

# Finance and Investment Risk Analysis of Listed Company Shenhua Group

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**Abstract.** With the development of market economy, finance risk is inevitable in the operation of enterprises. Measures must be carried out to prevent financial risks to reduce the finance risk of enterprises. Taking listed company Henan ShenHua group for example, we analyzed the current status of financial risk management of the Shenhua group from financing risk and investment risk based on the financial statements of the group. The index data of the group were compared with the industry average to evaluate financial risk of the Shenhua group, and put forward some measures to prevent and avoid financial risk. The study in the paper is of great help to enrich risk management theory and prevent the occurrence of finance risk of enterprises.

## 1. Introduction

The financial risk analysis and response of listed companies is the focus of the economic field. Globally, every year many large enterprises encounter risks and eventually leads to the bankruptcy and liquidation of the company due to the out of control of financial risks[1]. This is a heavy blow to the normal operation of the enterprise, its industry and the entire economy and society. Listed companies may face financial risks from time to time. Today's free economy is increasingly complex[2]. In the business activities associated with enterprises, the expected income is different from the real income. The expected expenditures are also different from the world's expenditures. Sex will cause enterprises to face the threat of financial risks at all times, which will cause listed companies to face unexpected capital outflows[3]. If they continue for a long time, they will induce financial crisis to erupt until they are dying. The development of China's free market economy is booming and improving. There are many business opportunities in the global economic market, creating unlimited development space for enterprises. This environment is a double-edged sword, and at the same time, it faces numerous challenges and fierce competition[4]. In the market competition, if a company wants to be invincible in multi-party competition, it must strengthen enterprise risk management and improve management quality[5]. On the one hand, we must strengthen the control of daily production and management. On the other hand, we should pay more attention to the control of risks, raise awareness of risk management, absorb the experience of others' failures, improve our own defects, stop losses in time, and eliminate the fortunes.

## 2. Finance Status of Shenhua Group

Henan Shenhua Coal and Electricity Co., Ltd., referred to as "Shenhua Group", was established on August 31, 1998 with a registered capital of 190.50 million yuan. Its main business is coal production, sales, washing and processing, power generation; railway franchise line, mine Production and sales of equipment; manufacturing, packaging, export and export of carbon products. In recent years, the operating conditions in the industry have generally been sluggish. Overcapacity has caused market competition to intensify. The price of goods has fallen, and downstream demand has also fallen. The profit margin of listed companies has been compressed and faced greater financial risks. China's Henan Shenhua Group announced that it started the construction of an aluminum smelting project investing around RMB 6.75 billion (\$996.59 million). The company also said that its new project,

located in the southwestern province of Yunnan, would be having an annual capacity of 900,000 tones. In recent years, the operating conditions in the industry have generally been sluggish. Overcapacity has caused market competition to intensify. The price of goods has fallen, and downstream demand has also fallen. The profit margin of listed companies has been compressed and faced greater financial risks.

### 3. Finance risk analysis

This section analyzes the data of Henan Shenhua group in the past five years, and finds the advantages and disadvantages of the company in financial risk management and prevention, and puts forward corresponding suggestions, so that it can be more in the future operation. The risk of financing is a variable factor in the process of financing for the purpose of maintaining normal operation, which leads to an unfavorable change in operating results. Here, the analysis of the risk of financing the Shenhua group is based on the financial leverage factor and solvency. The financial leverage factor is the ratio of the rate of change in the after-tax profit per share of common stock to the rate of change in profit before interest and taxes. In general, when the ratio is greater than zero, it is positively correlated with the financing risk.

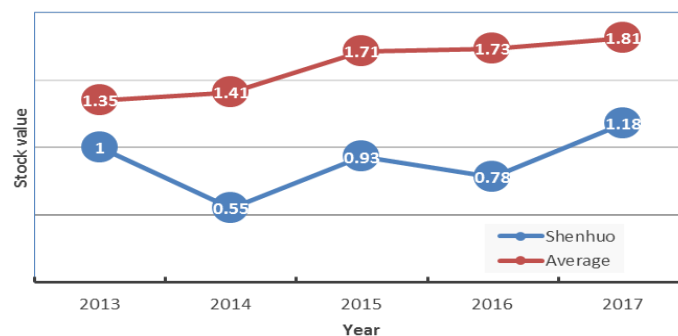


Fig. 1 Stock value of Shenhua group in 2013-2017

As shown in Fig. 1, the financial leverage factor of Shenhua group in 2013-2017 is lower than the industry average, indicating that the operation of Shenhua group in the past five years is better in the industry, and the financing risk is relatively small. In 2013-2016, this indicator has a downward trend, and the financing risk is effectively controlled. However, in 2017, the indicator reached the peak within 5 years, and it needs to be paid attention to, respond quickly, and promptly remedy, and beware of the deterioration of the situation. Short-term solvency is the ability of a company to fully repay debt in a relatively short period of time. Current liabilities are recurring liabilities, and current liabilities are mostly repaid by liquid assets, and the common current ratio and quick ratio of short-term solvency are judged.

The current ratio is the ratio of current assets to current liabilities. It assesses the ability of short-term liabilities to repay debts with more liquid assets before the repayment period. This ratio is proportional to the solvency. The larger the value, the liquid assets. The larger the ratio, the stronger the ability to borrow, and the lower the risk of financing; on the contrary, it shows that the ability to borrow is weak and the risk of financing is relatively high. It is necessary to take timely measures to increase the proportion of liquid assets and enhance the ability to borrow. However, this does not mean that the greater the current ratio, the better. Usually between 1 and 2, the current assets can guarantee the normal repayment of short-term debt without excessive idle assets.

The quick ratio refers to the ratio of the company's quick-moving assets to current liabilities, and reflects the ability of the company to repay current liabilities with real-time assets. The distribution of current assets in the coal industry is characterized by a large proportion of inventories and accounts receivable. Therefore, we should combine the accounts receivable turnover rate with the quick ratio to ensure the authenticity of the results.

Table 1 Short-term solvency of Shenhua group in 2013-2017

Year	Current ratio		Quick ratio	
	Shenhua group	Average	Shenhua group	Average
2013	0.46	1.1	0.26	1.02
2014	0.50	1.14	0.27	0.93
2015	0.46	1.16	0.26	0.73
2016	0.47	1.15	0.31	0.61
2017	0.48	1.17	0.29	0.57

As shown in Table 1, the current ratio of Shenhua group in the past five years is less than 1, and basically maintained at 0.5, which indicates that the current liabilities of Shenhua group are about twice that of current assets, and the current assets are seriously insufficient. Compared with the industry average, there are also big differences, and companies are vulnerable to the risk of capital chain disruption. The quick ratio is also lower than the industry average, assets cannot be quickly realized, and solvency is weak. In summary, the current ratio and quick ratio of Shenhua group are far from the industry average between 2013 and 2017. The short-term solvency of enterprises is at a disadvantage in the industry. Shenhua group should be cautious in fund planning and develop various financing methods. To provide enterprises with timely financing and seize market opportunities to provide protection.

In order to comprehensively and objectively assess the financing risks of Shenhua group, it is indispensable to analyze the long-term solvency. The asset-liability ratio is the ratio of total liabilities to total assets, reflecting the percentage of self-owned funds. This ratio is negatively related to the financing risk. The smaller the ratio, the smaller the proportion of self-owned funds obtained through borrowing, the more the financing risk is. small. As can be seen from Table 5 and Fig. 2, the asset-liability ratio of Shenhua group is slightly higher than the industry average, but the difference is long. The long-term solvency of enterprises is relatively good in the industry. However, the ratio has been increasing year by year. It may be due to the fact that the company is in the development stage in recent years, which requires more working capital and debt, and the proportion of assets obtained through borrowing from its own funds is relatively large. The equity multiplier is the ratio of total assets to total shareholders' equity, which is positively correlated with financing risk. As shown in Table 2, the equity multiplier of Shenhua group in the past five years is higher than the industry average, indicating that the proportion of shareholders' equity in corporate assets is small, and the enterprises have more liabilities and raise risks.

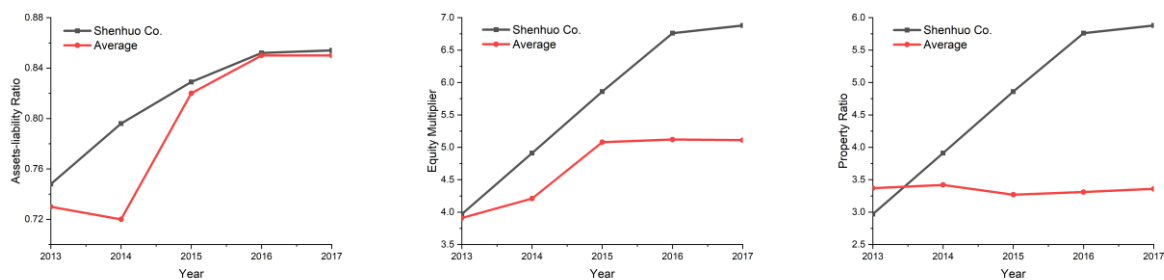


Fig. 2 Long-term solvency curves of Shenhua group in 2013-2017

#### 4. Investment risk analysis

Investment risk is the variability of an enterprise's economic benefits to the ongoing project. Here, the investment risk analysis of Shenhua group is guided by the operating leverage factor and the total asset growth rate. The operating leverage factor refers to the ratio of the profit-to-tax profit conversion rate to the production-to-sales conversion rate. When the fixed cost is positive, the ratio is always greater than 1. Under the same production and sales level, the operating leverage factor is proportional to the financing risk.

Table 2 Operating leverage of Shenhuo group

Year	Shenhuo	Average
2013	-10.27	1.97
2014	-8.25	2.53
2015	-0.68	2.7
2016	-2.50	3.49
2017	4.97	4.76

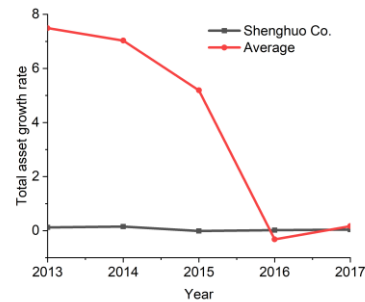


Fig.3 Total asset growth rate of Shenhuo group

As shown in Table 2, the operating leverage factor of Shenhuo group in 2013-2016 is negative, indicating that the company is in a loss state during the four years, and the investment risk is very large. In 2017, the indicator was at a positive value, indicating that although the company has turned from loss to profit, its operating conditions are still not very optimistic. The investment risk has decreased but is greater than the industry average. The growth rate of total assets is the ratio of total assets increase to total assets in the current year, which represents the growth of asset size in this fiscal year. Assets are the premise for the company to survive, and it is a strong reliance on debt repayment. The growth rate of total assets is positively correlated with long-term solvency. It can be seen from Table 7 and Fig.3 that the total asset growth rate of Shenhuo group in the past five years is generally low, far below the industry average, and the growth rate of total assets is slow.

## 5. Conclusions

In the present paper, the ratio analysis method is used to identify and analyze the financing risks, investment risks taking Henan Shenhuo Co. Ltd as an example. The causes of the financial risks of Shenhuo Co. Ltd is determined. The main reason is that the internal capital structure is not appropriate enough and the financing methods lack diversity. The growth rate of total assets of Shenhuo group is slow, facing certain investment risks. Compared with the industry, its inventory turnover rate is relatively fast, and the accountability of accounts receivable is relatively high, but the total asset turnover rate is relatively low. The three parties have a combined effect, and the operation of Shenhuo group is relatively low. This paper analyzes the financial status of Shenhuo in recent years from financing and investment, and identifies the existing and potential risks in the production and operation process. The risk management theory supports the analysis of existing problems and proposes countermeasures in a targeted manner, thereby avoiding the losses caused by financial risks, increasing the income, enhancing the core competitiveness of enterprises.

## References

- [1] S.M. Wanjohi, J.G Wanjohi, and J.M Ndambiri, The Effect of Financial Risk Management on the Financial Performance of Commercial Banks in Kenya, *International Journal of Finance and Banking Research*, vol. 3, pp.70-81, 2017.
- [2] A. Olsen R. Financial risk perceptions: a consciousness perspective, *Qualitative Research in Financial Markets*, vol, 6, pp. 66-74, 2014.
- [3] R. Fairchild, Financial risk management: is it a value-adding activity? *Balance Sheet*, vol. 10, pp. 22-25, 2002.
- [4] A.Wong, Corporate sustainability through non-financial risk management, *Corporate Governance: The international journal of business in society*, vol. 14, pp. 575-586, 2014.
- [5] F.J. Hsu and Y.C. Chen. Is a firm's financial risk associated with corporate social responsibility? *Management Decision*, vol 53, pp. 2175-2199, 2015.