

Case Application of Defect Identification Index System Design in the Course of 《Internal Control》

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Abstract

With the development of economic globalization, internal control of enterprises has become a key factor in ensuring stable operation, preventing risks, and enhancing competitiveness. Especially in the capital intensive, technologically complex, and fiercely competitive industry of automobile manufacturing, the importance of internal control is even more prominent. This study uses methods such as literature review, case analysis, and a combination of quantitative and qualitative analysis to identify the manifestations of internal control deficiencies in Shuguang Stock, determine the deficiencies in the five elements of internal control in Shuguang Stock, and further analyze the causes and risks of internal control deficiencies.

Keywords

internal control; Defect identification; Risk management; Optimization strategy.

1. Introduction

At a certain stage of the company's business activities, internal control is an inevitable requirement for effective management work. This article is based on the logical research of the key points of the internal control course, and through theoretical and case analysis, aims to provide theoretical and practical basis for the teaching of internal control deficiencies in the course. Using Shuguang Co., Ltd. as a case study to expand research on the identification and management of internal control defects in China's automobile manufacturing industry, providing reference for traditional automobile manufacturing enterprises to identify risks and reduce the "pain" of development in transformation and upgrading.

2. Literature review

Domestic scholar Song Haoze (2019) pointed out that the criteria for identifying internal control defects in enterprises include the likelihood of losses caused by defects, as well as the potential size of losses that may be caused [1]. Ding Yougang (2022) used empirical methods to establish quantitative indicators for the quality level of internal control deficiencies reported by listed companies in China, and studied the impact and influence of these standards on the company's internal control [2]. Zhang Aimei, Yang Xuening (2021), and others explore the impact of internal control deficiencies and their rectification on the sustainability of corporate earnings from the perspective of agency costs [3]. Sun Mengjie and

Wang Shengnian (2023), after in-depth exploration of the impact of internal control defect disclosure on accounting information pricing efficiency, concluded that the disclosure of internal control defects actually improves the governance level of enterprises. [4] Sudipta Basu, a foreign scholar; Foreign scholar Bambi Hora; Edward Walker; Yinghong Zhang (2022) assumes that deficiencies in internal controls reduce the reliability of accounting information, further increasing the various risks faced by the company [5]. Dennis H. Caplan; Saurav K. Dutta; Alfred Zhu Liu (2022) studied the impact of significant internal control deficiencies on goodwill and found that ICMWS also had a high recognition rate of goodwill impairment in subsequent years. Disclosing and rectifying ICMWS can improve the valuation of subsequent acquisitions [6]. Jagan Krishnan; Jong Eun Lee; Yinqi Zhang (2018) examined the reasons why some IPO companies proactively disclose their internal control weaknesses (ICWs) and remediation progress in their prospectuses before going public, as well as the relationship between such disclosure and IPO underpricing (i.e., first day return), confirming that disclosing ICWs and remediation progress can reduce information asymmetry [7].

3. Theoretical basis for identifying internal control defects

3.1. Quantitative Analysis for internal control defects

Quantitative analysis method mainly uses mathematical analysis and statistical analysis to calculate relevant data and analyze the important information behind the data. This article applies quantitative analysis to the assessment of the operational effectiveness of internal control systems and financial statement analysis.

1. Evaluate the effectiveness of the internal control system operation. This article quantitatively analyzes indicators such as the number of internal control defects and the number of different types of internal control defects. By evaluating the situation of internal control evaluation reports and internal control audit reports, the implementation of internal control systems is evaluated.

2. Identify potential internal control deficiencies in the enterprise through financial statement analysis. By calculating various indicators including total asset return rate, asset liability ratio, etc., the company's debt paying ability, operational ability, etc. are analyzed to reveal the internal control deficiencies and influencing factors of the enterprise.

3.2. Qualitative Analysis for internal control defects

This article adopts methods such as data review, case analysis, and logical reasoning to qualitatively analyze the internal control elements under the COSO framework and determine the internal control deficiencies of the enterprise. Referring to the research of Lisa et al. (2013) [8], a "Quantitative Evaluation Index Table for the Effectiveness of Enterprise Internal Control" and a "Qualitative Evaluation Index Table for the Design and Operation of Enterprise Internal Control" were established, as shown in Table 1.

Table 1 Indicators for the Effectiveness of Internal Control in Enterprises

I	Business objectives			
II	Profitability indicators	Operating indicators	Solvency indicators	Development

III	Net profit margin on sales	Net interest rate of assets	Return on net assets	Cost profit margin	Earnings per share	Inventory turnover rate	Turnover rate of accounts	Turnover rate of assets	Turnover rate of fixed assets	Total asset turnover	Current ratio	Interest cover	Cash ratio	Quick ratio	Asset liability ratio	Growth rate of total assets	Net profit growth rate	Growth rate of net assets
N	N P M	RO TA	R OE	PM CE	EP S	IT R	AR TR	CA TR	FA TR	TA TR	C R	IC R	CRa sh	Q R	DA R	TA GR	NP GR	N A G R
N	A 1	A 2	A3	A 4	A 5	B 1	B 2	B 3	B 4	B 5	C 1	C 2	C 3	C 4	C5	D 1	D 2	D 3

4. Internal control defect identification of case company

4.1. Introduction to the background of Shuguang shares

Shuguang shares, fully known as Liaoning Shuguang Automobile Group Co., Ltd., is one of the first batch of listed automobile manufacturing enterprises in Liaoning Province. It was founded in 1984 and listed on the main board of Shanghai Stock Exchange in December 2000. On June 9, 2023, after fierce bidding, Beijing weizixi successfully won 97.895 million shares of St dawn, which accounted for 14.49% of the company's total share capital, and became the largest shareholder of St dawn. With the completion of this equity change, the actual controller of St dawn was also changed to Liangzi, which undoubtedly brought new opportunities and challenges to the company's future development.

Table 2 original data of internal control evaluation indicators

Indicator	2018	2019	2020	2021	022
A3	-4.30	1.61	1.86	-16.79	-14.42
A4	-4.56	2.02	2.12	-17.22	-18.14
A5	-0.19	0.07	-0.08	-0.68	-0.49
B1	6.04	5.56	6.90	5.72	3.95
B5	0.41	0.40	0.48	0.53	0.40
C2	-48.08	232.63	488.88	-350201.55	-1697.00
C4	-17.51	-7.84	-13.29	-16.47	-5.77
C5	-141.60	38.76	17.75	-875.46	-17.72
D2	0.88	1.03	1.10	0.87	0.63
D3	52.55	47.81	38.91	39.82	44.80

Data source: obtained by processing the annual report of Shuguang shares

It can be seen from table 2 that the main business income of Shuguang shares has a downward trend as a whole, reflecting the poor operation of Shuguang shares' main business and the

abnormally high proportion of bulk trade income, resulting in the concentration of business risks and the lack of enterprise risk identification ability. In 2022, the total asset turnover rate of Shuguang shares decreased by 0.0089 times. The main reason is that although the turnover rate of current assets of Shuguang shares has increased, its proportion of current assets in total assets has decreased. Due to the change of asset structure, the liquidity of assets declined, resulting in the decline of the total asset turnover rate of Shuguang shares.

The decrease in current assets is the reason for the decline in the current ratio of Shuguang shares. The decline in the current ratio reflects the weakening of the short-term solvency of Shuguang shares and the increased risk of enterprises facing difficulties in short-term debt repayment. It will also further affect investors' concerns about the future development prospects and profitability of Shuguang shares, and affect its share price and market value. To sum up, the asset turnover speed and inventory turnover speed of Shuguang shares have decreased, and the asset utilization efficiency has decreased, reflecting that Shuguang shares is facing risks such as fierce market competition, slow-moving products, overstocking inventory, and capital occupation.

In terms of asset structure, the proportion of fixed assets has increased. Considering the declining trend of inventory turnover rate and quick ratio of Shuguang shares, which have been less than 1 for many years, it can be inferred that Shuguang shares has the risk of inventory backlog. The high proportion of fixed assets causes enterprises to face greater pressure on capital occupation, which further affects the liquidity of enterprises. Based on the above analysis, from 2018 to 2022, although the long-term solvency of Shuguang shares has improved, the short-term solvency has weakened and the liquidity risk has increased. In addition, the asset structure of Shuguang shares is also changing, and the proportion of fixed assets is increasing, which has an impact on its capital occupation and liquidity.

4.2. Summary of internal control defects of Shuguang shares

4.2.1. the proportion of bulk trade in main business income has increased abnormally

After sorting out the relevant data of the annual report from 2018 to 2022, it is found that the sales of complete vehicles and the income of axles are the most important main business income of Shuguang shares, but the proportion of complete vehicle income shows a downward trend. The proportion of revenue from bulk trade is relatively high, resulting in concentration of business risks, dependence on the supply chain, and increased capital pressure on Shuguang shares, affecting cash flow and financial status. At the same time, the profits of enterprises may be affected by the fluctuations of the bulk trade market, leading to the instability of profits.

4.2.2. the net profit and net profit after deduction of non-profit have been negative for many consecutive years

The continuous negative net profit of Shuguang shares after deduction of non-profit for many years has increased the company's financial risk, increased the company's debt pressure, and caused the tension of the capital chain. This may further affect the company's operation and profitability, forming a vicious circle.

4.2.3. prominent problems in related party transactions

The main manifestations of issues related to Shuguang shares are: failure to disclose the

relationship of related parties, failure to timely and fully disclose related party transactions, failure to scientifically and accurately evaluate the assets of related party transactions, and failure to fully discuss the decision-making of large related party transactions at the general meeting of shareholders. In 2020, Shuguang shares did not disclose the relationship of Youke Meimei as its pickup dealer. At the same time, it is worth noting that the directors of Youke Meimei are relatives of zhangxiugen, the actual controller of Shuguang shares, and there is a situation of interest preference, especially the company did not fully disclose the fact that it lent 25million yuan to Youke Meimei in 2020 and did not recover it until 2022. In September, 2021, Shuguang announced that it would purchase the technology of two models, Chery S18 (rilin M1) and Chery s18d9 (rilin x1), which were held by Tianjin Meiya New Energy Automobile Co., Ltd. for the purpose of developing pure electric cars and SUVs and entering the new energy field. But there are multiple objections to this transaction. Shuguang shares has internal control defects such as incomplete authorization and approval, poor information communication, and ineffective internal supervision.

4.3. Internal control defect rectification and risk management plan

Shuguang Co., Ltd. once suffered huge losses due to its transformation into the field of new energy cars, and the decision to purchase outdated patents deviated from the strategic goal. Therefore, it is necessary to strengthen the management and control of the enterprise's strategic risk.

First, establish strategic risk awareness. It is clear that the strategic risk is affected by many factors, and it is difficult to determine whether the strategic decision is correct by a single index combined with the short-term situation. Therefore, it is necessary to strengthen the strategic risk awareness of decision-makers.

Secondly, strengthen risk identification and assessment. Strategic risks should be comprehensively and regularly assessed, and the severity, possibility and timing of various risks should be paid attention to. Classified management and control should be carried out according to the nature of risks and potential impact.

Finally, strengthen risk management. Propose targeted management strategies for the identified risks. For example, to enter the field of new energy vehicles, it is necessary to select the right track, scientifically evaluate the technology, equipment, personnel and other conditions of the enterprise to produce new energy vehicles, and maximize the advantages accumulated in the traditional pickup truck and bus manufacturing for decades, so as to minimize the risk. Establish a risk response plan to deal with various risks that may occur, such as technological changes in new energy vehicles, changes in vehicle design, and general market pricing adjustments. In the specific risk management practice, we should strengthen the monitoring of strategic risk and adjust the risk management strategy according to the actual situation.

4.3.1. operational risk management

First of all, we must improve the competency of personnel. In particular, it is necessary to strengthen the assessment and training of the ability of senior management personnel to avoid wrong decisions. It is necessary to strengthen the skill training of enterprise employees and cultivate a good enterprise culture of honest management, innovation and creation, craftsmanship spirit, etc.

Secondly, we must standardize the management activity process and reduce the process risk. Improve the control of enterprise transaction process activities, so that personnel's responsibilities are clear, the approval and authorization are perfect, and the transaction is legal.

Thirdly, we must strengthen business control and reduce business risks. For major business operations, management control must be strengthened, business risk assessment must be done well, and changes in the market environment and competitors' dynamics must be monitored in time to reduce business risks.

Finally, we must strengthen the control of information system. Shuguang shares must ensure the security of the enterprise information system in use, the availability that matches the actual situation of the company, and ensure data security.

4.3.2. financial risk management

First, strengthen the management of financing risk. The selection of financing channels should be reasonably evaluated, the control of financing costs should be strengthened, the financing plan and financing distribution plan should be established within a reasonable range.

Secondly, strengthen the management of investment risk. Scientifically assess the risks and benefits of investment activities, listen to experts' opinions and suggestions, and avoid investment mistakes. Have a clear plan for investment and adopt diversified investment to avoid huge losses caused by single investment and difficult to make up.

Finally, strengthen the risk management of income distribution. Reasonably divide the operating income of enterprises and strengthen the management of retained earnings of enterprises.

4.3.3. market risk management

First, strengthen the management of product market risk. It is necessary to strengthen the market monitoring of main business products such as axles, establish a sales forecast plan, strengthen the contact with upstream and downstream enterprises of the supply chain, and ensure the timely and stable delivery of products. Strengthen inventory management, establish inventory plan, set reasonable safety inventory, ensure reasonable inventory reserve, and avoid large inventory backlog. With many auto parts and precise manufacturing, quality control must run through the whole process of auto production and manufacturing from design to production and sales. Enterprises should strictly control the quality inspection to ensure that the cars produced meet the quality standards and customer requirements.

Secondly, strengthen the management of financial market risk. Pay attention to interest rate fluctuations and changes in the stock and option markets, improve the knowledge and competence of management personnel, and strengthen the identification of financial risks. Establish a risk response mechanism, make scientific decisions and avoid major financial losses.

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