

Analysis on Financing Channels of Real Estate Enterprises in China: Greenland Holdings and Vanke

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Abstract. After a long period of prosperity, the real estate market in China is over the hill. With real estate corporations' constant profits falling, banks take strong actions to keep the quality of bank loans. At the same time, the government implements policies regarding deleverage in the real estate industry, e.g., 3 Red Lines Policy. Consequently, it is crucial for real estate enterprises to reform their liabilities structure by adopting a variety of financing channels. Greenland and Vanke are leading enterprises in the Chinese real estate sector and are both listed in China. This paper intends to explore the status quo of current real estate financing channels through comparison of financing channels employed by these two giants. Based on the annual financial statements of 2020 and 2021, both Greenland and Vanke adopt traditional financing channels, that is, bank loan, bond, and equity, in which bank loan accounts for the largest proportion. However, the new financing scheme, REITs, which can relieve high asset-liability ratio is skipped over. Accordingly, this study took a look into possible reasons of choices made by these two enterprises. These results offer some suggestions in regard of the future development of financing channels for the real estate industry.

Keywords: Real estate enterprises; financing channels; bank loan; REITs.

1. Introduction

Since the 1990s, the Chinese real estate market has gone through rapid development and a long period of prosperity. One of the characteristics of the real estate sector is that it is a typical capital-intensive industry, and it is common that a real estate company invests a fairly large amount of its capital at the earlier stage of a project. Moreover, it always takes a long period of time for the project to come to a successful completion, and thus a long payback period. Therefore, capital raising is of great importance to real estate companies which need to manage a stable capital chain. There are several traditional financing channels for real estate corporations, that is, enterprises' own fund, private lending, housing pre-sale fund, bank loan, equity financing, bond financing, e.t, in which bank loan is the most commonly used.

However, in recent years the financial environment has been increasingly harsh for real estate corporations. On the one hand, since 2017, strict economic policy with regard to real estate business has been implemented by Ministry of Housing and Urban-Rural Development and People's Bank of China, aiming to enhance financing supervision and prevent systematic financial risks [1]. In August 2020, 3 Red Lines Policy, which explicitly stipulates an asset-liability ratio less than 70% regardless of advance payment, a net debt ratio less than 100%, and a cash to debt ratio greater than 1, was introduced in response to Chinese real estate enterprises' high ratio of liabilities [2]. As an crucial part of economic deleverage, the authorities prioritized to reduce leverage in real estate enterprises. On the other hand, with the constant improvement in the housing rental market, the construction of indemnificatory housing are advancing by leaps, which allows people multiple choices other than commercial housing and mounts unprecedented challenges towards real estate developers [3]. Specifically, they are confronted with declined sales revenue, cash-flow problems and poor debt paying ability, which might further lead to difficulties in financing.

According to Anastasia Dykusova and Elena Golovina, the real estate market is quite vulnerable to economic and political changes [4]. Consequently, the approaches to finance during periods of tightened monetary policy has been cut down and it is essential for real estate enterprises to utilize innovative financing channels in order to ensure sustainable development [5]. As discovered by Kashyap, Stein, and Wilcox, in a tighter monetary policy environment, the supply of bank loans

reduce and an enterprise's measure of external financing changed accordingly [6]. Prior to this, Meltzer found that it became more common for small-scale and illiquid firms to use commercial credit as a substitution for bank loans in the US from 1955 to 1957, in which tightened monetary policy had been adopted [7]. Dong and Sun found that it was more feasible for non-state-owned companies and small companies to cope with outstanding financing difficulties during the period of loose monetary policy [8].

This study intends to look into the current situation of real estate financing channels in China through case study. To begin with, two listed real estate corporations have been selected, namely Greenland and Vanke. On top of that, the author will analyze their financing channels respectively, and then make a thorough comparison. Furthermore, this paper will make analysis regarding the comparison and then discuss the future development of Chinese real estate financing channels and give some suggestions.

2. Financing Channels

When the real estate market is growing, the developers can profit a great deal from all kinds of projects in a relatively short of time [9]. It is not difficult at all for them to repay a debt, which guarantees the quality of bank loan. Therefore, for a long period of time, banks in China tend to lend significantly to the real estate sector. It might partially explain the fact that the most common financing channel adopted by Chinese real estate enterprises is bank loan, including liquidity loans, land reserve loans, commercial housing development loans, loans for economically affordable housing, and commercial property loans. However, when the the real estate market is slowing down, developers are up against a sharp decline in earnings, and find it hard to recover their initial investment and repay the bank loan [9]. Therefore, the nonperforming loans (NPLs) are hiking, which compelled policy-makers to cope with a strong arm. For example, it is prerequisite for real estate companies to obtain certain credentials and have no bad credit history, which is required by the central bank's policies [1]. Besides, there are standardized and rigorous procedures for banks to provide credit rating to real estate corporations and then review their projects. It is common that banks tend to support high quality customers and therefore promote their projects, while it is progressively difficult for small and medium-sized real estate developers to earn themselves a bank loan [1].

With macroeconomic regulation and control policies being more and more tightened, especially the increasingly higher loan interest rates as well as restrictive terms and regulations of bank loan in terms of real estate industry, real estate companies was forced to explore other financing channels such as corporate bonds, which was more than popular before 2017 [10]. There are two major advantages regarding bond financing [3]. For one thing, it is convenient for real estate firms to raise large amounts of capital within a relatively short period of time. For another, bond financing does not practically have any essential influence on corporate decision-making. Nevertheless, in 2017, the central government strengthened supervision and control over real estate debt financing, and the bond issuance rate soared approximately to 5.00% for the Top Twenty real estate enterprises accordingly, leading to a plunge in the insuance of corporate bonds [10]. Additionally, due to the immature operational mechanism of corporate bond market in China, the fairly large amount of fund associated, and the poor liquidity of real estate assets, it was often the case that corporate bonds could not be honored in time [1].

Once a real estate company is successfully listed on a stock exchange, it is empowered to collect abundant funds from the public almost immediately, and refinance thereupon through appropriate allotment of shares, seasoned equity offerings and convertible bond [11]. Owing to the permanent and irreversible nature of equity financing, an independent publicly-owned company is not required to return the initial capital raised, as long as it regularly pays dividends, which is in favour of the funds management. In the mean time, the risk of financing is reduced in accordance with numerous investors who subscribe shares, which guarantees sustainable growth [11]. Besides, going public helps enterprises to improve their popularity, which in turn boosts sales. However, there are several

disadvantages in regard to equity financing. To begin with, the constantly rising cost repels small and medium-sized companies. In addition, tax is not deductible during repayment period. Furthermore, there are difficulties and obstacles in the process of going public. Specifically, there are four stages, that is, restructuring, tutoring, declaration and stock issuing, which come under close scrutiny by China Securities Regulatory Commission and therefore could last a long period of time. As a result, equity financing is particularly suitable for large enterprises with deep pocket, abundant human resources and fully integrated organization [12].

REITs originates in the United States, aiming at lower the threshold for individual investors to participate in the terrifying real estate market [13]. Specifically, scattered investors are given the opportunity to benefit from commercial housing trading, rent payment and revaluation of property [13]. REITs refers to Real Estate Investment Trusts and constitutes one of the essential means for real estate enterprises to raise capital. It is an investment trust fund established by issuing shares or public debt [14]. It is managed by specialized institutions which proportionally allocates return on investment to investors. In 2005, China's first REITs passed verification and was listed in Hong Kong in November. It soon became one of the important means of real estate securitization, and gradually developed into an essential form of investment and financing tool during the progress of housing rental market [15]. According to Wind Information Database, the total issuance amount of REITs-like products in China reached USD \$64.9 billion in 2017 [15]. The localization and development of REITs in China helped to some extent refine the unfavourable inherent characteristics of real estate industry, that is illiquidity and non-securization. Moreover, it can alleviate the predicament confronted by both banks and real estate developers, that is, the real estate sector in China depends excessively upon bank loan.

3. Greenland Holdings Corporation Limited

Greenland Holdings Corporation Limited (hereinafter referred to as Greenland Holdings), was founded in 1992, and headquartered in Shanghai, China. It is listed on the A share market in China (600606.SH) and holds shares of companies which went public in Hong Kong. Since its establishment, Greenland has become a conglomerate in which there are three core engines for its comprehensive development pattern, namely, real estate, infrastructure, and finance. It carries out development strategies characterized as capitalization and internationalization, and runs businesses covering 50 countries from all five continents. It is worth mentioning that Greenland has been listed 11 years in a row as one of the finalists in the Fortune Global 500, and ranked as the 125th in 2022. In the financial year 2022, the total assets, gross revenues, total profit and return on equity was respectively USD 14691 billion, USD 5448 billion, USD 179 billion, and 7.07%.

Greenland Holdings was able to minimize liabilities while stabilizing its overall development. 81.2 billion Liabilities with interest was cut down in 2021, and 147.6 billion was deleveraged in total since "3 Red Lines Policy" was implemented. At the end of 2021, the balance of liabilities with interest was reduced to 240.6 billion. Nevertheless, the corporation generated 544.3 billion in operating revenues, with 19% year-on-year growth. The net cash flow from operation activities was 62.2 billion, up by 39% on a year-on-year basis. For the cash flow to be stable, the income declined sharply. Specifically, the total profit was USD 17.9 billion, the net profit attributable to shareholders was USD 6.2 billion, and the ROE reached 7.1%.

From Table 1, it can be ascertained that from fiscal year 2020 to 2021, liabilities with interest dropped sharply, in which short-term loans declined from 4.88 billion to 3.83 billion, down by 22%, whereas long-term loans fell to 16.47 billion, that is, down by 36% from 25.7 billion. In the meanwhile, bond payable was decreasing by 32%, which was on account of the repayment due in 2021. Although the quick ratio was basically flat for two years, it was far lower than the industrial standard, which was 68.5%, meaning a rather poor performance in short-term solvency. Similarly, the industrial average asset-liability ratio was 68.6%, far below the level of the corporate, which illustrated a high financial risk. From cash flows from financing activities, it can be seen from the

sharp fall by 158.59% that the repayment of debt increased while new loans decreased. Specifically, cash received from borrowing went down by 34% and cash received from the issuance of bonds was down by 68%.

Table 1. Key financial data of Greenland Holdings (USD Billion).

Column heading	2021	2020	Up/Down(%)
Short-Term loans	3.83	4.88	-22
Long-Term loans	16.47	25.70	-36
Bond payable	4.10	6.02	-32
Quick ratio	0.45	0.49	-8.16
Asset-liability ratio	88.84	88.89	-0.05
Cash flows from financing activities	-14.16	-5.35	-158.59
Cash received from borrowing	13.52	20.62	-34
Cash received from the issuance of bonds	2.60	2.05	-68

4. Vanke CO., LTD

China Vanke CO., LTD (hereinafter referred to as Vanke), was established in 1984 in Shenzhen Special Economic Zone and was listed on the Chinese A share market in 1991. Soon after that in 1993, it issued B shares on Shenzhen Stock Exchange, and then the B share was floated on the SEHK in 2014 by introduction. Vanke consistently dedicates itself to providing ordinary people with good products and high-quality services in terms of residential development and property services and it establishes dominance in those areas, on the basis of which it expands businesses in recent years to include logistics and warehousing services, residential property for lease, the development and operation of commercial real estate, standard office and industrial park, hotels and resorts, education, and even food. Currently, the ecosystem built by Vanke has developed into a relatively mature state. Vanke ascended to the list of Fortune Global 500 in 2016 for the first time and was since a frequenter. In 2021, it ranked 106th on the list.

Confronted with market fluctuations, Vanke maintained a secure and healthy financial condition in 2021. It gained an industry-leading credit rating and successfully met the requirements stipulated by the “3 Red Lines Policy”. Vanke continuously optimizes its debt structure and lower the financing cost through the issuance of corporation bonds and mid-term notes so as to improve the capacity against financial risks. Its net debt ratio stayed low for a very long period of time, which was 29.7% in 2021. The liabilities with interest has been structurally optimized and the variation of the total amount was kept under control. The balance of liabilities with interest was 265.96 billion at the end of 2021, up only by 2.9%. At the end of 2021, the monetary funds was 149.35 billion, and the multiple of monetary capital covering short-term debt was 2.5, which was about 0.2 times higher than that at the end of 2020. Vanke has the ability to keep cash flows from operation activities positive for 13 years in a row.

Table 2. Key financial data of Vanke (USD Billion).

Column heading	2021	2020	Up/Down(%)
Short-Term loans	2.26	3.85	-43
Long-Term loans	24.20	20.23	17
Bond payable	8.31	6.68	22
Quick ratio	0.4	0.41	-0.01
Asset-liability ratio	79.74	81.28	-1.54
Cash flows from financing activities	3.62	4.98	-29
Cash received from borrowing	16.81	16.26	1
Cash received from the issuance of bonds	2.35	1.37	67

From Table 2, it can be concluded that liabilities with interest was mostly composed of long-term loans, which growth by 17%. On the contrary, short-term loans plummeted by 43%. In 2021, Vanke issued corporation bonds totaling 1.57 billion yuan, accomplished the issuance of 6 billion yuan special corporation bonds for housing lease by two batches. At the meantime, 6 billion yuan medium-term note was issued in three batches with a coupon rate of 3.08%. In addition, Vanke completed overseas issuance of RMB bond totaling 1.45 billion yuan with a coupon rate of 3.45%. As a result, bond payable increased by 22%. The quick ratio was 40% in 2021, which was much lower than the industrial average, that is, 68.5%, indicating a poor short-term debt paying ability. In relation to cash flows from financing activities, there was a drop of 29%, in which cash received from borrowing was basically remained the same while there was a leap of 67% in cash received from the issuance of bonds.

5. Comparison

It can be deduced from above that both Greenland Holdings and Vanke adopted bank loan, bond financing, and equity financing as financing channels, and a lot of efforts was made to minimize liabilities under the “3 Red Lines Policy”. By the end of 2021, the comprehensive financing cost was 5.7% for Greenland, and 4.11% for Vanke. Even so, the asset-liability ratio for both enterprises was still much higher than the industrial average.

In regard to bank loans, Greenland repaid both short-term and long-term loans, and the cash received from borrowing plummeted by 34%. In comparison with Greenland, although Vanke managed to repay short-term loans which decreased by 43%, it continued to borrow from bank for long-term loans, and the cash received from borrowing showed a slight increase of 1%. A high asset-liability ratio is shared between Greenland and Vanke, which is much higher than the real estate industrial standard. From the above comparison, it can be seen that the dominance of bank loan is hard to shake, especially for Vanke, which verifies the fact that bank loan accounts for most of capital sources of real estate enterprises. Capital raised from bank participates in the whole process of project development, which will not be a problem until the government policies changed in opposition to real estate sector. As discovered by Massimo Massa and Lei Zhang, a tight monetary policy shrinks the balance sheets of a bank and reduces the supply of bank loans [5]. Once it gets difficult for real estate companies to obtain capital from bank, there is strong probability of capital chain rupture, which will be a deadly disaster for both the real estate sector and financial industry. In terms of bond financing, both Greenland and Vanke issued bonds in 2021, however, for Greenland there were payments at maturity in 2021 whereas Vanke does not have any matured bonds in 2021, which could explain the decline and rise of bond payable for Greenland and Vanke respectively. In addition to cooperate bonds, both Greenland and Vanke adopted mid-term notes as a channel to optimize debt structure and control risk. From the above comparison, it can be concluded that through bond financing Greenland and Vanke tactfully transferred risk factors of financing to creditors. On the one hand, it will be the creditors who bear most of the operating losses confronting those enterprises[12]. On the other hand, if there are profits, the corporations are able to obtain the shares that they deserve. Therefore, it seems that bond financing is a safe bet. Above all, it is an effective financing alternative to bank loan. It is worth mentioning that there is a big difference in the issuance rate. Specifically, the highest issuance rate in 2021 reached 7% and 3.98%. In relation to Equity financing, since both Greenland and Vanke are public companies, it is normal for them to promote increase in capital and share. In 2021, Greenland did not issue new shares while Vanke did. Neither Greenland or Vanke employs REITs as a financing channel.

The most frequently-used financing channel by both Greenland and Vanke is still bank loan, which could be explained by the fact that banks in China benefits a great deal from the rapid growth of real estate industry and lend vastly to real estate enterprises[9]. It partially owes to the reason that compared to other types of loans, secured real estate loans are more likely to yield higher recovery rate when it comes to default [9]. Besides, the real estate industry in China has been through a very

long period of prosperity, featured with constantly rising property prices and high investment growth. In a growing real estate market, banks are apt to lend more to developers as a result of higher returns on assets [9].

Beyond that, bond and equity financing are employed by both Greenland and Vanke to optimize liability structure, and the choice between bond and equity might depend on the application of the capital raised. As the analysis conducted by David T. Brown and Timothy J. Riddiough showed, funds collected from equity tend to be allocated for investment whereas proceeds obtained from bond financing are more likely to be used to reconfigure the liability structure[14]. At the same time, it was also discovered in the analysis that real estate developers were prone to use bond financing to regulate the total leverage ratios so as to remain credit rating[14]. Furthermore, it was concluded in the analysis that liability structure before any issuance determined whether bond or equity should be chosen. Specifically, corporations with higher level of secured debt tend to issue equity while corporations with a larger proportion of unsecured debt are more likely to issue bond[14].

In terms of REITs, as a developing financing channel in China, it still needs to accurately locate itself. It is not used by Greenland and Vanke, which might be due to the late initiation and development of REITs in China and corresponding terms and regulations are incomplete. According to Sun and Peng, not until 2009, mainland China started to explore REITs and it was 2011 when the first REITs product came into existence[13]. Additionally, real estate developers are reluctant to switch completely to new financing channels due to the cost of borrowing, let alone REITs might fundamentally change their pre- and post-offer liability structures as discovered by[14].

6. Conclusion

In summary, through two particular listed real estate enterprises, Greenland and Vanke, this paper tried to study the status quo of financing channels in the Chinese real estate sector. In the context of supply exceeding demand in recent years, real estate market starts to become sluggish, in which real estate developers find it hard to recover original investment and their profits plummet. In consequence, the quality of bank loans deteriorate, and banks start to tighten credit line, which is deadly for some real estate enterprises and therefore dangerous for the society. That is where “3 Red Lines Policy” comes and makes a contribution in terms of regulating highly indebted operation in real estate enterprises, especially those leading ones.

Indeed, the government has compelling obligation to improve laws and regulations regarding real estate market and innovate financing scheme for real estate corporations, which will empower them to mix and match a variety of financing channels so as to lower financing risks and costs and maximize profits. For instance, a real estate developer can raise more capital through REITs which includes the general public in the development of the corporation, meaning sustainable development. Similarly, the real estate enterprises should wean themselves off bank loan and upgrade their internal ability to finance, that is to say, more attention and energy should be invested into the research and development of new financial products. Besides, financial products can also be custom-made to suit certain consumer group, which in turn satisfy multiple needs of non-institutional investors.

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