

Analysis of the Debt-paying Ability and Countermeasures of a Certain Energy Company

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Abstract: This article conducts an in-depth analysis of the debt-paying ability of a certain energy company. Based on financial data, it is revealed that it has prominent problems such as a persistently high debt-to-asset ratio, short-term debt repayment indicators lower than the industry safety threshold, an imbalance between debt maturity structure and capital ratio, and poor stability of cash flow. These issues have led to an increase in the enterprise's financial risks, pressure on financing costs, and potential fluctuations in credit ratings, thereby hindering business expansion and market competitiveness. In response to this, this paper proposes countermeasures from aspects such as strengthening the dynamic monitoring of liquidity and the efficiency of asset realization, optimizing the debt-to-equity ratio and the combination of financing tools, strictly controlling the cost of financial leverage and operating expenses, and establishing a cash reserve redundancy and emergency dispatch mechanism. The aim is to systematically enhance financial flexibility, assist enterprises in building a solid risk barrier in the wave of energy transition, and achieve high-quality development.

Keywords: Financial statements; Debt-paying ability; Countermeasure Analysis

1 Significance of the project

A certain energy company, as a leading enterprise in China's power industry, its operational and financial conditions directly reflect the dynamics and trends of China's power market. With the accelerated advancement of the global energy transition and the continuous deepening of domestic power marketization reform, a certain energy company is facing unprecedented challenges and opportunities. In recent years, China's economy has developed rapidly and the demand for electricity has continued to rise, providing a broad space for the development of the power industry. However, what accompanies it is fierce market competition and a constantly changing policy environment. The gradual opening up of the electricity market has made traditional power enterprises such as certain energy companies have to confront more complex and changeable market challenges head-on^[8].

Meanwhile, the state's emphasis on environmental protection and low-carbon development has compelled a certain energy company to increase investment in clean energy while maintaining efficient operation. This undoubtedly raises its financial burden and debt repayment pressure. On the other hand, the fluctuations in coal prices, the rapid development of new energy technologies, and the adjustments in the trading rules of the electricity market have all had a profound impact on the profitability and debt-paying ability of a certain energy company. How to maintain a stable financial situation amid this series of changes has become an urgent problem that a certain energy company needs to solve. Therefore, conducting an in-depth analysis of the debt-paying ability of a certain energy company and exploring effective countermeasures not only concerns the sustainable development of the energy company itself, but also provides valuable references for the entire power industry^[7].

This article aims to analyze the financial situation of a certain energy company, reveal the current situation and challenges of its debt-paying ability, and put forward targeted countermeasures and suggestions, with the expectation of providing useful references for the enterprise management of the power industry.

2 Synthesis of research

The research on the debt-paying ability of enterprises by foreign scholars has been relatively mature, revealing the key factors influencing the debt-paying ability of enterprises from multiple perspectives.

M. Aghera, C. D. Lakhani, and S. M. Trivedi (2018), through their research on agricultural product processing and trading enterprises, emphasized the importance of working capital management to the debt-paying ability of enterprises. They found that the working capital turnover rate was positively correlated with the return on assets and the net profit margin, indicating that effective working capital management can enhance the debt-paying ability and profitability of enterprises.

The research by Ouma OS and Musau S (2021) focused on the loan repayment ability of small and medium-sized enterprises in Kenya and found that financial leverage has a significant positive impact on the loan repayment of small and medium-sized enterprises. This indicates that a reasonable liability structure helps enterprises improve their debt-paying ability.

The research of Delev A (2014) revealed the impact of liquidity problems of listed companies in Bulgaria on their debt-paying ability. He found that some enterprises have a weak short-term debt-paying ability due to an unfavorable ratio of current assets to current liabilities.

The research of Richard Arhinful (2024) emphasizes the impact of capital cost on dividend policy decisions, which in turn affects the debt-paying ability of enterprises. He found that the cost of debt had a negative impact on dividend payments and coverage ratios, while the weighted average cost of capital had a positive impact on dividend payments and coverage ratios.

In recent years, domestic scholars have also made remarkable progress in the research on the debt-paying ability of enterprises, especially in industries such as agriculture, condiments, real estate, stationery, liquor and power.

In the power industry, Yu Weidan (2017) took Huaneng International as an example, analyzed its debt-paying ability in detail through the ratio analysis method, and put forward suggestions for improving operational efficiency. This provides direct reference and basis for the research of this article. She pointed out that Huaneng International is under pressure in terms of short-term debt-paying ability, but its long-term debt-paying ability is relatively strong^[10].

Wang Sihan (2024) emphasized in his research in the agricultural field the impact of unstable inventory turnover and asset-liability ratio of seed enterprises on their debt-paying ability^[2]. Han Tingting's (2024) research in the condiment industry has revealed the financial challenges that enterprises face in the rapidly changing market environment and proposed countermeasures to enhance their debt-paying ability^[3].

In the real estate industry, the studies of Zhang Guimin (2024), Li Bingxin (2024), and Lei Chunping (2022) all emphasized the issue of debt-paying ability under the high-leverage business model^[1]. They pointed out that real estate enterprises should continuously pay attention to risks, strengthen risk management and optimize the financial structure^[4].

Li Yanli (2023) explored the significance of a company's debt-paying ability to its operation and development from a broader perspective. She emphasized the necessity of conducting static and dynamic analyses of debt-paying ability and proposed methods such as financial ratio analysis to accurately grasp the changes in an enterprise's debt-paying ability^[5].

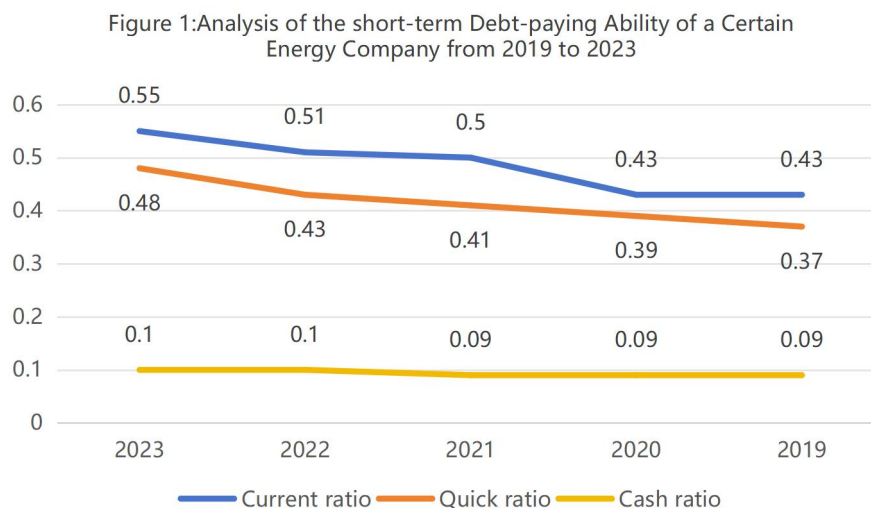
In the stationery industry, Xu Haochen (2023) took Chenguang Stationery as an example to analyze the impact of the COVID-19 pandemic on the real economy and the traditional stationery industry, and put forward corresponding countermeasures and suggestions^[6].

In terms of listing and financing strategies, the research of Shou Jie (2022) and Xiang Qiongyao (2021) focuses on the impact of enterprises' listing and financing strategies on their debt-paying ability. They proposed methods by optimizing financing strategies and enhancing debt-paying ability.

In the liquor industry, Bai Zongliang (2023) focused on the impact of digital transformation on the debt-paying ability of enterprises. He believes that although digital transformation has a long-term positive impact on the debt-paying ability of liquor enterprises, it may weaken their debt-paying ability in the short term^[9].

3 Analysis of the current situation

3.1 Analysis of the Company's short-term debt-paying Ability



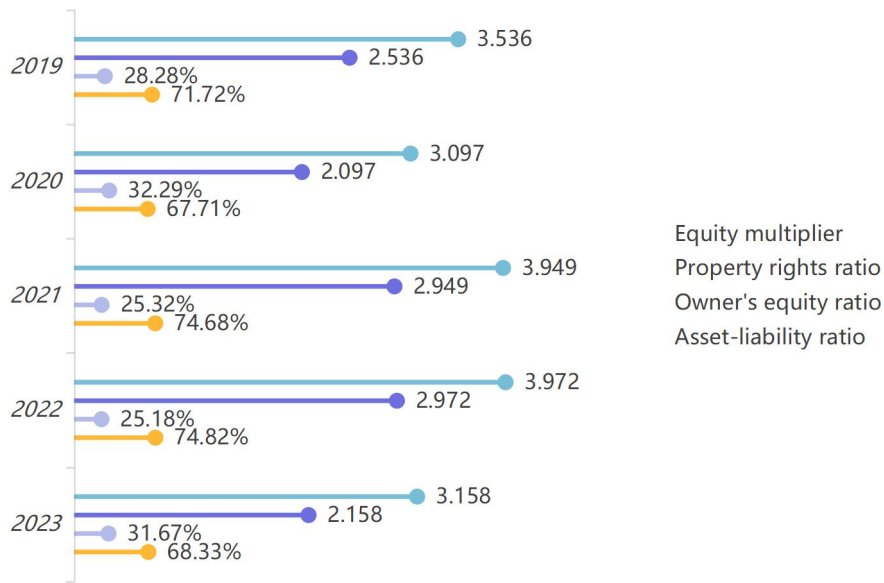
The current ratio measures an enterprise's ability to repay current liabilities with current assets. According to the data, the current ratio of a certain energy company has shown an upward trend year by year from 2019 to 2023, but it remains relatively low overall. The current ratio was 0.43 in both 2019 and 2020, indicating that the company's current assets were only sufficient to cover approximately 43% of its current liabilities, and its short-term debt-paying ability was relatively weak. From 2021 to 2023, the current ratios rose to 0.50, 0.51 and 0.55 respectively. Although they rose, they were still below the ideal current ratio (a current ratio between 1.5 and 2.0 is considered ideal), indicating that although the short-term solvency of the company has improved, there is still some debt servicing risk.

The quick ratio more accurately reflects the ability of an enterprise to use assets that can be quickly liquidated in the short term to repay current liabilities. According to the data, the quick ratio of a certain energy company has also shown an upward trend year by year, but it is still relatively low overall. From 2019 to 2020, the quick ratios were 0.37 and 0.39 respectively, indicating that the company's quick assets could only cover approximately 37% to 39% of its current liabilities, and its short-term debt-paying ability was relatively weak. From 2021 to 2023, the quick ratios rose to 0.41, 0.43 and 0.48 respectively. Although there was an increase, it was still lower than the ideal quick ratio (it is generally believed that the quick ratio should be greater than 1), indicating that the enterprise's ability to quickly liquidate assets in the short term to repay current liabilities still needs to be improved.

The cash ratio measures an enterprise's ability to repay current liabilities with cash and cash equivalents in the short term. According to the data, the cash ratio of a certain energy company remained stable from 2019 to 2023, but was generally low: from 2019 to 2023, the cash ratio was between 0.09 and 0.10, indicating that the company's cash and cash equivalents could only cover approximately 9% to 10% of its current liabilities, and its short-term debt-paying ability was very limited. The stability of the cash ratio also reflects the robustness of an enterprise in cash management. However, an excessively low cash ratio implies that when facing short-term debt repayment pressure, the enterprise may need to rely on the realization of other assets or external financing to cope.

3.2 Analysis of the Company's long-term debt-paying Ability

Figure 2: Analysis of the Long-Term Debt-paying Ability of a Certain Energy Company from 2019 to 2023



The asset-liability ratio reflects what proportion of a company's total assets is formed through liabilities. According to the data, the asset-liability ratio of a certain energy company shows a certain degree of volatility. From 2019 to 2020, the asset-liability ratio decreased from 71.72% to 67.71%, indicating that the enterprise's asset structure has been optimized and its long-term debt-paying ability has been enhanced. From 2021 to 2022, the asset-liability ratio rose to 74.68% and 74.82% respectively, indicating that the company's debt scale has increased and its long-term debt-paying ability is facing certain pressure. In 2023, the debt-to-asset ratio dropped to 68.33%, although it improved compared to 2022, it still remained at a relatively high level. Generally, it is believed that the appropriate level for a debt-to-asset ratio is 40% to 60%, indicating that the proportion of long-term liabilities of an enterprise is still considerable.

The owner's equity ratio measures what proportion of a company's total assets is formed by the capital contributed by shareholders. According to the data, the owner's equity ratio of a certain energy company changes inversely to the asset-liability ratio. From 2019 to 2020, the owner's equity ratio rose from 28.28% to 32.29%, indicating that the proportion of the enterprise's net assets increased and its long-term debt-paying ability strengthened. From 2021 to 2022, the owner's equity ratio dropped to 25.32% and 25.18% respectively, corresponding to the increase in the asset-liability ratio, indicating that the proportion of the enterprise's net assets decreased and its long-term debt-paying ability weakened. In 2023, the owner's equity ratio rebounded to 31.67%, although it improved compared to 2022. However, attention still needs to be paid to its ability to repay long-term liabilities.

From 2019 to 2023, the equity ratio of a certain energy company rose from 2.53 times to a peak of 2.97 times in 2022, and then dropped back to 2.16 times in 2023. The overall fluctuation was consistent with the trend of the asset-liability ratio. Behind this change lies the imbalanced feature of the company's capital structure, which is "debt expansion and equity weakening". On the one hand, the new energy transformation strategy has driven the average annual growth rate of non-current assets to 9.8%, but the accumulation speed of equity capital has lagged behind, resulting in the proportion of debt capital rising from 69.53% to 73.87%, and the equity ratio passively increasing. On the other hand, the net loss of 12.673 billion yuan in 2021, coupled with dividend payout, further weakened the ability to replenish internal capital and intensified the pressure of debt capital on total assets. Although equity capital increased by 44.9 billion yuan in 2023 due to equity financing, which pushed down the equity ratio, the absolute value was still higher than the industry safety threshold (less than twice), indicating that the company's long-term debt repayment reliance on debt capital remains high.

From 2019 to 2023, the equity multiplier of a certain energy company rose from 3.54 times to 3.97 times in 2022 and dropped to 3.16 times in 2023, presenting a "leverage expansion - deleveraging" cycle that was in sync with the equity ratio. The high equity multiplier once helped the company expand its asset scale, but the negative effects of financial leverage gradually emerged: In 2021, the proportion of financial expenses to earnings before interest and taxes reached 112%, devouring the profit margin. The ROE (Return on Equity) plummeted from 1.90% in 2019 to -10.20% in 2021, forming a negative cycle of "debt-driven growth - deteriorating profits - weakened debt-paying ability". In 2023, the equity multiplier dropped to 3.16 times, and the ROE rebounded to 5.30%, confirming the law of diminishing marginal returns of the leverage effect. Although the current equity multiplier is lower than the industry average (3.5 times), considering the heavy asset nature of new energy projects, it is still necessary to be vigilant against the risk of insufficient investment capacity that may be caused by excessive deleveraging.

3.3 Analysis of the Problems Existing in the Company's Debt-paying Ability

The liquidity problem of a certain energy company is mainly reflected in the insufficiency of short-term debt-paying ability. Although the current ratio and quick ratio have increased in recent years, they are still relatively low overall, far below the ideal current ratio (which is generally considered to be greater than 1) and quick ratio (which is also generally considered to be greater than 1). This means that when enterprises are faced with short-term debt repayment pressure, they may have difficulty repaying debts promptly through current assets or quick assets, thereby increasing the debt repayment risk. Furthermore, the cash ratio is also relatively low, indicating that the enterprise has insufficient reserves of cash and cash equivalents, making it difficult to cope with sudden short-term debt repayment needs.

The capital structure problem of a certain energy company is mainly reflected in the high asset-liability ratio. In recent years, the asset-liability ratio of enterprises has remained at a relatively high level and fluctuated greatly, which indicates that a large proportion of the total assets of enterprises is formed through liabilities. A high debt-to-asset ratio not only increases the financial leverage of enterprises but also reduces their financial stability, making them more vulnerable to economic fluctuations or changes in the market environment. Furthermore, the growth of the equity ratio and the equity multiplier also reflects the increase in the scale of corporate liabilities relative to owner's equity, further exacerbating the irrationality of the capital structure.

The high debt cost problem faced by a certain energy company is mainly composed of huge interest expenses and handling fees generated during the financing process, etc. Its financial expenses dropped from 10.7 billion yuan in 2019 to 8.868 billion yuan in 2023, but still remained at a relatively high level. Interest expense, as an important component of financial expenses, exerts considerable pressure on the financial burden of a certain energy company. In terms of bank loans, a certain energy company raises funds through long-term and short-term borrowing and other means. While in terms of capital market financing, the company issues various products such as medium-term notes and ultra-short-term financing bonds, which have different interest rate and term characteristics. The debt maturity structure shows the coexistence of long-term and short-term debts, and the proportion of long-term debts is relatively high. Unreasonable debt maturity structure, fluctuations in credit ratings and other factors will all push up the cost of debt. An excessively high proportion of long-term debt

may increase the pressure of interest payment. A downgrade in credit rating will lead to an increase in financing costs. Under the current market interest rate environment, in order to reduce the cost of debt, an energy company may consider optimizing the debt structure, moderately increasing the proportion of short-term debt to lower the average interest rate level, and focusing on improving the credit rating to obtain more favorable financing conditions. Meanwhile, strengthening communication and consultation with creditors to strive for more favorable debt restructuring or deferred repayment arrangements is also an effective way to reduce the cost of debt. High debt costs not only increase the financial burden of enterprises, but also affect their profitability and market competitiveness.

The cash flow issue is another important aspect of the debt-paying ability of a certain energy company. Although enterprises have a strong self-sustaining ability in business activities, the net cash flows generated from investment activities and financing activities fluctuate greatly and are generally negative or at a relatively low level. This means that enterprises may overly rely on external financing in terms of investment, while they may face certain financing pressure in terms of fundraising. The instability of cash flow may make it difficult for enterprises to quickly allocate funds when facing short-term debt repayment pressure, thereby increasing the debt repayment risk. In addition, cash flow problems may also affect the operational efficiency and profitability of enterprises, further weakening their debt-paying ability.

4 Strategies and Countermeasures for enhancing debt-paying ability

4.1 Strengthen liquidity management

A certain energy company should strengthen the management of current assets and improve the turnover rate and liquidity of current assets. This can be achieved through measures such as strengthening the collection of accounts receivable, improving the efficiency of cash utilization, and optimizing inventory management. Optimizing inventory management can reduce inventory overstock and increase inventory turnover rate. Strengthening the collection of accounts receivable can accelerate the return of funds and improve the efficiency of fund utilization. Improving the efficiency of cash utilization can be achieved by rationally arranging fund expenditures and reducing unnecessary cash occupation.

An energy company should establish a sound early warning mechanism for short-term debt repayment to promptly identify and respond to short-term debt repayment risks. This can be achieved by regularly analyzing financial indicators such as the current ratio and quick ratio of the enterprise to assess its short-term debt-paying ability. Meanwhile, it is also necessary to strengthen the monitoring and analysis of external factors such as the market environment and policy changes, so as to adjust business strategies in a timely manner and deal with potential debt repayment risks.

In order to enhance liquidity management, an energy company should also improve financing flexibility. This can be achieved by strengthening cooperation with financial institutions and establishing diversified financing channels, etc. Strengthening cooperation with financial institutions can obtain more favorable financing conditions and reduce financing costs. Diversified financing channels can reduce the financing risks of enterprises and improve financing efficiency.

4.2 Optimize the capital structure

A certain energy company should gradually reduce its asset-liability ratio and decrease the proportion of liabilities in total assets. This can be achieved by increasing shareholders' equity, optimizing the debt structure and other means. Increasing shareholders' equity can be achieved through methods such as retained earnings and issuing new shares. Optimizing the debt structure can be achieved by adjusting conditions such as debt maturity and interest rates to reduce debt costs and enhance the flexibility of debt repayment.

Increasing the owner's equity ratio is an important means to optimize the capital structure. A certain energy company can increase its net profit by enhancing its profitability, reducing losses and strengthening cost control, etc., thereby increasing the owner's equity. In addition, enterprises can also

increase shareholders' equity and raise the owner's equity ratio through equity financing, introducing strategic investors and other means.

During the financing process, a certain energy company should balance the proportion of debt and equity financing and avoid over-reliance on a single financing method. By rationally allocating debt and equity financing, the financing efficiency can be improved, the financial risks of enterprises can be reduced, and financial support can be provided for the stable development of enterprises.

4.3 Financial cost control

An energy company should strive to reduce the cost of debt and cut down on interest expenses. This can be achieved through optimizing the debt structure, improving the credit rating, and strengthening negotiations with financial institutions, etc. Optimizing the debt structure can reduce the cost of debt. Improving the credit rating can lead to more favorable financing conditions. Strengthening negotiations with financial institutions can lead to more favorable financing terms. In addition to reducing debt costs, a certain energy company should also strengthen cost control and lower operating costs. This can be achieved by optimizing the production process, improving production efficiency, and strengthening supply chain management, etc. Optimizing the production process can reduce waste in the production process. Improving production efficiency can reduce production costs. Strengthening supply chain management can reduce procurement costs and sales costs and enhance the profitability of enterprises.

In order to enhance the effectiveness of financial cost control, an energy company should also improve the efficiency of fund utilization. This can be achieved through reasonable arrangement of fund expenditures, strengthening fund supervision, and optimizing investment decisions, etc. Reasonable arrangement of capital expenditure can ensure the orderly use of enterprise funds. Strengthening the supervision of funds can prevent the abuse and waste of funds. Optimizing investment decisions can ensure the maximization of the return on investment of enterprise funds.

4.4 Increase the amount of cash held

A certain energy company should strengthen the management of cash flow and improve the sustainability and stability of cash flow. This can enhance cost control, improve profitability, and be achieved through optimizing budget management and other means. Strengthening cost control can reduce the operating costs of enterprises and improve their profitability. Improving profitability can be achieved through measures such as expanding the market and enhancing product quality. Optimizing budget management can ensure the orderly use of enterprise funds.

To deal with the possible debt repayment risks, a certain energy company should establish a cash reserve mechanism to ensure that the enterprise has sufficient cash reserves. This can be achieved by setting cash reserve targets, regularly assessing the adequacy of cash reserves, and other means. Setting cash reserve targets can ensure that enterprises have sufficient cash reserves to cope with possible debt repayment risks. Regular assessment of the adequacy of cash reserves can help identify and replenish them in a timely manner, ensuring that the company's debt-paying ability is not affected.

While increasing the amount of cash retained, an energy company should also optimize the efficiency of cash utilization. This can be achieved through measures such as strengthening fund supervision and rationally arranging fund expenditures. Strengthening the supervision of funds can prevent the abuse and waste of funds and improve the efficiency of fund utilization. Reasonable arrangement of capital expenditure can ensure the orderly use of enterprise funds.

5 Conclusion

This article conducts an in-depth analysis of the current debt-paying ability of a certain energy company and reveals the core problems it faces, including insufficient short-term debt-paying ability, unbalanced capital structure, high debt cost and large fluctuations in cash flow, etc. These problems

pose a challenge to the financial stability of a certain energy company, restricting its business development and market competitiveness. In response to the above problems, this paper proposes a series of targeted strategies, covering aspects such as enhancing liquidity management, optimizing capital structure, strengthening financial cost control and increasing cash retention. By implementing these strategies, a certain energy company is expected to improve its short-term debt-paying ability, reduce the asset-liability ratio, alleviate the financial burden, and enhance the sustainability and stability of cash flow. This will not only help relieve its current debt repayment pressure, but also lay a solid foundation for the long-term stable development of a certain energy company. In the future, a certain energy company should continuously monitor market dynamics, flexibly adjust its business strategies, ensure financial stability in the complex and volatile market environment, and achieve sustainable development.

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