduce the Depreciation of the RMB

Exchange rate movements are objective, but measures can be taken to reduce losses to some extent. From the perspective of housing enterprises, we can deal with it from the perspective of financial strategy, housing enterprises in the financial management of the implementation of the "balance of income and expenditure and assets and liabilities currency matching" principle (Yuan and He 2016), to avoid and hedge the risk of foreign currency fluctuations. When the exchange rate changes substantially, the housing enterprises should adopt the "income and assets of hard currency, expenditure and debt soft currency" to avoid exchange rate risk strategy. From the outside of the housing enterprises, you can use financial derivatives to hedge the losses caused by the fluctuation of RMB exchange rate. From the financial derivatives of capital markets, forward foreign exchange, options, swaps, currency swaps and interest rate swaps, and other financial derivatives can be fully used, but each instrument has a different risk hedging effect (Clark and Judge 2009), the enterprise should combine its own actual and experience to choose financial derivatives. Keep foreign exchange positions within a reasonable range and fully reduce the losses caused

by the depreciation of the RMB.

7 Future Research

Through the study, it is found that the financing of foreign bonds of housing enterprises has become a common method of financing, and there are certain problems, but taking corresponding countermeasures can solve the problem to a great extent. In order to promote the sustainable development of foreign bond financing of housing enterprises, based on the existing research and the combing of this study, the following prospects are put forward. First, take an empirical approach to analyze the impact of China's financial policy and foreign financing environment on the cost, scale, mode, and rating of foreign bonds of housing enterprises. Second, to study the benefits of China's foreign bond financing to housing enterprises. Third, make a comparative study of the way of financing the foreign bonds of housing enterprises, especially the different ways of issuing U.S. dollar bonds. In addition, the different currencies of foreign bond financing of housing enterprises and the listing location of the issuance conditions, financing costs, issuance cycle, especially some small-scale foreign currency bonds research less. Fourth, study the interdepartmental regulatory model of offshore bond financing, especially cross-sectoral coordination under longterm management. Fifth, empirical analysis of the use of different financing methods to the benefits of housing enterprises, evaluation of the choice of better financing methods, such as the study mentioned in the development of foreign housing enterprises, with the domestic central enterprise background cooperation and development, participation in domestic and foreign banks, etc., the current research on each method to bring real benefits to enterprises is relatively lacking. From a practical viewpoint, housing enterprises pay focus on the actual benefits of each financing method.

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