



**A GOAL-ORIENTED STUDY ON THE CONSTRUCTION OF ENTERPRISE
INTERNAL CONTROL EVALUATION INDEX**

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Abstract

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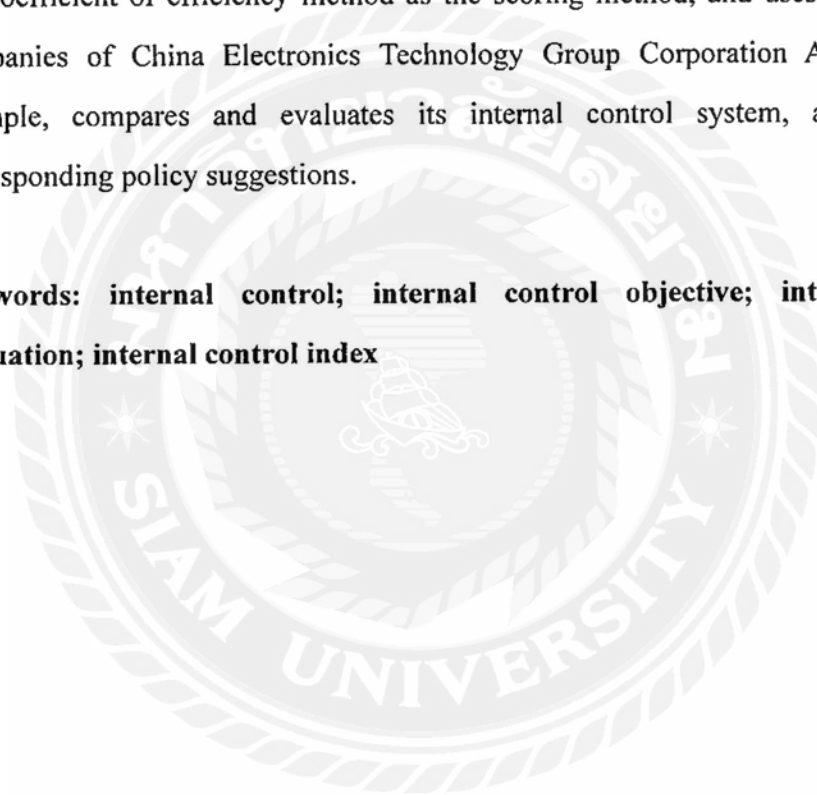
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At present, our country's economic system constantly deepens the reform, pays great attention to adjusting the economic structure and requires improving the quality and efficiency of development. The requirements of this era put forward higher requirements and greater challenges for the enterprises. In the course of economic reform, enterprises will inevitably face more economic risks. In such a stressful and risky economic environment, the risks of internal control will rise accordingly. Enterprises must strive to effectively avoid risks. For the goal of risk prevention, the smooth development and growth under the environment of economic reform, an effective internal control system is particularly important. One of the measures for the effectiveness of the internal control system is: to a certain extent, it can guarantee the legal compliance of the enterprise, safeguard the assets of the enterprise, ensure the authenticity of the financial report information, and enhance the efficiency and effectiveness of the operation, thus further promoting Enterprises to achieve development strategy, that is, to achieve the objectives of internal control to provide a guarantee as an important driving force for business development to

to build a target-oriented index system to evaluate the internal control of enterprises. In this paper, the five goals of internal control are oriented and divided into three levels according to their internal logic level relations. According to the achievement of five goals through further subdivision, the framework of internal control evaluation is derived, which uses the hierarchy analysis Method AHP empowers each index, uses the coefficient of efficiency method as the scoring method, and uses the five listed companies of China Electronics Technology Group Corporation A-shares as an example, compares and evaluates its internal control system, and gives the corresponding policy suggestions.

Keywords: internal control; internal control objective; internal control evaluation; internal control index



摘 要

题目: 以目标为导向的企业内部控制评价指数构建研究

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当前,我国经济体制不断进行深化改革,注重调整经济结构,并要求提高发展质量和效益,这一时代的要求对企业提出了更高的要求与更大的挑战。在企业进行经济改革的过程中,必然会面临着更多的经济风险,在这种压力大、风险多的经济环境中,内部控制的风险就会随之上升,企业要想有效地实现规避风险、预防风险的目标,在经济改革大环境下顺利发展成长,一个有效的内部控制制度就显得尤为重要。具有有效性的内部控制制度的其中一个衡量标准为:在一定程度上能够保证企业的合法合规经营、维护企业的资产安全、保证财务报告信息的真实性、提高经营的效率和效果,进而推动企业实现发展战略,即为内部控制目标的实现提供了保障,能够作为企业发展的重要推动力,最大效能地发挥自身的作用。以此为要求,本文将选择构建以目标为导向的指数框架体系来进行企业的内部控制评价。在本文中,内部控制的五目标为导向,并根据其内在逻辑层级关系划分为三个等级,根据通过进一步细分的五目标的完成度,得出内部控制评价的框架,其中使用了层次分析法 AHP 对各指标赋权,使用功效系数法作为评分法,并用中国电子科技集团公司 A 股五家上市公司为实例,对其内部控制制度进行了比较评析,给出了相应政策建议。

关键词: 内部控制, 内部控制目标, 内部控制评价, 内部控制指数

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CHAPTER1

INTRODUCTION

1.1 Research Background

In recent years, the report on the work of the Chinese government clearly pointed out in the report on the work of the Chinese government that China will continue to deepen the reform. In the economic field, reform and innovation will surely flow through all the links. In this context, the reform and innovation of enterprises is an inevitable requirement for sustained development, the state requires enterprises pay attention to adjusting the economic structure, and continuously improve the quality and efficiency of development. Based on this, we should interpret that in order to realize the long-term development of enterprises, the key point is that we must maintain the vitality and motivation of a company's development, maintain the unique development advantages of enterprises, and effectively evade and prevent risks in the course of development. In order to establish an effective internal control system, enterprises have put forward the necessary requirements. In the process of reform and development, enterprises are bound to face more economic risks. In such a stressful and risky economic environment, a sound The internal control system can cope with the rising internal control risk and reduce the risk of the enterprise. Therefore, building a perfect internal control evaluation mechanism is conducive to providing enterprises with a good internal control environment and helps enterprises to continuously find defects and make continuous improvement. This is the basis and top priority for the development of enterprises.

After investigation, at present, most of the internal control targets of our country have unbalanced development. People do not have corresponding theoretical basis for the concept of internal control. They just stay on the surface and do not really play a part in the development of internal control A major driving force. In view of such situation, in the work of internal control evaluation, we need to build a more detailed and intuitive evaluation mechanism, provide a quantitative evaluation method of internal control for most enterprises in our country, and provide reference

to the continuous improvement of internal control in accordance with.

1.2 Research Purposes

Based on the goal-oriented evaluation of internal control of enterprises, we can improve the internal control to effectively guide the management, and at the same time, we can serve the objective of constantly improving the internal control by quantifying the targets and enabling the Company to continuously improve its internal control system. Oriented evaluation of internal control, while incorporating normative research and empirical research, so that enterprises have internal control evaluation of specific goals and standards, the more easily be able to improve the program into the specific work, reflected in the management of the day-to-day , Making internal control no longer blunt and conceptualized, further developing the awareness of corporate control and continuously improving the internal control system.

In summary, on the basis of combing the research results, based on the goal-oriented evaluation of internal control evaluation, this paper constructs the evaluation system of internal control using the research methods to form a set of quantitative evaluation method of internal control system, The paper analyzes some specific contents of the internal control assessment of China Electronics Technology Group Corporation, taking five A-share listed companies of China Electronics Technology Group Corporation as an example to conduct specific analysis and evaluation of internal control and put forward corresponding policy recommendations.

1.3 Research Significance

The research significance of this paper is that it is an identification tool that can help investors make decisions by constructing a set of quantitative and intuitive internal control index system. The objective and comparable index can more directly display the internal management level of enterprises and reduce The financing cost of the enterprise further promoted the positive performance of the board of directors of the Company, promoted the management of the company and raised the level of supervision over internal control. It calculated that the index of internal control of the

enterprise can directly serve as the reference for the CPA to audit, reducing the work cost to a certain extent.

In this paper, the goal-oriented internal control as a measure of the degree of achievement of each goal to test the effectiveness of internal control. According to the accurate data, it shows the company's completion of each factor. According to the result of the calculation, Proposed the countermeasures and suggestions for improving the internal control of the Company, further explored the index research of internal control, and filled in the deficiencies in the research of the index of internal control, so as to provide reference for the future scholars.



CHAPTER2

LITERATURE REVIEW

This article will review the literature at home and abroad from several aspects, such as the general situation, methods and status quo of the construction of internal control evaluation system, and make relevant analysis and discussion.

2.1 Internal Control Evaluation Research Overview

The results of internal control evaluation in early studies abroad show that personal experience exerts an influence on the professionalism of internal control evaluation. Therefore, in order to evaluate the internal control process without being influenced by the individual subjective opinions of evaluators, more researchers prefer to establish a quantitative model to analyze and evaluate the internal control of the enterprise.

Srivasta (1985) used the modeling tool as a tool for internal control evaluation. Chow and Boren (1987) proposed a content analysis method and established an information disclosure model. Intosai (2004) suggested that effective internal controls can not be regarded as absolute guarantees and should be analyzed in the light of the specific conditions of the enterprises. The model built by Schwartz (2006) is guided by the five elements of internal control and has certain promotion significance. Chil-Yang Tseng (2007) established an enterprise risk management index in line with the goal of internal control. Arnmkka and Jokipii (2010) found that firms with strain characteristics found that firms can effectively resist risks through internal control and make a scientific assessment of their effects.

Domestic studies include Guo and Fu (2002) classified the internal control factors hierarchically, used cluster analysis and fuzzy-level analysis to establish the evaluation model. Wang (2004) using mathematical methods to build a model to test the effect of internal control. Chen and Zhang (2008) suggested that the premise for the efficient completion of internal control objectives is to conduct effective internal

control evaluation. Wang (2005) reviewed and summarized the evaluation of China's internal control from the aspects of theory and practice, and based on this, conducted an active discussion on the internal control mechanism in our country. Zhang (2011) argues that the basic function of internal control is to make scientific judgments and accurate assessments of the actual implementation of the control activities and their effects. Zhang and Zhang (2011) , according to the specific circumstances of China's listed companies, based on the degree of realization of the goal of internal control, an evaluation index model was constructed. Liu and Xu (2015) Based on the research foundation of evaluation of internal control of a transportation department in our country, based on the good experience of foreign countries and some enterprises in our country, the reasonable construction of the evaluation index system of internal control of our country's administrative institutions exploring.

2.2 The Method of Internal Control Evaluation and Model Building

At present, there are mainly three major types of evaluation methods for internal control at home and abroad: seminars, questionnaires and management analysis. Wei (2005) and other use of network technology to evaluate. Dai (2006) put forward a method of evaluation using case studies. Luo and Wang (2008) made use of the fuzzy evaluation method to provide an evaluation tool for the evaluation of internal control. Zhou et al. (2008) discussed specific steps regarding the evaluation system of internal control. Wang (2009) stated that the evaluation should proceed from both the process and results. Zhang (2013) also established an index system through AHP in fuzzy comprehensive evaluation in the research, which made the evaluation of internal control from qualitative analysis to quantitative analysis.

In terms of the evaluation model, Thompson (1992), Noordin (1997) and Michael G. Alles (2003) all started from the function of internal control system elements and proposed what should be included in the evaluation of internal control efficiency. Wang (2004) considered the effectiveness of internal control through mathematical statistical analysis and established the mathematical model of internal control evaluation. Lin, Zheng and Wang (2007) designed the comprehensive

evaluation index (ICI) of internal control. Luo and Wang (2008) using analytic hierarchy process, the index empowerment, to build an evaluation system. Wang (2009) proposed IC-CMM (Internal Control Capability Maturity Model), a process-oriented, established a comprehensive evaluation model. Dai and Zhang (2011) set up the internal control index according to the achievement of the control objectives so as to achieve the objective of comprehensive quantitative evaluation of the internal control targets. In addition, on the basis of the research on the evaluation system of foreign internal control. Zhang (2011) constructed an internal control and evaluation model that is in line with China's actual conditions and actual conditions in China. Qiu and Tong (2016) considered that effective internal control can prevent enterprises from risks, maintain the normal operation of the company and enhance the corporate value. In the study, a total of 1085 A-share manufacturing listed companies in Shanghai and Shenzhen. The data are tested empirically, and the empirical analysis shows that the evaluation system of internal control can better measure the effectiveness of internal control.

2.3 The Impact of Internal Control Research Overview

Abroad Botosan (1997) found that there is an association between the level of internal control and the cost of capital of the enterprise. Doyle (2005) proved that small-scale, poor-performing companies prefer biased disclosure of internal control weaknesses. Udihoitach et al. (2009) found that board quality and the proportion of experts in the audit committee all play a catalytic role in internal control. In domestic research, Feng (2001) believes that the corporate governance environment and structure are positively related to internal control. Cai (2005) found that an enterprise should combine internal control with management management to jointly serve the enterprise. Fang (2009) found that the level of internal control information disclosure of listed companies is obviously related to the profitability and scale of the company, the proportion of independent directors and whether the engaged accounting firms are "big four". Li (2011) is aiming at the goal. Taking the data of Shanghai Stock Exchange Company in 2008 as an example, the results show that the ownership

concentration of controlling shareholders and the remuneration of the board of directors and managers have an impact on the internal control of the enterprise.

2.4 Review of the Status Quo of the Construction of Evaluation Index of Enterprise Internal Control

At present, the construction of evaluation index of internal control of enterprises both at home and abroad mainly focuses on two aspects: one is from the five elements of internal control; the other is the goal-oriented. The first aspect mainly focuses on whether the enterprise has implemented the internal control. The selected indicators generally come from the internal audit report issued by the accounting firm and the self-evaluation report of the internal control of the enterprise. The second aspect is the goal-oriented of the internal control index construction, which is more inclined to the effectiveness of internal control, and the selected indicators based on five targets for internal control.

Foreign countries start early with the development of internal control theory, with high level of theoretical research and various research methods, which make a good contribution to the further development of internal control theory. However, in the aspect of empirical research, direction to quantify the lack of research on the internal control mechanism of enterprises, foreign internal control of the relevant literature rarely mentioned from the perspective of the development of enterprises to evaluate the quality of the internal control environment. Most of the researches are from a micro point of view, not all-round combination of the actual development strategy of the enterprise, the asset safety objectives, and lack of consideration of the overall direction, which in this respect remains to be further studied. At present, the domestic research status is more inclined to how to use the internal control system to govern the company, and more from the point of view of the factors, the empirical research is conducted. The internal control evaluation of the enterprise is based on the whole and the object is the external behavior of the enterprise. However, most of the research directions are limited to specific perspectives. Based on the theory level, the empirical research is less empirical and specific. There is not much research on the

depth of research. There are few studies on how to combine concrete models and use examples from goal-orientation. The research of enterprise internal control evaluation from perspective is still very limited.

Therefore, this article will be based on the goal: to carry out the evaluation of enterprise internal control indicators.



CHAPTER 3

RESEARCH METHODS

3.1 Research Methods

3.1.1 Literature Analysis

This paper firstly reviews and summarizes the domestic and international researches on the evaluation system of internal control. Then, combining the various practices of domestic and international internal control evaluation, the author analyzes the specific situation of selected listed companies to further verify the internal control Evaluation system is effective.

3.1.2 Case Study

After establishing the evaluation system of internal control in the thesis research, in order to verify the validity of the evaluation system, taking the five A-share listed companies of China Electronics Technology Group Corporation as an example, the effectiveness of internal control is evaluated.

3.1.3 Information Research Law

During the research, we collected the annual public information of 5 listed companies of A-share of China Electronics Technology Corporation by collecting them on the websites of Shanghai Stock Exchange, Sina Finance Network, Shenzhen Stock Exchange and other homepages of listed companies, mainly including annual report, self-evaluation report of internal control, social responsibility report, interim announcement, company rules and regulations and punishment and announcement of major events. Through the collection, processing and collation of these information to serve the research topics, as the data base of this study.

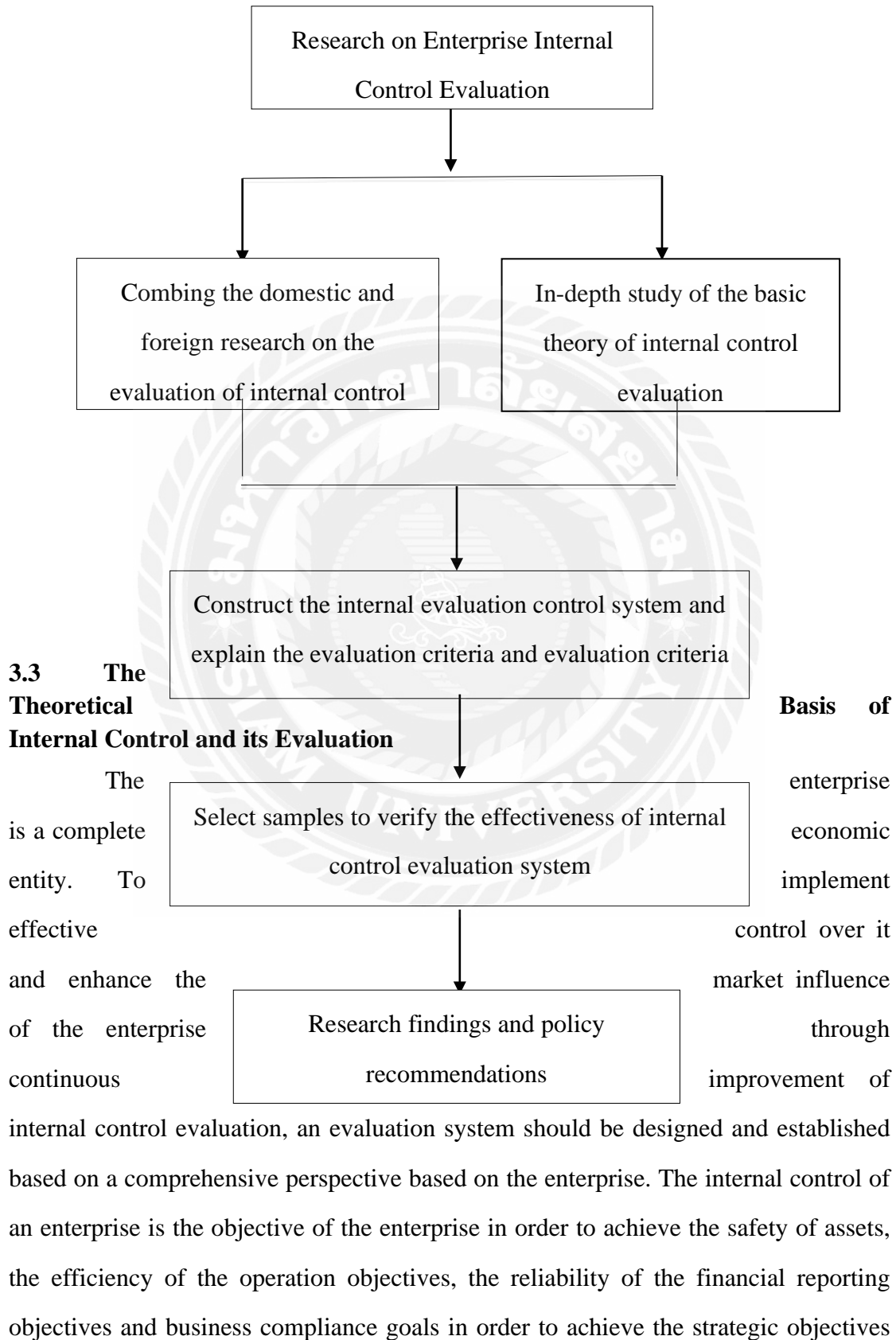
3.2 Theoretical Framework

By establishing target-oriented evaluation index of enterprise internal control and selecting five listed companies of A-share of China Electronics

Technology Group Corporation as samples, this thesis uses Analytic Hierarchy Process (AHP) to empower each indicator and uses the power coefficient method as the score method. Use the combination weight to evaluate the achievement of its internal control objectives and test its validity. The main idea of building the evaluation index of internal control based on the goal-oriented perspective is:



Table 1.1 Technology Road-map



of the enterprise, established within the economic organization and implementation. A complete set of systems, methods and procedures for monitoring, controlling and coordinating functions. Sound internal control evaluation should first establish a sound theoretical basis, the following will introduce the internal control evaluation, index construction and other related theories.

3.4 The Meaning of Internal Control Evaluation

The evaluation of internal control is an integral part of internal control and a very important link in internal control. Its role is as follows: It provides a reliable guarantee for enhancing the effect of internal control of the enterprise; It is an internal control; It is a kind of pressure mechanism to improve the level of internal control of the management; It can continue to promote the performance of the audit function.

The self-evaluation of internal control of an enterprise is implemented by the board of directors and the management of the company. During the process of internal control evaluation, the following procedures should be followed: Firstly, the evaluation procedure is formulated to evaluate the effectiveness of internal control and evaluate the internal work defects, and then after the assessment is completed, the enterprise prepares the self-assessment report of internal control and makes relevant disclosure in the annual report. Internal control report directly linked to the credibility of the enterprise. In addition, CPA should also put forward opinions and conclusions based on the control effectiveness of the audited entity and the report.

To sum up, the evaluation of the internal control of the enterprise has the function of further discovering the deficiencies in the internal control of the enterprise and facilitating the improvement of the internal control system of the enterprise in order to improve the integrity of the internal control system of the enterprise.

3.5 The Goal-oriented Theory of Internal Control Evaluation

The content of this paper is based on the comprehensive internal control evaluation theory and the goal-oriented theory of internal control evaluation research is a further overview and extension of the theory of internal control.

3.5.1 Goal-oriented Meaning

Goal-oriented theory is a kind of motivation theory, which is proposed by Haus (2005). According to the theory of goal orientation, in order to maintain the driving force for further progress, we should make the next higher goal and continue to maintain the strong motivation of reaching the goal, so as to maintain a sustained enthusiasm. In behavioral science, human behavior can be divided into three categories: goal-oriented behavior. It refers to the behavior to achieve specific goals; The target behavior. That is, to achieve the goal, to meet the needs of the behavior; indirect behavior. It refers to the behavior of non-immediate goals. Behavioral scientists have found that for the goal-oriented behavior, the degree of motivation will continue to increase as the goal approaches, and this trend will eventually end with the completion of the goal or the goal will be destroyed by the setback. For the target behavior, the situation is different, when the target behavior begins, the degree of motivation is the opposite trend.

Goal-oriented behavior is a kind of incentive behavior, but when the goal is too long or the goal is too simple, it will not achieve the desired effect of the incentive, so the manager should constantly formulate a reasonable goal and provide the goal, so that the goal-oriented behavior can maximize effectiveness.

In conclusion, goal-oriented evaluation of internal control is in line with the current economic reform trend, the continuous development of enterprises environmental requirements, theoretical research is also constantly developing and improving, the internal control of the building is gradually with the production and operation of enterprises goal to achieve unity and agreement.

3.5.2 The Goal of Internal Control

Internal control can literally be understood as a series of management and binding activities carried out within the enterprise by the managers of the enterprises in order that the enterprises can operate in the direction they want. However, due to

the current close economic ties, there are external risks that are complicated by business conditions. Researchers conducting internal control should consider the overall economic and social system from a comprehensive perspective.

The first account of the meaning and objectives of internal control stems from "Internal control: A key element of a coordinated system and its importance to management and CPAs" (1949), where the objectives shown are the asset and business objectives. Based on this, the meaning of internal control objectives continue to evolve. In 1992, the theory put forward by the COSO report in the United States standardized the theory of internal control and pointed out several key points of internal control theory. First, internal control is a process activity. In this process, we must achieve the three objectives set forth, which is the highest goal and purpose of internal control; Second, the main body of internal control is human, including not only the top management of enterprises, such as board members, managers, but also all grassroots personnel, each employee, internal control is implemented by full control; Third, for the internal control objectives of the enterprise, internal control activities given a "reasonable assurance" is not "absolute guarantee."

In our country, the theory of internal control is also constantly developing. In June 2001, the "Internal Control - Basic Norms" issued by the Ministry of Finance was the first time that our country clearly defined the meaning and objectives of internal control by means of law. The accounting objectives shown are the objectives of assets and the compliance targets.

In June 2008, the "Basic Norms for Enterprise Internal Control" jointly promulgated by the five ministries and commissions established the five-goal theory of internal control with reference to the formal definition of China's specific national conditions, that is, from the highest strategic goal to the fundamental asset safety Goals and objectives of legal compliance.

According to the evolvement process of the meaning and goal of internal control both at home and abroad, it can be seen that the general trend of development of the goal meaning of internal control is as follows: the goal is more and more subdivided, the range is wider and wider, the content is richer and richer.

Combination of common development services for the enterprise.

3.5.3 Objective-oriented Evaluation of the Meaning of Internal Control

Internal control evaluation system consists of five factors: the evaluation objectives, evaluation of the main object of evaluation, evaluation methods and evaluation criteria.

3.5.3.1 Evaluation Goals

The objective of internal control evaluation is included in the goal of internal control and serves for continuous improvement of internal control. According to PDCA theory, effective internal control includes four aspects: design-execution-evaluation-the trend of improvement (Yang, 2011) . The most direct goal of internal control evaluation is to scientifically and reasonably evaluate the effectiveness of internal control and use the evaluation results to provide the internal management and external investors with the correct decision-making service.

3.5.3.2 Evaluation of the Main Body

In the early stage of the appraisal process mainly based on certified public accountants, the internal control of financial reports was mainly used for auditing. However, due to the lack of a detailed understanding of the internal environment of the CPA and the lack of coordination among the enterprises during the work, internal control evaluation results are not entirely accurate. The internal audit as the main assessment, the lack of a certain degree of independence, the internal audit staff for their own consideration will be some of the conditions to hide, causing the results of the evaluation of the loss of reliability. Self-evaluation of internal control is the responsibility of the Board of Directors. The Audit Committee under the Board of Directors carries out specific implementation. Since the evaluators are very familiar with the internal conditions of the enterprise, the evaluation work will proceed smoothly. In addition, as the internal control service serves the development goals of

the enterprise, management has a positive impact on the management. Evaluation process will have a higher incentive, but the disadvantage is that management out of their own interests, self-evaluation process in the production of internal control defects will be selectively disclosed, affecting the decision-making of external investors and also making it difficult for regulators to supervise. It can be seen that the evaluation of internal control should also be the main body of the assessment of the continuous development of diversity (He, 2005).

3.5.3.3 Evaluation Object

The Basic Standards for Enterprise Internal Control and the COCO (Control Standards Committee of the Institute of Chartered Accountants in Canada) separately define the effectiveness of internal control evaluation and internal control. Based on this, the internal control evaluation targets whether the internal control system of the enterprise is with integrity, objectivity and effectiveness.

3.5.3.4 Evaluation Method

There are three aspects: First, the internal control information disclosed by the enterprise; Second, the major defects issued by the accounting firm; Third, the realization of internal control objectives. At present, the implementation of internal control in our country is not perfect, and the market environment is not mature. Therefore, based on the information disclosed by the enterprise autonomously, the internal control evaluation system constructed lacks certain objectivity and reliability. Based on this, we choose to build an evaluation system based on the degree of realization of internal control objectives to evaluate the effectiveness of internal control. The advantages of this method are as follows: the evaluation results are objective and reliable, the required information is easily obtained, the work cost is reduced and the work efficiency is further enhanced. By using this evaluation method, the internal control system of the enterprise can be better implemented and applied, avoiding “Formalism” behavior.

3.5.3.5 Evaluation Index

According to the five goals of internal control of the enterprise, namely, the safety of assets, the efficiency of operation, the compliance of operation and the reliability of financial reports so as to realize the strategic objectives of development of the enterprise. According to the different nature and specific conditions of different objectives, the representative of the indicators is selected, and the five major goals are subdivided, constituting the enterprise's internal control evaluation index system.

3.6 The Meaning of Goal-oriented Internal Control Index Construction

Evaluation of internal control, in theory, predecessors made a careful and detailed study, but most of the text information more knowledge and more complex. By building a goal-oriented internal control index, this article is to evaluate the study of internal control, internal control evaluation of enterprises Provide a simple and intuitive method.

3.6.1 Theoretical Meanings

The concept of system theory points out: To describe and recognize the characteristics of complex systems by means of system theory, we regard each part and every link of the system as well as the internal environment and the external environment of the system as a dynamic relationship, that is, mutually related and mutually constrained system development dynamic concept used to find the system can achieve the best solution. In order to evaluate the level of internal control by quantifying the goals of internal control, this article should construct the index from the perspective of system thinking, give full consideration to the dynamic interaction between different objectives and different elements of internal control, and construct the internal control Index should reflect the overall internal control of the company as a whole, as well as different internal control objectives and different elements of the internal relations, to achieve a holistic, systematic, scientific and practical.

According to the COSO report (2013), "Management should follow the goal-oriented and principle-based approach in internal control. When all five elements

of internal control exist and play a role in achieving reasonable assurance of the achievement of internal control objectives, internal control can be as valid. "

This article will build on the internal control index system theory and the COSO framework as the theoretical basis.

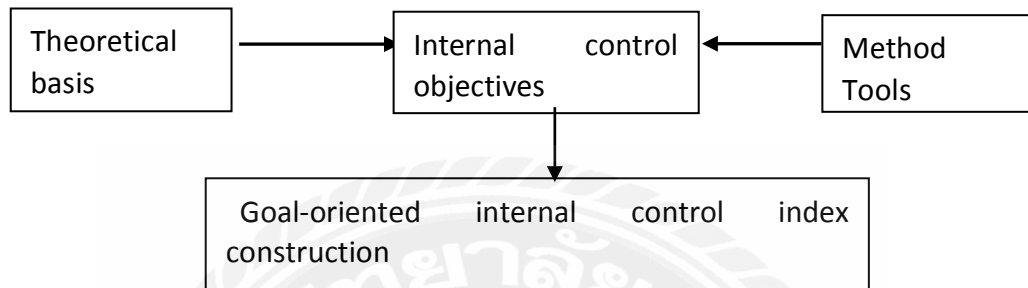
3.6.2 Method Basis

Through the statistical index construction theory, we can see that the index design generally need to go through four key steps: the first step, the index system should be based on the relevant theory to establish a goal-oriented system as a whole to build the index evaluation system; the second step, the standardization of indicators of data processing. It is also called non-dimensional treatment, because different evaluation indexes have their own different real economic meanings. There are differences in the standards, which will result in the failure of all the indexes to be compared. Therefore, the indexes are standardized and normalized statistically to eliminate the impact of the original indicator dimensions; the third step, to determine the weight of each indicator. According to the method of generating weight, it can be divided into the subjective weight evaluation method and the objective weight evaluation method, in which the subjective weight method is obtained by experts based on experience to obtain the weights, including fuzzy evaluation method, Delphi method and AHP. Objective weighting method is determined by the correlation coefficient or coefficient of variation between the indicators, including the entropy method, the principal component analysis and the gray correlation analysis, etc. The fourth step is to build the total evaluation index model through certain methods to evaluate the different aspects of the value together to form a total index. The methods include linear weighting, multiplication and mixture of the two methods.

CHAPTER 4

RESULTS AND ANALYS

The main idea of the internal control of the index construction based on the target perspective is:



4.1 Selection of Indicators

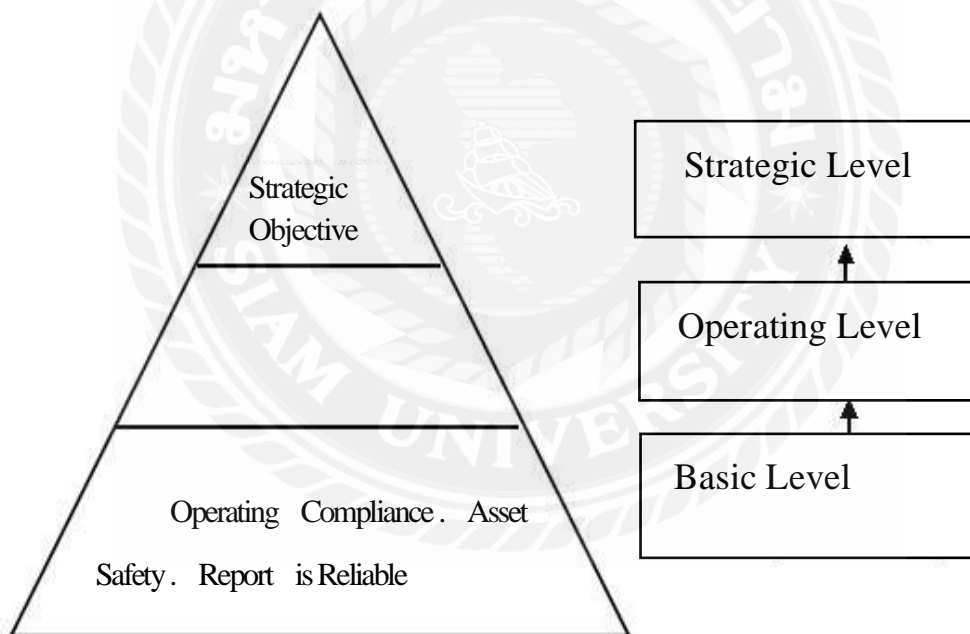
This article will start with the "results" of internal controls and build an index based on the degree of completion of internal control objectives. The objective of internal control is divided into two levels in business management: the first level is the overall view, the control target shown based on the internal control system, and the second level is subdivided into the control objectives that should be possessed by various positions in the enterprise. The second level is the first level of concrete performance. This article will be based on the five goals of internal control, the goal can be directly measurable indicators to evaluate the internal control of enterprises intuitively.

4.1.1 Internal Control Objectives Related Settings

This article will be divided into three levels of internal control objectives, the relationship between the three levels of the overall connotation and subdivision of a single connotation. The first level is the strategic level. The objective of this level of internal control is to realize the development strategy of the enterprise, which is the overall goal of the enterprise and plays an important role in realizing the sustainable development of the enterprise. After this level of subdivision can be divided into the

second and third levels, respectively, for the operating level and grassroots level, operating level of internal control objectives is to continuously enhance the effectiveness of business efficiency, which is a bearing on the existence of upward For the highest level of service, down to rely on the realization of the basic objectives, this goal for enterprises to continue to optimize the organization, improve quality and efficiency requirements. The third level for the grassroots level, which is based on the second level as the prerequisite, including to ensure that the legal compliance of business operations, asset safety and financial reporting reliability of the three internal control objectives, the upper two goals to achieve the foundation , To achieve these three goals, you can visually effect on the second level.

Table 4.1 Level of Internal Control Five Goals



4.1.2 The Choice of Internal Control Target Index

4.1.2.1 Strategic Level

Corporate strategic objectives are the highest level of internal control objectives, reflecting the long-term business growth and development planning capabilities. The measurement of the strategic objectives of the enterprise depends largely on the enterprise's own strategic path of development. In addition, the strategic

objectives of realizing the enterprise are also influenced by the macro-economic policies of the country and the external factors such as the level of competition among industries. But concluded that the completion of the strategic objectives of enterprises generally can be assessed from the following points: First, the market competitiveness of enterprises, the most intuitive is the level of business revenue growth, which can reflect the level of business and the result of market competition, but also shows the level of the core competitiveness of enterprises, and second, the development prospects of enterprises and companies want to achieve sound and rapid development, so we must have a certain asset reserves for all kinds of business operations activities to do a good job of basic work, and have the ability to operate to obtain profits and maintain a steady growth of profits, thus representing enterprises with good growth capacity, good prospects for development, so this selection of total asset growth and net profit growth rate as to evaluate the strategic target index. In addition, selecting the asset-liability ratio as a measure of the enterprise indicators shows whether the development prospects a management level

4.1.2.2 Operating Level

In this level, the business objectives are divided into efficiency and effectiveness of two indicators to select the indicators, the efficiency of business operations can fully demonstrate whether a business has a good operating environment, including the operation of funds, liquidity, etc., high efficiency Fully meet the needs of the day-to-day operation of the enterprise, and thus to enhance efficiency and form a virtuous circle, so select the indicators of asset turnover rate of business operations, including accounts receivable turnover, total assets turnover, which guarantees the normal operation of enterprises significance. In the aspect of business performance, this article chooses the business profitability and return on net assets, which can represent the profitability and profitability of the enterprise, as the basis for measuring the profitability of the enterprise.

4.1.2.3 Grassroots Level

4.1.2.3.1. Business Compliance

The state has made the relevant laws and regulations for the operation of the enterprise. Enterprises as the important elements of the economic life of the modern society. The bottom line of not exceeding the law is the most important guarantee. Internal control requires the compliance of the enterprise internally development also plays an important role. Secondly, modern society emphasizes credit, whether a company has credible and reliable reputation has a great impetus to its sustainable development, abide by the contract is the obligation of enterprises, the business failure to comply with the provisions of the contract, and even beyond the framework prescribed by laws and regulations, will be litigation possible, leading to huge amounts of compensation companies pay for the company's own positive image of the formation of its adverse effects, but also reflects the internal Control system has flaws. Therefore, this article selects the law-breaking behavior of the enterprise and whether it suffers from the litigation of other enterprises as the basis to inspect the lawful compliance of the enterprise management.

4.1.2.3.2. Asset Safety

The current economic and social funds to increase more meaning, not just focus on the original meaning of physical security, the value of security has also been introduced to the internal control of assets within the scope of the target. Therefore, this article first select the growth rate of net assets as a basis for measuring asset targets. In the aspect of preventing the loss of assets, this article chooses specific indicators: the impairment loss of assets and the external guarantee rate, which is used to intuitively consider the effect of the work done by the enterprise on asset safety.

4.1.2.3.3. The Reliability of Financial Reports

In this goal, on the one hand, the quality of financial reports can be evaluated based on the audit opinion of the external auditors on the financial reports; on the other hand, the correction indicators of significant accounting errors can be used to measure the achievement of reliability goals. This article also selected the

financial restatement as a measure of the indicators, because the occurrence of financial restatement will trigger the company's own image, the credibility of the market decline, but also may lead to the commission's investigation and large expenses. Therefore, the financial restatement is the embodiment of the weakness and weakness of the enterprise management system, indicating that the internal control system of the enterprise is flawed. In view of this, the financial restatement should also be selected as another important measure in reporting objectives.

In summary, the indicators selected by the five major targets of the three levels of internal control are summarized in Table 4-2.

Table 4.2 Internal Control Evaluation System Framework					
Internal control objectives	nature	Evaluation index	Formulas and instructions	Indicator type	grade
The strategic goal of the enterprise	Quantitative	Total assets growth rate	(Total assets of the year - total assets of the previous year) / total assets of the previous year	Positive	Strategic level
		Assets and liabilities	Total liabilities / total assets	Moderate	
		Operating income growth rate	(Current year operating income - last year operating income) / last year operating income	Positive	
		Net profit growth rate	(Net profit of the year - Net profit of the previous year) / Net profit of the previous year	Positive	
Business efficiency goals	Quantitative	Total asset turnover	Main business income / average balance of total assets	Positive	Operating level
		Accounts receivable	Operating income / average balance of accounts	Positive	

		turnover	receivable		
		Operating profit margin	Operating profit / operating income	Positive	
		Roe	Net profit / average net assets	Positive	
Management of compliance goals	Qualitative	Illegal behavior	When not present, it is 1. Otherwise, it is 0	Positive	Basic level
		Suffer legal proceedings	Is it subject to prosecution by other units, 1 if not existing, 0 otherwise?	Positive	
Asset safety goals	Quantitative	External guarantee rate	Total amount of external guarantee (Note) / total assets	Negative	
		Asset impairment losses	Assets impairment loss / total assets at the end of the year	Negative	
		Net asset growth rate	(Closing net assets - Opening net assets) / Opening net assets	Positive	
Financial reporting reliability goals	Qualitative	Audit opinion on financial report	According to the audit report issued by certified public accountants to determine the views	Positive	
		Major accounting fraud	Annual report whether significant accounting fraud behavior as a measure, absent when 1, otherwise 0	Positive	
		Financial recap	Annual report whether the financial restatement, absent when 1, otherwise 0	Negative	
<p>Note: The amount of external guarantees in the formula does not include the amount of the guarantee provided by company of the controlling subsidiaries on the list.</p>					

4.2 Calculation of Weights

In the process of evaluation, different indicators have different emphases, so we also need to calculate the specific weight of different indicators.

4.2.1 Determine the Weight of the Method of Introduction

There are many ways to determine the weight of indicators, according to the summary can be divided into two categories: the subjective weighting law and the objective weighting law. The subjective weighting method adopts a qualitative method. According to subjective experience, experts judge each index to obtain weights, including AHP, fuzzy evaluation method and Delphi method. The disadvantage is that these three evaluation methods are based on Judging from the subjective experience, there will be some subjective arbitrariness, influenced by man-made factors. The law of objective evaluation of empowerment is a method of determining the weights by the coefficient of variation of the index or the correlation coefficient between the mutual indicators, including factor analysis, maximum entropy, principal component analysis and gray relational analysis. One method fully considers the interrelationship between different indicators and calculates the weight of determination through the original information provided by each indicator, avoids the expected deviation from the subjective human judgment and helps to further improve the evaluation results of internal control accuracy among them, in the evaluation of internal control more widely used methods are analytic hierarchy process, fuzzy evaluation method and principal component analysis.

4.2.2 Calculation of Indicator Weight

Analytical Hierarchy Process (AHP) can combine qualitative analysis with quantitative analysis as a whole, and quantify the qualitative problems judged by subjective experience. This method can not only reflect the results of qualitative analysis, but also has the advantages of quantitative analysis. The principle of AHP is as follows: First of all, to establish a hierarchical structure, the indicators of a complex problem through the relationship between each other, it will be broken down into a number of orderly level, generally including the target layer, the guideline layer and

the program layer Secondly, construct the comparison judgment matrix, and quantify the importance of each layer according to certain objective facts, and use 1-9 and its inverse to quantify the significance difference between the index of the same level and the index explained by the previous level; Thirdly, the judgment matrix is established and the eigenvector (W) corresponding to the largest eigenvalue of the matrix is calculated. After the normalization, the weight of the single layer is calculated and the consistency is checked, and the importance of the lowest level relative to the highest level is determined. Sadie believes that in order to ensure that the matrix does not have obvious logical contradiction, the consistency of the matrix should be tested to calculate the random consistency index $CR = CI / RI$ of the judgment matrix, Among them, $CI = (\lambda_{max} - n) / (n-1)$. Finally, calculate the comprehensive weight and test the consistency, the use of each layer on a single layer of weight, you can calculate the object layer to the highest layer (target layer) comprehensive weight. The following table shows the weight of each indicator that is calculated through the steps of AHP.

Table 4.3 Indicator Weights			
Internal control objectives	First level indicator weight	Evaluation index	Secondary indicator weight
The strategic goal of the enterprise	0.2098	Total assets growth rate	0.1856
		Assets and liabilities	0.1776
		Operating income growth rate	0.3876
		Net profit growth rate	0.4897
Business efficiency goals	0.2525	Total asset turnover	0.4056
		Accounts receivable turnover	0.3786
		Operating profit margin	0.7633
		Roe	0.4294

Management of compliance goals	0.2180	Illegal behavior	0.3097
		Suffer legal proceedings	0.3869
Asset safety goals	0.1322	External guarantee rate	0.4097
		Asset impairment losses	0.1659
		Net asset growth rate	0.4337
Financial reporting reliability goals	0.1875	Audit opinion on financial report	0.3653
		Major accounting fraud	0.2522
		Financial recap	0.3948

4.3 Index Evaluation Criteria and Scoring Methods

This article through the above identified many evaluation index used to sub-measure the achievement of internal control objectives, including quantitative indicators and qualitative indicators, in order to come to accurate and reliable evaluation results of internal control, the key lies in the evaluation criteria for internal control and the score. The method is scientific and reasonable. Because of the different nature of each index selected in this paper, there are big differences, so it is not suitable for using a unified absolute evaluation criteria, in order to be able to improve the accuracy of the calculation of internal control index, we refer to study the practices of other scholars, different evaluation methods will be adopted according to the different nature of each indicator.

For the qualitative indicators, according to different indicators of the level of internal control measures to measure the level of different categories to take individualized treatment. For example, in the report objective, when we evaluate the audit opinion on the financial statements, the criteria we set for the evaluation are as follows: If the audit report issued by a certified public accountant is negative, the score of the indicator is 0; The auditor's report issued by the accountants was unable to express their opinion, the index score was 25 points; certified public accountants

issued opinions on the audit opinion is reserved, then the index score of 50 points; Certified Public Accountants audit report issued with the emphasis on matters paragraph of the unqualified opinion, the index score of 75 points; Certified Public Accountants audit report issued as a standard unqualified opinion, then the index score of 90 points. In the evaluation of whether there is significant accounting fraud, we set the standard as one-vote veto, that is, if the company is found to have significant accounting fraud, the company's overall financial reporting reliability score is 0 Points; if there is no abnormality, the index score is 65 points (30 points plus 70 times 50%).

For quantitative indicators, we selected the coefficient of efficacy as a measure of the various quantitative indicators. The reason why the efficiency coefficient method is selected is that this method can directly and effectively convert the index into the score of the evaluation without considering the dimension problem of each index. The advantage of the efficiency coefficient method is that it is widely used and has a strong practicality and calculation is simple. The relationship between different indicators and the goal of achieving internal control can be divided into three categories: positive indicators, negative indicators and moderate indicators. For different types of evaluation indicators, we use the following formula to calculate:

For positive indicators:

$$k_i = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}} \times 70 + 30 \quad (\text{formula4-4})$$

For negative indicators:

$$k_i = \frac{X_{\max} - X_i}{X_{\max} - X_{\min}} \times 70 + 30 \quad (\text{formula4-5})$$

For moderate indicators:

$$k_i = \left(1 - \frac{|X_i - d|}{|X_{\max} - d|}\right) \times 70 + 30 \quad (\text{formula4-6})$$

In the above three formulas, d is a modest value, X_i is the actual value of the indicator, X_{\max} is the maximum value of the indicator in the industry. X_{\min} is

the minimum value of the indicator in the industry, k_i is the final score of each indicator. The constant in the formula can be converted into a percentile efficiency coefficient, this article after reference to the relevant literature research here took 70 and 30 (base points) these two values.

Through the above analysis, we come to our country's enterprise internal control evaluation index model:

$$CICI = \sum_{i=1}^{16} k_i w_i \quad (\text{formula4-7})$$

Among them, $CICI$ for the internal control evaluation score; k_i score for each indicator; w_i for each evaluation index weight coefficient.

4.4 Internal Control Composite Index Evaluation Criteria

After calculating the comprehensive evaluation index of internal control of an enterprise, the index will be classified according to the grade so as to objectively assess the effectiveness level of the internal control of the enterprise. The specific classification of the grade is as shown in the following table:

grade							
overall ratings	90-100	80-90	70-80	60-70	50-60	40-50	0-40
Effectiveness	very effective	effective	More effective	Generally effective	poor effect	Less effective	The effect is very poor

4.5 Application of Internal Control Evaluation System Framework

The goal-oriented framework of the evaluation system of internal control of enterprises has been completed. Whether the evaluation system is practical or not and whether further results need to be confirmed are needed. Based on this, this article

will take China Electronics Technology Group Corporation's five A-share listed companies as an example, the 2013 internal control effectiveness of specific evaluation.

4.5.1 China Electronics Technology Group Company Background

China Electronics Technology Group Corporation (referred to as China Electronics Branch) is a state-owned key backbone enterprise established on the basis of the electronic research institutes and high-tech enterprises directly under the Ministry of Information Industry under the approval of the State Council and one of the ten major military groups under the direct management of the Central Government. Founded on March 1, 2002, it is one of the state-authorized authorized investment institutions of state-owned assets and is directly supervised by the State-owned Assets Supervision and Administration Commission of the State Council.

China Electronics Technology Group Corporation is a national large-scale backbone enterprise that mainly undertakes the Rocket-type electronic information system project, major equipment, key components and components and software developed and manufactured by the State as the major military and civilian large carrier. China E-Techco actively implemented the strategy of "going global" to expand the international trade market and initially built a foreign trade marketing network covering key global markets. Successively with dozens of countries, government departments and well-known enterprises to establish a cooperative relationship, and on behalf of the country to participate in many international organizations in the international market has established a good CETC brand and image. This article will analyze and evaluate the internal control of the five A-shares listed companies of China Electronics Technology Group Corporation. The five companies are: Hangzhou Hikvision Digital Technology Co., Ltd. (002415), Taiji Computer Co., Ltd. (002368), Shanghai Huadong Computer Co., Ltd. (600850), Anhui Sichuang Electronics Co., Ltd. (600990), Chengdu Wei Shi Tong Information Industry Co., Ltd. (002268).

4.5.2 China Electronics Technology Group Corporation A-share Listed Company's Internal Control Information and Data Processing

4.5.2.1 Data Source

This paper collects the public information of 2013 E-5 listed companies of China Electronics Technology Group Corporation as of December 31, 2013, including the annual report, self-evaluation report of internal control, social responsibility report, interim announcement, company rules and regulations and Punishment and major event announcements. The main sources of information are Sina.com, Shanghai Stock Exchange, Shenzhen Stock Exchange and other websites and homepage of listed companies.

4.5.2.2 Information About Internal Control of the Company

4.5.2.2.1 The Legal Compliance of the Business

Company Name	Stock code	Illegal behavior	Whether to suffer legal proceedings
Hikvision	002415	1	1
Tai Chi shares	002368	1	1
East China Computer	600850	1	0
Four to create electronics	600990	1	1
Guardian pass	002268	1	1

It can be seen from the table above that none of the five listed companies of China Electronics Technology Group Company A shares have any illegal or illegal behaviors, indicating that all five companies abide by the current laws and regulations, participating fairly in the market competition and operating legal compliance. The image has played a favorable role in promoting and enhancing the influence of enterprises. However, in the indicators of litigation matters, the results showed that they were not optimistic. The lawsuits were involved in the other four companies

except the guards, but only one company in Huadong Computer Is passive litigation, accounting for 20% of the proportion, indicating that the company will face the risk of repayment, is not conducive to the construction of a positive image of the company, showing some degree of internal control deficiencies.

4.5.2.2.2 The Safety Goal of Assets

Table 5.2 Asset Objectives				
Company Name	Stock code	External guarantee rate	Asset impairment losses	Net asset growth rate
Hikvision	002415	0.000000	0.008591	0.149270
Tai Chi shares	002368	0.021734	0.006821	0.058766
East China Computer	600850	0.066725	0.009199	0.065316
Four to create electronics	600990	0.011183	0.011474	0.089810
Guardian pass	002268	0.094479	0.024918	1.024937

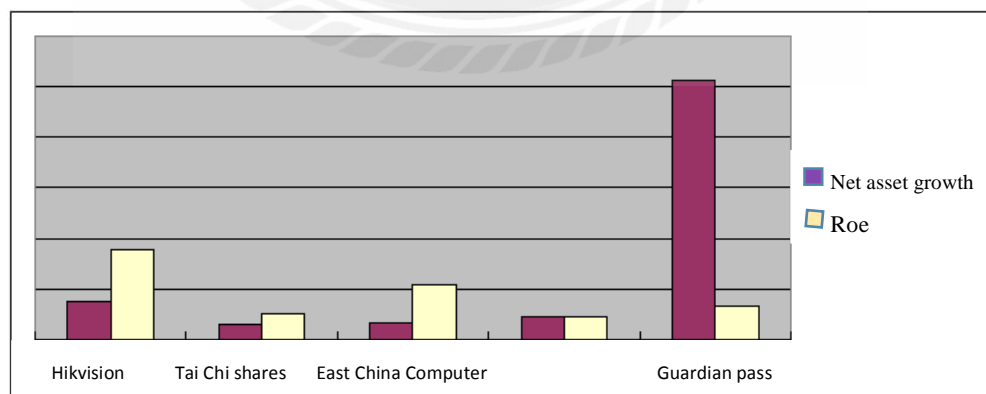
As the data in the above table shows, the average of the external guarantee rate and the impairment loss on assets of five listed companies of China Electronics Technology Group Corporation are 0.077945 and 0.012201 respectively. By comparison, the external guarantee rate and assets impairment Loss is the maximum, we can see that the Guardian pass in the realization of the safety objectives of the assets to a lesser extent, enterprises use of assets is relatively low efficiency, Guardian should continue to improve asset utilization, reduce idle assets, and pay attention to understanding Be guaranteed corporate solvency, prevent business litigation.

Net asset growth rate represents a company's ability to develop, and its corresponding rate of return on net assets represent the development of protection, is

the vitality of the enterprise, when the two are higher values, representing the business in the future development Stamina greater value-added hedge ability. The following table compares the growth rate of net assets and return on net assets of various enterprises and found that the overall level of the five enterprises is better. However, the comprehensive comparison between the shares of Taiji and SiChuang Electronics is relatively low. The two companies' development ability is poor .

Company Name	Stock code	Net asset growth rate	Roe
Hikvision	002415	0.149270	0.358900
Tai Chi shares	002368	0.058766	0.101502
East China Computer	600850	0.065316	0.219849
Four to create electronics	600990	0.089810	0.092642
Guardian pass	002268	1.024937	0.130442

Table 5.4 Comparison of Growth Rate of Net Assets and Return on Net Assets of Enterprises:



4.5.2.2.3 The Reliability of Financial Reporting Goals

Table 5.5 Financial Reporting Objectives				
Company Name	Stock code	Audit opinion on financial report	Major accounting fraud	Financial recap
Hikvision	002415	Standard without reservation 90	1	0
Tai Chi shares	002368	Standard without reservation 90	1	0
East China Computer	600850	Standard without reservation 90	1	1
Four to create electronics	600990	Standard without reservation 90	1	1
Guardian pass	002268	Standard without reservation 90	1	0

Companies of China Electronics Technology Group A are standard unqualified opinions, indicating that the financial reports of the five companies are in good condition and accurately reflect the actual conditions of the Company and are in good condition. In the financial restatement indicator, after reviewing the 2013 financial reports of various companies, it was found that there were financial restatements in three of the five listed companies, namely Hikvision, Taiji and Guardian, respectively, but none of the three companies occurred Major accounting fraud, the reason for financial restatement is mainly due to changes in accounting policies and major accounting errors correction. In summary, China Electronics Technology Group A shares of five listed companies in the reliability of the financial report to complete the target level, we must continue to maintain this good momentum.

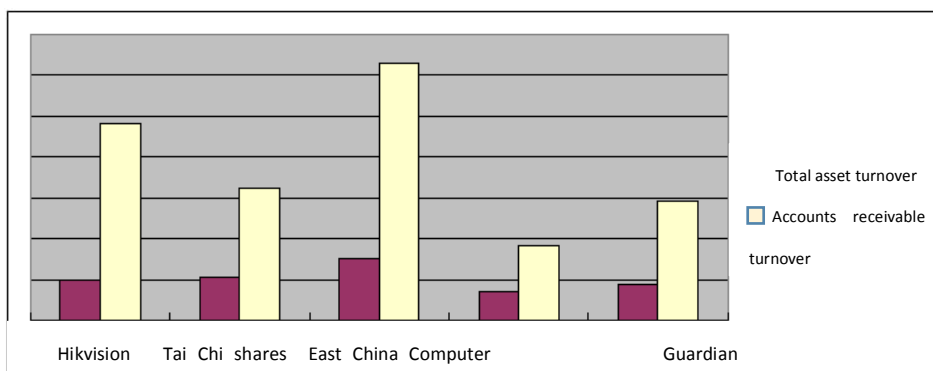
4.5.2.2.4 Management Efficiency Target

Company Name	Stock code	Stock code	Accounts receivable turnover	Operating profit margin	Roe
Hikvision	002415	0.974667	4.813604	0.254020	0.358900
Tai Chi shares	002368	1.061190	3.235868	0.042415	0.101502
East China Computer	600850	1.526076	6.277315	0.054646	0.219849
Four to create electronics	600990	0.713399	1.838866	0.038622	0.092642
Guardian pass	002268	0.875671	2.906505	0.077250	0.130442

According to the above data, the average operating profit rate and ROE of five listed companies of China Electronics Technology Group A were 0.0933906 and 0.180667, respectively. The two indexes of Four Electronics are the lowest, indicating that four Electronics In business objectives to a lesser extent.

The comparison of Figure 5-7 shows that the two indicators of SZ Electronics show the lowest value, which shows that the solvency of enterprises is relatively low, the revenue of corporate assets is poor, and the management's ability to manage assets needs to be further strengthened.

Table 5.7 Comparison of Enterprise Gross ROA And Receivables Yield



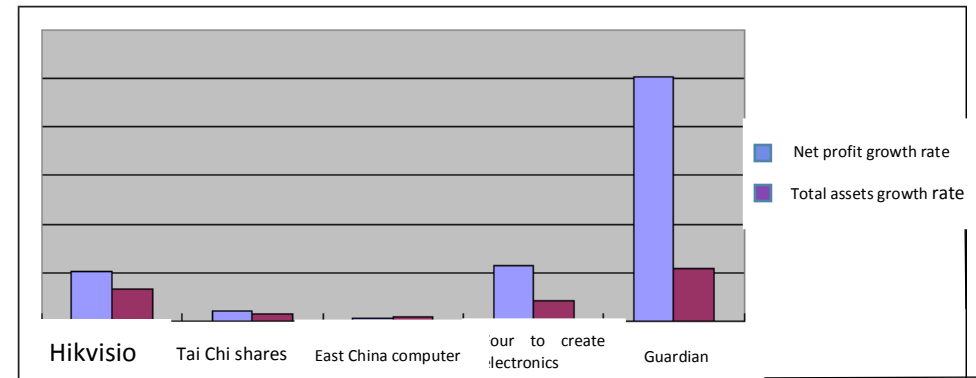
4.5.2.2.5 Corporate Strategic Objectives

Company Name	Stock code	Operating income growth rate	Assets and liabilities	Net profit growth rate	Total assets growth rate
Hikvision	002415	0.603690	0.301137	0.521165	0.339071
Tai Chi shares	002368	0.264153	0.513076	0.101239	0.071502
East China Computer	600850	0.0710096	0.603311	0.030264	0.045492
Four to create electronics	600990	0.508530	0.648269	0.571947	0.208764
Guardian pass	002268	1.702673	0.334789	2.518425	0.536650

As shown in Table 5-8, the average growth rate of revenue of five listed companies of China Electronics Technology Group Corporation in A-share is 0.6300284. By comparison, the value of this company is the highest, indicating that the enterprise's competitiveness in the industry high, occupy high market share. The average debt-to-asset ratio is 0.4801164, of which, Hikvision is low and relatively low compared with the average debt-to-asset ratio of the industry, indicating that the pace of corporate development is too cautious and further innovation and development should be made on strategic objectives.

Enterprise development prospects, through comparative analysis, the maximum net profit growth of 2.518425, the minimum value of 0.030264, a greater gap between the corresponding total assets growth rate with the level of net profit growth rate changes, Guardian through two indicators are the highest, Huadong computer is the lowest. Enterprises should formulate reasonable strategic goals according to their own development level in order to achieve sound and rapid development.

Table 5.9 Enterprise net profit growth and total assets growth rate comparison



4.5.2.3 Data Processing

The above are the specific values of the targets selected by the target-oriented internal control of five listed A-share companies of China Electronics Technology Group Corporation. To calculate the comprehensive evaluation index, the first step is to obtain the concrete score of the second-level evaluation index, the second step is to obtain the specific score of the first-level evaluation index, and finally the total internal control evaluation index of the enterprise is obtained. For example, in the strategic goal of the second-level target revenue growth rate, to calculate its score, the specific calculation is as follows:

China Electronics Technology Group Corporation A shares of five listed companies Hikvision enterprises in 2104 operating income growth rate of 0.603690, the access to information that the industry's largest operating revenue growth rate of 775.04%, the minimum operating income growth rate of -90.65%. In addition, as the operating income growth rate is a positive indicator, we need to select the positive index formula of the efficiency coefficient method:

$$k_i = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}} \times 70 + 30$$

The specific data into the above formula was:

$$k_i = \frac{60.37\% - (-90.65\%)}{775.04\% - (-90.65\%)} \times 70 + 30$$

$$= 42.21$$

Using the above formula, we can draw all secondary Hikvision scores, the results shown in Table 5.10

Table 5.10 Internal control secondary indicators score statistics		
Internal control objectives	Secondary indicators	Score points
The strategic goal of the enterprise	Total assets growth rate	39.54
	Assets and liabilities	51.20
	Operating income growth rate	42.21
	Net profit growth rate	40.12
Business efficiency goals	Total asset turnover	53.16
	Accounts receivable turnover	32.45
	Operating profit margin	61.20
	Roe	43.42
Management of compliance goals	Illegal behavior	65
	Suffer legal proceedings	65
Asset safety goals	External guarantee rate	65.24
	Asset impairment losses	66.95
	Net asset growth rate	76.62
Financial reporting reliability goals	Audit opinion on financial report	90
	Major accounting fraud	65
	Financial recap	65

According to the above table, we can list the score of the secondary evaluation index K as:

$$k_2 = \begin{Bmatrix} 39.54 & 51.20 & 42.21 & 40.12 \\ 53.16 & 32.45 & 61.20 & 43.42 \\ 65 & 65 & 65.24 & 66 \\ 76.62 & 90 & 65 & 65 \end{Bmatrix}$$

Secondly, according to the weight of the second-level evaluation index to the first-level evaluation index, the weight vector W is:

$$w_2 = \begin{Bmatrix} 0.1856 & 0.4056 & 0.3097 & 0.4337 \\ 0.1776 & 0.3786 & 0.3869 & 0.3653 \\ 0.3876 & 0.7633 & 0.4097 & 0.2522 \\ 0.4897 & 0.4294 & 0.1659 & 0.3948 \end{Bmatrix}$$

Based on the above data, Hikvision score of first-class indicators:

$$Y_1 = Y_2 \times W_2 = \begin{Bmatrix} 52.4391 \\ 99.2058 \\ 45.2790 \\ 71.0659 \\ 74.9320 \end{Bmatrix}$$

The weight value of the internal control evaluation index through the first-level index calculated before is expressed as the weight vector is:

$$w_1 = \{0.2098 \quad 0.2526 \quad 0.2385 \quad 0.1422 \quad 0.1978\}$$

Therefore, Hikvision internal control evaluation comprehensive score:

$$Y = Y_1 \times W_1 = 69.3667$$

Through the above methods, we can draw the internal control index scores of 2013 of the five A-shares listed companies of China Electronics Technology Group Corporation, and their overall rankings are shown in the following table:

Ranking	Company Name	Stock code	Internal control index
1	Guardian pass	002268	71.2986
2	Hikvision TV	002415	69.3667
3	Tai Chi shares	002368	64.7228
4	Four to create electronics	600990	60.6008
5	East China Computer	600850	59.0421

As shown in the table above, in 2013, the total internal control composite index of China Electronics Technology Group Corporation's five A-share listed companies scored a maximum of 71.2986 points with a maximum score of 71.2986 and the lowest was 61.0421. Huadong Computer Corporation, Among them, the scores of the internal control composite index of the four companies are between 60-70.

grade							
overall ratings	90-100	80-90	70-80	60-70	50-60	40-50	0-40
Effectiveness	very effective	effective	More effective	More effective	poor effect	Less effective	The effect is very poor
Number of enterprises	0	0	1	3	1	0	0
percentage	0	0	20%	60%	20%	0	0

Based on this result, statistics were made on the rating scale of the internal control composite index of five listed companies of China Electronics Technology Group Corporation, the details of which are shown in the following table:

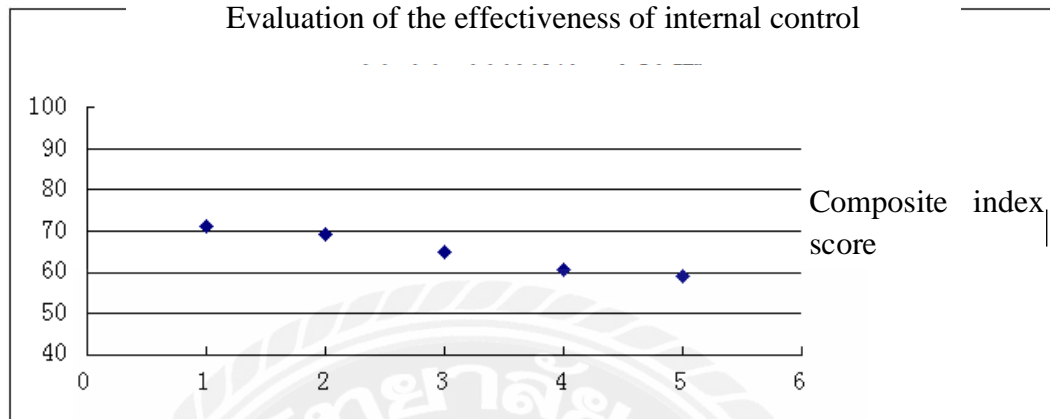
As can be seen from Table 5-12, the internal control effectiveness of China Electronics Technology Group Corporation A-share listed companies is more than 70 points, only one enterprise is more effective and the other four companies are located between 50-70. The internal control Generally effective and poor results.

4.5.3 Internal Control Validity Evaluation Results Analysis

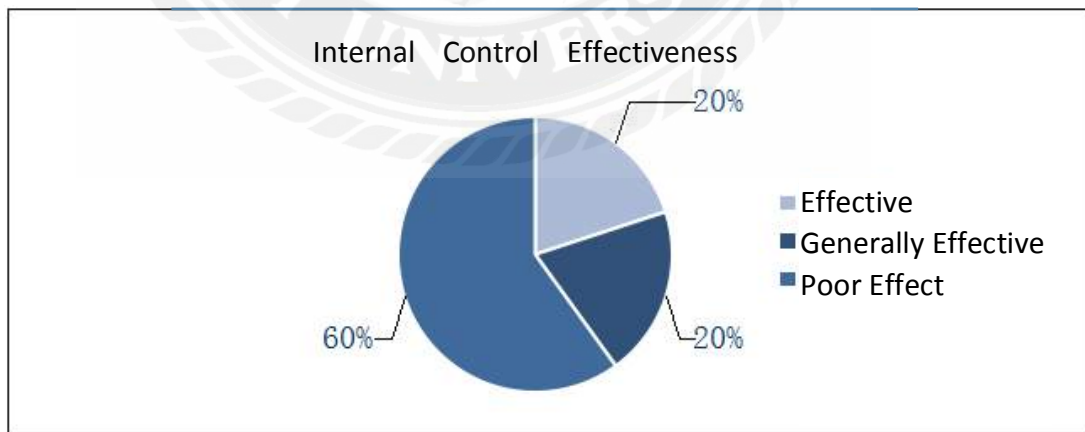
According to the calculation result analysis, the highest score of the integrated control effectiveness of five listed companies of China Electronics

Technology Group Corporation in 2013 was 71.2936, the lowest score is 59.0421. The scatter chart of the details of the comprehensive scores of the five companies is

Table5.13 Scatter Plot

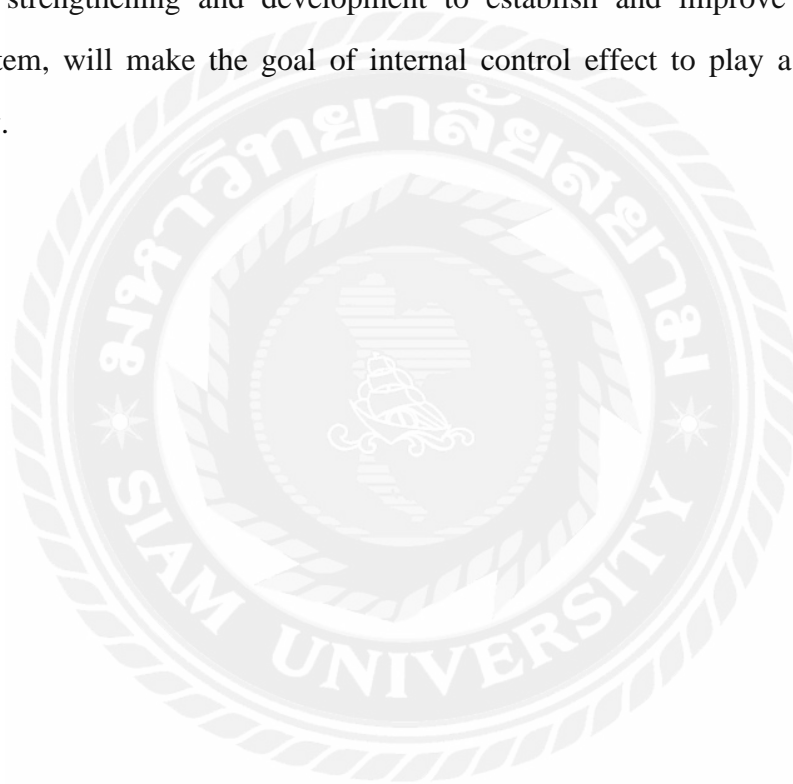


According to the appraisal level of the effectiveness of internal control as defined above, the level of internal control effectiveness is divided into seven levels. In 2013, there were 1 internal control of CIC in 5 A-share listed companies, accounting for 20% of the total. Three are generally effective, accounting for 60%; poor one, accounting for 20%. Specific circumstances:



The above analyzes the results of the comprehensive evaluation index of internal control of 2013 among the five A-shares listed companies of China Electronics Technology Group Corporation in accordance with the evaluation level of

the effectiveness of internal control constructed. At present, the results of internal control comprehensive evaluation index of China Electronics Technology Group Corporation A-shares of five listed companies. Most of the effectiveness of internal control is within the scope of internal control generally effective, as a whole is at a medium level, still has a lot of room for improvement, in the internal control of various enterprises also need to be further targeted to further improve and perfect. Overall, the internal control targets of China Electronics Technology Group Corporation A-share listed companies more obvious effect, I believe that through continuous strengthening and development to establish and improve the internal control system, will make the goal of internal control effect to play a greater role some utility.



CHAPTER 5

CONCLUSION, SUGGESTION AND THE RESEARCH LIMITATION

5.1 Research Conclusions and Policy Recommendations

Based on the above analysis results, it is found that the internal control of the five listed companies of China Electronics Technology Group Corporation in A-share is sound and well-established, most of which are within the general effective range of internal control, which is in a period of rising development and greater room for improvement. There are still some defects imperfect links. In order to obtain long-term sustainable development of the company, we must promptly improve and strictly follow the requirements of the "basic norms" to establish and improve the company's internal control system, strengthen the rectification for the weak links, timely make up for the hidden dangers and maintain the current internal control of the enterprise good status quo and constantly consolidate and improve the specific situation of enterprises, we must strictly implement the emphasis on the importance of efficiency, the focus shifted slightly how to improve the efficiency of internal control department transfer, the department heads should take the lead and effectively implement the internal control various measures were taken to continuously strengthen the awareness of internal control and to add some awareness-raising measures such as regular internal control meetings, setting up a special internal control team, considering the combination of internal control indicators and performance appraisal system, and internal control of daily work start, the implementation of internal control into the corporate culture of the spirit of the enterprise to form their own unique core competitiveness, and constantly narrow the gap to the model enterprises to learn from the development.

According to the goal-oriented framework of goal-oriented internal control evaluation system constructed above, we can calculate the score of internal control evaluation index of five listed companies of China Electronics Technology Group

A-share. According to the development status of the five companies, we can accurately evaluate and analyze out of five companies currently for internal control should work, companies should focus on "short board", in view of the weaknesses of internal control, vigorously improve and enhance the overall effectiveness. Based on this, this article will be based on the goal-oriented internal control point of view, the China Electronics Technology Group Corporation A shares of five listed companies were made the following suggestions.

5.1.1 Recommendations for Achieving the Goal of Legal Compliance for Operations

East China Computer to achieve this goal in the poor, involving passive litigation, easy to cause negative impact on the company, the risk of debt. Based on this, on the East China Computer made a few suggestions on this goal:

First of all, for the internal control and supervision of enterprises, the management should make great efforts to prevent the occurrence of risks, and can give due consideration to the formulation of relevant rules and regulations, so that the order prohibits and standardize the internal behavior of enterprises; secondly, enterprises should start from themselves, Internal vigorously popularize legal knowledge so that each employee is clear about their own responsibilities and obligations should be fulfilled. Enterprises can employ relevant legal advisors so that they can be properly dealt with in legal disputes and can take precautions to prevent legal disputes proactively. They are better able to perform their duties in compliance with legal compliance targets and fulfill their own responsibilities and obligations.

5.1.2 Recommendations to Achieve the Safety Objectives of Assets

Based on the above analysis of the specific values of the various enterprises obtained, it is concluded that in this target, the inefficient use of assets by the Guardian-Tongji Company and the poor ability of development of the Taiji Group and the SiChuan Electron Co., Ltd. In view of these short board gives the following policy recommendations:

First of all, do a good job in protecting the basic assets of the enterprise. Nowadays, to prevent misappropriation and illegal occupation of funds and theft of physical assets are still problems that should be solved by internal control of enterprises. The solution to this problem is to formulate the asset budget scientifically and rationally in the daily operation and management of enterprises, Scientific procurement, accurate acceptance, standardized custody, regular reconciliation inventory, scientific maintenance, regular maintenance, scientific treatment, prevention of loss of assets, depreciation of value, loss of assets or idle, resulting in waste of resources, to ensure that the enterprise inventory assurance in the best inventory status, to play the best effect of fixed assets; the second step, do a good job in the preservation and appreciation of corporate assets, and promote the continuous preservation and appreciation of assets. Enterprises should give full play to the material foundation of asset resources, and adjust and optimize the asset structure according to their own specific situations. The purpose is to speed up the turnover of accounts receivable and inventory, which is that the enterprises have sufficient funds to operate, so that the assets are preserved and added value.

5.1.3 Recommendations to Achieve the Reliability of Financial Reporting Recommendations

In the reliability of financial reporting, the five companies are all done better. We should continue to maintain this trend and keep improving. The policy recommendations for this goal are:

First of all, efforts should be made to supervise the internal control of enterprises so as to prevent the occurrence of fraud in financial information. In order to ensure the integrity of the enterprise's financial information, enterprises should establish a scientific and perfect internal audit institution, on the one hand, keep the auditors independent. On the one hand, they should constantly improve their audit methods and use high-tech audit methods to make the internal audit department's supervisory function On the other hand, the enterprise should publicly disclose the self-evaluation report of internal control. After investigating the relationship between

the effectiveness of internal control of several enterprises and whether to disclose the self-evaluation report of internal control, it is discovered whether the effectiveness of internal control of the enterprise is to some extent and whether the enterprise is willing to disclose the internal control self-evaluation report publicly This shows that enterprises should voluntarily disclose the self-evaluation report on internal control and have a positive and positive impact on the implementation of internal control so that the internal control system can better serve the enterprises.

5.1.4 The Goal of Achieving the Goal of Efficiency and Efficiency Management

Five enterprises in the completion of this goal, creating the lowest level of four electronics, data analysis shows that the efficiency of the operation of the enterprise low, poor corporate liquidity, poor income-generating assets, management of asset management ability needs to be further strengthened. Based on this, the following suggestions are given:

First of all, the most important thing is to improve the core competitiveness of enterprises. The core competitiveness is the backbone of an enterprise based on the market. At present, some enterprises choose a diversified business strategy for more comprehensive development. However, some enterprises have not clearly defined Primary and secondary, there has been a departure from the main business of the phenomenon, which is contrary to the goal of business development, in fact, is to weaken the core business of core competitiveness, so that enterprises do not have a relatively stable core competitiveness, it will lead to its The risk of investment mistakes in the process of growth and development. Enterprises should consider their own specific circumstances, consider the introduction of advanced science and technology, equipment and a large number of talented people to understand the market consumption trends, close to the consumer psychology, is to maintain market share, maintain competitive advantage, in addition, companies can consider extending the market scope, optimize the industrial structure, combine with the scientific innovation and development, cater to the current trend of scientific and technological reform and become the leader in the competition market. Secondly, starting from the

inside, the enterprise should strengthen the operation and management, establish a scientific and reasonable control standard and system, we will continue to improve the efficiency and effectiveness of our operations and strengthen cost management. To a certain extent, we will increase corporate profits and obtain more funds to achieve the goal of operational efficiency and efficiency.

5.1.5 Recommendations to Achieve the Strategic Goals of the Enterprise

Data analysis shows that the debt-to-asset ratio of Hikvision is lower than the industry average, indicating that the pace of development of the enterprise is too cautious and fails to achieve continuous innovation and development on the strategic target. At the same time, the development prospect of Huadong Computer is not optimistic. The strategic target to complete the effect is not satisfactory. This article combines the development of enterprises themselves, given the following policy recommendations:

First of all, make the market share of enterprises continue to be improved, companies can be based on a holistic SWOT analysis based on the overall development planning, fully developed in its own advantages, and guide the market to seize the initiative to achieve bigger and stronger business goals, at weak links carefully analyzed, targeted optimization, carefully analyze the development trend, and further improve market share; Second, improve the anti-risk ability of enterprises, after analysis, enterprises in the development process, the risks are divided into internal and external two part of which, the impact of external risks greater, companies should establish a risk prevention mechanism for external risks, to prevent and prevent business risk situation. In the strategic planning of enterprises, the managers of enterprises also play a certain role. Managers should assess the situation and base their efforts on the overall perspective of the enterprise. In the long run, they should give full consideration to risk measurement, reasonably analyze the gains and losses and make correct decisions.

5.2 Research Limitations

Internal control is based on the market rules of the party where the rules. After years of management practice, internal control has played a significant role in many aspects such as business activities, information assurance, inspection and fraud prevention, etc. It integrates various elements and resources of the enterprise and organically combines and coordinates one enterprises can maximize their own ability to play. Based on the target perspective of internal control, based on the selected indicators that can represent each target, this paper quantitatively builds the evaluation system of internal control of the enterprise. Taking CEC A-share listed companies as an example, this article evaluates the internal control of the five companies analysis. The innovation of this paper lies in the research from the perspective of external independence. According to the hierarchy of logical relations existing among the major internal control objectives, the selected indicators are empirically weighted and the framework of evaluation system is constructed.

After many years of evolution, the theory of internal control of enterprises has some defects and it is hard to solve. In view of the complexity and diversity of internal control theory and the requirement of researchers' ability and level of internal control evaluation. Due to the author's own knowledge and limited energy, this article still has some research and implementation limitations as follows:

First, during the process of selecting evaluation index according to the goal of internal control, all the indexes selected in this paper are based on the information disclosed in the case study, and some hard-to-obtain indicators are discarded, which may affect the reliability of the conclusion.

Second, the index weighting method selected in this dissertation is analytic hierarchy process. The method itself has its own limitations, which leads to the limitation of its use. In some cases, it will lead to inaccurate calculation results.

In the future study and research, I will continue to overcome the shortcomings recognized in the essay writing process, carry out targeted study and research, optimize continuously and strive for further improvement.

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