

Analysis Of Financial Statement of Chinese Real Estate Enterprises-Take One Certain Company as An Example

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Abstract. Real estate enterprises play an important role in the economic development of China, which are directly influence the economy. Different from other enterprises, real estate enterprises have the features of high leverage, large capital demand, slow repayment and long investment period. In recent years, the central government has implemented a series of policies, real estate enterprises facing severe financial risks. It's important for enterprises to identify and prevent the financial risks. As a representative of China's highly leveraged and large-scale real estate enterprises, the company continuously violates the "three lines and four levels" policy when it is implemented. This article analyses the financial risks of this company by collecting the company's financial statement data from the past five years, using ratio analysis and Z-value model. By researching the data, this article finds that the company has weak debt paying ability, operational ability, and profitability in recent years, also facing high financial risks.

Keywords: Real estate; financial risks; ratio analysis; Z-value model.

1. Introduction

As the global economic integration deepening, the economy of China is rapidly developing. As one of the important industries of national economic development, real estate plays an important role in the development of the Chinese economy. In recent years, in order to decrease the rapid rise in housing prices, the government has implements a series of regulatory policies such as purchase and sale restrictions, make the control of financial policies stronger, and real estate enterprises are facing rising stress to "destocking" and capital chains [1]; At the same time, in the process of development, the real estate enterprises have a large demand for funds and a wide range of business, making inventory turnover and fund management become an important problem that the industry must face. At the same time, the financial risks are gradually rising, such as highly debt and severe vacancy problem. With the continuous saturation of the market and the constant intervention of macro policies, real estate enterprises with high debt ratios are facing large financial risks. The maturity debt influences the cash flow of real estate enterprises, which will result in a continuous increase in debt ratio, the difficulties of financing, and the increases of costs, these may lead to real estate enterprises to shut down [2-3]. Therefore, using useful financial strategies is extremely important for real estate enterprises.

This article takes the company as the example of this case, using the theory of financial risk identification and early warning of enterprises, adding ratio analysis method to ensure and explore the financial risks of the company in the financing, investment and cash flow parts, focusing on the liquidity crisis of the company, analyzing the current financial situation and crisis causes. At the same time, this article uses the Z financial warning model to analyze potential financial risks and establish the Z-value model to explore the shortages of the company in financial risk identification [4].

2. Definition and Classification

Financial risks can be defined broadly and narrowly. The broadly financial risks refer to that the company suffers from unforeseeable factors which cause losses. Broadly financial risks can be divided into four categories based on their occurrence: financing risk, investment risk, fund recovery risk, and income distribution risk [5]. The financing risk is the risk caused by unreasonable borrowing; Investment risk is the risk of actual returns falling short of expected returns due to changes in demand and other factors; The fund recovery risk is the risk caused by the uncertainty of time and amount in the process of fund conversion; The income distribution risk is the risk caused by brought to the subsequent operation and management of the enterprise due to the problem of income distribution. Narrowly financial risk refers to the financing risks caused by debt and poor business operations [6-8]. This article uses the broadly financial risks theory to identify and analyze financial risks from a broader perspective.

3. Profile

The company is a globally operating large-scale group, founded in 1992 and headquartered in Shanghai, China, which is listed on the A-share market in China and holds a controlling stake in a Hong Kong-listed company. Since its establishment, the company has formed a comprehensive business pattern of "main business in real estate and infrastructure, synergistic development of financial, energy, consumption and other industries" globally, and implemented the strategies of capitalization, publicization and internationalization. Its business has spread to five continents in more than 50 countries, and it has been ranked among the top 500 global enterprises for 12 consecutive years.

The contract sales of real estate have been increasing steadily for eight years. In 2023, its revenue was \$648,021 thousand US dollars, ranking 15th among Chinese real estate enterprises. Meanwhile, the company also faces certain challenges. In 2018, its asset liability ratio was 89.49%, which violated the standard that industrial enterprise asset liability ratio cannot exceed 80% set by the State-owned Assets Supervision and Administration Commission. In addition, with China's strict control over real estate industry's debt, financing is constantly contracting, which brings great debt repayment pressure and financing risks to the company [9].

4. Construction and Analysis

4.1. Ratio Analysis

This paper selects Citychamp Dartong Co., Ltd and Risesun Real Estate Development Co., Ltd as reference for financial risk identification for the company. Citychamp Dartong Co., Ltd, Risesun Real Estate Development Co., Ltd, and the company have a strong comparability in terms of industry positioning, enterprise scale, and operational ability. By analyzing the financial ratios of the three companies over the past five years, we can compare and analyze the financial data of the company horizontally and vertically, and objectively identify the financial risks of the company.

4.1.1 Debt repayment ability

The current ratio is the ratio of current assets to current liabilities, reflecting a company's short-term ability to repay debts. As shown in Table 1, the current ratio of a certain group has always been greater than 1 from 2019 to 2023, indicating that the company's current assets are sufficient to repay short-term debts. However, the current ratio of the company has shown a downward trend in the past 5 years, and there is still a certain gap with the same industry, indicating that the company's ability to repay debts is constantly declining. If the current ratio continues to decline, the company's cash inflow may not be able to cover short-term debts and operating expenses, affecting the company's daily operations and even facing the risk of shutdown. In addition, the company's default risk on debt rises,

and once it defaults, not only the company's credit will be affected, but it may also face legal proceedings.

Table 1. Current Ratio

Current ratio	2019	2020	2021	2022	2023
The target company	1.22	1.20	1.12	1.08	1.10
Citychamp Dartong Co., Ltd	1.25	1.79	1.36	1.33	1.29
Risesun Real Estate Development Co., Ltd	1.32	1.42	1.24	1.11	1.21

Source: Annual Reports of Companies from 2019 to 2023

The Acid-test ratio is the ratio of the difference between current assets minus inventory to current liabilities, as shown in Table 2. From an industry perspective, the Acid-test ratio of the company is significantly higher than that of comparable enterprises, indicating that its short-term debt repayment ability is relatively favorable compared with the same industry. However, compared with previous years, the Acid-test ratio of the company has decreased in 2021 and increased slightly in 2022, and it has always been far less than 1, indicating that the company's asset liquidity is poor and is far from being able to repay its short-term liabilities. This will bring a series of risks to the company, such as the risk of facing a shortage or even breakdown of the capital chain in the short term, limited financing channels, decreased ability to pay suppliers and partners, leading to instability in the company's supply chain and ultimately hindering the company's normal operation.

Table 2. Acid-test Ratio

Acid-test ratio	2019	2020	2021	2022	2023
The target company	0.33	0.42	0.39	0.41	0.43
Citychamp Dartong Co., Ltd	0.20	0.22	0.23	0.37	0.41
Risesun Real Estate Development Co., Ltd	0.32	0.33	0.25	0.20	0.22

Source: Annual Reports of Companies from 2019 to 2023

The debt to asset ratio is the ratio of total liabilities to total assets. From Table 3, the debt to asset ratio of the company increased slightly from 2019 to 2021 and then began to decline slowly from 2022 to 2023. Compared with the same industry, the asset-to-liability ratio of the company is obviously higher. All of this indicates that the asset structure of the company is very unreasonable, with most of its capital coming from debt. The excessive debt burden has increased the financial burden of the Group and made the company's profitability unstable. If external policies change or the company's credit rating declines, limiting its financing channels, the company may lack sufficient funds to support its operations and even face the risk of bankruptcy.

Table 3. Debt to asset ratio

debt to asset ratio	2019	2020	2021	2022	2023
The target company	88.53%	88.89%	88.84%	87.97%	87.84%
Citychamp Dartong Co., Ltd	64.46%	62.02%	65.64%	64.30%	63.66%
Risesun Real Estate Development Co., Ltd	82.45%	82.07%	84.49%	89.96%	87.19%

Source: Annual Reports of Companies from 2019-2023

4.1.2 Operational capacity

Accounts receivable turnover is the ratio of operating income to accounts receivable. The company's receivable turnover ratio was the lowest among the three companies, much lower than that of Risesun Real Estate Development. Besides, the company's receivable turnover is broadly on a downward trend. This indicates a slow return of funds to the company. If companies do not collect accounts receivable in time, cash flow will be affected. Moreover, the slow return of funds may be due to the low payment capacity of customers. The lower the receivable turnover, the lower the

likelihood that a company will recover its accounts in the future, indirectly leading to an increase in bad debt losses and credit risk (See Table 4).

Table 4. Receivable Turnover Ratio

receivable turnover ratio	2019	2020	2021	2022	2023
The target company	5.65	4.78	5.00	3.86	3.79
Citychamp Dartong Co., Ltd	9.87	11.05	9.31	4.94	3.03
Risesun Real Estate Development Co., Ltd	19.94	14.91	7.96	5.47	11.45

Source: Annual Reports of Companies from 2019-2023

Inventory turnover is the ratio of operating costs to average inventory for a given time period. The company had the highest inventory turnover ratio among the three companies in 2019-2021, but it has fallen since 2022. This shows that the company's operating capacity has declined for the last two consecutive years, no longer favorable. Declining inventory turnover means that inventory is backed up and funds are tied up for long periods of time and not available for operations. Besides, a decline in inventory turnover represents poor sales, causing the company's performance to decline, losing its competitiveness in the marketplace, and slipping in credit ratings and ability to raise capital. Long-term inventory backlogs may also involve contractual breaches, product quality and other issues (See Table 5).

Table 5. Inventory Turnover Ratio

Inventory Turnover Ratio	2019	2020	2021	2022	2023
The target company	0.57	0.56	0.64	0.54	0.51
Citychamp Dartong Co., Ltd	0.35	0.41	0.54	0.72	0.79
Risesun Real Estate Development Co., Ltd	0.33	0.30	0.20	0.17	0.32

Source: Annual Reports of Companies from 2019-2023

Total asset turnover is the ratio of operating income to the average value of total assets over a given period of time. From Table 6, a group's total asset turnover ratio was basically stable in 2019-2021 and decreased sharply in 2022 and 2023. In the past two years, the company's total asset turnover ratio has been much lower than that of comparable companies, which shows that the company's efficiency in capital utilization has declined. The long capital recovery period makes companies need a large amount of financing to maintain their operation, which further increases the financial leverage and leads to an increase in the risk of debt repayment of the enterprise. Moreover, the significant decline in total asset turnover also implies that the market demand for the company's assets is reduced and that the value of the company's assets can depreciate significantly when the real estate market is volatile. Besides, the decline in asset turnover rate makes investors and banks lose confidence in enterprises, raising the cost of financing, compressing corporate profits and increasing operational risks.

Table 6. Total Assets Turnover Ratio

Total Assets Turnover Ratio	2019	2020	2021	2022	2023
The target company	0.39	0.36	0.38	0.31	0.28
Citychamp Dartong Co., Ltd	0.31	0.36	0.39	0.47	0.43
Risesun Real Estate Development Co., Ltd	0.29	0.26	0.16	0.12	0.26

Source: Annual Reports of Companies from 2019-2023

4.1.3 Profitability

Net sales margin is the ratio of net profit to sales revenue. The net sales margin of the company continued to decline in 2019-2023, falling to a negative value in 2023, and was also significantly lower compared to other companies. This information suggests that the company's profitability has been significantly affected by the policies of the last two years, and that it has even incurred losses.

Declining profits pose financial, market, investment, strategic, and policy risks to companies. Risks such as higher financing costs, loss of market share, loss of customers, limited strategic options, and sensitivity to external policy changes (See Table 7).

Table 7. Net Sales Margin

Net Sales Margin	2019	2020	2021	2022	2023
The target company	4.90%	4.64%	1.73%	1.06%	-3.09%
Citychamp Dartong Co., Ltd	6.87%	3.97%	-9.96%	1.36%	-4.05%
Risesun Real Estate Development Co., Ltd	13.52%	10.87%	-10.59%	-57.99%	2.16%

Source: Annual Reports of Companies from 2019-2023

Return on Equity is the ratio of net income to the average stockholder's equity. According to Table 8, this ratio of the company in the past five years saw a downward trend and became negative in 2023. Seeing from the whole industry, the net asset returns of the three companies fluctuated significantly from 2019 to 2023, illustrating the profitability of this industry is not optimistic and the real estate industry is in sluggish development. Therefore, affected by the environment, the company's profitability declines sharply, limiting the fund input into investment, research and expansion. Meanwhile, the company is at the risk of defaulting on their debts and is likely to go bankrupt because of capital chain rupture caused by debt default.

Table 8. Return on equity

Return on equity	2019	2020	2021	2022	2023
The company	19.89%	18.57%	7.07%	1.12%	-11.18%
Citychamp Dartong Co., Ltd	5.40%	3.95%	-13.03%	1.00%	-6.52%
Risesun Real Estate Development Co., Ltd	21.88%	15.97%	-12.24%	-69.37%	1.63%

source: annual reports from 2019 to 2023 of each company

4.2. Z-value Model Analysis

The specific formula of Z-value model: $Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5$ This formula was concluded by Altman who selected manufacturing enterprises as the research object, having some limitations. Therefore, he designed Z3 model later, that $Z = 6.65X_1 + 3.26X_2 + 6.7X_3 + 1.05X_4$. The tested cooperation's financial condition is healthy, and the company has no risk of bankruptcy when it's Z-value is greater than 2.90; when this value is below 1.20, there is a risk of bankruptcy. Z-values between 1.20 and 2.90 are referred to as gray areas [10]. By analyzing the result of Z-value in the table, we can clearly find the financial risk range of the company from 2019 to 2023 and the change of Z-value of the company in recent five years. To be specific, the Z-value was at its highest in 2019, illustrating the company's financial position reached its peak during this period. In the following years, Z-value fluctuated, with a minimum in 2022 and an increase in 2023. However, there's a gap with the safe area, meaning that the company are at high risk and are possible to go bankrupt (See Fig. 1).

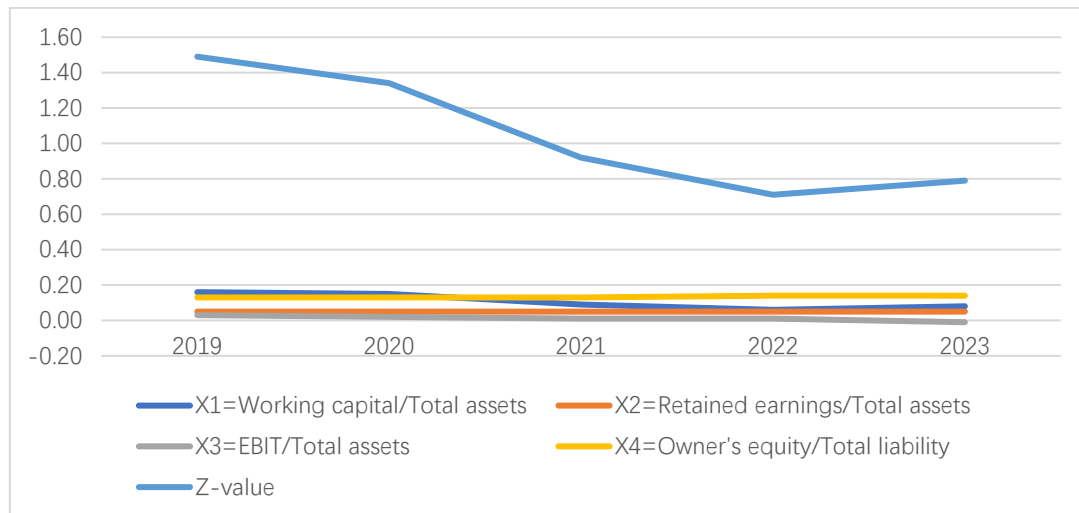


Fig. 1 Tendency of Z-value

source: annual reports from 2019 to 2023 of the company

5. Conclusions and Limitations

5.1. Conclusions

This paper collects and analyzes the relevant financial reports of the company as a case study and analyzes the current financial situation of the company, as well as its debt situation and capital flows. Besides, this paper makes quantitative evaluations of the company's debt-servicing capacity, operating capacity and profitability using ratio analysis and Z-value modeling.

According to the analysis of this paper, the data of the company in the last five years is not optimistic. Compared to the entire real estate industry, the company's debt-servicing capacity is not high, which means higher short-term debt service risk. The company is faced with risks of broken financial chains, loss of market share, loss of customers, etc., and is possible to lack sufficient funds to support operations, even at risk of insolvency.

5.2. Limitations and Future Prospects

This paper leaves much to be desired in the analysis of financial risk in real estate companies. This paper mainly utilizes ratio analysis and Z-value modeling and no entropy method, etc., are added for data analysis. Therefore, this paper's analysis is not comprehensive, which needs to be further studied.

Authors Contribution

All the authors contributed equally, and their names were listed in alphabetical order.

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