# Financial Risk Evaluation and Prevention and Control Methods of Listed Companies in China's Electric Power Industry

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**Abstract:** With China's economy entering the stage of rapid development, the competition of listed companies in the electric power industry belonging to the national economy is also very fierce, and it is easy to appear many problems related to financial risks. Through the research on the current situation of financial risk of listed companies in the power industry, this paper has an in-depth understanding of the types of corporate financial risk and the ways of evaluation, and discusses the ways of preventing financial risk combined with the concrete practice, so as to provide some feasible suggestions for promoting the further development of listed companies in the power industry. The types of financial risks are very complex, and enterprise managers need to make accurate decisions on the long-term development of the company according to the actual situation, so as to help the normal operation of the financial market and promote the progress of society.

**Keywords:** Enterprise financial risk, Electric power industry, Risk prevention and control

## 1. Introduction

The electric power industry is the basic energy industry in the national economy and plays an essential role in the national economy. The listed companies in the electric power industry are the pillar enterprises of the electric power industry, and the operation status of listed companies in electric power enterprises is related to the safety of the whole industry. After the impact of COVID-19, with the development of economic globalization, listed companies of electric power enterprises are also facing many challenges. In recent years, the debt ratio of listed companies of electric power enterprises has been relatively high, and the debt repayment pressure of enterprises is great, which brings significant risks to the financial status of enterprises. Through a comprehensive analysis of the profitability, debt paying ability and operating ability of enterprises, this paper evaluates the financial risks of enterprises better on the basis of previous studies and draws on some successful cases to provide effective suggestions for listed companies in the power industry to prevent financial risks.

General theory: Financial risks will inevitably occur in the daily production and operation activities of enterprises, which has a great relationship with the financing and investment decisions of enterprises, and the internal control of enterprises. In an ideal enterprise, internal management is

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scientific and efficient to ensure that every link is carried out effectively so that the operation of the enterprise is in order to obtain the maximum benefits.

After the impact of the novel coronavirus epidemic, the global economic situation is not optimistic, including the power industry, which is indispensable to the national economy. The risks faced by enterprises have a lot to do with the internal supervision of enterprises, the construction of internal systems, and the risk awareness of managers. Through the summary study, the paper summarizes the measures that are beneficial to the financial risk prevention of electric power industry companies and help enterprises reduce risk losses and obtain higher returns so as to promote the sustainable development of enterprises.

### 2. Literature Review

It is understood that from the perspective of the entire business activities, financial risk is divided into investment risk, financing risk, profit risk, debt repayment risk, guarantee risk, exchange rate risk, fund recovery risk, income distribution risk and other issues. For listed companies in the power industry, these risks are very likely to occur.[1][2]

# (1) Investment risk:

The first is investment risk. Any listed company will make investment decisions to maximize shareholders' equity and gain more benefits, among which the decisions of managers are particularly important. Good decisions can bring great benefits to the operation and profitability of the enterprise, but wrong decisions may also bring losses or even bankruptcy risks to the enterprise.

# ② Financing risk:

Financing risk, also known as financial risk, is the risk that an enterprise issues stocks or bonds in order to obtain working capital. When the operation is good, it will bring objective doubts to the enterprise and shareholders, but it will also bring great danger to the enterprise when the operation is not good.

# ③ Profit risk:

Profit risk is equivalent to the profitability of enterprises and also refers to the ability of enterprises to obtain profits through various economic resources. To analyze the profitability risk ability of the enterprise, it is necessary to find out the problems in the daily business activities of the enterprise, analyze the causes of the problems, and then take measures to put forward suggestions to solve the problems. To control the profit risk, on the one hand, it is necessary to analyze the source of funds, analyze the reasons for the formation of income, and explain the cash flow and equity value. At the same time, it is also necessary to analyze the technical structure of the enterprise and control the development of the enterprise from the macro level.

### 4 Debt repayment risk:

Debt repayment risk refers to the possibility of payment difficulties due to excessive debt burden, lack of short-term financing and necessary cash holdings after M&A. Usually, enterprises need to borrow money, leveraged buyouts and other ways to complete mergers and acquisitions. After the acquisition, the future capital flow of the target enterprise is uncertain, and LBO must achieve a high rate of return to make the acquirer benefit.

### (5) Guarantee risk:

Guarantee risk refers to the possibility that credit guarantee institutions will suffer losses due to various uncertain factors in the process of guaranteeing business operations. In the long-term business activities of enterprises, they often provide guarantees for associates, cooperative units, etc., but such decisions are very risky. If the borrower is unable to repay the debt when the debt matures, the guarantor is liable to repay the debt for it, resulting in financial risks within the enterprise.

# **6** Exchange rate risk:

The emergence of exchange rate risk is that many large enterprises have some foreign exchange business, and the risk caused by the uncertainty of the financial cost of enterprises caused by the change of exchange rate is the exchange rate risk. Specifically, when the foreign exchange assets of the party enterprise are greater than the foreign exchange capital and liabilities, the decline of the foreign exchange rate will bring foreign exchange losses to the enterprise.

# 7 Capital recovery risk:

The risk of fund recovery mainly refers to the risk caused by the uncertainty of the time and amount of receivable recovery. If the capital return of the enterprise is blocked, it will cause the financial cost of the enterprise to rise, affect the normal operation of the capital, and seriously lead to the deterioration of the financial situation of the enterprise and even lead to the bankruptcy of the enterprise.

# (8) Income distribution risk:

The income distribution risk is mainly the financial risk caused by the unreasonable income distribution policy. When enterprises obtain this year's profits for income distribution, they need to ensure a reasonable proportion of income distribution and corporate surplus and can not distribute too much and cause insufficient retained earnings of enterprises. If such a situation occurs, it will cause the shortage of funds in the later production and operation activities of the enterprise, and then affect the continuous operation of the enterprise, and seriously cause the financial crisis of the enterprise.

Whether it is the daily operation of the enterprise or the decision making of the manager, it is necessary to consider various influencing factors to minimize the damage and strive to obtain the maximum profit.

There are two methods of financial risk analysis: quantitative analysis and qualitative analysis. For quantitative analysis, listed companies can consider their operating conditions according to their financial leverage, operating leverage and total leverage coefficient, and financial leverage is generally determined by fixed debt interest rates and interest tax profits. In addition, quarterly and annual financial statements of enterprises are also extremely important. Enterprise managers and shareholders comprehensively consider the operating conditions of listed companies through balance sheets, cash flow statements and income statements, so as to adjust decisions to achieve better operating results. In addition, qualitative analysis is also a good way to analyze financial risks. The managers of commercial companies can convene the core members of the enterprise to take the form of a meeting to brainstorm ideas and effectively avoid the occurrence of financial risks.

# 3. Methodology

### (1) Reasons for the formation of financial risks:[3]

# 1) External environment of the enterprise:

The daily business activities of enterprises cannot be separated from the external environment of enterprises, and the political environment, cultural environment, economic environment and market environment will have different degrees of influence on the financial activities of enterprises. The political culture of different countries is different. When enterprises conduct foreign exchange business, they need to take into account the political culture differences between different countries to avoid unnecessary losses. At the same time, the state's fiscal policy is also constantly changing, and enterprise managers need to pay attention to the adjustment of tax rates and timely adjust the major decisions of enterprises. Some enterprises raise funds through foreign capital financing, which is affected not only by the interest rate but also by foreign exchange because the change in the foreign exchange rate will have an impact on the import and export benefits of enterprises. Therefore,

enterprises need to pay attention to the changes in interest rates and exchange rates and adjust the major decisions of enterprises in a timely manner.

2 Internal environment of the enterprise:

The internal environment of an enterprise is also a major cause of financial risk. The unreasonable internal capital structure of an enterprise is a very serious problem. The unreasonable capital structure means that in the process of financing, the unreasonable ratio of debt and equity leads to an increase in the financial risk of the enterprise, which further affects the normal operation and development of the enterprise. First, excessive reliance on debt financing will affect the capital structure of enterprises. In order to expand and develop rapidly, many start-ups usually use debt financing to raise funds, but it often leads to a high proportion of corporate debt. Once the enterprise has problems in operation or the market financial environment changes, the debt burden of the enterprise will increase, bringing great financial risks to the enterprise, and even leading to bankruptcy. Secondly, the ownership structure of an enterprise is also a very important factor within the enterprise, and the unreasonable ownership structure mainly refers to the unreasonable distribution of shareholders' rights and interests. The key reason for the problems between the management and shareholders is that the management tends to excessively pursue short-term interests while ignoring long-term development, thus increasing the financial risk of the enterprise.

3 Poor liquidity of corporate assets:

The liquidity of enterprise assets, that is, the ability of assets to be converted into cash and maintain their purchasing power, and the financial risk of enterprises has a close relationship with the liquidity of assets. The liquidity of enterprise assets is the realization ability and repayment ability of enterprise assets without loss of value, and it is also divided into physical liquidity, mortgage liquidity, future liquidity, advance liquidity and so on. In the enterprise, the specific performance of the asset liquidity is not strong, including lack of funds, inventory of goods, serious debt and so on.

(2) Evaluation method of financial risk:[4]

For the evaluation of financial risk, there are several methods that can be combined with the status of listed companies' assets, liabilities, owners' equity and other conditions to evaluate the risk of enterprises.

- 1. Single variable judgment model: The single variable judgment model is to control a variable unchanged, observe the changing trend of the dependent variable, and ensure that irrelevant variables do not affect the judgment of the result. Among listed companies, univariate determination is to determine the financial risk of an enterprise according to a certain financial indicator of the enterprise, which is applicable to enterprises with obvious financial risks or financial difficulties with obvious differences in financial ratios.
- 2. Multivariate decision model: The multivariate decision model is also a multivariate linear decision model, which is more convincing and comprehensive than the univariate model. This model has multiple constraints, and it needs to consider the interaction between various variables to predict the state of a specific time point so as to consider the financial risk status of the enterprise.
- 3. Comprehensive evaluation method: The comprehensive evaluation method is more comprehensive, covering the profitability of enterprises, solvency, growth ability, etc., to measure the weight distribution of indicators and use scores to consider risks. The subjectivity of this method is strong, and managers with strong comprehensive ability are needed to use this method to evaluate financial risks.
  - (3) Countermeasures to control financial risks:
  - (1) Construction of financial risk early warning system:

Risk early warning is a process of quantitative evaluation of possible uncertainties in the system and further warning by means of certain methods according to the internal and external environment of the system. The company's financial risk early warning needs to take the company's financial data

and non-financial data as the benchmark, analyze and forecast the company's financial situation with the help of accounting, financial management, marketing, auditing and other academic theories, find out the potential financial risks of the company, and timely report the company's managers to adjust the relevant management and decision-making measures.

2 Improve the structure of corporate governance:

The internal control of enterprises plays a decisive role in enterprises; enterprises need to build a standardized property rights system, and the clarity of property rights is an important prerequisite for the clarity of rights and responsibilities. At present, there are still many enterprises in country whose property rights are not clear, which will lead to a lot of information is not transparent and then cause enterprises financial risk. Therefore, enterprises must have a perfect property rights system, to achieve clear rights and responsibilities, and a clear division of labor.

③ Standardize the management system of enterprises' external guarantees:

The external environment of the enterprise will also have a huge impact on the production and operation activities of the enterprise. The enterprise needs to consider the risks it needs to bear and make good risk predictions when guaranteeing the external.

4 Build a sound investment decision-making mechanism:

The investment decision and financing decision of enterprises will affect the sustainable development of enterprises. For the impact of financing decision mistakes on enterprises, enterprises must strengthen the construction of investment decision mechanisms to reduce the impact of financing decisions.

### 4. Results

# (1) Risk status of listed electric power companies:[5]

The difference between the listed companies in the electric power industry and the listed companies in the general industry is that the electric power industry has the characteristics of a natural monopoly. The economic communication of the power industry is not an ordinary enterprise can bear; China's power production and operation activities by the State grid and the Southern power grid the same management, according to the actual operating costs of the national power market pricing, for a long time China's power industry construction, operation, management are monopolized. In addition, China's power industry is a tight industry of capital and technology, and China's power listed companies have problems such as large investment scale, long return period and high long-term assetliability ratio.

- (2) Analysis of risk causes of listed electric power companies:
- (1) External factors:

First of all, the listed companies in the power industry belong to the industry of the national economy, which will be greatly affected by the national macro-control, and the adjustment of the power industry policies, government subsidy policies, and national tax policies will greatly affect the operation of the listed companies in the power industry. For example, in recent years, the dual-carbon policy has emerged. In order to achieve the goals of the policy within the specified time, relevant companies in the power industry have put forward many strategies for energy conservation and emission reduction, and new energy-related technologies are also being updated and developed in a timely manner. In addition, the operation of listed companies in the power industry is also greatly affected by economic factors. Economic factors include state investment in the power sector, changes in interest rates in the financial market, changes in international foreign exchange rates, etc.

### 2 Internal factors:

There are also many problems in listed companies in the power industry, such as imperfect internal control and unreasonable asset structure. Internal control is a regulation formulated by enterprises to

improve operating efficiency and help enterprises develop efficiently and with high quality. However, the management and ownership of the enterprise are separated. If the internal execution of the enterprise is insufficient, it is likely that the managers will misappropriate public funds, which will affect the shareholders' rights and interests and increase the possibility of financial risks.

### 5. Discussion

The financial risk of enterprises is abstract and complex; there are many factors that affect the financial risk of enterprises, and the financial status of different enterprises is also different. In this regard, we can conduct a comprehensive analysis of enterprises, and build a comprehensive evaluation system for enterprises from the perspectives of financing risk, investment risk, fund recovery risk, exchange rate risk, income distribution risk, etc., to conduct a quantitative analysis of the financial risks of enterprises. The financial risk of listed companies is negatively related to their profitability, and the higher the financial risk, the smaller the profitability of enterprises. In this regard, the mining industry carries out quantitative analysis on the large asset-liability ratio, cash turnover ratio, main business income growth rate, net profit growth rate, cost and expense profit rate, etc., and then analyzes the probability of the financial risk of the enterprise. The management of the enterprise also needs to adjust the relevant decisions according to these data to avoid the occurrence of financial risks.

## 6. Conclusion

This paper comprehensively expounds the basic concept of financial risk, introduces the basic classification of enterprise financial risk, analyzes the status of enterprise financial risk according to the current situation of listed companies in the electric power industry, analyzes the causes of financial risk of listed companies in the electric power industry combined with the particularity of the electric power industry, and gives suggestions to solve the problem. This paper mainly focuses on the analysis of the concept of enterprise financial risk, lacks specific test data and the perspective of considering the problem is not comprehensive enough. The following research needs to apply the theory into practice and analyze the feasibility of the suggestions so as to put forward useful suggestions for the development of enterprises.

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