

# Research on Recognition of Financial Abnormalities of Listed Companies

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## Abstract

The emergence of financially abnormal companies has, to some extent, damaged the company's stakeholders and hindered the healthy development of the capital market. Under this circumstance, how to effectively identify the financial status of an enterprise has become an urgent problem to be solved in our country. This article takes listed companies with double deposits and loans as the research object, uses radar chart method and indicator scoring to analyze the financial status of the company layer by layer, and identifies Chinese listed companies for capital market investors, analysts, auditors and relevant regulatory agencies. Whether a company with double deposits and loans with high deposits provides a simple, practical, and reliable method of financial abnormality.

## Keywords

Double deposit and loan; Radar; Pharmaceutical manufacturing.

## 1. Introduction

In 2019, as the listed companies Kang Dexin and Kang Mei Pharmaceutical both fell down, the issue of "double deposits and loans" has caused great concern to investors. As far as the 2018 China Securities Regulatory Commission inquiries about the annual report, there are Many companies are involved in double deposits and loans. The stock market in 2019 caused a panic disorder of double deposits and loans. Investors talked about double deposits and loans and they changed. They have a biased view of the view of double deposits and loans, and believe that the existence of double deposits and loans is a problem. The company believes that these companies will thunder, and their investment will avoid these companies. In fact, the inventory double high is one of the abnormal financial information, but the inventory double high is not a sufficient condition for an enterprise's financial abnormality, and some companies with the characteristics of inventory double high are still operating normally. On the one hand, in order to reduce the adverse impact of double deposits and loans, it is necessary to correctly understand the double deposits and loans, and to correctly understand and identify the company's financial abnormalities; on the other hand, in recent years, China's financial problems such as unclear financial accounting and fictitious profits Frequent occurrences, financial anomalies are becoming more common, to a certain extent, damage to information users and hinder the healthy development of the capital market. Therefore, it is very important to effectively identify the company's financial situation and identify whether the company has abnormal identification. Therefore, this article aims to explore scientific and reasonable methods to identify whether listed companies have financial abnormalities, to help investors screen out companies with high normal operating financial quality, help regulators find companies with high possibility of fraud, and choose China University The pillar industry of the health strategy-listed companies in the pharmaceutical manufacturing industry conduct case study analysis.

## 2. Literature Review

There are not many studies on the double high deposits and loans in the academic community. Chen Wei and Zhang Yongjun (2012) [1] believe that the phenomenon of "double high deposits and loans" plagues many domestic enterprises: on the one hand, there are large amounts of low-interest bank deposits. On the other hand, there are large amounts of high-interest bank loans. Taking Z Group as an example, the method of building a "capital pool" by the headquarters of Z Group and reducing the "double high deposit and loan" through unified lending and unified lending is discussed in detail. In the study of the specific situation of double deposits and loans, Liu Li (2019) [2] uses case analysis to analyze the financial statements and related events of listed companies that have double deposits and loans in recent years, and sort out high monetary funds. The problem behind the high amount of debt clearly distinguishes the specific situation of double deposits and loans in various companies, and provides analysis ideas and methods for users of the report. Zhao Xuanmin and Zhang Xuxia (2019)[3] used case analysis method to take the double deposit and loan phenomenon of Kangmei Pharmaceutical as an entry point to discover the fact of company fraud, and the falsely increased monetary funds are not real, especially for the purpose of "turning losses into profits" For the purpose of financial whitewashing, and specifically analyzed the fraudulent methods of Kangmei Pharmaceutical and the countermeasures to these methods. To sum up, scholars at home and abroad have carried out identification research on deposit-loan double highs and conducted theoretical analysis, but have not conducted a series of quantitative studies, nor have they further studied whether deposit-loan double high companies are financial abnormalities.

## 3. Theoretical Analysis and Empirical

The indicator of double deposit and loan is classified into the category of abnormal financial information, that is, monetary funds and interest-bearing liabilities are at a high level for a period of time. Representing the capital chain of an enterprise, in general, the amount of debt will not be artificially high, so the authenticity of the capital needs to be considered. If the actual deposit and loan of the capital are high, the possibility of an abnormal financial company will be reduced, which may be the asset structure., The problem of capital operation efficiency.

Financial anomalies here are more focused on horizontal anomalies in the industry, which are based on industry comparability. The indicators should have a reasonable range. The performance of the reported data clearly exceeds the performance of comparable companies in the same industry. The economic characteristics of the same industry determine the basic performance of companies in the industry, and the financial performance of comparable companies in the same industry will not differ much within a certain time frame. The reasons for the occurrence of financial anomalies in this article are divided into two situations. First, the actual business problems of the enterprise will cause abnormal fluctuations in financial data, and there are also unreasonable financial data phenomena caused by financial data manipulation.

The radar chart method can clearly and intuitively analyze multi-variables, and analyze the quantitative relationship of each type of indicators by describing the rays of the radar chart, using the industry average as the unit circle, to visually show the financial situation and analyze the specific company. The financial situation and operating capacity of the company further determine whether it is the fluctuation of financial data caused by operating problems.

The radar chart is drawn with a four-segment analysis method that focuses on profitability, stability, liquidity and growth, and selects relevant indicators to measure the financial and operating status of the enterprise. Return on total assets, rate of return on net assets, profit margin on main operations, cost and profit margin, total asset turnover, current asset turnover,

inventory turnover, asset-liability ratio, cash-liability ratio, and net asset growth rate, A total of 10 indicators, including 4 indicators of profitability, 3 indicators of operating ability, 2 indicators of solvency, and 1 indicator of growth ability. The selection of indicators focuses on the measurement of operating conditions. In the radar chart, you can intuitively see the deviation of each financial indicator from the industry average.

#### 4. Results

This article takes the pharmaceutical manufacturing industry as an example. The data of 227 listed pharmaceutical manufacturing companies are used to calculate the average based on various financial indicators. Kangmei Pharmaceutical and Treasure Island, both of which have high deposits and loans, are selected, both of which belong to the pharmaceutical manufacturing industry. Their main business is the production and sales of Chinese herbal medicines, chemical drugs, etc. The main businesses are similar and have high comparability.

**Table 1.** Kangmei Pharmaceutical and Treasure Island Financial Index Statistics

project	Industry average	standard1	2018 Kangmei	ratio	2018 Treasure Island	ratio
Return on Total Assets (%)	5.3	1	4.81	0.91	15.76	2.97
RoE (%)	7.4	1	4.03	0.54	9.3	1.26
OPE (%)	30.1	1	29.04	0.96	69.03	2.29
Cost expense margin (%)	9	1	7.64	0.85	25.85	2.87
Turnover of total assets (Times)	0.6	1	0.27	0.45	0.37	0.62
Current asset turnover((Times)	1.1	1	0.35	0.32	0.57	0.52
Inventory turnover((Times)	2.9	1	0.54	0.19	0.67	0.23
Assets and liabilities (%)	66	1	62.08	0.94	39.09	0.59
Cash flow debt ratio (%)	6.6	1	-0.07	-0.01	0.11	0.02
Net asset growth rate (%)	7.9	1	-11.93	-1.51	6.49	0.82

It can be clearly seen from the above chart that the main business profit margin and cost expense profit margin of Treasure Island are higher than the industry average. According to the specific situation of the company, the main business is injection of Xuesaitong (lyophilized) and Shuxuening injection In the high-end traditional Chinese medicine preparation market, it has an advantageous position and belongs to high-margin products in the industry, so business profit margins higher than the industry average are not abnormal. In terms of operating capacity, the asset turnover rate and inventory turnover rate of the two companies are similar, both of which are lower than the industry average, and the operating capacity is weak. However, in terms of development capability, Kangmei Pharmaceutical has performed poorly, largely below the industry average, and has a negative debt solvency. It can be concluded that the company has insufficient cash flow and low solvency, and the company has a certain degree of financial abnormalities.

To sum up, Kangmei Pharmaceutical has a poor business situation and has experienced financial anomalies. There is no financial anomaly on Treasure Island and the indicators are good.

## 5. Conclusion

This paper combines quantitative analysis and qualitative analysis, and uses radar chart method to distinguish the company's operating performance and financial status. If the performance deviates from the industry average to a large extent, it can be classified as a financial abnormality caused by poor management. To a certain extent, it provides reference significance for distinguishing and judging the causes of financial abnormalities.

## References

- [1] Chen Wei, Zhang Yongjun. Z Group's approach to reduce "double deposits and loans" [J]. Finance and Accounting (Finance Edition), 2012 (10): 43-44.
- [2] Liu Li. Risk analysis and identification of double deposits and loans in listed companies [J]. Commercial Accounting, 2019(16): 72-75.
- [3] Zhao Xuanmin, Zhang Xuxia. Looking at corporate financial fraud from the perspective of "double deposits and loans"-taking Kangmei Pharmaceutical as an example [J]. Management and Management 2019(12): 54-56.
- [4] Zhang Deran. Test method for outliers in statistical data [J]. Statistical Research, 2003(05): 53-55.
- [5] Huang Shizhong, Ye Qinhua, Xu Shan. Analysis of the characteristics of financial fraud of listed companies----Based on the sample of financial fraud from 2007 to June 2018[J]. Finance and Accounting, 2019(10): 24-28.