Comparison of financing models of real estate enterprises: evidence from Vanke and Poly

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Abstract. Contemporarily, the problem of financing plays a critical role in real estate enterprises. As for China, the financing model of real estate enterprises is single, and the capital structure is unreasonable. Therefore, it is particularly crucial for real estate companies to search an appropriate financing model. In this paper, we investigate the financing models based on the case analysis of Poly Development and Vanke, which are both leading enterprises in China's real estate enterprises, and compare the differences in the cost of funds and cash flow. According to the analysis, Vanke's financing model was better than Poly's development. If real estate enterprises want to break through the current predicament, they should change the situation of relying on bank loans, e.g., raise fundings from additional corporate bonds and medium-term notes to increase the proportion of direct financing and reduce the proportion of indirect financing. Enterprises should also explore diversified financing methods and expand financing channels. These results provide clues to guide real estate companies to obtain a more reasonable and perfect further exploration.

Keywords: Real estate; Financing Mode; Poly; Vanke.

1. Introduction

The real estate market plays a pivotal role in China, and there is an increased demand for housing with a booming economy. The real estate industry is a capital-intensive industry that is highly correlated with financial markets. During the 2008 financial meltdown, it was the collapse of the last real estate industry that triggered the crisis. This knock-on effect went beyond the US, spreading massively to other countries. The outbreak of this crisis also sounded the alarm for China's real estate market. The real estate industry started earlier in developed countries. Compared with China, the financial systems of European and American countries are more mature and complete. Foreign scholars have also put forward many related theories including MM theory, trade-off theory etc. However, China's real estate market developed relatively late, and most theories are based on theories put forward by foreign scholars. In this rapidly changing society, neither European and American countries nor China have given specific guidance on how real estate companies should choose financing models [1].

Since the first half of 2019, the financial difficulties in China have become particularly prominent, and many enterprises, e.g., Evergrande Group went into delinquency. Meanwhile, Chinese central government has held a firm position as 'no housing speculation'. In 2020, the People's Bank of China lowered the deposit reserve ratio and the cost of financing to support economic development. This has eased the financing difficulties of some companies to some extent [2]. According to the data released by the choice database, there are three main sources of capital for the real estate industry in China: domestic loans, foreign capital, and self-raised funds. To be specific, domestic loans amounted to 49,416.6 billion yuan from June 2019 to May 2022. However, the funds obtained through foreign capital were only 225.9 billion yuan. Therefore, for real estate companies, it is particularly important to find more diversified financing options. Some scholars proposed that the real estate companies can raise funds from the stock market through IPO, but they need to meet the listing standards to achieve this. In fact, few of them can fulfill these requirements for public listing, and raise funds by issuing stocks [3]. Therefore, these enterprises have to seek the other suitable financing models for their own development according to their own situation in this current fiercely competitive environment, and seek to obtain the greatest advantage.

At present, the financing mode of real estate enterprises in China mainly includes bank loan, listing financing, bond financing, real estate trust, overseas financing and private equity financing. According to data and related materials on the official website of the National Bureau of Statistics, China's investment in real estate development in 2021 was 14.7602 trillion yuan, up 4.4 percent from the previous year. Trust accounts for 30.9% of the total financing scale of Chinese real estate enterprises, credit debt for 31.1% of the total financing scale, overseas foreign debt for 15.2%, ABS for 22.8% [4]. Real estate companies relied more on debt financing; debt financing is main financing channels [5].

Based on literature review, the current research on the financing mode of real estate enterprises mainly focuses on the whole industry or targeted at a certain company, and few authors compare the financing mode of two representative companies. Nevertheless, it is essential to compare the leading enterprises in the real estate industry in order to figure out which mode is more favorable to the development of enterprises. On this basis, these results are able to provide guidance for the financing of real estate enterprises in the early stage of development, and take the best from the best.

In this paper, Vanke and Poly Development are selected as leading enterprises in the real estate industry, and the diversification of their financing modes has far-reaching research significance. Vanke, founded in 1984 and listed on the Shenzhen Stock Exchange in 1991, is the largest professional housing developer in China. Vanke has taken a more diversified approach to financing. In addition to bank loans, it used almost all equity financing methods except warrants. Poly Development was founded in 1992 and listed on the Shanghai Stock Exchange in 2006. In 2019, its property companies were listed on The Hong Kong Stock Exchange, becoming the property company with the largest IPO financing scale and the highest PE issue. In terms of financing, Poly has taken relevant measures to cope with the current severe environment. It established Lixin Insurance Fund in 2010 and began to issue US dollar bonds in 2013 etc.

This paper is divided into seven parts, where the rest part of the paper is organized as follows. The second part, the financing status of real estate enterprises in China will be discussed. Next, Vanke's financing model will be demonstrated, which mainly shows Vanke's capital structure and financing mode, which is divided into internal financing and external financing. Afterwards, Poly's financing model, which is similar to Vanke. The fifth part is financing effect of financial analysis between the two companies. Additionally, the sixth part shows financing suggestions for real estate enterprises. Eventually, a brief summary is given in Sec. 7.

2. The current situation of real estate financing in China

According to the data released by the National Bureau of Statistics, the actual funds in place of real estate enterprises between 2018 and 2021 showed an upward trend year by year, of which the growth rate of actual funds in place rose slightly between 2018 and 2020, but fell sharply to 4.2% in 2021 shown in Fig.1. Among them, the proportion of self-financing has gradually increased, but the increase in self-financing has shown wave fluctuations shown in Fig. 2. With the implementation of favorable policies, real estate companies are also actively self-help, many companies supplement cash flow through project transfers, shareholder loans, etc., and some housing enterprises continue to raise funds through equity allotment financing.

In 2021, the average financing cost of some large and medium-sized real estate development enterprises will be 6%. For example, Vanke and Poly Real Estate have the background of state-owned enterprises, and the financing cost is relatively low, 4.11% and 4.46%, respectively [1]. For small and medium-sized real estate enterprises, they have been facing the problem of financing difficulties, wanting to borrow through banks, but the qualifications do not meet the bank standards. In this case, so many enterprises can only obtain loans from other financial markets at higher interest rates, which undoubtedly adds to the financing cost burden of enterprises [6].

In order to reduce the financing costs of enterprises, the central bank and the State Council have successively issued policies to alleviate the financing difficulties of real estate enterprises. On the one hand, the central bank will continue to insist that the house is used to live, not to speculate. On the other hand, it will continue to promote the satisfaction of the reasonable financing needs of enterprises at the bank end, accelerate the progress of lending loans to credit enterprises, and increase the intensity of credit delivery.

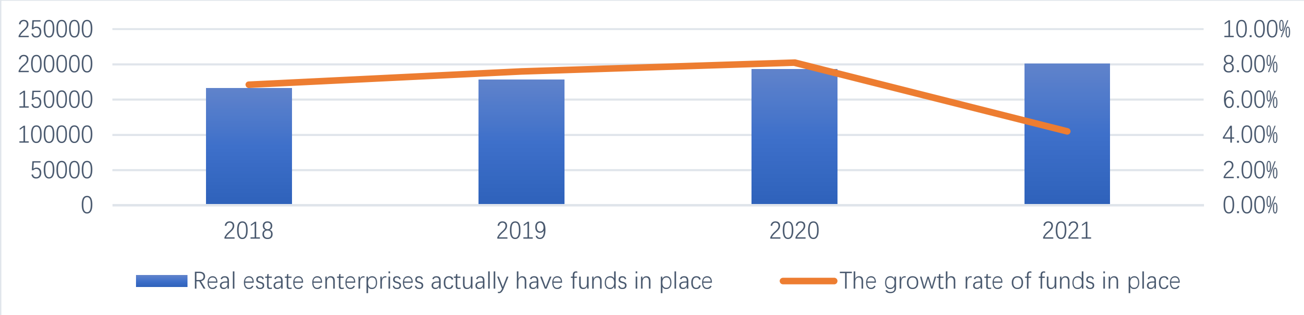

Fig. 1. Funds in place of real estate enterprises from 2018 to 2021 (unit: hundred million).

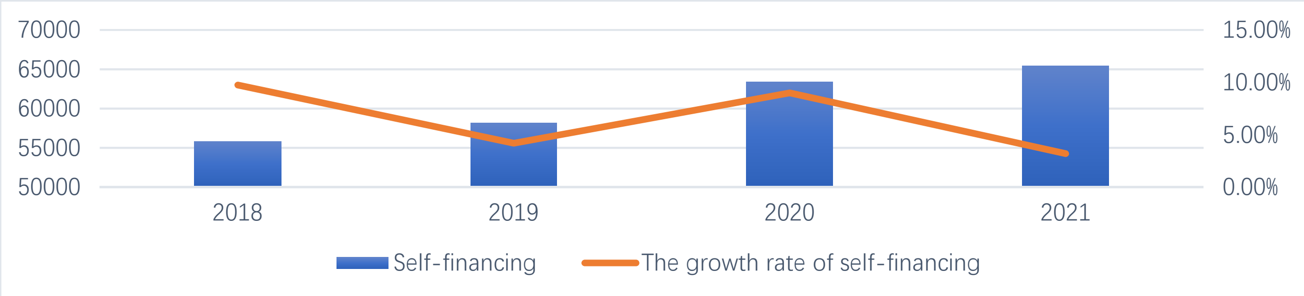

Fig. 2. Self-financing of real estate enterprises from 2018 to 2021(Unit: hundred million).

3. Case study of Vanke's financing model

3.1 Analysis of Vanke's capital structure

As for Vanke, seen from the Table. 1, its asset-liability ratio from 2019 to 2021 shows a declining state, which can be calculated that the average asset-liability ratio for three years is 81.79%. For real estate enterprises, if more than 80%, the debt ratio is already too high. We find that although the asset-liability ratio of Vanke is high and there is certain financial risk and insolvency possibility, its trend is declining, which indicates that the company is developing in a healthy direction. Meanwhile, it can also be seen that the main financing method of Vanke is debt financing [7]. In addition, Vanke's liquidity ratio remained at about 1.2 from 2019 to 2021, which was slightly lower than the industry average, indicating that its solvency had certain risks and mainly depended on short-term bonds. However, the liquidity ratio showed an upward trend, indicating that the company's asset liquidity was improving. Finally, Vanke's equity multiplier has decreased year by year since 2019, indicating that its shareholders' investment capital is gradually increasing and creditors are protected more. On the whole, Vanke mainly relies on debt financing, supplemented by equity financing. Considering the liquidity ratio, Vanke is developing in a good direction.

Table 1. Vanke’s asset structure

Vanke			
	2019	2020	2021
Asset-liability ratio	84.36%	81.28%	79.74%
Current ratio	1.13	1.17	1.22
equity multiplier	6.39	5.34	4.94

3.2 Vanke’s external financing

External financing refers to the fact that an enterprise raises funds from other economic entities other than the enterprise in a certain way, and there are many sources and channels. External financing can be divided into indirect financing and direct financing. As a leading enterprise in China's real estate market, Vanke's development history is roughly the same as that of China's real estate industry, so its financing methods have always been the focus of attention.

As for indirect financing, this article focuses on bank loans. Vanke has a high credit rating and has maintained long-term good cooperation with major banks. Bank loans serve as the backing force for Vanke to try to diversify financing, helping Vanke to effectively improve the speed of capital turnover. The government has introduced relevant policies and carried out macro-control, making the conditions for bank loans more stringent. Vanke’s bank loans in 2019-2021 are shown in Table 2.

Table. 2 Vanke's Bank loan.

	Bank loan	Total liability	Proportion
2019	2,224.4	14593	15.24%
2020	2,892.2	15193	19.04%
2021	1492.04	15458	9.65%

In the past three years, it can be concluded from the proportion of Vanke Bank loans to total liabilities that Vanke's dependence on bank loans has gradually declined. Among them, the sudden increase in 2020, we speculate that the reason is due to the economic downturn caused by the new crown epidemic, Vanke needs more bank loans to maintain its stable flow of funds.

With regard to direct financing, this article mainly studies equity financing and bond financing. Equity financing can obtain a large amount of funds for further investment activities, and the equity capital obtained does not need to be repaid, while it can also improve the asset structure, reduce the asset-liability ratio, and enhance the financing ability of enterprises in other channels [8]. Vanke’s equity financing from 2019 to 2021 is summarized in Table 3. Vanke issued new shares at HK$29.68 and HK$25 per share in 2019 and HK$25 respectively in 2019 and 2020, and adopted the method of "dividends in lieu of shares" in 2021. Through equity financing, Vanke's cash flow is more stable.

Table. 3 Vanke's equity financing.

	Type	New issue
2019	Foreign capital stocks listed abroad	262,991,000
2020	Foreign capital stocks listed abroad	315,589,200
2021	Foreign capital stocks listed abroad	7,651,174

Regarding bond financing, in recent years, Vanke’s financing needs have also been rising due to the continuous expansion of the scale of enterprises. The Administrative Measures for the Issuance and Trading of Corporate Bonds came into effect in January 2015, and the types of bond issuance are more abundant and the methods of bond issuance are more diverse. Coupled with the more convenient conditions brought by a series of policies to bond financing, Vanke has made more efforts in bond financing. In the past three years, the amount of bonds issued by Vanke has continued to rise, and the proportion has continued to rise, achieving the purpose of optimizing the structure of Vanke's debt and enhancing its financial risk capabilities [9]. In the economic downturn, the real estate market financing encounters a very big advantage. However, at the same time, bond financing also has a certain risk of repayment of principal and interest.

4. Case study of Poly's financing model

4.1 Analysis of Vanke's capital structure

As illustatrated in Table. 4, asset-liability ratio, liquidity ratio and equity multiplier are stable at around 78%, 1.5 and 4.6 for Poly Real Estate during 2019-2021. Compared with Vanke, Poly Real Estate's asset-liability ratio is lower, but there are still certain financial risks. It is worth mentioning that the current ratio in the real estate industry is very good, indicating that its short-term solvency is good. Finally, the proportion of shareholders' investment capital to total assets is also relatively stable. It can be seen from the side that the epidemic has a relatively small impact on Poly Real Estate.

Table. 4 Poly's asset structure

Poly Real Estate			
	2019	2020	2021
Asset-liability ratio	77.79%	78.69%	78.36%
Current ratio	1.56	1.51	1.52
equity multiplier	4.5	4.69	4.62

4.2 Poly’s External financing

With the acceleration of the promotion of the main business of Poly Real Estate and the increase in the types of projects involved, the financing model of Poly Company has been further improved to obtain more funds. In terms of indirect financing, similar to most domestic real estate enterprises, bank loans are still the main financing channel for Poly Real Estate. As a large-scale central enterprise real estate company, Poly Real Estate has established cooperative relations with a number of banks since its establishment relying on its strong strength and development potential [10]. Poly Real Estate's bank loans for 2019-2021 are shown in Table 5. Based on the results, the proportion of bank loans in Poly Development has continued to decrease in the past three years. Although Poly Development is trying to adjust the proportion of bank loans through other financing models, it has a certain effect, the proportion of bank loans in total liabilities is still high.

Table. 5 Poly' s Bank Loan

	Bank loan	Total liability	Proportion
2019	2480	8036	30.86%
2020	2487	9847	25.26%
2021	2,710	10970	24.70%

Since China's capital market restricts equity financing, only companies with good development potential and strength can issue additional shares, so that when Poly Development carries out stock issuance, investors will pay more attention to enhance the corporate image. Poly Development's equity financing in 2019-2021 is shown in Table 6. Poly Development has carried out additional issuance of RMB common shares from 2019 to 2021, but the amount has decreased. Poly Development has obtained a large amount of working capital through equity financing. Although the financing cost of equity financing is higher, the cycle and use of funds are more flexible. Since the working capital obtained from the additional stock issuance does not need to be repaid to investors when due, and no additional interest is required, the financing cost of Poly Development is greatly reduced.

Table 6. Poly‘s equity financing

	Type	New issue	Issue price（yuan/shares）
2019	RMB common stocks	37,646,064	7.51
2020	RMB common stocks	34,940,529	6.69
2021	RMB common stocks	2,491,892	6.69

Compared with equity financing, bond financing has fewer intermediate links and lower cost of obtaining funds, but there are more restrictions on the cycle and the use of funds. Poly Development has only carried out bond financing in 2020 and 2021, and the amount of financing has increased significantly in 2021. The amount of funds obtained by Poly Development through bonds has increased significantly, accounting for a large proportion of financing. Bond financing has made an important contribution to the stability of the capital chain of Poly Development

5. Vanke and Poly financing effect of financial analysis

5.1 Financing costs

Financing is the core of a real estate enterprise, thus the cost of financing is the core indicator to measure the quality of a real estate enterprise. In general, real estate companies with low financing costs generally have strong long-term competitiveness, in other words, they are safer and more stable. The comprehensive financing cost of Poly Development in 2021 is about 4.46%, compared with 4.77 in 2020, the financing cost continues to decline and continues to maintain its leading position in the industry. Vanke‘s comprehensive financing cost in 2021 is 4.11% compared with 6% of the industry's average financing cost, and Vanke has a greater advantage.

From the above data, it can be concluded that Vanke's financing cost will be lower than that of Poly Development in 2021. Basde on the analysis, Vanke have continuously optimized the debt structure and reduced the financing costs of enterprises through financing instruments (e.g., corporate bonds and medium-term notes), thereby improving the company's ability to prevent financial risks. In order to reduce the cost of financing, enterprises should tap the potential of internal funds according to changes in the financial environment, increase the proportion of this part, and reduce the proportion of exogenous funds to reduce the repayment pressure of enterprises.

5.2 Cash flow analysis

For real estate enterprises, cash flow is like the source of life to maintain their operation. Once the cash flow falls into crisis, most real estate enterprises are likely to face the threat of bankruptcy.

As can be seen from Table. 7, Vanke's overall net cash flow fluctuated greatly. Although the net cash flow decreased to -45.2 billion yuan in 2021, the net cash flow generated by its operating activities remained positive for 13 years, indicating that Vanke's operating profitability and sustainability are very good. However, the net cash flow generated by Vanke's operating activities in 2021 decreased significantly compared with that in 2020. The reasons are mainly attributed to the large decrease in Vanke's sales amount, the increase of average land price and the impact of industry shocks. In addition, the net cash flow generated by investment activities is negative, indicating that the enterprise is in the stage of outward investment expansion. Especially under the impact of national macro-control in the past two years, the company has increased investment intensity, and some investment projects may fail [11].

Table. 7 Vanke and Poly cash flow overall analysis table

Vanke（Unit: 100 million yuan）			
	2019	2020	2021
Net cash flows from operating activities	456.87	531.88	41.13
Net cash flows from investing activities	-286.27	57.97	-262.81
Net cash flows from financing activities	-333.38	-325.04	-231.04
Total net cash flows	-162.78	264.81	-452.71
Poly Development（Unit: 100 million yuan）			
	2019	2020	2021
Net cash flows from operating activities	391.55	151.56	105.51
Net cash flows from investing activities	-104.98	-69.27	-199.87
Net cash flows from financing activities	-28.35	-18.78	344.58
Total net cash flows	258.22	63.51	250.22

Finally, the net cash flow generated by financing activities in the past three years is negative, indicating that Vanke's dividend is greater than its loan amount, which further indicates that the enterprise is operating healthily. Whereas Poly Development's net cash flow has always remained positive, indicating that Poly's cash flow is relatively abundant and the risk of cash flow rupture is very small in the short term. It is worth mentioning that Poly Development is the only one among the top five real estate enterprises that has maintained the green standard of "three red lines". The net cash flow generated by business activities has also been positive in the past three years, indicating that the enterprise is excellent in operation and can form its own cash cycle and turnover, which has a strong sustainability. However, the net cash flow generated by investment activities has been negative for three consecutive years, indicating that enterprises are in the stage of external expansion and need a lot of investment. Finally, the largest difference between Poly and Vanke is the net cash flow generated by financing activities, Poly net raised two years earlier in 2021 rose sharply, up to 1934.87% from a year earlier, showed that Poly massive use of financial leverage, increase the size of the financing to promote the development of the nonresidential business structure, it has to do with Poly real estate developing the strategy of "real estate ecological development platform".

Table. 8 Vanke and Poly cash flow analysis.

Vanke（Unit: 100 million yuan）						
	2019		2020		2021	
	amount	proportion	amount	proportion	amount	proportion
Cash inflow from operating activities	4698.49	77.13%	5083.62	73.37%	4842.16	73.19%
Cash inflow from investment activities	159.34	2.62%	305.64	4.41%	163.87	2.48%
Cash inflow from fund-raising activities	1233.94	20.26%	1539.36	22.22%	1610.07	24.34%
Total cash inflow	6091.76	100.00%	6928.62	100.00%	6616.09	100.00%
Poly Development（Unit: 100 million yuan）						
	2019		2020		2021	
	amount	proportion	amount	proportion	amount	proportion
Cash inflow from operating activities	3530.52	74.22%	4105.30	71.23%	5086.96	71.42%
Cash inflow from investment activities	21.52	0.45%	65.72	1.14%	40.35	0.57%
Cash inflow from fund-raising activities	1204.60	25.32%	1592.70	27.63%	1994.86	28.01%
Total cash inflow	4756.65	100.00%	5763.72	100.00%	7122.17	100.00%

Table. 9 Vanke and Poly cash outflow analysis

Vanke（Unit: 100 million yuan）						
	2019		2020		2021	
	amount	proportion	amount	proportion	amount	proportion
Cash outflow from operating activities	4241.62	67.82%	4551.74	68.31%	4801.03	67.92%
Cash outflows from investment activities	445.60	7.12%	247.67	3.72%	426.67	6.04%
Cash outflows from fund-raising activities	1567.32	25.06%	1864.40	27.98%	1841.11	26.05%
Total cash outflow	6254.54	100.00%	6663.81	100.00%	7068.81	100.00%
Poly Development（Unit: 100 million yuan）						
	2019		2020		2021	
	amount	proportion	amount	proportion	amount	proportion
Cash outflow from operating activities	3138.97	69.78%	3953.74	69.36%	4981.45	72.49%
Cash outflows from investment activities	126.51	2.81%	135.00	2.37%	240.22	3.50%
Cash outflows from fund-raising activities	1232.95	27.41%	1611.48	28.27%	1650.29	24.01%
Total cash outflow	4498.42	100.00%	5700.21	100.00%	6871.95	100.00%

Seen from Table. 8, in terms of Vanke, the proportion of cash inflow from operating activities, investment activities and financing activities in the total cash flow has little change, accounting for about 73%, 3% and 22%, respectively. On this basis, the main cash inflow of Vanke comes from operating activities, which is also in line with Vanke's strategy of "rapid marketing". Secondly, the proportion of cash inflow generated by fund-raising activities occupies the second place, and its amount is in the trend of increasing year after year. As for Poly Development, operating activities and investment activities generated cash flow to total cash inflows than important than Vanke, were 71% and 1% respectively, but the operating activities cash inflow amount of Poly rise year by year.

On the other hand, Vanke's operating activities cash inflow amount decreased by 4.75%, compared to the same show that Poly business profitability is improving. Moreover, the proportion of cash inflow of Poly's financing activities is larger than that of Vanke, which is mainly because Poly has actively raised funds for diversified business layout in recent years and vigorously promoted the business layout of "real estate investment and development as the main, and comprehensive services and real estate finance as the auxiliary". The proportion of cash inflow of Poly's fund-raising activities is larger than that of Vanke, becoming one of the important sources of cash inflow.

Moving to Table. 9, for Vanke, the amount of cash outflow from operating activities shows an increasing trend year by year, but accounts for about 68% of the total cash outflow. The cash outflow of investment activities in 2021 increased by 72.27% compared with that in 2020, indicating that Vanke gradually recovered from the impact of COVID-19 and expanded its investment scale again. Poly's cash outflow from operating activities is similar to Vanke's, but its growth rate is significantly faster than Vanke's. Although the cash outflow of Poly's investment activities has increased, the amount is only about half of Vanke's, indicating that Poly has not yet entered the stage of comprehensive external expansion. Considering the cash outflow of fund-raising activities, Poly is preparing for the industrial layout of comprehensive expansion and development in the future.

5.3 Asset position analysis

It can be seen from Table. 10, Vanke's monetary funds will rise first and then decline from 2019 to 2021, but its monetary funds held are 149.352 billion yuan, which is much higher than the current liabilities due within one year and above the industry average. The accounts receivable grew rapidly in 2020 and 2021, with a year-on-year growth of more than 50%, indicating that Vanke's credit sales scale grew significantly in the past two years. On the one hand, the existence of accounts receivable is conducive to enterprises‘ expanding sales scale and bringing more profits, but excessive accounts receivable will increase the financial risk of enterprises. Hence, enterprises should pay more attention to it [12]. In these three years, Vanke‘s inventory and total assets both grew steadily, and the proportion of current assets to total assets remained above 80%, indicating good liquidity of assets.

Table. 10 Vanke and Poly asset status analysis

Vanke（Unit: 100 million yuan）				Poly Development（Unit: 100 million yuan）			
	2019	2020	2021		2019	2020	2021
Monetary fund	1661.95	1952.31	1493.52	Monetary fund	1394.19	1460.19	1713.84
Accounts receivable	19.88	29.92	47.44	Accounts receivable	18.45	24.50	31.79
prepayments	977.96	622.48	672.30	prepayments	427.51	421.97	426.86
Other accounts receivable	2354.65	2494.99	2660.61	Other accounts receivable	1331.25	1532.46	1578.49
inventory	8970.19	10020.63	10756.17	inventory	5840.01	7414.75	8096.56
Long-term equity investment	1304.76	1418.95	1444.49	Long-term equity investment	590.46	725.50	950.89
Investment real estate	735.65	799.54	859.53	Investment real estate	195.10	212.82	272.95
Fixed assets	124.00	125.77	128.21	Fixed assets	74.72	76.62	112.75
Assets total	17299.29	18691.77	19386.38	Assets total	10332.09	12514.41	13999.33

Poly Development's monetary capital, inventory and total assets have grown steadily in the past three years, indicating that the enterprise is developing in a good direction, but there is still a certain gap compared with Vanke. It is worth noting that investment real estate and fixed assets increased by 28.26% and 47.16% year-on-year in 2021, mainly owing to Poly's purchase of 17 new real estate projects in 2021, involving 14 commercial land and 3 residential land in Foshan, Dongguan, Nanjing and Wenzhou. Finally, Poly's current assets account for about 85% of the total assets, which is slightly more liquid than Vanke's.

5.4 Financial capability analysis

Table. 11 demonstrates Vanke's current ratio and quick ratio in recent three years are about 1.2 and 0.4, but the quick ratio has a downward trend. In this case, the proportion of inventory in the current assets of the enterprise has increased, and the short-term solvency has decreased. For ordinary enterprises, liquidity ratio should be above 2, and quick ratio should be above 1 to have strong short-term solvency [13]. Vanke's short-term solvency is close to the average ratio of the industry, so it needs to pay attention to the capital chain. As for long-term solvency, Vanke's asset-liability ratio and equity ratio are higher than the industry average, but they are developing in a healthy direction, indicating that Vanke's long-term solvency is improving.

Poly's current ratio and quick ratio are both higher than Vanke's, indicating that its short-term solvency is significantly better than Vanke's and above the industry average. The equity ratio and asset-liability ratio are also lower than Vanke's, indicating that Poly's long-term solvency is better than Vanke's in the past three years. Nevertheless, it is necessary to be aware of the financial risks caused by the increase of its equity ratio and asset-liability ratio.

Table. 11 Vanke and Poly solvency analysis table.

Vanke				Poly Development			
	2019	2020	2021		2019	2020	2021
Current ratio	1.13	1.17	1.22	Current ratio	1.56	1.51	1.52
Quick ratio	0.43	0.41	0.40	Quick ratio	0.59	0.53	0.53
Equity ratio	539.34%	434.29%	393.58%	Equity ratio	350.16%	369.32%	362.15%
Asset-liability ratio	84.36%	81.28%	79.74%	Asset-liability ratio	77.79%	78.69%	78.36%

Table. 12 Vanke and Poly profitability analysis table

Vanke				Poly Development			
	2019	2020	2021		2019	2020	2021
Net profit margin on sales	14.99%	14.15%	8.41%	Net profit margin on sales	15.92%	16.47%	13.05%
Return on equity	22.47%	20.13%	9.78%	Return on equity	21.01%	17.10%	14.39%
Earnings per share	3.44	3.57	1.94	Earnings per share	1.59	2.34	2.42
Net asset per share	16.64	19.32	20.30	Net asset per share	9.70	11.76	13.37

It could be summarized in Table. 12, Vanke's net margin on sales and return on equity maintained a high level in 2019 and 2020, but Vanke's profitability declined seriously in 2021. Net margin on sales was only 8.41%, down 40.57% year-on-year, and return on equity was 9.78%, down 51.42% year-on-year. Through reviewing the company's annual report, it is found that Vanke's operating revenue in 2021 only increased by 8.04%, but its operating cost increased by 19.37%. In addition, the decline in investment income and the provision of a large number of asset impairment losses also reduced Vanke's profitability in 2021. Although the earnings per share declined seriously, the net asset per share increased, denoting that the company can still bring substantial returns to shareholders even if its earnings are not good.

Poly's net margin on sales also have a significant decline in 2021, but it is worth noting that the return on equity has been in a downward trend nearly three years. On the one hand, it means the overall trend and the rising cost of company business of real estate; on the other hand, Poly in a few years ago bought a lot of high premium plot, makes now declining margins. In addition, Poly's earnings per share and net asset per share rose year after year, indicating that Poly's profit momentum is still very strong.

6. Suggestions

6.1 Appropriately increase the proportion of equity financing.

The Tables. 13 and 14 count Vanke's Equity financing in the past three years. Compared with the main financing model which is external financing, the proportion of Equity financing is low. Because the development cycle and interest payment period of real estate enterprises are relatively long, and the return of funds is slow, enterprises should increase the proportion of equity financing to ensure internal control of the company. Therefore, real estate companies should expand the proportion of equity financing by attracting potential investors.

Table. 13 Vanke equity financing status.

		2019	2020	2021
Vanke	Equity	11302	11618	11625
	Capital reserve	12385	18554	20584
	Retained earnings	166100	195883	203885
	Retained earnings/Total assets	9.60%	13.02%	11.80%

Table. 14 Poly equity financing status

		2019	2020	2021
Poly Development	Equity	11930	11970	11970
	Capital reserve	18320	17817	17817
	Retained earnings	110098	165773	194846
	Retained earnings/Total assets	10.66%	13.25%	13.91%

6.2 Reduce the proportion of indirect financing and increase the proportion of direct financing

From the above analysis of Poly Development and Vanke's financing model, it can be seen that the two companies rely too much on indirect financing in the financing structure, i.e., bank loans. However, the lending policy of banks is greatly affected by national policies. For example, if interest rates are higher in the face of austerity, businesses should reduce borrowing from banks, thereby reducing financing costs. Companies can increase the proportion of direct financing by issuing bond financing of corporate bonds and medium-term notes, optimize the capital structure to a certain extent, and obtain long-term funds for enterprises.

6.3 Explore diversified financing methods

Enterprises can address some of the financing issues by establishing real estate trust funds. As for top of that, they can also vigorously develop overseas financing of real estate enterprises as an important supplement to domestic financing channels. Further enhance the overall financing capacity through overseas capital markets that are less affected by macro-control.

7. Summary

In conclusion, this paper investigates financing mode and financing effect in terms of Vanke and Poly Development. As a representative of real estate enterprises in China, Vanke has abundant financing means. Bank loans accounted for significantly more than bond financing, equity financing accounted for the least. However, it can be clearly seen that Vanke's bank loan in 2021 is only half of that in 2020, accounting for only 9.65% of the total liabilities. Vanke's financing cost decreases to 4.11% in 2021,which has a great advantage. Although Vanke's operating conditions in 2021 are not good, its net cash flow from operating activities is still positive. Besides, its monetary funds are much higher than its current liabilities due within one year. It is worth noting that Vanke's net profit margin on sales and return on equity declined very seriously in 2021, mainly because its operating revenue only increased by 8.04%. Nevertheless, its operating cost increased by 19.37%, and a large amount of asset impairment losses were also deducted.

Regarding to Poly Development, bank loans and bond financing amount have increased in varying degrees. In 2021, Poly's total debt exceeded one trillion yuan for the first time, but the number of external issued stocks has been decreasing. In addition, its financing cost has gradually decreased in the past three years, dropping to 4.46% in 2021, which also possesses a strong competitive advantage. The net cash flow generated by Poly's business activities has declined year by year in the past three years, but the monetary capital, inventory and total assets have grown steadily, denoting that the enterprise is developing in a good direction. Finally, its short-term and long-term solvency is better than Vanke's, but the net profit rate on sales and return on equity both tend to decline.

In general, Vanke's financing modes are more diversified, the proportion of different financing modes is more balanced, and relies less on bank loans, which is conducive to reducing financing risks for enterprises. Vanke and Poly Development also need to pay attention to the financial risks brought to the company by the increase in bond financing. Although Vanke's profitability in 2021 is not optimistic, it still guarantees normal dividends to shareholders, expressing that Vanke is capable of improving its profitability.

Nevertheless, there are some shortcomings and defects for this paper. Firstly, ascribed to the difficulty of information acquisition and space limitation, it does not analyze emerging financing methods, e.g., medium-term notes, real estate trusts and real estate funds. Secondly, this paper analyzes the data from 2019 to 2021, which is a slightly shorter time line. The above two deficiencies may directly lead to a certain deviation between the conclusion of this paper and the actual situation. In the future, It is hoped that researchers can collect more comprehensive data to compare the financing modes of the two companies and provide more reliable financing suggestions for real estate enterprises. Overall, these results offer a guideline for the majority of housing enterprises. There is no absolute good or bad financing mode. Real estate enterprises should explore and develop financing modes suitable for their own companies according to their financing costs and cash flow.

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