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The impact of equity incentive executive compensation on corporate performance

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Abstract

The management rights and ownership of modern enterprises are often separated. Enterprise owners, i.e. shareholders, pursue the maximization of enterprise profits, while enterprise managers pursue the maximization of their own interests. This leads to conflicts between the two parties in the process of pursuing the maximization of their respective interests. To address the inconsistency of interests in principal-agent relationships, effective corporate governance mechanisms are needed. The equity incentive system is one of the important means for modern enterprises to implement effective human capital management. Its purpose is to bind the personal interests of management with the interests of the enterprise, and motivate managers to create greater value for the company. With the transformation and upgrading of China's economy, the pressure of business competition among enterprises has increased. More and more Chinese enterprises are implementing equity incentive systems to better stimulate the motivation of managers and achieve the goal of good business development. Listed companies, due to their requirements for technology and talent aggregation, also favor the use of equity incentives to attract and gather more and better core employees, stimulate employees' scientific research and innovation capabilities, and promote faster and better development of the company.

This article is based on the principal-agent theory, incentive mechanisms, and corporate financial performance evaluation. Literature review is conducted using empirical research methods such as case analysis and regression analysis. Firstly, H Company is selected as the case object to introduce the two equity incentive policies and methods adopted by H Company in its business development, compare and analyze the financial performance of the enterprise during the same period, and evaluate the effects caused by different equity incentives. In order to verify the results of the case analysis, this article further uses 1049 Chinese listed manufacturing enterprises from 2013 to 2021 as samples for empirical research, and tests the research hypotheses in sequence. The final empirical results indicate that, firstly, the

implementation of equity incentive plans by listed manufacturing companies does significantly improve company performance, and this effect varies greatly for enterprises with different property rights and industries. Non state-owned enterprises have more market-oriented characteristics and a higher frequency of talent turnover. Therefore, compared to state-owned enterprises, the implementation of equity incentive plans has a more significant positive effect on the performance improvement of non-state-owned enterprise companies; High tech manufacturing enterprises have a stronger thirst for talent and require high-quality talents to ensure product and technological innovation. Therefore, implementing equity incentives has a more significant promoting effect on company performance than traditional manufacturing industries. Secondly, the incentive methods, incentive numbers, and exercise prices in the equity incentive elements can also significantly and positively affect the performance of listed manufacturing companies. Empirical evidence shows that an increase in incentive intensity will actually reduce company performance, while the correlation between validity period and company performance is not significant. The research results of this paper aim to provide reference for similar enterprises to implement equity incentives.

Key words: equity incentive; Financial performance; Excitation intensity

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Chapter 1 Introduction

1.1 Research Background

Equity incentive refers to rewarding directors, management, and core employees of a company with equity or the right to enjoy economic benefits, enabling them to participate in company decision-making, share profits and risks, and thus motivate them to serve the company in the long term. Compared with foreign countries, China's listed companies implemented the equity incentive system relatively late. The *Management Measures for Equity Incentive of Listed Companies (Trial)* issued by the China Securities Regulatory Commission in 2005 marked the official implementation of China's equity incentive system. This provides standardized guidance from multiple aspects such as incentive targets, program design, and planning elements. Subsequently, several important policies were introduced, such as the *Guiding Opinions on the Pilot Implementation of Employee Stock Ownership Plans by Listed Companies* issued by the China Securities Regulatory Commission, the *Measures for the Administration of Equity Incentives in Listed Companies*, and the *Guidelines for the Implementation of Equity Incentives in Listed Companies Controlled by Central Enterprises* issued by the State owned Assets Supervision and Administration Commission of the State Council. The implementation of these policies has further standardized and improved China's equity incentive assessment system and management methods. According to the Wind Economic Database, from 2006 to 2020, a total of 2547 listed companies issued 3904 equity incentive plans, of which 764 companies announced two or more plans. As of December 31, 2020, a total of 1819 listed companies on the A-share market have issued equity incentive plans, with 41% on the Shanghai and Shenzhen motherboard, 34% on the ChiNext board, 23% on the SME board, and 2% on the ChiNext board. With the continuous maturity of the ChiNext, the Shenzhen Stock Exchange revised the *ChiNext Stock Listing Rules* in June 2020, further expanding the incentive targets for listed companies. This policy accelerated the reform of the ChiNext equity incentive system. In addition, the China Securities Regulatory Commission issued the *Listing Rules for Stocks on the Sci-tech Innovation board of the Shanghai Stock Exchange* in June 2019, which will be conducive to the implementation of equity incentive plans for companies listed on the sci-tech innovation board. In the past decade, most listed companies have

implemented equity incentive plans for a period of 4-5 years, which fully reflects the company's emphasis on medium to long-term performance. This not only avoids short-term behavior that drives the sustainable development of the company, but also avoids the consequences of being disconnected from the incentive goals due to excessively long incentive periods.

At the same time, due to the original *Company Law* of our country prohibiting companies from repurchasing our company's stocks and prohibiting executives from transferring their holdings of our company's stocks. This institutionally constrains the implementation of equity incentive systems in listed companies, preventing operators from sharing the remaining interests of the enterprise. Financial performance evaluation, as the most important and fundamental part of financial management theory, runs through the entire process of financial management. It reflects the economic or social benefits achieved by a company's financial activities within a certain period of time. However, after the implementation of the *Company Law (Amendment)*, companies were allowed to repurchase the portion of the company's issued shares that did not exceed all, in order to reward the company's employees. This means that equity incentives will become a normalized mechanism for listed companies. The notice on issues related to the pilot reform of the split share structure of listed companies officially kicked off the reform of the shareholding system, eliminating the differences between circulating and non circulating stocks in the circulation system. This means that the split share structure has achieved a complete legal solution, while also laying the foundation for the management to exercise their rights. This means that the split share structure has achieved a complete legal solution, while also laying the foundation for the management to exercise their rights. The new law ensures the legitimate exercise of management rights from an institutional perspective, and the reform of the split share structure provides operational space for the effective exercise of management rights. As a modern enterprise management system, equity incentive mechanism is an important means to improve corporate governance structure and improve capital operation efficiency, and also an effective way to achieve the goal of maximizing enterprise value. The implementation of the *Management Measures for Equity Incentives of Listed Companies (Trial)* provides a prelude to the implementation of equity incentives in China. In 2008, the China Securities Regulatory Commission issued a memorandum on matters related to enterprise equity incentives 1. 2. 3, providing conditions for the further

implementation of the equity incentive system in Chinese enterprises In 2016, based on the trend of doubled development of equity incentives for Chinese enterprise management, the China Securities Regulatory Commission officially released and implemented the *Management Measures for Equity Incentives of Listed Companies*. This standardizes and improves laws such as restricted stocks and stock options for enterprises. For companies that wish to receive equity incentives, it is a legitimate and compliant guide, making it faster and more convenient for these companies to introduce equity incentive plans. That is to say, China's equity incentive system has entered a mature stage.

Since 2006, the new *Company Law* in China has carried out policy reforms on the system of enterprise stocks. In order to fully implement a series of laws, regulations, and policies related to the split share reform policy and equity incentives for listed companies in China, equity incentives have become an important choice for enterprise incentive management strategies. Equity incentives, as an incentive mechanism, can effectively enhance the enthusiasm of internal management, enhance the company's performance, and overall management level, thereby achieving the goal of increasing the company's value. According to statistics from the domestic securities market, after the revision of laws and regulations such as the *Management Measures for Equity Incentives of Listed Companies* and the *Company Law* in 2018, 397 A-share listed companies in China implemented equity incentive plans in 2018 alone. It can be seen that in the market economy environment, equity incentives have become an important way to mobilize the enthusiasm of internal management and employees in enterprises. At the same time, it also indicates that in order to improve the competitiveness of enterprises and maintain their long-term and stable development, it is very necessary to integrate equity incentives into the actual operation of enterprises. Therefore, it is necessary to use equity incentives to improve corporate governance in the future, in order to achieve the goal of improving corporate performance and promoting proactive management operations on the company's business.

Therefore, based on the special institutional background of implementing equity incentive plans in China, the paper conducts a practical study on performance-based equity incentives, and conducts a deep analysis of the effects of equity incentives on financial performance of listed companies. In China, equity incentives, as an incentive mechanism, have important significance in enterprise management. It not only enable management to obtain additional benefits, but also enhance enterprise’s cohesion and

market competitiveness. Therefore, this paper selects H Company's equity incentives as a case study to analyze the role of equity incentives in corporate financial performance, and tests the impact of equity incentives on corporate governance effects from the perspective of H Company's financial performance. At the same time, this paper further selected data from manufacturing listed companies from 2013 to 2021 as a sample to explore the impact of equity incentives on corporate performance. In empirical analysis, the relationship between equity incentives in listed companies and corporate financial performance was linked, and the mechanism of the impact of equity incentives on corporate financial performance was analyzed in depth. The impact effects between the two in different external environments were also explored. Therefore, this paper supplements the relevant research on the equity incentive system of listed companies in China and provides useful reference for future research work.

1.2 Research Significance

At the theoretical level, this paper further supplements and enriches the relevant research on equity incentives and corporate financial performance in listed companies, and further expands the application boundaries of information asymmetry theory, principal-agent theory, human capital theory, and incentive theory in Chinese listed enterprises. There are many domestic and foreign literature studies on the relationship between equity incentives implemented by listed companies and corporate financial performance and behavioral effects. Some literature studies the external environment such as macro policies, market factors, and institutional environment. There are also literature studies on the relationship between internal factors such as equity structure and nature, various characteristics of management, and corporate financial performance. However, there is limited literature on the impact and mechanism of equity incentives on corporate financial performance in listed companies. This paper links equity incentives of listed companies with corporate financial performance, deeply analyzes the mechanism of the impact of equity incentives on corporate financial performance, and explores the impact effects between the two under different external environments. Therefore, this paper provides a certain supplement to the relevant research on the equity incentive system of listed companies in China, and provides useful reference for future research work. At the same time, this paper attempts to incorporate factors such as enterprise R&D investment and financing constraints to study the mechanism of the impact of equity incentives on corporate

financial performance in listed companies, supplementing and improving information asymmetry theory, principal-agent theory, human capital theory, and incentive theory to a certain extent.

At the practical level, exploring the specific impact and possible pathways and mechanisms of equity incentives on financial performance of listed companies through empirical methods has certain practical reference significance for listed companies, relevant regulatory departments, and external investors. Firstly, for listed companies themselves, after understanding the impact effects and mechanisms of the two, they can promote and utilize equity incentive systems more reasonably based on their actual situation, improve core employee equity incentive measures, and provide reference for further improving their own research and development expense management and internal and external financing systems. For relevant regulatory authorities, in recent years, the equity incentive system for domestic listed companies has become increasingly common, relevant laws and regulations have been continuously improved, and the capital market has gradually developed. By exploring the relationship and existing pathways between the two, as well as the negative inhibitory effects of financing constraints, it can help them better implement and improve the capital regulatory system, as well as improve relevant laws and regulations and fully leverage the financing function of the capital market. Finally, for external investors, it can help them to a certain extent better understand and judge the specific relationship between the two, thereby determining whether to invest in or withdraw from the enterprise. Therefore, the research in this paper has certain practical reference value, which helps to conduct in-depth analysis of the fundamental aspects of enterprise operation, obtain higher capital returns, and reduce economic losses caused by drawbacks such as information asymmetry.

1.3 Research Content and Methods

1.3.1 Research Content

On the basis of summarizing and analyzing previous literature, this paper first selects H Company, a listed company on the main board of China, as a research case to explore the relevant influencing factors of corporate financial performance from the perspective of equity incentives. Subsequently, based on the results of case studies,

this paper applies theories such as information asymmetry and principal-agent to conduct qualitative analysis and propose relevant hypotheses. Once again, this paper selects listed manufacturing companies in China that implemented equity incentive plans from 2013 to 2021 as research samples to explore the impact and mechanism of equity incentives on financial performance of listed companies. Finally, this paper tested the hypothesis through multiple regression, stepwise regression, and other methods, and proposed corresponding conclusions and suggestions.

This paper is mainly divided into five parts, and its content is arranged as follows:

Chapter 1 is an introduction. This section mainly includes the following content. Firstly, it elaborates on the relevant research background and the theoretical and empirical research significance of this paper. After summarizing and analyzing domestic and foreign research literature, this chapter provides a brief summary and evaluation, while also analyzing the main research content and methods used in this paper, and describing the tentative innovation of this topic.

Chapter 2 is the relevant theoretical basis. This section mainly includes the following content. Firstly, it introduces the relevant concepts of equity incentives and corporate financial performance. At the same time, it describes the relevant theoretical foundations of this topic, such as equity incentives and the theory of stakeholders in corporate financial performance evaluation, and describes the evaluation methods of corporate financial performance.

Chapter 3 is the implementation process and effect analysis of H Company's equity incentive plan. This section mainly includes the following content. After analyzing the motivation of H company's equity incentive, this chapter proposes an analysis of its impact on the financial performance of the enterprise from the basic content of H company's equity incentive. Next, this chapter analyzes the internal mechanism by which equity incentives affect corporate performance.

Chapter 4 is an analysis based on panel data, exploring the impact of equity incentives on corporate financial performance. The research design section first introduces the samples selected in the paper and the corresponding data processing methods, and sequentially introduces the meanings and measurement methods of each variable selected in the paper. As a result, the model (4-1) and model (4-2) of this paper are proposed. The empirical part consists of two parts. The first part is the basic verification of the impact of equity incentives on company performance, and in-depth

testing of the heterogeneity of different property rights and the impact of equity incentives on company performance in high-tech manufacturing and traditional manufacturing industries. The second part is further validation of the relationship between equity incentive elements and company performance. Finally, a robustness test was conducted in this chapter to ensure the reliability of the results.

Chapter 5 is the research conclusion and contribution. This section mainly includes the following content. Firstly, this chapter summarizes the relevant research content of this topic, and finally summarizes the relevant research conclusions of this topic. At the same time, based on the research conclusions of this topic, relevant suggestions are proposed for optimizing the equity structure and strengthening equity incentives to impact the financial performance of enterprises. Finally, this chapter also points out some limitations of this research topic, and proposes some ideas and suggestions for further research on this topic.

1.3.2 Research Methods

The research of this topic adopts two methods: case analysis and systematic theoretical analysis, and uses various research methods to explore the factors that affect the financial performance of enterprises through equity incentives from both theoretical and empirical perspectives. This topic first establishes a theoretical analysis framework between equity incentives and corporate financial performance, and analyzes the impact of equity incentives on corporate financial performance. Then, this paper uses the collected data on the impact of H Company's equity incentives on corporate financial performance to verify the hypothesis proposed in this study. Finally, this paper proposes corresponding suggestions based on the research findings. The main research methods involved in this project are:

(1) Case analysis method. Based on a comprehensive analysis of existing literature, this topic first briefly analyzes the impact of the four dimensions of corporate governance on corporate financial performance in this topic. Secondly, it selects indicators that can comprehensively measure corporate governance and corporate financial performance, and proposes the research hypotheses for this topic. Then it selected the data results of H Company's equity incentives on corporate financial performance as a case study for analysis, thus summarizing the research conclusions of this topic and proposing relevant suggestions.

(2) Literature research method. When constructing the theoretical framework of

this topic, the author read various monographs, journal papers, etc. related to this research in advance, thus forming a systematic understanding of the content of this research topic. The existing literature provides important references for determining the research methods, relevant theoretical foundations, and constructing empirical models of this topic.

(3) Empirical research based on public data. On the basis of case analysis, this article conducts empirical research design on research hypotheses, which includes collecting sample company data, defining relevant variables, and setting appropriate empirical models. In the empirical process, the author first used Stata16 software to conduct statistical analysis on public data, and then used multiple regression method to test the impact of equity incentives on financial performance of listed companies.

Chapter 2 Literature Review

2.1 Research on the Motivation Factors of Equity Incentive

2.1.1 External Influencing Factors

The external factors that affect company performance include macro policies, market factors, institutional environment, etc.

The following scholars have conducted research on external macro policies. Marcus (1981) studied the impact of government policies on enterprises and proposed the viewpoint of objectively balancing risks and benefits to address the uncertainty of external policies. The sample of Carboni's (2017) study was taken from multinational listed companies in Europe, and it was found that after receiving government support, these manufacturing companies further increased their investment in research and development. Domestic scholars such as Gu Xiaming et al. (2018) found that when domestic economic policies are unstable, enterprises have a greater driving force to innovate, resulting in a corresponding increase in input and actual technological output. Miao Wenlong (2019) found that government subsidies are crucial for the development of enterprises. The more subsidies a company receives from the government, the more driving force it has to carry out business activities. Xia Qinghua and Tan Manqing (2020) found that in areas with poor development environments, the incentive effect of industrial policies on enterprises is stronger than in areas with good development environments. Zhu Jinsheng and Zhu Hua (2021) found that government subsidies exceeding a certain threshold can encourage different companies to choose equity incentives.

The research results of scholars on market factors are as follows. Yan Fei (2023) found that the shareholding ratio of controlling shareholders, the degree of correlation between shareholders, and the stability of shareholder structure all have an impact on the effectiveness of equity incentives. For example, companies with a higher proportion of controlling shareholders' shareholding may have significant constraints on their equity incentive effectiveness. Therefore, optimizing the equity structure and reducing the shareholding ratio of controlling shareholders can help improve the effectiveness of equity incentives. Secondly, the level of company management also has a significant impact on the effectiveness of equity incentives. Li Yue's (2021)

research shows that the level of enterprise management is directly related to the implementation effect of equity incentives. Enterprises with high management levels can better utilize equity incentive plans, which can enhance employees' work enthusiasm and ultimately enhance company performance. Therefore, strengthening internal management and improving management level is the key to improving the effectiveness of equity incentives. In addition, the level of company performance is also an important factor affecting the effectiveness of equity incentives. Wang Ruxue's (2020) study found a close relationship between company performance and the effectiveness of equity incentives. Good performance can improve the effectiveness of equity incentives, while poor company performance may weaken the positive effects of equity incentives. Therefore, improving a company's performance level helps to enhance the effectiveness of equity incentives. Finally, the external market environment also has an impact on the effectiveness of equity incentives. Li Dongjiao's (2020) research shows that factors such as market competition, policy environment, and capital market conditions can all have an impact on the effectiveness of equity incentives. In a fiercely competitive market environment, implementing equity incentive plans can enhance the competitiveness of employees and thus enhance the company's performance. In a relaxed policy environment and stable capital market, the effectiveness of equity incentives is more easily realized.

2.1.2 Internal Influencing Factors

The internal influencing factors of company performance mainly focus on corporate capital structure, personal characteristics of executives, and management incentives.

In terms of capital structure and finance, Hall and Oriani (2006) studied data from multinational listed companies and found that the degree of shareholder control over the company can have a strong impact on the company's R&D investment and future market performance. Aghion et al. (2013) found that the more shares institutional investors hold in a company, the stronger their control over management, and thus their ability to bear risks will be enhanced. They will also be more inclined to carry out equity incentive activities. In terms of executive characteristics, scholars' research results are as follows. Zhang Zhaoguo and Cao Danting et al. (2017) distinguished the term of a chairman into an existing term and an expected future term. They found that there is a non-linear relationship between enterprise technological

innovation and the former, while there is a positive correlation with the latter. Liu Yunguo and Liu Wen (2007) studied the relationship between management tenure, resignation, and R&D expenses, and found that a company's R&D expenses are positively correlated with management tenure, and negatively correlated with whether management resigns. In addition, scholars have also studied the impact of executives' physiological characteristics, tenure, education, and other aspects on enterprises. Zhou Jian, Qin Rong, and Wang Shunhao (2021) found that non independent directors of enterprises participate more in the development of enterprises because they are more involved in the operation of enterprises compared to independent directors, so they have a strong promoting effect on the development output of enterprises. Jiang Aihua and Fei Kunjie (2021) found that if a company's management has served in a local government, it will weaken the promoting effect of government procurement on the development of the company, while the weakening effect of previous experience in the central government on promoting the development of the company is not significant.

In terms of management incentives, Xia Yun and Tang Qingquan's (2008) empirical study found that after implementing equity incentive plans for management, the company's output will be improved. Especially when the H Company has good performance and abundant resources, this promotion effect is better. The scholar used empirical research methods to evaluate the implementation effect of equity incentive plans through the analysis of enterprise output data. In contrast, the author's research mainly adopts case and empirical research methods to deeply explore the relationship between equity incentive plans, management behavior, and corporate governance in specific companies.

Among the internal and external factors that affect company performance, external factors tend to lean towards policies and markets, which have uncertainty in their impact. The key to improving a company's performance still lies in the company itself, so internal factors have a significant impact on the company. In the internal factors of the enterprise, the management and core technical employees are the direct subjects of enterprise development. Developing a reasonable and effective equity incentive system can not only attract and retain talents in the short term, but also promote the two major development entities to play their own functions and roles in the long term, thereby strengthening the competitive advantage of the enterprise and promoting its sustainable development. Based on this, the following will conduct a

literature review on equity incentives and company performance.

2.2 Positive Impacts of Equity Incentives on Company Financial Performance

As early as 1976, Jensen and Meckling (1976) found that equity incentive schemes can give business operators the right to obtain undistributed profits, which can enable shareholders and operators to achieve convergence in the company's goals, that is, maximize the company's profits. This can effectively reduce the agency composition and improve the performance of the enterprise. So equity incentives can have a positive impact on a company's performance. Morck (1988) studied the Fortune 500 companies of that year and found that a certain degree of equity incentives can improve the financial performance of the company. In other words, the higher the degree of equity incentives a company provides to its managers, the better its performance will be. Murphy (1990) believes through research that equity incentives can to some extent enhance a company's own value. Guo Juying (2010) and Sun Yihui (2011) found in their research that equity incentives play a certain motivating role for company executives, among which corporate culture can have a positive impact on employee motivation. Sun Wenjun (2016) analyzed and studied the equity incentive plans of family enterprises. Through analyzing various data of the enterprise, he found that the more power and responsibility are separated from each other, that is, the higher the degree of "de familialization" of family enterprises, the better the effectiveness of equity incentives. Sheng Meixi (2018) conducted a study on the four equity incentives of Qingdao Haier Company and found that equity incentives did indeed promote the financial performance of Qingdao Haier Company. Among them, it is particularly significant for improving the profitability of enterprises, and has a good short-term impact on the stock market of enterprises.

The study on the relationship between equity incentives and corporate performance can be traced back to Jensen and Meckling's (1976) research. Management shareholding can enhance their sense of ownership, align their pursuit of interests with shareholders, pay more attention to the long-term development of the enterprise, and thus attach importance to investment in key R&D projects of the enterprise. Empirical research by domestic scholars Liu Yunguo and Liu Wen (2007) found that companies that implement equity incentives during executive tenure have

higher R&D expenses than other companies that do not implement equity incentives during executive tenure.

Tian Xuan and Meng Qingyang (2018) found that implementing equity incentive systems can promote the input and output sides of enterprises. Zhu Qi and Guan Xiru (2019) studied the impact of equity and salary incentives on A-share listed companies in Shanghai and Shenzhen, and segmented the main board and ChiNext markets. They found that equity incentives have a promoting effect on R&D investment in mainboard listed companies, but the impact of salary differences is not significant for mainboard and manufacturing listed companies. Zhao Xi and Lin Delin (2019) distinguished two groups of employees and executives in their research and found that implementing equity incentives for employees is more effective in promoting corporate performance than motivating executives. Wang Huaiming and Qian Erxian (2021) studied the impact of the external environment faced by high-tech enterprises when implementing equity incentives, that is, when market competition is fierce and industry concentration is high, motivating core employee equity can better promote the development of enterprise performance.

2.3 Negative Impacts of Equity Incentives on Company Financial Performance

David and Kasznik (2000) found through research that setting performance goals for managers after implementing equity incentives in a company can lead executives to do inappropriate things for personal gain. For example, operators may falsely report profits and adopt short-sighted behavior, which not only does not improve the company's performance, but also brings hidden dangers to the company's future development. Sanders (2001) found that business operators may avoid future operational risks in order to obtain stock option incentives by studying equity incentive schemes. But this can only ensure that the company's future operations will not make major mistakes, but it may not necessarily have a significant improvement for the company's future development. After executives receive stock options, in order to ensure the stability of the stock price, they will relax their assessment of the company's future performance. This is not beneficial for the future development of the enterprise. Shilong and Xu Hengbo (2013) conducted research on equity incentives in companies and reached a conclusion. Some companies' equity incentive plans cannot

change their financial performance, and even some companies' performance may worsen. This incentive plan, which has a worse incentive effect, often occurs in some traditional industry enterprises.

Vishny (1998) concluded through analysis. He believes that many cases indicate that although some corporate executives have received equity incentives provided by the company, these incentives may have a positive or negative impact on the company's subsequent operations. Therefore, it is difficult to determine the impact of equity incentives on corporate performance. Based on previous data, Wei Gang et al. (2000) found that the operating performance of a company is not significantly related to whether the company conducts equity incentives. Zhu Jian (2005) believes through research that there is no inevitable connection between the value of a company and whether the enterprise conducts equity incentives. At the same time, he believes that the model and effectiveness of equity incentives in China are not perfect, and most enterprises do not consider long-term effects when implementing equity incentives, and the continuity of incentives is not guaranteed. Adrian (2006) also believes that there is no correlation between equity incentives and corporate financial performance through research. Terry (2011) conducted empirical research and analysis, believing that equity incentives can significantly affect the equity structure of a company. But he believes that changes in the equity structure of enterprises cannot directly explain their impact on financial performance.

Some scholars have also made further supplements to the above research results. Zhang Haiping and Lv Changjiang (2011) argue through research that equity incentives not only have no impact on corporate performance, but sometimes may even be exploited by shareholders and managers, thereby harming the interests of the company. Since the implementation of the equity incentive pilot plan in China in 2006, there has actually been significant development, but it has also caused many controversies. Some equity incentive schemes have little effect after implementation, while some schemes actually lower the company's stock price and performance, leading to situations where some company management use accounting manipulation of profits to create profits for their own benefit.

Zhang Xingliang and Cheng Qiwei (2020) studied the external mechanism of fiscal subsidy policies to stimulate the development of enterprises. They found that when there are equity incentives within a company, financial subsidies are more effective in promoting R&D investment. Yang Huihui, Pan Fei, and Hu Wenfang

(2020) studied the impact of the internal environment faced by executives when receiving equity incentives. They found that major shareholder control is divided into two types: matching of two rights and separation of quantity rights. If the enterprise implements executive equity incentives, the technological capability of the enterprise increases in the environment of matching the two rights, but decreases in the separation of the two rights. Qin Yuanjian and Yang Jie (2020) found that financing constraints play a mediating role in employee shareholding and corporate performance development. Relieving financing constraints in high-tech enterprises is an important mechanism for the impact of employee stock ownership plans on corporate performance. Chen Pengcheng, Lin Lulu, and Li Chaofang (2021) included the impact of reverse acquisition clauses in their research on equity incentive systems. They found that granting equity after the implementation of anti-takeover clauses does not effectively promote the increase in corporate performance. This paper focuses on considering the external environment faced by listed companies when implementing equity incentive systems on corporate performance, thus incorporating the variable of financing constraints. Unlike the approach of Qin Yuanjian and Yang Jie, this paper does not explore the internal mechanism of financing constraints as an intermediary variable, but rather as a moderating variable to explore the impact of the external financing environment faced by listed companies when implementing equity incentive systems.

In addition to some literature in section 2.2 that suggests a positive correlation between equity incentives and company performance, some literature also finds that the two are not correlated or negatively correlated. Bizjak et al. (1993) found that the lower the shareholding of business operators, the higher their R&D expenses in their financial reports. When the shareholding ratio increases, the R&D expenses decrease. Chen Kunyu (2010) found that listed companies that focus on R&D innovation cannot promote an increase in corporate performance after implementing equity incentives for executives. Xu Changsheng et al. (2018) found that equity incentives cannot promote the increase of corporate performance by using propensity score matching to control for sample bias.

In addition, some literature studies have found a non-linear relationship between the two. Chen Huadong (2016) found that there is an "inverted U-shaped" relationship between the number of equity granted to executives and the company's R&D expenses during a manager's tenure. That is to say, after distinguishing the ownership

structure, it is found that the greater the incentive intensity of private enterprises compared to state-owned enterprises, the more obvious the effect. Zhou Fei and Yang Dongxu (2019) used different research methods to construct simultaneous equation models and obtained the same research conclusions as Chen Huadong. Zhao Shifang and Jiang Xu et al. (2020) studied panel data of A-share listed companies from 2005 to 2015 and found that executive equity incentives have an "inverted U-shaped" relationship with corporate output. Shao Jianbing and Wu Shan (2020) used high-tech enterprises as research samples to distinguish innovation into exploratory and exploitative types. They found that the implementation of equity incentive plans by enterprises is positively correlated with the former and has an "inverted U-shaped" relationship with the latter. Xie Sisheng and Yang Jingyi (2021) focused their research on employees of high-tech enterprises, distinguishing between state-owned and private enterprises. They found that the number of stocks granted to technology talents in private enterprises can promote corporate performance within a certain range, but exceeding the limit will suppress corporate performance.

2.4 Literature Summary

In terms of incentive motivation, it can be summarized as incentive motivation to improve performance and reduce agency costs, as well as welfare motivation for executives' self-interest. In terms of equity incentive models, most companies consider their own conditions and development stages, and use stock options and restricted stock models more frequently. In terms of performance impact, most studies believe that equity incentives have a positive impact on improving company performance, enhancing employee motivation, and increasing shareholder wealth. A few studies suggest that equity incentives have a weak impact on corporate performance, and there is no consensus on the impact of equity incentives on corporate performance. From the perspective of research objects, most existing literature focuses on the overall research of listed companies, with relatively few studies specifically targeting the equity incentives of a single private listed company. Most scholars study the impact of equity incentives on corporate performance and financial indicators, or study executive equity incentives. However, with the rapid development of information technology enterprises, equity incentives for core employees are becoming increasingly important for the long-term development of enterprises. Equity incentives for core technical talents are a good supplement to

equity incentives. From the perspective of research methods, most literature adopts empirical research and concludes that the overall situation is the case, and the applicability to individual individuals with specificity needs to be discussed. Therefore, using case studies to study targeted research questions is a good supplement to empirical research. At the same time, regarding the impact of equity incentives on company performance, most scholars believe that equity incentives have a positive impact on company performance, although some scholars believe that these effects may not be too obvious or may not have a certain correlation. However, it is widely recognized in the academic community that equity incentives have a positive impact on enterprises, and equity incentives are also positive and advisable.

Although domestic research on the impact of equity incentives on corporate financial performance has achieved certain results, there are still some shortcomings. Firstly, in terms of research methods, most literature tends to adopt normative research, case analysis, and qualitative analysis methods, lacking sufficient empirical research and quantitative analysis, which limits the universality and reliability of research results. Secondly, in terms of research subjects, domestic research mainly focuses on state-owned enterprises, with relatively little research on private enterprises, which reduces the universality of research results. Existing research on the impact of equity incentives on corporate financial performance often only takes a short-term perspective and pays less attention to the long-term impact, which is not conducive to a comprehensive evaluation of the actual effectiveness of equity incentives. In addition, domestic research on the design, implementation process, and financial performance evaluation indicators of equity incentive schemes is relatively general and lacks in-depth exploration. Furthermore, existing research lacks analysis based on China's unique institutional background and market environment, such as factors such as state-owned enterprise reform and market competition, which may affect the accurate judgment of equity incentive effects. Finally, research on the mechanism and transmission pathways of the impact of equity incentives on corporate financial performance is not yet sufficient, which leads to limitations in the academic community's understanding of the actual role and effectiveness of equity incentives.

In summary, there are still some shortcomings in the research on the impact of equity incentives on corporate financial performance in China, including methods, objects, perspectives, and depth. Future research should be improved and expanded on this basis. Based on the above experience summary, this paper will use a combination

of literature review, case analysis, and empirical research to comprehensively review the relevant theories of equity incentives, and verify research hypotheses through empirical analysis, improving the reliability and universality of the research. At the same time, this paper will also analyze the impact of equity incentives on corporate financial performance from multiple perspectives, including market response, core talent retention and introduction, enterprise R&D investment and innovation output, and financial performance, enriching the research content and perspective. Finally, based on panel data, this paper conducts empirical research on the impact of equity incentives on corporate financial performance. The samples in this paper cover different industries, enterprise nature, and enterprise scale, improving the representativeness of the research samples.

Chapter 3 Implementation Process and Effect Analysis of H Company's Equity Incentive Plan

3.1 Introduction to H Company

H Company was founded in 1979 and listed on the Shenzhen Stock Exchange in 2010, with stock code (002508) and stock abbreviation (H Company). It is a company specializing in the research and development, production, and sales of electrical products in the kitchen field. Its main production and sales include range hoods, integrated range hoods, gas stoves, disinfection cabinets, water purifiers, gas water heaters, and other household kitchen appliances, committed to creating a higher quality kitchen new life. After more than 40 years of development and growth, H Company has achieved the top sales of range hoods globally and domestically for six consecutive years. The embedded products launched by H Company have unique characteristics, greatly saving kitchen space, and are innovative products for kitchen appliances. H Company is also one of the first Chinese kitchen appliance brands to expand into overseas markets. After more than 10 years of continuous development, H Company's high-end image and international influence have been enhanced, making it a successful case of Chinese brand internationalization.

As of 2020, H Company's operating revenue was 8.2 billion yuan, a year-on-year increase of 4.74%, with range hoods accounting for 50.56% and gas stoves accounting for 23.59%. However, overall, the sales of range hoods and gas stoves have declined. The main reason for the decline in sales is the impact of the COVID-19 epidemic, which has led to a certain impact on the entire kitchen appliance industry. However, in 2020, the company's sales of dishwashers and disinfection cabinets increased significantly, which represents an increase in consumer demand for a kitchen living experience. That is to say, the future development space of kitchen appliances is enormous, making it the most anticipated market in the entire household appliance industry. At the same time, innovation in kitchen electrical products is accelerating, mainly manifested in three aspects. Firstly, the iteration of individual products is accelerated, and the product functions are diversified. Secondly, the concept of an integrated kitchen has become increasingly popular, with a focus on integrated

kitchen systems as the future development direction. Thirdly, health products represented by dishwashers, disinfection cabinets, and embedded steaming and baking machines are gradually becoming popular. In the long run, technologies such as artificial intelligence and the Internet of Things will lead the upgrading of intelligent products, while also leading the transformation of the kitchen appliance industry.

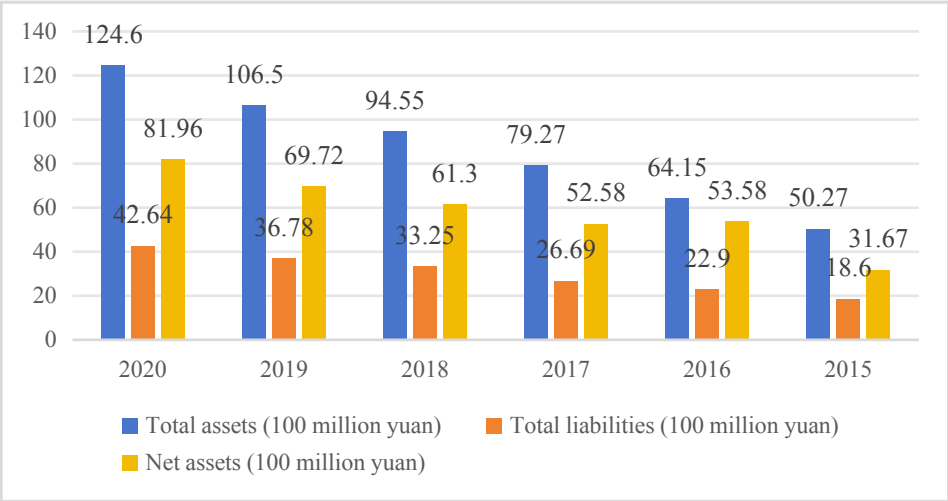


Figure 3-1 Financial Situation of H Company from 2015 to 2020

According to figure 3-1, it can be seen that since 2015, H Company's assets, liabilities, and net assets have steadily increased year by year, with an asset liability ratio basically stable at 35%. The H Company has good debt paying ability and stable development prospects. As of 2020, the company's assets had reached 12.46 billion yuan, and the net assets listed on the Shenzhen Stock Exchange in 2010 were 137100 yuan. After ten years of development, the net assets have been 9 times higher than when it went public that year. The above data all indicate that H Company's financial condition is good and its future development prospects are bright. At the same time, as a leader in the household kitchen appliance industry, H Company has increased its research and development in emerging kitchen appliance categories while ensuring the steady growth of traditional kitchen appliance categories, continuously strengthening its leading advantage and moving towards the centenary of the enterprise.

According to table 3-1, the equity structure of H Company is relatively simple. The domestic non-state-owned legal entity Hangzhou Boss Industrial Group Co., Ltd. ranks first in terms of shareholding ratio, with a shareholding ratio of 49.68%. Other domestic and foreign natural persons and legal entities jointly hold shares. Founder Ren Jianhua is the actual controlling shareholder and the largest shareholder of the company. Except for his wife Shen Guoying, who holds shares among the top ten

shareholders, the other shareholders have no family relationship with Ren Jianhua. The reasonable and moderately concentrated equity structure of the H Company helps to improve its efficiency in decision-making and handling daily affairs, ensuring the sustainability of the company's strategy formulation and execution.

Table 3-1 Shareholdings of the Top 5 Shareholders of H Company at the End of 2020

Name of shareholder	Nature of shareholders	Shareholding ratio (%)
Hangzhou Boss Industrial Group Co., Ltd	Domestic non-state-owned legal persons	49.68
Hong Kong Securities Clearing Company Ltd. (HKSCC)	Overseas legal person	13.09
Shen Guoying	Domestic natural persons	1.29
TEMASEKFULLERTONALPHAPTELTD	Overseas legal person	1.10
Hangzhou Jinchuang Investment Co., Ltd.	Domestic non-state-owned legal persons	1.00

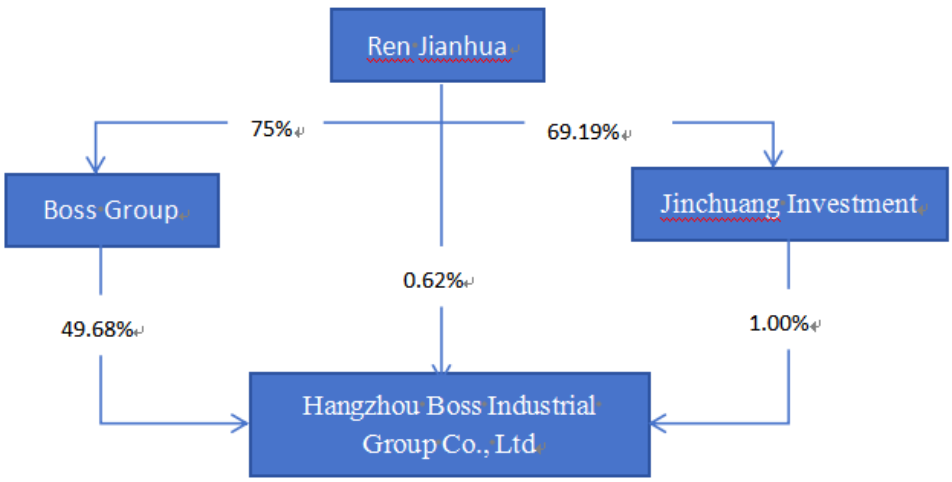


Figure 3-2 Property Rights and Control Relationship between the Company and the Actual Controller at the End of 2020

3.2 Background and Motivation of H Company's Equity Incentive Implementation

3.2.1 Background of H Company's Equity Incentive Implementation

(1) Sound legal environment

In 2005, the China Securities Regulatory Commission issued the Trial Measures for Equity Incentives, marking the first time that Chinese enterprises have implemented equity incentives. Subsequently, in 2006, the State owned Assets Supervision and Administration Commission issued new policies, providing policy support for China's state-owned enterprises to implement equity incentive plans. In April 2019, the Shanghai Stock Exchange issued the *Listing Rules for Stocks on the Science and Technology Innovation Board of the Shanghai Stock Exchange*, which provided guidance for implementing equity incentive plans for enterprises on the sci-tech innovation board. At the same time, the country has increased its efforts to reform state-owned enterprises and continuously innovate equity incentive policies, thus providing a favorable legal environment for enterprises to implement equity incentives. According to figure 3-3, it can be seen that from 2006 to 2010, Chinese enterprises began to explore the implementation of equity incentive plans, with an average annual announcement quantity of only 42. The number of announcements of equity incentive plans steadily increased year by year from 2011 to 2016. The number of equity incentive announcements in 2017 saw a cliff like growth, due to the official implementation of the *Management Measures for Equity Incentive of Listed Companies* in May 2016. This means that China is about to enter a new era where the system is relatively mature, the market orientation is relatively clear, and the design is gradually independent, providing a good platform for enterprises to implement equity incentive plans. Therefore, the number of companies implementing equity incentive plans surged in 2017.

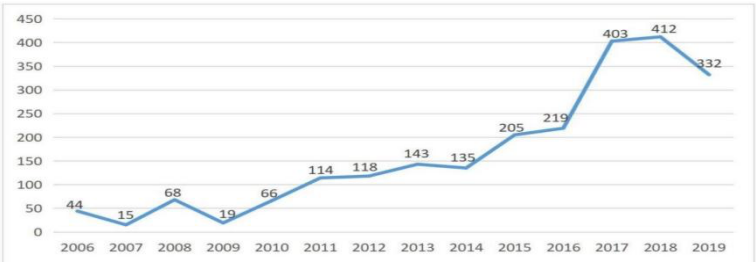


Figure 3-3 Number of Equity Incentive Announcements in the A-share Market from 2006 to 2019

Since announcing the first equity incentive plan in 2014, H Company has successively announced five more equity incentive plans in 2015, 2018, and 2021, targeting senior management, core technical personnel, and agents. The first restricted stock incentive plan in 2014 was a period of steady growth in the number of announcements of equity incentive plans in the A-share market. It can be said that H Company has also complied with the policy promotion and actively implemented the equity incentive plan to attract and retain talents.

(2) Intensified industry competition

Household kitchen appliances have always been an important consumer product in consumer life. With the advancement of urbanization and the increasing income level of residents, people have put forward higher requirements for household kitchen appliances, which has led to progress and development in the kitchen appliance manufacturing industry. At the same time, consumers' requirements for the quality and appearance of kitchen appliances are gradually increasing. The demand for traditional kitchen appliances such as range hoods and gas stoves is decreasing, and the demand for more kitchen appliances that represent exquisite lifestyles such as dishwashers, electric ovens, steam stoves, and other new products is expanding. In the future, with technological progress, high-end and intelligent home appliances will become the industry's development trend. At the same time, many foreign kitchen appliance manufacturers have rushed into the domestic market competition, exacerbating the fierce competition between household kitchen appliance products. Therefore, innovative research and development is a crucial guarantee for enterprises. However, research and development itself requires the support of talents. In order to attract and retain core technical talents, various kitchen appliance companies have gradually introduced equity incentive plans to increase their research and development capabilities. As a leading enterprise in the kitchen appliance industry, H Company was the first to launch an equity incentive plan in 2014 and an employee stock ownership plan in 2015. It grants shares to the target company, closely linking the interests of core employees with the economic interests of the enterprise, ensuring the long-term retention of core R&D personnel in the enterprise. This effectively enhances the core competitiveness of the enterprise and greatly promotes the long-term and stable development of H Company in the future.

(3) Huge market demand

In recent years, China's economic level has developed rapidly, and the living standards of the people have also been continuously improving. According to the *2020 National Economic and Social Development Statistical Bulletin of the National Bureau of Statistics*, as of the end of 2020, China's urbanization rate has increased to 60%, and it is expected to increase to 65% in the future. With the continuous improvement of urbanization level, there is great potential for the development of the domestic kitchen appliance industry. At the same time, with the rise of the residential economy and people's health awareness, people are paying more attention to the improvement of the kitchen life experience, especially the health products represented by dishwashers, disinfection cabinets, and steam grills, which are very popular. The future kitchen appliance market has become the most anticipated market in the entire household appliance industry. H Company is a leading enterprise in household kitchen appliances in China, with not only a large domestic market share, but also a stable market share in the international market. In order to continue to ensure the position of H Company in the domestic and international markets, it is necessary to enhance its productivity, product innovation and development capabilities, in order to deepen intelligent manufacturing, lean operations, and technology driven, and continuously optimize its organizational structure. Therefore, the implementation of equity incentive plans by H Company is an inevitable trend in the development and operation of the company.

3.2.2 Motivation for H Company to Implement Equity Incentive

In 2010, H Company went public, and 2013-2014 was the two years of rapid development in the home appliance industry, with fierce competition in the industry. According to the annual report data of H Company from 2011 to 2013, the proportion of highly educated talents in enterprises only reaches 13.5%, which limits their research and innovation capabilities. At the same time, industry competition is intensifying. Multiple reasons have prompted the implementation of H Company's equity incentive measures. It can be said that the reasons for implementing equity incentives in enterprises include the following:

(1) Reducing agency costs

The ownership and management rights of modern enterprises are separated, and managers are responsible for the daily operations of the enterprise based on their

professional abilities, while owners do not participate in the daily business activities of the enterprise. This leads to a contradiction of information asymmetry between the two. Managers and owners do not have consistent goals, and they are more concerned with their own interests, such as high salaries, social status, or work environment, which are conducive to their own development. This may lead them to make decisions that deviate from the goal of maximizing shareholder interests. The conflict between the two has emerged, followed by an increase in agency costs. The implementation of equity incentive plans by companies can precisely alleviate the agency problem. By granting managers a portion of the company's stock to become part of the company's owners, managers will consider issues from the perspective of shareholders when making decisions, striving to maximize shareholder equity. In this way, the conflict of interest between the two will be alleviated. At the same time, the implementation of equity incentive plans will align the interests of managers and owners, and the cost of agency can also be effectively reduced.

(2) Relieving financial pressure

Enterprises usually adopt incentive models such as stock options, employee stock ownership, and virtual stocks to implement incentive plans. This model does not occupy company funds and does not involve the issue of company cash flow, greatly reducing the financial pressure on the enterprise to pay salaries. It can also appropriately reduce operating costs, which is beneficial for the financial performance of the enterprise. Since its listing in 2010, H Company has continuously expanded its scale and business scope, making it difficult to continue using the original traditional salary model. Moreover, the increase in the number of employees has brought high salary expenses to the enterprise. Once the enterprise encounters financial constraints, it is unable to pay corresponding compensation to employees, which has an impact on the long-term and healthy development of the enterprise. At this time, the new CEO Ren Fujia launched the first phase of the equity incentive plan after taking office, granting restricted stocks to company directors, middle and senior management personnel, and core technical personnel. This measure can temporarily alleviate the pressure on corporate cash flow by granting equity, and on the other hand, it can stimulate executives to work diligently through equity incentives, killing two birds with one stone.

(3) Attracting and retaining talents

As a leading brand of household kitchen appliances, H Company has always

been committed to the research and development of new products. With the intensification of market competition, the speed of technological innovation in the home appliance industry is also increasing, and the demand for talent is gradually increasing. The kitchen appliance industry itself requires a large number of R&D personnel, which is a challenge for enterprises. According to the annual report data of H Company from 2011 to 2013, only 12.71%, 14.10%, and 13.03% of the company's employees had a bachelor's degree or above during this period. The low proportion of highly educated talents in enterprises limits their R&D and innovation capabilities. To enhance the innovation ability of enterprises, it is necessary to introduce high-quality talents and establish their own research talent team. Innovating and developing new products in the face of constantly changing consumer demands is a magic weapon for enterprises to stand out in the fierce competitive environment. In September 2014, H Company implemented its first equity incentive plan, followed by an employee stock ownership plan in 2015, an agent stock ownership plan in 2018, and a core personnel stock ownership plan in 2021. Overall, H Company has utilized equity incentives to attract and retain talent.

3.3 Content of H Company's Equity Incentive Plan

H Company first implemented the equity incentive plan in 2014, and as of 2021, it has implemented six phases, mainly involving three entities: corporate executives, core technical employees, and agents. The agent shareholding plan is the first new incentive plan implemented for agents in the entire household appliance industry, which is of great significance for enhancing the value of the enterprise. According to the draft announcement of the six phase equity incentive plan launched by H Company, the following is a brief introduction to the content of the incentive plan. Figure 3-4 shows the timeline of H Company's six phase equity incentive plan.

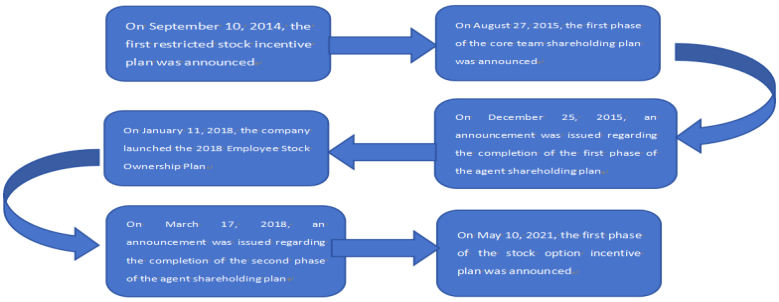


Figure 3-4 Time Flow Chart of H Company's 2014-2021 Equity Incentive Plan

3.3.1 Restricted Stock Incentive Plan

In order to further establish and improve the company's long-term incentive mechanism, in accordance with relevant laws, regulations, and normative documents, H Company announced the first restricted stock incentive plan on September 10, 2014. The first plan involves 87 incentive targets, including 7 management personnel and 80 core technical personnel. A total of 4.5 million restricted shares were issued, accounting for 1.41% of the total 32 million shares on the announcement date. Among them, 4.07 million shares were first granted to the incentive target, accounting for 90.4% of the total plan. 430000 shares were reserved for grant within 12 months from the first grant date, accounting for 9.6% of the total incentive plan. The exercise conditions of this incentive plan are two indicators: net profit growth rate and return on equity. The net profit growth rate of the first grant from 2014 to 2016 should be greater than 30%, 65%, and 110%, and the return on equity should not be less than 20%. The net profit growth rate of the reserved portion from 2015 to 2017 should be greater than 65%, 110%, and 160%. Similarly, the return on equity should not be less than 20%.

The validity period of the term equity incentive is from the date of grant of restricted stocks to the date of complete unlocking or repurchase cancellation of all restricted stocks, with a maximum of 5 years. Regarding the reservation of restricted stocks, due to the company's allocation of capital reserves in the 2014 annual profit distribution, the original 4.05 million shares of restricted stocks were adjusted to 6.075 million shares by transferring 5 shares per 10 shares to owners. The reserved portion was also adjusted from 430000 shares to 645000 shares, accounting for 0.13% of the company's total share capital on the grant date.

3.3.2 Employee Stock Ownership Plan

In order to promote the transformation from a "manager" to a "partner" identity, H Company announced on August 27, 2015 the "Core Management Team Shareholding Plan", which regards the shareholding plan as an innovative long-term incentive mechanism. The number of incentive targets for the first phase of the core team shareholding plan is 12, involving company directors, supervisors, and senior

management personnel. The planned fundraising amount is 16 million yuan, and the stock lock-in period is more than 12 months. The validity period is three years from the date of approval by the shareholders' meeting. After the expiration of the validity period, it can be extended upon approval by the board of directors upon the approval of the shareholding plan management committee.

On January 10, 2018, H Company launched an employee stock ownership plan, in which employees can voluntarily participate and implement the stock ownership plan in accordance with legal and compliance principles. At the same time, employees should bear corresponding risks, bear their own profits and losses, and have equal rights and interests with other investors. Its purpose is to establish and improve a mechanism for sharing benefits between employees and owners, enhance employee cohesion and the company's competitiveness, and fully mobilize employees' work enthusiasm and creativity. The personnel participating in this employee stock ownership plan involve a portion of the company's directors, supervisors, executives, core technicians, business personnel, as well as supervisory level and above employees who have worked in the company for more than one year, covering a wide range. There are two main sources of funding for employee stock ownership plans: employee self raised funds and company loans, with a ratio of 1:1 between borrowing and self raised funds. The total amount of funds raised this time is 206.4 million yuan, with a stock price of 51.56 yuan per share, involving a total of 4 million shares of the underlying stock, accounting for 0.42% of the company's total existing capital of 949032800 shares. The duration of this plan is three years, and the lock-in period of the underlying stock is not less than 12 months.

3.3.3 Agent Shareholding Plan

The marketing models of China's home appliance industry are mainly dealer based and agent based, and the dealer model is also the basic sales model chosen by most home appliance industries at present. In this mode, when the distributor receives the product, the enterprise can recognize the revenue, and the risk and reward are transferred to the distributor together. For the enterprise, the operational risk is relatively small and there is no backlog of large inventory. In the agent model, agents are more like company branches, and receiving goods from the headquarters does not require prepayment. Enterprises only recognize revenue when agents at all levels sell products to end consumers, and agents earn price differences from it. The sales model

of H Company is an agent model. Except for sales subsidiaries established by companies in Beijing and Shanghai that directly sell to the outside world, other regions in China adopt the regional general agent model. The regional general agent is responsible for product sales, store establishment, and market expansion within the region. In order to promote the efficient operation of the agency system model, strengthen the maintenance of relationships with agents at all levels, and closely link the interests of agents with the company to improve their loyalty to the company, H Company implemented two phases of agent shareholding plans on August 27, 2015 and March 17, 2018, respectively.

Firstly, the upper limit of the proposed fundraising amount for the first phase of the agent shareholding plan is 99.2 million yuan, with the source of funds being self raised by the agent. The underlying stock is 8.73 million shares, accounting for approximately 1.80% of the company's existing total share capital. The company entrusts Nanhua Futures Co., Ltd. to be responsible for management, and the upper limit of the fund management plan share is 297.6 million shares. Priority and secondary shares are set up in a ratio of 2:1. The agent's shareholding plan fully subscribes to secondary shares, with priority given to Hangzhou Boss Industrial Group's subscription. If the market is facing a decline, the decline in secondary shares may be greater than the decline in the company's stock. Similarly, if the market rises, the returns on secondary shares will also be greater, which means that the gains and losses on secondary shares are amplified through share grading. The second phase of the agent shareholding plan was released on March 17, 2018. This shareholding plan is different from the first phase, with a share grading ratio of 1:1, and the actual profits are distributed based on 15% and 85% for priority and secondary, respectively.

3.3.4 Stock Option Plan

The sudden COVID-19 in 2020 has brought down the global economy, and the epidemic prevention and control measures have also caused trauma to China's real economy. As a leading enterprise specializing in the production and sales of household kitchen appliances, H Company's main products during the epidemic, such as large suction range hoods and gas stoves, have seen a decline in sales of traditional household kitchen appliances. On the contrary, household disinfection and sterilization appliances such as dishwashers and disinfection cabinets have been sought after and their sales have increased. In order to stabilize the company's

position in the market, H Company must increase its R&D and innovation capabilities, attract and retain technical talents. Therefore, the company released the first phase of the stock option plan on May 10, 2021. The target audience for this equity incentive is 142 people, involving middle-level management personnel and core technical (business) backbone. A total of 3.13 million stock options were granted, with a underlying stock price of 36.83 yuan per share. The proportion of the number of stock options to the total share capital on the announcement date of this incentive plan is 0.33%. The funds raised this time will be used to supplement the company's working capital. In terms of exercise conditions, this incentive plan is based on the operating revenue in 2020, with a compound growth rate of no less than 10% from 2021 to 2023, and the net profit attributable to the parent company shall not be lower than the net profit attributable to the parent company in 2020.

3.4 Implementation of Equity Incentives in H Company

H Company has implemented an equity incentive plan since 2014 and has implemented six equity incentive policies as of 2021. Among them, the company is the only one in the industry that implements equity incentives for agents. The six previous equity incentives involved a wide range of objects, and innovatively utilized employee stock ownership plans to incentivize employees within the company, laying a solid foundation for the long-term healthy development of the company. The previous section has provided a brief introduction to the content of the six equity incentive plans, followed by a brief analysis of the implementation of the six incentive plans.

3.4.1 Implementation of Restricted Stocks

As of 2019, the last reserved portion of H Company's first restricted stock incentive plan has been unlocked. From 2014 to 2016, the company's return on equity was 22.45%, 25.79%, and 27.79%, respectively, which exceeded the annual assessment target of no less than 20% for the return on equity. At the same time, the net profit growth rate was also higher than the target set for the year. For the portion of stocks reserved for grant, from 2015 to 2017, the company's net asset return rates were 25.79%, 27.79%, and 34.07%, respectively, and the net profit growth rates were 113.70%, 199.89%, and 267.69%, respectively. It can be said that the company

exceeded the target and had a significant incentive effect. That is to say, this incentive plan has greatly enhanced the profitability of the company, especially the net profit growth rate. This growth can be regarded as a "textbook" type of growth, providing a successful reference for the company to carry out equity incentive plans in the future.

On May 5, 2015, the 2014 equity distribution plan of H Company was approved by the shareholders' meeting, which was carried out by transferring 5 shares per 10 shares from the capital reserve to all shareholders. The number of restricted shares granted in the first installment was 2.025 million shares, and the number of shares after the change was 6.075 million shares. In 2014, the net income per share was 1.18 yuan. In January 2016, due to the fulfillment of the conditions for the first grant of performance evaluation, the restricted stocks granted for the first time were unlocked. The number of shares that can be unlocked by the 86 incentive targets in the first phase is 1.8225 million, with 4.2525 million shares remaining after the first phase is unlocked. In April 2016, due to the resignation of the incentive target, the company repurchased and cancelled 10500 restricted stocks that the incentive target had already acquired but had not yet been unlocked. The remaining number of shares after the first phase of unlocking of the company after deregistration is 4.242 million shares.

On May 5, 2016, the shareholders' meeting of the company approved the *2015 Profit Distribution Plan*, which increased the number of restricted shares from 6.075 million shares to 9.1125 million shares by transferring 5 shares per 10 shares from the capital reserve to all shareholders. The remaining number of unlocked shares in the first phase has been adjusted from 4.242 million shares to 6.363 million shares. The number of reserved restricted shares has been adjusted from 640000 shares to 960000 shares. The second phase of unlocked equity incentive plan was announced in January 2017. Due to one of the 86 incentive recipients in the first phase resigning and one failing the assessment, the 31500 shares of Peng Zhonglian, who failed the performance assessment for the first incentive recipient, were repurchased and cancelled. And the H Company has unlocked 3.618 million shares for 84 people, leaving 2.7135 million shares after the second phase of unlocking. In February of the same year, H Company announced a notice of restricted stock reserved for grant, granting 288000 shares to 28 incentive recipients who met the unlocking conditions, accounting for 0.0394% of the total company's share capital, with the remaining 672000 shares.

In May 2017, the company implemented the 2016 equity distribution plan, which

increased by 3 shares for every 10 shares. In February 2018, H Company announced the announcement of the third unlocking period, which allowed 84 eligible incentive recipients to unlock a total of 3.52755 million restricted shares. In January 2019, the third tranche of 36262500 restricted shares was lifted from the 27 individuals who were reserved for grant (one person resigned and the company repurchased a total of 8775 shares). At this point, all three phases of the first restricted stock in 2014 have been unlocked.

3.4.2 Implementation of Employee Stock Ownership Plan

According to H Company's announcement, the implementation of the first phase of the core management team shareholding plan on December 24, 2015 is as follows. Under the operational management of Nanhua Futures Management Company, the corresponding product of the core management team's shareholding plan, the "Nanhua H Company Management Team Shareholding Phase 1 Asset Management Plan", has completed the stock purchase plan in the secondary market. The number of shares it purchased is 1.1719 million, with an amount of 40.80 yuan per share. On the day of purchase, it accounted for 0.24% of the company's total share capital, and the lock-in period is 12 months from the announcement.

On May 5, 2018, the purchase of H Company's employee stock ownership plan was completed, and the management party, Shenzhen Nuts Asset Management Company, completed the purchase plan by purchasing the product corresponding to the employee stock ownership plan, "Fruit Capital - H Company Win-win No.1 Private Equity Investment Fund", in the secondary market. At that time, the average transaction price of the stock was 35.94 yuan per share, and the number of purchased shares was 5.4433 million, accounting for 0.57% of the company's total share capital. On July 22, 2020, H Company announced that all shares held in the 2018 employee stock ownership plan will be sold through centralized bidding, and subsequent property liquidation and distribution will be carried out. At this point, the implementation of the employee stock ownership plan has been completed.

H Company has implemented the employee stock ownership plan twice, with the first implementation involving senior executives. The second phase of the shareholding plan has expanded the scope of personnel, allowing more employees to enjoy the company's stock, cultivating their sense of ownership, and thus sharing risks and benefits with the company. Through simple analysis and summary, the employee

stock ownership plan has the following three functions:

Firstly, the corporate governance structure has been optimized and the brand value of the H Company has been enhanced. By implementing an employee shareholding plan to increase their holdings of company stocks, it is beneficial to establish and improve a sharing mechanism that combines the interests of individual employees and the overall company. At the same time, employee shareholding will to some extent disperse the company's equity, greatly reducing the possibility of rights being concentrated on a certain person, which can effectively improve the level of corporate governance.

Secondly, it has improved the company's constraint mechanism and reduced agency costs. On the one hand, the first phase of the core team shareholding plan has promoted the transformation from "manager" to "partner", fully leveraging the operational initiative of managers to improve enterprise management and performance. They will always aim to safeguard the interests of the company, actively take on the risks and challenges of operation, and play the greatest role in ensuring the company's long-term competitive advantage. On the other hand, through the implementation of employee stock ownership plans, a mutual supervision and constraint mechanism has been formed among employees, operators, and owners. The contradiction of information asymmetry between owners and operators can also be resolved, which can to some extent reduce agency costs.

3.4.3 Implementation of Agent Shareholding Plan

On December 25, 2015, H Company announced the completion of the implementation of the first phase of the agent shareholding plan. According to the announcement, the entrusted party Nanhua Futures Co., Ltd. purchased the "Nanhua H Company Agent Holding Phase 1 Asset Management Plan" stock in the secondary market at a price of 40.78 yuan per share, accounting for 1.50% of the company's total share capital, with a quantity of 7.2812 million shares. The implementation of the second agent shareholding plan is as follows. On March 5, 2018, the entrusted party Shenzhen Nuts Asset Management Company purchased 8311165 shares of the company's stock through the secondary market bidding trading method of the Shenzhen Stock Exchange, with an average transaction price of 39.81 yuan per share. As of August 19, 2020, all shares of the second phase of the company's agent shareholding plan have been sold through centralized bidding, and subsequent

property liquidation and distribution work will be carried out. At this point, the second phase of the agent shareholding plan has been fully implemented.

H Company is an enterprise in the entire household appliance industry that implements an agent management model, and is also the only enterprise in China that implements an equity incentive plan for agents. The company focuses on maintaining relationships with agents, granting core employees agent shares, realizing their desire to become "bosses", fully leveraging the advantages of agents in distribution and delivery, and improving the consumer experience. The company can also timely understand market changes and consumer demand changes through feedback from agents, thereby increasing the market share of products. According to the comparison table of the two agent shareholding plans, it can be seen that the amount of funds raised by the second agent shareholding plan is higher than that of the first agent shareholding plan, and the proportion of agent shares has also changed. Within three years, the H Company has implemented two agent shareholding plans, reflecting the company's emphasis on the future development of agents and looking forward to the development and growth of the agent team.

3.5 Analysis of the Effects of H Company's Equity Incentive Implementation Plan

3.5.1 Share-price Effects

Stock price is the value of a stock, representing the trading price of a stock. It fluctuates up and down with changes in the market, hence it is also known as the "economic barometer" and the "signal tower" of the national economy. Equity incentives, as a common incentive measure in companies, have played an important role in attracting talents and stimulating employees' work enthusiasm. At the same time, the implementation of incentive plans may make investors believe that there is great room for future performance improvement of the company, and in the short term, it will attract their attention and buy company stocks. This paper takes six equity incentive plans implemented by H Company as research events, with a time range of one month before the announcement of the equity incentive and two months after the announcement as the reflection research interval. At the same time, this paper takes the stock prices of the Shenzhen Composite Index during the same period as a

comparative object to study and analyze the impact of H Company's incentive plan on the company's short-term stock price.

(1) On September 10, 2014, the implementation of the equity incentive plan was first announced

H Company first announced the implementation of the equity incentive plan on September 10, 2014, and has since regarded the equity incentive plan as a long-term incentive mechanism. According to the short-term stock price changes after the initial announcement of the plan in Figure 3-5, it can be seen that the stock price changes of H Company have been relatively small from one month before the initial announcement of the equity incentive plan to two months after the announcement of the plan. Among them, before September 10, 2014, the stock price of H Company gradually decreased from the original 31.7 yuan to 29.95 yuan as of the announcement date. On September 10, the announcement date, the stock rebounded to 31.16 yuan. One and a half months after the announcement of the equity incentive plan, the stock price rose to 36.49 yuan on October 29th, an increase of 6.54 yuan compared to the 29.95 yuan before the announcement, or as high as 21.8%. At the same time, the fluctuation of the stock prices on the Shenzhen Stock Exchange has also shown a stable upward trend, and the fluctuation of H Company's stock price is basically similar to the changes in the overall market. The market experienced an overall decline from August 11th to September 1st, reaching its lowest point of 7941.16 yuan on September 1st, the lowest point in three months. Meanwhile, the overall market has shown an upward trend since September 10th. But on October 29th, when H Company reached its highest stock price, the market was not at its highest level in three months. It can be seen that the implementation of H Company's first equity incentive plan has a certain effect on the short-term stock price of the company.

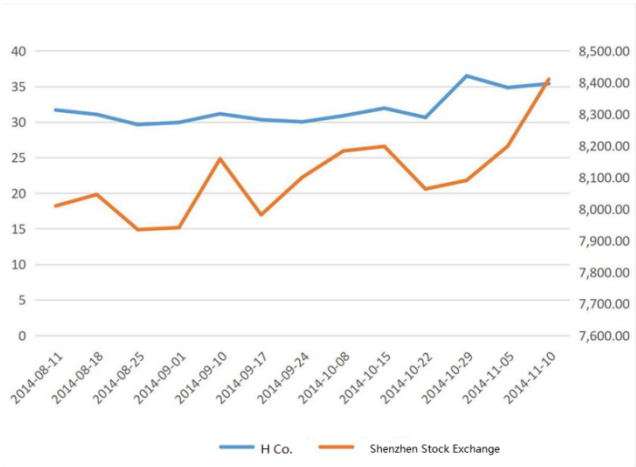
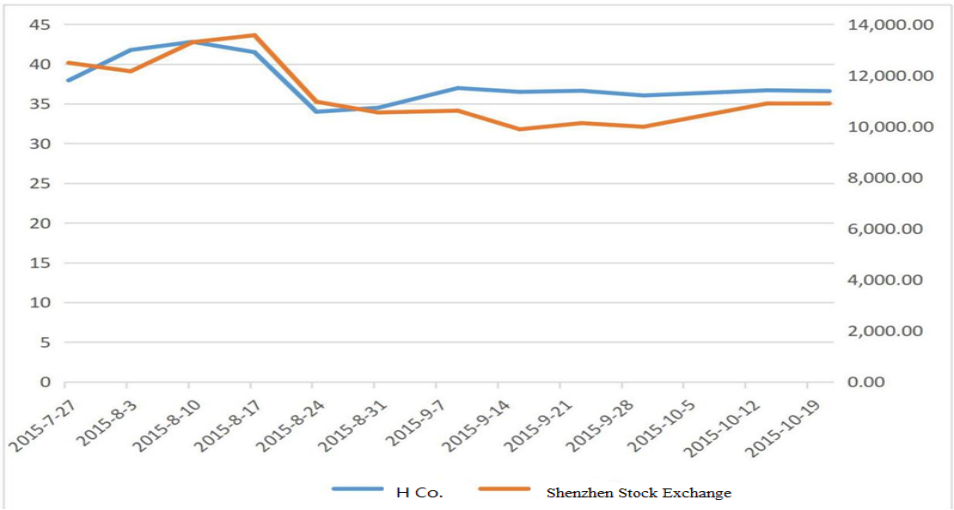


Figure 3-5 Short Term Stock Price Fluctuations before and after the First Restricted Stock Incentive in 2014

(2) 2015 Core Management Team Shareholding Plan and Phase 1 Agent Shareholding Plan

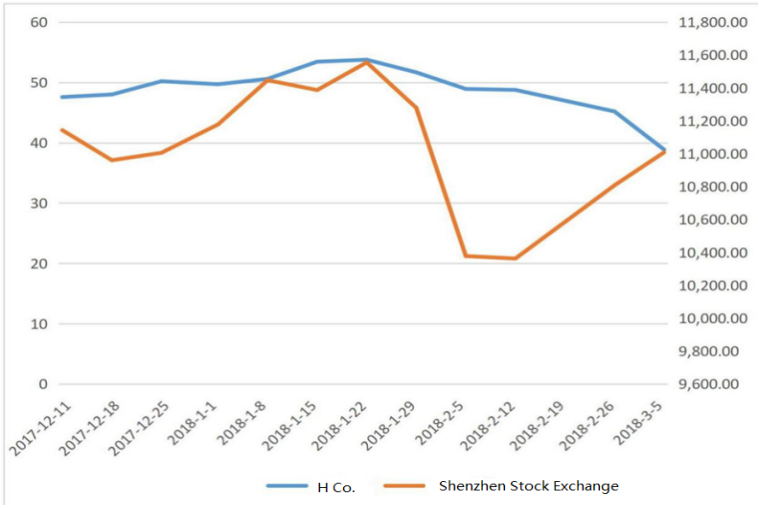


On August 27, 2015, the company successively launched the core management team shareholding plan and the first phase agent shareholding plan, expanding the incentive targets to core management personnel and agents. H Company uses equity incentives as a long-term incentive measure to stimulate employees' work enthusiasm. According to figures 3-6, it can be seen that on August 24th before the announcement date, the stock price of H Company dropped to a three-month low of 34 yuan, and after the announcement date, the stock price showed a stable growth trend. From the fluctuation of the stock price in the overall market, it shows a stable downward trend. Prior to the release of H Company's second incentive plan, H Company began to decline from the highest value of 13573.9 yuan. After H Company announced its second incentive plan, the overall trend of the market showed a slow decline, with a slight rebound starting from October 14th. However, H Company has shown an overall upward trend since the release of its second incentive plan, with gains consistently higher than the overall market. Based on this, it can be seen that the second equity incentive plan of H Company has a certain degree of improvement effect on short-term stock prices.

Figure 3-6 Short Term Stock Price Fluctuations before and after the 2015 Core Team Shareholding Plan and the First Agent Shareholding Plan

(3) January 2018 Employee Stock Ownership Plan

On January 10, 2018, H Company issued an employee stock ownership plan



incentive announcement, announcing a new phase of equity incentive plan, which involves ordinary employees. According to figures 3-7, it can be seen that one month before H Company announced its first employee stock ownership plan, the company's stock price steadily increased, with an average stock price of approximately 49.2 yuan. After the company announced its equity incentive plan on January 10th, the stock price rose to 53.77 yuan on January 23rd, reaching a 9% increase in just half a month. The trend of the overall market is roughly the same before H Company's announcement. However, since January 22nd, the overall trend of the market has shown a cliff like decline, and at the same time, the stock price of H Company has also begun to decline, but the decline has always been smaller than the magnitude of the market. Based on the analysis of the international situation that year, this situation was mainly due to the trade war between China and the United States in early 2018. The sharp drop in US stocks affected the world economic situation, and China's stock market was also affected and continued to decline. During this period, H Company was also affected by the overall situation, and its stock price began to show a downward trend. However, compared to the overall market, the downward trend is relatively gentle. It can be seen that multiple equity incentive plans have an upward effect on the short-term stock price of H Company, increasing its ability to face risks.

Figure 3-7 Short Term Stock Price Fluctuations before and after the Employee Stock Ownership Plan in January 2018

(4) May 2021 Stock Option Plan

Two years later, on May 10, 2021, H Company continued to implement the equity incentive plan, which is also the sixth equity incentive plan implemented by H Company. The main targets of this incentive plan are middle-level management personnel and core technical and business backbones. According to figure 3-8, it can

be seen that one month before the implementation of the equity incentive plan, the stock price of H Company began to fluctuate and decline on April 12, and on April 27, the stock price dropped to the lowest level of 34.2 yuan. After H Company announced its incentive plan on May 10th, its stock price showed a stable upward trend. Two months after the announcement of the incentive plan, H Company's stock price reached 47.7 yuan on July 7th, and the highest price increase from the announcement date to three months was 39.5%. It can be seen that this equity incentive plan has a positive incentive effect on the short-term stock price increase of H Company. From the perspective of the overall market situation, after the announcement date of H Company, there was an overall upward trend of volatility, but the overall growth trend was not as significant as that of H Company. It can be inferred that the equity incentive plan implemented by H Company has an upward effect on the company's short-term stock price.

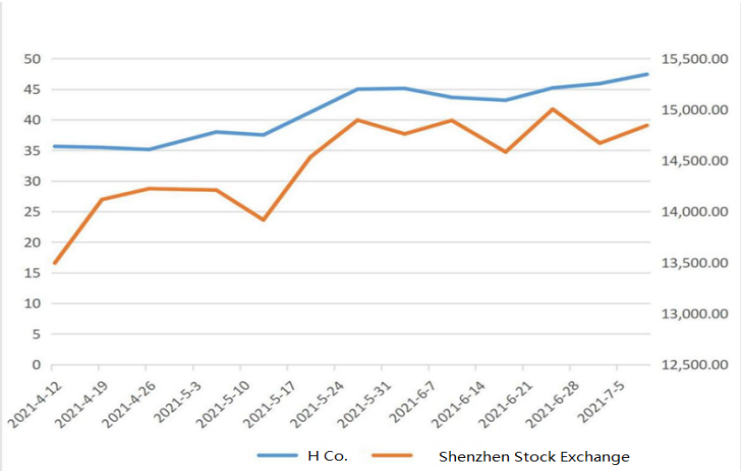


Figure 3-8 Short Term Stock Price Volatility before and after the Stock Option Plan in May 2021

3.5.2 Financial Performance Analysis

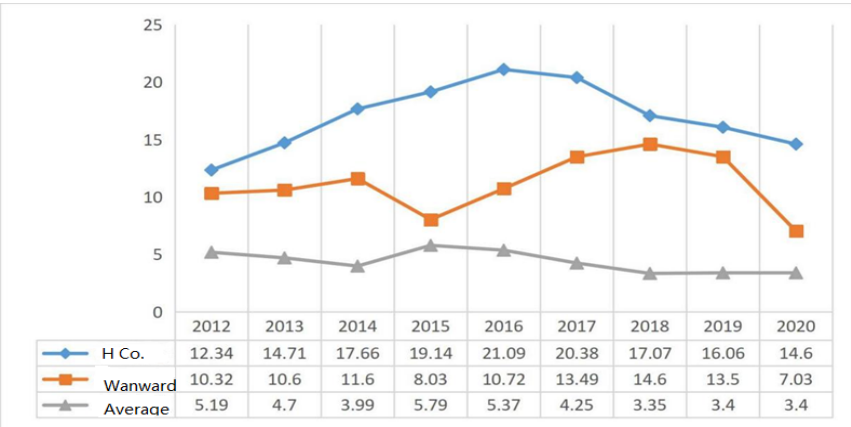
This section analyzes the financial performance of H Company, selecting data from 2012 to 2020 as the research object, and conducts research and analysis from four aspects: H Company's profitability, debt paying ability, operational ability, and development ability. At the same time, this section adopts a combination of horizontal and vertical analysis to strive for in-depth exploration and analysis of the impact of H Company's implementation of equity incentive plans on corporate financial performance in all aspects. Among them, the horizontal analysis mainly selected

Wanhe Electric Appliances (stock code: 002543), a listed company with the same industry, business scale, and total revenue as H Company, and used the industry average as the reference object. The main reason for choosing Guangdong Wanward New Electric Co., Ltd as a comparison is that during the same period, Wanward New Electric Co., Ltd did not implement equity incentives. This study selected Wanward New Electric Co., Ltd of the same size and without implementing equity incentives as the control group, aiming to reveal the actual impact of equity incentives on corporate performance, corporate governance, and core employee retention through comparative analysis. In addition, by excluding other factors that may affect the company's performance, it helps to more accurately evaluate the effectiveness of H Company's equity incentive implementation plan. This comparative analysis method is widely used in the academic community to study the effectiveness of equity incentive implementation, which can provide useful reference for Chinese enterprises to develop more effective equity incentive strategies.

(1) Profitability analysis

Profitability generally refers to the ability of a company to earn remuneration and profits, which is the core of all business activities. It can not only reflect the company's operating performance, but also evaluate investor returns. Profitability is also the main goal of enterprise operation and development. This paper conducts analysis and research based on the exercise assessment indicators of H Company's equity incentive plan, combined with three indicators that can strongly test the incentive effect: total asset return, net asset return, and sales net profit margin.

Return on Total Assets (ROTA) is used to reflect the company's ability to utilize all assets to obtain profits, and can also reflect the level of enterprise management. The comparison of total asset return between H Company and Wanward New Electric Co., Ltd and the industry average from 2012 to 2020 is shown in figure 3-9:



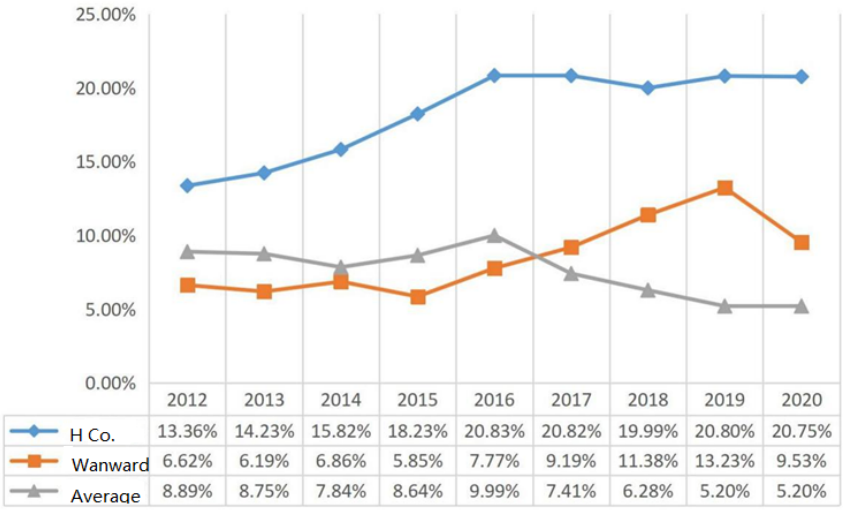
	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	12.34	14.71	17.66	19.14	21.09	20.38	17.07	16.06	14.6
Wanward	10.32	10.6	11.6	8.03	10.72	13.49	14.6	13.5	7.03
Average	5.19	4.7	3.99	5.79	5.37	4.25	3.35	3.4	3.4

Figure 3-9 Comparison of the Net Profit Margin of H Company's Total Assets from 2012 to 2020 with the Average of Wanward New Electric Co., Ltd and the Industry

According to Figures 3-9, it can be seen that H Company's total asset return rate has been increasing year by year from 2012 to 2016, with a total asset return rate of 8.75% higher in 2016 compared to 2012. Meanwhile, 2016 was also the year with the highest total asset return rate since the company went public. This year, the company launched a large number of innovative household kitchen appliances, such as embedded electric ovens, steam ovens, dishwashers, etc., with retail sales growing at a high rate of 41.70%, 58.41%, and 138.28%, respectively. This significantly increased the company's operating profit, with a net profit increase of 379 million compared to 2015. In 2018, the domestic and international economic situation was complex, and coupled with the continuous strict regulation of the real estate industry by the government, the entire kitchen appliance industry market fell into a downturn. This year, the return on total assets of H Company decreased to 17.07%. Comparing and analyzing the same period, it can be seen that the total asset return of Wanward New Electric Co., Ltd. decreased by 3.54% from 2014 to 2015. From 2018 to 2020, the company's total asset yield continued to decline due to the overall impact of the kitchen appliance market environment. According to the achievement of the performance evaluation goals set by the 2014-2015H company's equity incentive, the H Company has exceeded the standards set in the incentive draft. This indicates that the equity incentive plan of H Company has achieved the expected effect, which can effectively promote the improvement of the company's performance and greatly stimulate the morale and enthusiasm of employees.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	16.65	20.57	25.55	29.1	33.38	31.66	26.4	25.1	22.39
Wanward	26.89	20.6	20.95	13.9	20.22	26.1	28.34	26.54	13.22
Average	13.99	13.61	13.93	15.14	18.13	15.34	14.5	11.3	11

Figure 3-10 Comparison and Change of H Company's Net Asset Return from 2012 to 2020 with Wanward New Electric Co., Ltd. and Industry Average



	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	13.36%	14.23%	15.82%	18.23%	20.83%	20.82%	19.99%	20.80%	20.75%
Wanward	6.62%	6.19%	6.86%	5.85%	7.77%	9.19%	11.38%	13.23%	9.53%
Average	8.89%	8.75%	7.84%	8.64%	9.99%	7.41%	6.28%	5.20%	5.20%

Figure 3-11 Comparison and Change of H Company's Net Sales Profit Margin from 2012 to 2020 with the Average of Wanward New Electric Co., Ltd. and the Industry

Return on Equity (ROE) is commonly used to measure the efficiency of a company's utilization of invested capital towards shareholders. It is also an assessment indicator for the exercise of H Company's first equity incentive plan in 2014, and has strong specificity in testing the effectiveness of incentives. The net profit margin on sales is the ratio of a company's net profit to sales revenue. Operating revenue can directly reflect the company's own profitability, while net profit can indirectly reflect the operational capabilities of senior managers. This indicator can effectively reflect the efforts made by enterprises in controlling costs and increasing sales after implementing equity incentive plans.

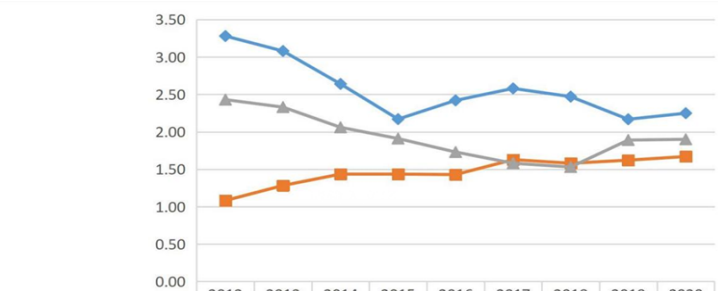
From figures 3-10 and 3-11, it can be seen that from 2012 to 2016, the return on equity and net profit margin on sales of H Company showed a significant upward trend, which was basically consistent with the industry average, but far higher than the industry average. Among them, after H Company first announced its restricted stock incentive plan in 2014, the ROE exceeded 25% that year, far higher than that of Wanward New Electric Co., Ltd. In 2015 and 2016, with the hot sales of China's real estate industry, it directly drove the market growth of the entire household kitchen appliance industry, and also intensified the competition between industries. During this period, the ROE of Wanward New Electric Co., Ltd. showed a downward trend, in stark contrast to H Company. In 2016, H Company's net profit margin on sales reached 20.83%, ranking first in the industry, mainly due to the following two factors. On the one hand, H Company implemented equity incentive plans for two consecutive years in 2014 and 2015, which played an important role in expanding the market

landscape and consolidating brand image. The equity incentive plan not only leaves core technical talents for the enterprise, but also introduces high-end technical talents. The reform of the salary system for R&D personnel has stimulated their innovation motivation. At the same time, H Company was increased its investment in product research and development, taking the lead in launching new products that meet consumer needs such as embedded microwaves, dishwashers, and ovens, firmly defending the company's leading position in the industry and consolidating its high-end brand image as the number one in the industry. On the other hand, in 2015, H Company implemented the agent equity incentive plan for the first time, increasing the incentive efforts for agents, constructing a flat channel structure, and promoting an increase in market share both online and offline. As of the end of 2016, the H Company had added 449 specialty stores in third and fourth tier cities, comprehensively improving the coverage of the end market and forming a growth point for new sales areas in third and fourth tier cities.

From 2017 to 2020, H Company's ROE and sales net profit margin indicators tended to flatten out, with ROE gradually declining since 2016. According to data from All View Cloud, due to the impact of market regulation in the domestic real estate industry, the online and offline growth rate of range hood and gas stove products experienced a significant decline in 2017. The sales scale of household kitchen appliances in 2018 decreased by 10.7% compared to last year. In 2020, affected by the COVID-19 and the rising price of raw materials, the retail volume of range hoods and gas stoves in the whole year declined compared with the previous year. In terms of the online market, there were 339 online brands in 2020, a year-on-year decrease of 78. The overall offline market had 202 brands, a year-on-year decrease of 15, which had a certain impact on the development of the kitchen appliance industry. According to figure 3-11, it can be seen that during the same period, due to the impact of the industry environment, the ROE and sales net profit margin of H Company tended to flatten out. However, compared to the same industry as Wanward New Electric Co., Ltd. and the industry average, H Company's sales net profit margin was much higher than theirs. This indicates that the several equity incentive plans implemented by H Company have a positive impact on the improvement of the company's profitability. The cost control of H Company is appropriate, even if there are changes in the entire kitchen appliance industry, it can ensure that the company's business situation is relatively stable.

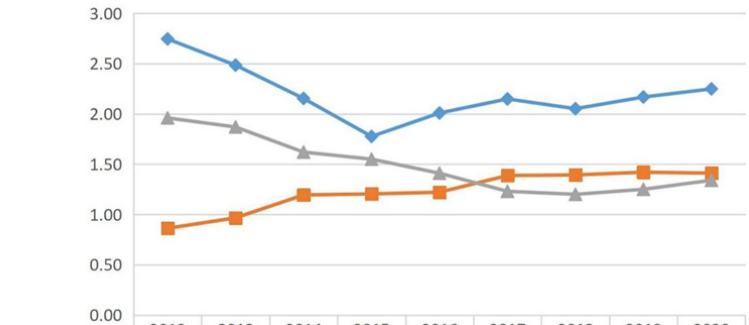
(2) Debt paying ability analysis

Debt paying ability is an important key factor for the long-term stable development of a company, and it is also a sign of a company's maturity. A reasonable debt structure is conducive to alleviating the financial pressure of enterprises, fully leveraging the leverage effect, and expanding the production scale of enterprises. This paper analyzes the solvency of enterprises from the following two aspects: short-term solvency and long-term solvency.



	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	3.28	3.08	2.64	2.17	2.42	2.58	2.47	2.17	2.25
Wanward	1.08	1.28	1.44	1.44	1.43	1.63	1.58	1.62	1.67
Average	2.43	2.33	2.06	1.91	1.73	1.58	1.53	1.89	1.90

Figure 3-13 Chart of Changes in Current Ratio between H Company and Wanward New Electric Co., Ltd., as well as Industry Average

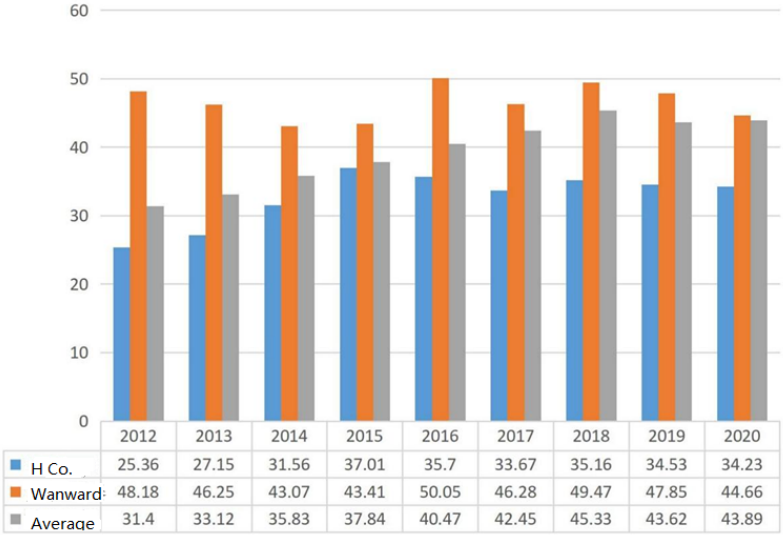


	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	2.75	2.49	2.15	1.78	2.01	2.15	2.05	2.17	2.25
Wanward	0.86	0.97	1.19	1.20	1.22	1.39	1.39	1.42	1.41
Average	1.96	1.87	1.62	1.55	1.41	1.23	1.2	1.25	1.34

Figure 3-14 Changes in Quick Ratio between H Company and Wanward New Electric Co., Ltd., as well as Industry Average

From figure 3-13 and 3-14, it can be seen that before 2014, H Company's current ratio and quick ratio were relatively high, maintaining around 3.2 and 2.6, respectively. This means that the company's current assets were not fully utilized, resulting in resource waste. After H Company announced its first equity incentive plan in 2014, its current and quick ratios remained around 2.4 and 2.0 from 2015 to 2020. Based on the financial report data of that year, the company's management has fully utilized the efficiency of fund utilization, greatly improved market sales, and reduced inventory

backlog. At the same time, the management has also strengthened management of accounts receivable and cash flow, fully utilizing financial leverage, and keeping the company in a stable state of development. The current ratio and quick ratio of Wanward New Electric Co., Ltd. are relatively low, basically maintaining at 1.5 and 1.4. Before implementing equity incentives, there is a significant gap between H Company and Wanward New Electric Co., Ltd. in the two indicators. However, in 2014, H Company implemented an incentive plan and gradually narrowed the gap with Wanward New Electric Co., Ltd. and the industry average, which means that the equity incentive policy has played a certain role.



	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	25.36	27.15	31.56	37.01	35.7	33.67	35.16	34.53	34.23
Wanward	48.18	46.25	43.07	43.41	50.05	46.28	49.47	47.85	44.66
Average	31.4	33.12	35.83	37.84	40.47	42.45	45.33	43.62	43.89

Figure 3-15 Changes in Asset Liability Ratio between H Company, Wanward New Electric Co., Ltd., and Industry Average from 2012 to 2020

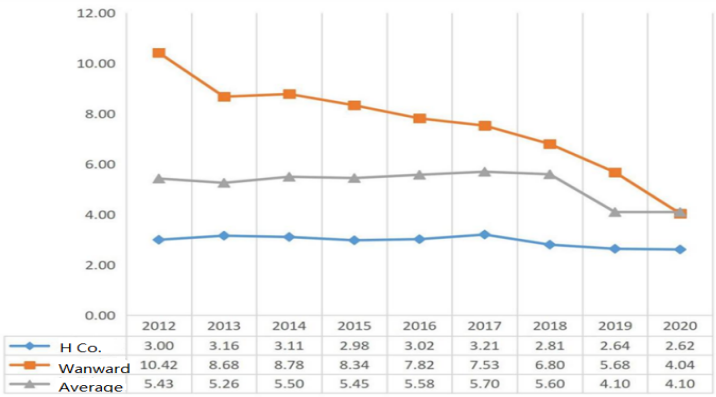
The long-term solvency of a company is mainly to determine its ability to repay debt principal and pay debt interest. In daily business activities, enterprises can improve profitability and optimize capital structure by borrowing funds and fully utilizing financial leverage. For this reason, this paper selects the asset liability ratio as an indicator for analyzing long-term solvency.

As a traditional physical manufacturing industry, the household kitchen appliance industry should have a reasonable asset liability ratio of around 40%. According to Figure 3-15, it can be seen that the asset liability ratio values of H Company from 2012 to 2014 are significantly different from the normal values, indicating that the H Company has insufficient utilization of wealth leverage. After H Company implemented the equity incentive plan in September 2014, the company's asset liability ratio reached 37.01% in 2015, and the asset liability ratio from 2016 to 2020 also increased year by year. As of 2020, the company's asset liability ratio has

remained stable at around 35%. In recent years, H Company's market share has been continuously expanding, and the investment in research and innovation has also increased. At the same time, the ability of enterprises to utilize external funds has continuously improved, and their total assets have also increased year by year, reaching 12.46 billion yuan by 2020. The company's asset liability ratio index has risen, fully leveraging the role of financial leverage and optimizing the company's capital structure. At the same time, the interest expense generated by liabilities accounts for a small proportion of cash flow in operating activities, which will not cause financial pressure. From this, it can be seen that the implementation of equity incentives by H Company has effectively improved the company's equity structure, fully utilized the financial leverage effect, and continuously enhanced the company's long-term debt repayment ability. In contrast, the asset liability ratio of Wanward New Electric Co., Ltd. remained stable at around 48% from 2012 to 2020, which is higher than the reasonable indicator of around 8%. Compared to H Company, Wanward New Electric Co., Ltd. has a greater debt and funding pressure, and may also bear higher average capital costs. Its long-term debt repayment ability is not as good as H Company.

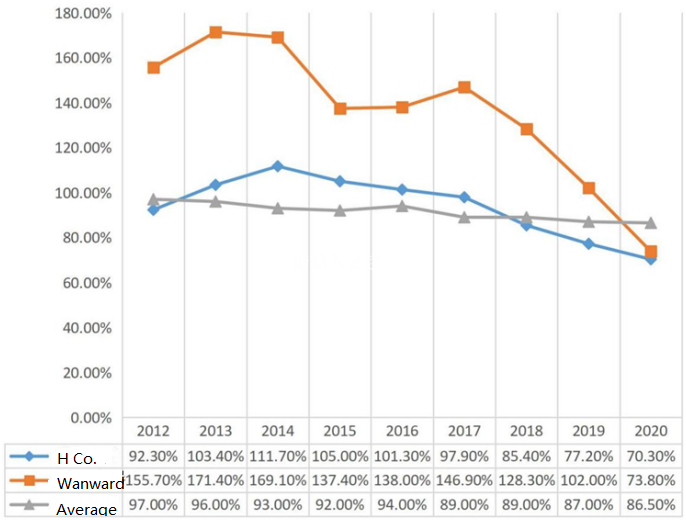
(3) Operational capability analysis

Operational capability is the ability of a company to create value through the use of assets. The improvement of a company's profitability depends on efficient operational capabilities, and the implementation effect of equity incentive plans can be analyzed from the perspective of the company's operational capabilities. This paper selects inventory turnover rate, total asset turnover rate, and accounts receivable turnover rate as indicators for operational capacity analysis.



	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	3.00	3.16	3.11	2.98	3.02	3.21	2.81	2.64	2.62
Wanward	10.42	8.68	8.78	8.34	7.82	7.53	6.80	5.68	4.04
Average	5.43	5.26	5.50	5.45	5.58	5.70	5.60	4.10	4.10

Figure 3-16 Changes in Turnover Rate of H Company, Wanward New Electric Co., Ltd., and Industry Average Inventory

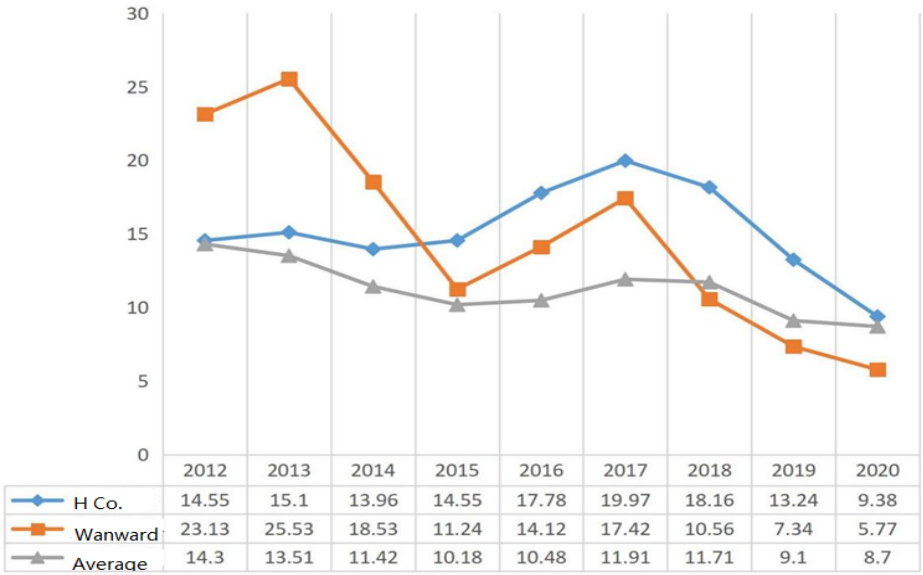


	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	92.30%	103.40%	111.70%	105.00%	101.30%	97.90%	85.40%	77.20%	70.30%
Wanward	155.70%	171.40%	169.10%	137.40%	138.00%	146.90%	128.30%	102.00%	73.80%
Average	97.00%	96.00%	93.00%	92.00%	94.00%	89.00%	89.00%	87.00%	86.50%

Figure 3-17 Changes in Total Asset Turnover Rate of H Company, Wanward New Electric Co., Ltd., and Industry Averages

Inventory turnover rate is the ratio of cost of sales to average inventory, which can be used to reflect the turnover rate of inventory. The higher the inventory turnover rate, the stronger the liquidity of the inventory, indicating a stronger ability to realize inventory assets, which can improve the efficiency of fund utilization of the enterprise. The total asset turnover rate can reflect the overall asset operating capacity of a company, and at the same time, this indicator can also indirectly reflect the importance that managers attach to marketing.

From figure 3-16, it can be seen that the several equity incentive plans implemented by H Company have little impact on the inventory turnover rate and total asset turnover rate indicators, and there is no significant change before and after the incentives. And the inventory turnover rate of H Company is basically maintained at around 3 times, lower than the industry average. The inventory turnover situation of Wanward New Electric Co., Ltd. is good, and H Company is far from it. The reason why H Company has a significant gap with the industry average is attributed to its own agency sales model. In this mode, the sales revenue is recognized for a long time. The agent will recognize the revenue only when the goods are handed over to the customer. The stocking cycle is long, which affects the company's inventory turnover. In terms of total asset turnover, H Company is on par with the industry average, mainly due to the longer service life of household kitchen appliances, high installation costs, and less demand for updates and iterations. In summary, H Company should adjust the evaluation indicators of the equity incentive plan appropriately without



affecting its current profitability, improve the turnover speed of assets, and thus enhance the operational capacity of H Company.

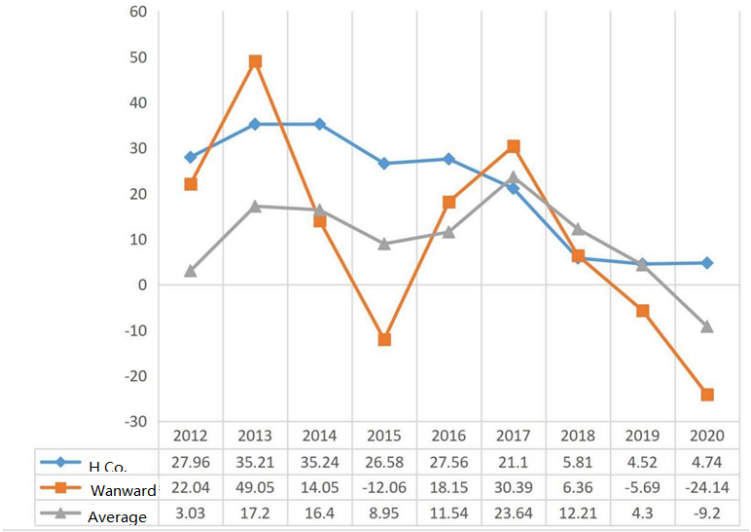
Figure 3-18 Changes in Accounts Receivable Turnover Rate for H Company, Wanward New Electric Co., Ltd., and Industry Average

From figure 3-18, it can be seen that compared to the industry average, the accounts receivable turnover rate of H Company had a small gap with the industry average before 2014, and remained at the same level. After H Company implemented its first equity incentive plan in 2014, there was a significant upward trend in the turnover rate of accounts receivable from 2015 to 2017. The reason for this phenomenon is that after the implementation of the agent equity incentive plan, they are closely bound to the interests of the company, and the agent's initiative in collecting payments has been improved, strengthening the management ability of accounts receivable and reducing the occupation of funds. From 2018 to 2020, the turnover rate of accounts receivable of H Company showed a downward trend, which was related to the overall downturn of the industry. In particular, the COVID-19 in 2020 had a great impact on the entire industry. Wanward New Electric Co., Ltd.'s accounts receivable turnover rate from 2012 to 2017 was higher than that of H Company. The inventory issuance speed was fast, and the collection speed of accounts receivable was also fast. The H Company has good operational capabilities and is worth learning from. To this end, H Company can enrich the conditions for equity incentive exercise, control operational risks, and thereby improve profitability.

(4) Growth ability analysis

Enterprise management not only needs to consider survival issues, but also seeks

better development prospects. The growth ability reflects the future development trend and speed of the company. This paper selects two indicators, revenue growth rate and net profit growth rate, to analyze the growth ability of H Company before and after equity incentives.



	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	27.96	35.21	35.24	26.58	27.56	21.1	5.81	4.52	4.74
Wanward	22.04	49.05	14.05	-12.06	18.15	30.39	6.36	-5.69	-24.14
Average	3.03	17.2	16.4	8.95	11.54	23.64	12.21	4.3	-9.2

Figure 3-19 Changes in Revenue Growth Rate of H Company and Wanward New Electric Co., Ltd

	2012	2013	2014	2015	2016	2017	2018	2019	2020
H Co.	40.29	43.96	50.32	45.84	45.76	21.08	1.55	7.89	4.46
Wanward	15.38	39.22	26.45	-25.06	57.04	54.19	31.74	10.46	-45.45
Average	5.37	14.41	13.13	21.25	32.08	-6.27	0.99	4.16	6.49

Figure 3-20 Changes in Net Profit Growth Rate of H Company, Wanward New Electric Co., Ltd., and Industry Average

From figure 3-19, it can be seen that in 2014, the company implemented its first equity incentive plan, and after 2016, the overall indicators of revenue growth rate and net profit growth rate showed a downward trend. The main reason is that the real estate market in China has been sluggish since 2015, and at the same time, the growth

rate of sales area of commercial housing has been declining from nearly 40%. The revenue growth rate of H Company from 2014 to 2016 was much higher than that of Wanward New Electric Co., Ltd. and the industry average, indicating that the equity incentive plan still played a certain role in stabilizing the company's performance. After 2017, the growth rate of the two indicators showed low performance, mainly due to H Company's pursuit of diversified development by introducing the low-end "MQ Electrical" brand, aiming to occupy a position in the low-end market. However, due to the loose market positioning of the entire kitchen appliances and the large gap in currency performance, the diversification strategy has indirectly lowered H Company's net profit. Therefore, when formulating an equity incentive plan, H Company can focus on technology driven transformation and brand upgrading, strengthen management of the costs and expenses caused by rising raw material prices, and maximize the implementation effect of the equity incentive plan.

3.5.3 Analysis of Non-financial Performance

When evaluating the effectiveness of implementing equity incentive plans in a company, it is not only necessary to analyze from the perspective of financial indicators, but also non-financial indicators. This paper analyzes the non-financial performance of the six equity incentive plans implemented by H Company from three aspects: market share, company personnel structure, and R&D innovation capabilities.

(1) Market share analysis

Table 3-2 Summary of H Company's Market Share from 2014 to 2020

Category	Ranking	2014	2015	2016	2017	2018	2019	2020
Range hood	Retail sales market share	24.15%	24.84%	24.65%	26.53%	26.62%	28.10%	28.30%
	Ranking	1	1	1	1	1	1	1
Gas stove	Retail sales market share	21.37%	21.61%	22.60%	23.92%	23.89%	25.60%	25.80%
	Ranking	1	1	1	1	1	1	1
Embedded steamer	Retail sales market share	/	/	20.73%	31.26%	33.80%	31.60%	24.50%
	Ranking	/	/	3	1	1	2	1
	Retail sales market	/	/	31.74%	43.32%	44.05%	35.60%	/

	share							
Embedded microwave oven	Ranking	/	/	3	1	1	1	/
	Retail sales market share	18.28%	19.41%	/	23.72%	23.22%	27.80%	21.20%
Embedded disinfection cabinet	Ranking	1	1	/	1	2	2	2
	Retail sales market share	/	/	21.66%	27.21%	26.13%	25.40%	34.10%
Embedded oven	Ranking	/	/	3	3	3	2	2
	Retail sales market share	/	/	/	8.95%	9.29%	7.00%	9.60%
Embedded dishwasher	Ranking	/	/	/	3	3	4	4

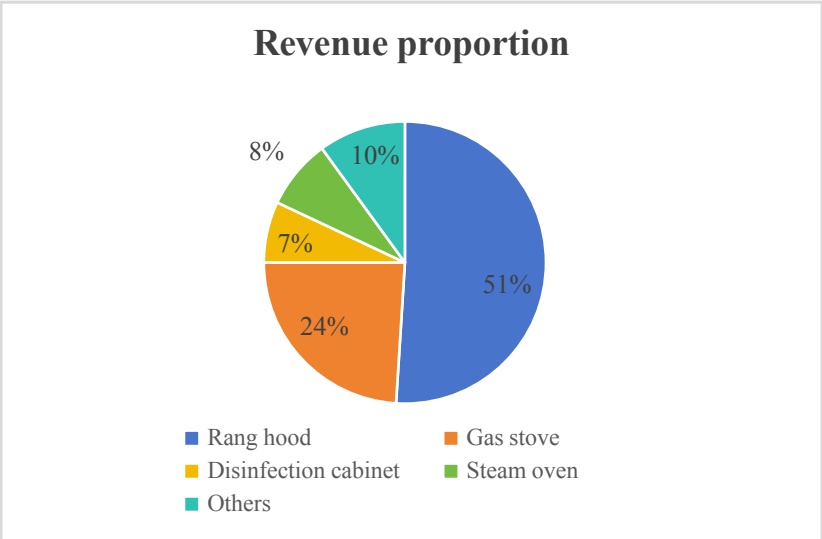


Figure 3-21 Proportion of Product Revenue of H Company in 2020

According to the data of H Company from 2014 to 2020 in table 3-2, it can be seen that H Company's main products, range hoods and gas stoves, firmly rank first in the industry, accounting for 75% of total revenue. After the first implementation of the equity incentive plan in 2014, H Company continuously optimized its market layout and made strengthening channel layout and technology research and development its future development strategy. And on the basis of consolidating the industry's top high-end brand image, we have expanded our production scale, increased our research and development efforts, and successively launched intelligent household kitchen appliances such as embedded dishwashers and disinfection cabinets. According to data from Zhongyikang Data Network in January 2018, the retail market share of

embedded steamers, microwave ovens, and disinfection cabinets all ranked first in the market. This indicates that the equity incentive plan implemented by H Company over the years has enabled the company to develop rapidly and maintain its leading position in the industry, promoting the continuous growth of the company's business scale and efficiency.

(2) Analysis of company personnel structure

As a leader in the household kitchen appliance industry, H Company's flagship product, the large suction range hood, has held the first place in the global range hood private brand market share for 7 consecutive years. To meet the diverse needs of consumers, the H Company has launched a series of intelligent integrated kitchen electrical products. The development of new products requires a large number of outstanding talents, and market expansion also relies on excellent marketing personnel. In order to stabilize existing talents and attract foreign talents, H Company has continuously expanded the scope of incentive targets in its equity incentive plan implemented over the years.

According to the data in table 3-3, H Company's personnel team has been growing since its listing, with 4621 employees as of 2020, almost double the number in 2011. After the first implementation of the equity incentive plan in 2014, the company attached great importance to the cultivation of core technical personnel. From the data in the table, it can be seen that the number of technical personnel increased from 390 before the implementation of incentives to 742 in 2020, with a significant increase. This indicates that the equity incentive plan has effectively attracted and left behind many talents for the company.

Table 3-3 Changes in Employee Composition of H Company from 2011 to 2020

Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Production personnel	446	675	720	755	628	992	958	1272	1297	1662
Administrative staff	514	349	391	195	139	432	291	293	312	405
Sales personnel	844	1114	1255	1330	1525	1312	1602	1663	1691	1637
Technical personnel	203	300	251	390	423	516	662	709	714	742
Logistics personnel	353	/	113	198	439	355	325	383	360	/

Financial personnel	/	93	102	117	111	112	114	135	138	166
Total	2360	2531	2832	2985	3265	3719	3952	4455	4512	4612

Table 3-4 Distribution of Education Degrees of H Company's Employees from 2011 to 2020

Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bachelor's degree or above	300	357	369	474	511	630	825	946	1026	1049
Junior college	411	461	516	622	664	748	944	1057	1060	1085
Total number of employees	2360	2531	2832	2985	3265	3719	3952	4455	4512	4612
Proportion of undergraduate and above	12.71	14.11	13.03	15.88	15.65	16.94	20.88	21.23	22.74	22.75

H Company ranks first in the industry based on research and development technology and its unique agency sales model. However, from the long-term development of the enterprise, a stable research team and a continuous flow of talents are the guarantee for the future of the enterprise. Among them, the stability of the research team can test the degree to which equity incentives play a role in retaining core talents for the company, while the overall quality of employees can reflect the impact of incentive plans on the quality of human capital. According to the data in Tables 3-4, after H Company implemented the equity incentive plan, the number of employees with a bachelor's degree or above has been increasing year by year since 2015. As of 2020, the H Company has 1049 personnel with a bachelor's degree or above, an increase of 749 compared to 2011. This indicates that the implementation of the equity incentive plan has strengthened the company's high-quality talent team and optimized the talent structure.

(3) R&D Innovation Analysis

The reason why H Company stands out as a leader in the household kitchen appliance industry is closely related to the company's R&D and innovation capabilities. The ability to develop and innovate can create strong core competitiveness for enterprises. This section analyzes the amount and proportion of R&D investment of H Company over the years, in order to explore the impact of

equity incentives on the company's R&D innovation ability.

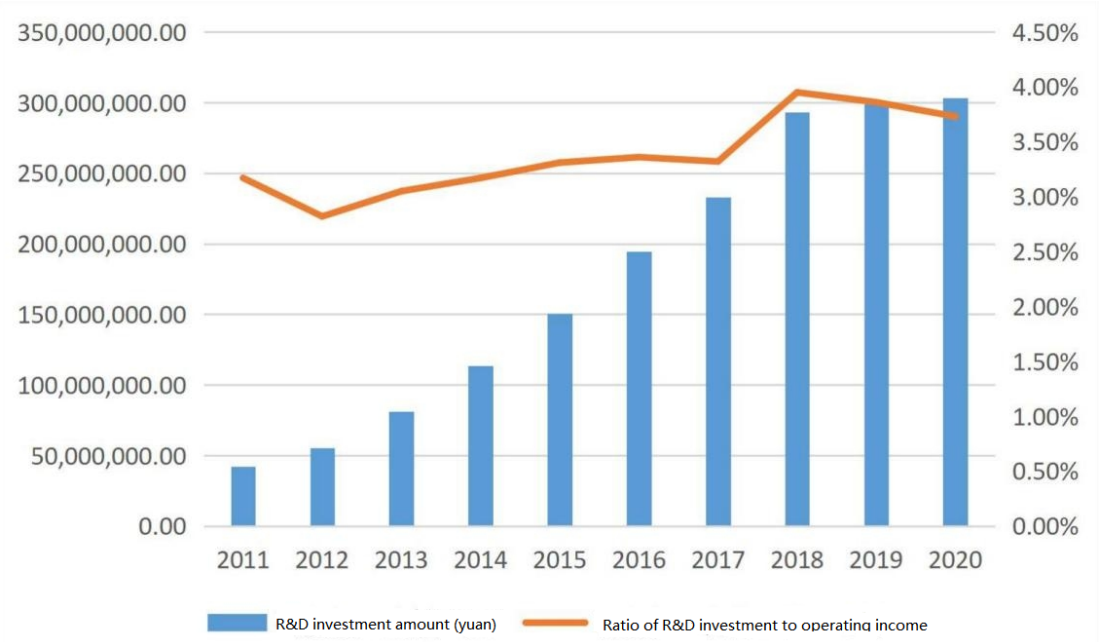


Figure 3-22 Table of R&D Investment of H Company from 2011 to 2020

As shown in figure 3-22, since H Company went public in 2010, its investment in R&D and innovation has continued to increase year by year, and a super factory was established between 2015 and 2018. From then on, internal and external employees can exchange opinions, collide ideas, and seek inspiration here, and new projects can also receive resource support here. In addition, H Company has also established innovation research institutes in Shenzhen and California, USA, which are in line with international talent, establish technology resource platforms, strengthen international technology cooperation, and broaden the global perspective of the enterprise.

The implementation of H Company's equity incentive plan has to some extent improved the company's R&D and innovation capabilities, mainly reflected in the following three aspects. The first is technological innovation. In 2020, the company applied for a total of 744 patents, including 161 invention patents and 418 patent authorizations. At the software technology end, it actively explored the development of the AI-IOT intelligent IoT platform, focusing on the research and development of AI intelligent products. In 2018, H Company won the China Quality and Technology Award and the Zhejiang Provincial Science and Technology Progress Award, all of which reflect H Company's leading industry research and development strength. Next is product innovation. The main product promoted by H Company, "High suction range hood," has become synonymous with "High end range hood. In recent years, the H Company has launched integrated and intelligent products, such as dishwashers,

disinfection cabinets, and embedded steaming and baking machines. These new products are increasingly recognized by consumers and hold a large market share. Finally, there is marketing innovation. H Company is the only enterprise in the industry that uses an agency based marketing model, and has established an efficient marketing system through equity incentive plans and partner systems. In addition, from 2014 to 2017, H Company increased its advertising expenses, changed the traditional advertising model, added KOL product promotion methods, and deeply rooted the high-end brand image in people's hearts.

3.6 Case Study Summary

3.6.1 Positive Impacts of Equity Incentives on H Company's Financial Performance

The author summarizes the vertical and horizontal analysis of the impact of H Company's equity incentives on corporate financial performance, and believes that the motivation for designing equity incentive plans is twofold.

(1) Continuously improving the company's operational performance and enhancing the stability of the team

In terms of equity incentives, H Company urgently needs to draw on the advanced technology, management experience, and marketing model of the international small home appliance giant Cyber Group after the completion of its property rights transformation. In the board of directors, the proportion of Saibo expatriate executives far exceeds the original management team. Saibo Group has obtained decision-making power through absolute control, but management and operation rights are in the hands of H Company. Under the collision of different cultural backgrounds, there will inevitably be differences between the Chinese and French sides regarding the formulation of company strategy and corporate governance methods, which has led to the resignation of several senior management personnel of H Company, affecting the daily operation and management of the company and its long-term development. Therefore, H Company has increased the incentive for its employees by repurchasing stocks with heavy funds from the secondary market and giving them away. Behind the transfer of benefits, it is H Company's deep intention to use the incentive system to stabilize the company's management team and promote the long-term development of the company.

(2) The equity incentives of listed companies have an impact on their financial performance through the path of R&D investment

The implementation of equity incentive mechanisms by listed companies can enhance their investment in research and development expenses, thereby promoting their financial performance. The level of R&D investment has a partial mediating effect on the relationship between equity incentives of listed companies and the total number of enterprise patent applications and invention patent applications. The equity incentive system of listed companies can improve the management's risk-taking ability and encourage them to make more risky decisions, using internal surplus funds to invest in medium to high-risk research and development activities. The increase in R&D investment lays the foundation for the development of enterprise R&D activities, and core employee equity incentives enhance their innovation enthusiasm, ultimately promoting the improvement of company performance.

(3) The financing constraints of listed companies have a moderating effect on the relationship between equity incentives and corporate financial performance

The financing constraints of listed companies can negatively regulate the relationship between equity incentives and corporate financial performance. The stronger the financing constraint, the weaker the incentive effect of implementing equity incentive system on the financial performance of listed companies. When there is an issue of information asymmetry in the market, when enterprises face financing constraints, the expenses required for research and development activities and subsequent investment of funds will be hindered, which directly affects the improvement of enterprise financial performance. In addition, when corporate financing is constrained, it will be difficult to implement incentives for executives and core employees. This reduces the initiative of executives in making innovation decisions and the enthusiasm of core employees in strengthening innovation research and development, indirectly suppressing the improvement of corporate financial performance.

3.6.2 The negative impacts of equity incentives on the financial performance of H Company

By comparing and analyzing with listed companies in China, it can be seen that the impact of equity incentive models on listed companies in China is significantly higher than in Western countries. It also indirectly verifies that the impact of H company's equity incentive on corporate financial performance needs to be improved.

And there is still room for optimization in the construction and development of the equity incentive model itself. At the same time, the equity incentive mechanism implemented by listed companies in China mainly focuses on employee level equity incentives, and for management, it focuses more on internal salary structure and distribution relationships within the enterprise. Therefore, this paper starts from the actual distribution research and identifies the impact of equity incentives on corporate financial performance.

(1) Simple setting of performance evaluation standards

After H Company first launched its equity incentive plan in 2014, it has launched five more incentive plans. From the announcement of the equity incentive plan, the setting of unlocking conditions for exercise is slightly simpler. The unlocking conditions for exercise are mostly items in the income statement, which may lead to short-sighted behavior by executives in pursuit of short-term profit goals, which is not conducive to avoiding the risks caused by agency behavior. In addition, according to the analysis of the completion of equity incentives in Chapter 3, it was found that before the implementation of the equity incentive plan in 2014, the actual net profit growth rate of H Company had doubled compared to expectations, and the return on equity had already reached 20% in 2014 and increased to 27.79% in 2016. The reserved portion of the first restricted equity incentive plan achieved a net asset return of 34.07% in 2017, and the exercise assessment indicators were set too low, making it difficult to accurately measure the contribution of the incentive personnel and the incentive value could not be truly reflected.

(2) Incomplete setting of assessment indicators

The third chapter of this paper analyzes the financial and non-financial performance of H Company's implementation of the equity incentive plan, and finds that the implementation of the incentive plan has to some extent improved the company's operational capacity, especially when the net profit growth rate and return on equity included in the assessment indicators have exceeded the standard values. However, it has not played a promoting role in the turnover speed of assets such as inventory and accounts receivable. The household kitchen appliance industry is a highly profitable physical industry, which not only requires efforts in profitability, but also accelerates asset turnover and improves product monetization ability. In addition, in terms of non-financial performance, such as market share indicators that are conducive to the long-term development of the enterprise, patent application and other

exercise assessment indicators, H Company's several incentive plans did not involve them. Therefore, to a certain extent, the assessment indicators of H Company's equity incentive plan are not comprehensive, and senior strategic management has neglected important driving points.

Chapter 4: Impacts of Equity Incentives on Enterprise Financial Performance: Analysis Based on Panel Data

The case of H Company has given us a preliminary understanding of the internal relationship mechanism between equity incentives and corporate performance. Is such an effect common in a larger sample of enterprises? Or is the relationship between the two discovered in the case study of H Company a universal pattern? In order to better answer this question, this chapter will conduct a second sub study, using a larger sample of enterprise panel data to analyze and test the internal relationship mechanism between equity incentives and financial performance.

4.1 Theoretical Analysis of the Relationship between Equity Incentives and Financial Performance in Enterprises

4.1.1 Equity Incentives and Company Performance

The management rights of modern enterprises are separated from the owners, and the demands of the company's management and shareholders are not the same. The former focuses more on their own welfare and personal benefits, while the latter values the overall sustainable development and operational profitability of the company, resulting in differences in the decision-making of the two for the company. Managing a company by the management can cause harm to the interests of shareholders, which is referred to as agency costs, which in itself can affect the company's performance.

Equity incentives can be used to solve this problem. The sales of manufacturing companies' own products are directly related to the overall operational effectiveness of the company. Granting a certain amount of equity to company executives or core employees directly relates their personal compensation to the company's development, which can stimulate their enthusiasm for serving the company. And creating more value from the perspective of the company can reduce the cost of agency. Jensen and Murphy (1990) found that equity incentives promote a company's performance level

by improving management compensation. Hall and Liebman (1998) found that equity incentives promote a positive relationship between company performance and CEO compensation. Xin Chang et al. (2015) pointed out that equity incentives can promote corporate development by enhancing a company's innovation capabilities. Zhang Tao and Wang Huijing (2018) found that equity incentives effectively alleviate the agency problem of listed companies, thereby improving the investment efficiency and business performance of the company. Moreover, equity incentive policies can increase employees' sense of belonging to the company, make them feel the company's emphasis on talent and recognition of themselves, increase the stickiness between the company and employees, and promote the improvement of company performance.

From the actual case analysis of H Company, it can be concluded that the implementation of equity incentive mechanism in H Company can enhance the investment of the enterprise in research and development expenses, thereby promoting the financial performance of the enterprise. The level of research and development investment has a partial mediating effect on the relationship between equity incentives of listed companies and the total number of enterprise patent applications and invention patent applications. The equity incentive system of listed companies can improve the management's risk-taking ability and encourage them to make more risky decisions. Thus, the surplus funds within the enterprise can be invested in medium to high-risk research and development activities, laying the foundation for the development of enterprise research and development activities. Core employee equity incentives can enhance their innovation enthusiasm and ultimately promote the improvement of company performance.

Therefore, the first hypothesis of this paper is proposed:

H1: Equity incentives for listed manufacturing companies can positively improve company performance.

4.1.2 Incentive Intensity and Company Performance

Incentive intensity is a measure of the size of equity incentives. As the intensity of motivation increases, the perspectives of employees and company owners become more consistent. The more shares employees receive from the company after meeting the equity incentive conditions, the more they have a say in the company, the more important they are in the company, and the more motivated they are, which can also

promote the improvement of company performance. Li Bingxiang and Huixiang (2018) found that incentive intensity, as an important component of equity incentive plans, has a significant positive impact on the effectiveness of the implementation of equity incentive plans.

Measuring the intensity of incentives is a complex issue, but in academia, several specific indicators are usually used to evaluate. Firstly, the proportion of equity based pay to total compensation is a widely adopted measurement method. The basic idea of this method is that equity options serve as an incentive tool to encourage employees to share in the company's success and growth, thereby motivating them to work for the long-term interests of the company. By calculating the proportion of equity option compensation in total compensation, it is possible to intuitively understand the level of incentive provided by the company to employees. Another commonly used measure is pay for performance. The core concept of this method is that employees' compensation should be linked to their performance and contribution. By implementing a performance-based compensation system, companies can ensure that employees not only achieve personal goals but also create value for the company. The specific forms of pay for performance include performance bonuses, commissions, stock rewards, etc. These incentive measures aim to stimulate employees' enthusiasm and creativity.

The actual case analysis of H Company can also prove that the relationship between incentive intensity and company performance is a complex issue that needs to consider multiple factors. Firstly, the stronger the incentive intensity, the higher the employee's work enthusiasm and initiative, which can promote the innovation and development of the company. However, if the incentive plan is not designed properly, excessive incentive intensity may lead to excessive competition and conflict of interest among employees, affecting the company's team collaboration and overall performance. In addition, the intensity of incentives also needs to be matched with the company's strategic goals and market environment. For example, in industries with fierce market competition, appropriately increasing incentive intensity can promote company performance growth, but in situations where market demand is sluggish, excessive incentive intensity may lead to a decline in performance. Therefore, the correct incentive intensity should be consistent with the company's strategic goals and market environment. In addition, the intensity of motivation needs to match the actual performance of employees. If an employee's performance is excellent but the

incentive intensity is too low, it may lead to employee turnover and decreased morale. On the contrary, if an employee's performance is poor but the incentive intensity is too high, it may waste the company's resources and fail to produce the expected performance.

Therefore, the second hypothesis of this paper is proposed:

H2: The stronger the intensity of equity incentives, the better the company's performance.

4.1.3 Number of Motivators and Company Performance

The number of incentive recipients is the total number of equity incentive recipients announced in the equity incentive plan. Compared to Western countries where the scope of equity incentives extends to company research talents, other employees, and even important external related personnel, the majority of equity incentives in listed companies in China are for company executives, with a relatively low proportion overall. Although the senior management talents of the company directly make company decisions, they do play an irreplaceable leadership role in the strategic development of the company, and it is normal for them to be the primary consideration for equity incentive measures. However, apart from company executives, core employees and other employees are also the foundation for efficient operation and development of the company, so it is also important to retain talent through equity incentives for other employees. Increasing the number of people receiving equity incentives can increase the audience for equity incentives, thereby encouraging more employees to work towards improving company performance. Li Lianwei (2017) selected a sample of listed companies before 2015 and analyzed the impact of equity incentive numbers on financial performance using a panel data model. He found that the number of equity incentives can to some extent induce some executives' interest grabbing behavior, so there is a partial positive correlation between the two within a certain range.

From the actual case analysis of H Company, it can also be confirmed that there is a certain correlation between the number of incentives and company performance, but it is not an absolute causal relationship. Firstly, the number of incentivized individuals is not the only criterion for judging a company's performance. Even if the company adopts incentive plans and many employees are incentivized, if the company's strategy is unreasonable and the market environment is unfavorable,

resulting in problems in its business, the company's performance will still be affected. Secondly, the relationship between the number of incentives and company performance is interdependent. If the company's business performance is good and employees receive reasonable incentives, it can improve their work enthusiasm and happiness, and achieve better performance. On the contrary, if the company's performance is poor, incentive plans may motivate employees in the short term, but they cannot promote the company's development in the long term, and may even lead to a decline in the company's performance. At the same time, the number of incentive personnel also needs to comprehensively consider the company's human resource planning and operating costs. If a H Companyires too many employees, even with high incentives, it may lead to a decrease in the company's performance due to excessive human resource costs. On the contrary, if a H Companyires too few employees, although the cost is low, it may be difficult to meet the company's business needs, resulting in the inability to improve performance.

Therefore, the third hypothesis of this paper is proposed:

H3: The more incentive personnel in the equity incentive elements, the more conducive it is to the improvement of company performance.

4.1.4 Enterprise Nature and Company Performance

There are many theoretical relationships between the nature of a company and its performance, among which the most important are agency theory and resource based theory. The agency theory holds that the ownership and control of a company are separated, and there is an agency relationship between the management and the owner. Management can pursue their own interests by controlling the company's resources, which may be inconsistent with the interests of the owners. Therefore, the nature of the enterprise will have an impact on the company's performance. Different ownership structures can bring different agency costs, which in turn affect the company's performance. The resource-based theory believes that the performance of a company depends on the resources and capabilities it possesses. The impact of enterprise nature on company performance is mainly reflected in the acquisition and management of enterprise resources and capabilities. For example, private enterprises usually focus more on short-term profits, but may lack the resources and capabilities for long-term development, while state-owned enterprises focus more on long-term development and social responsibility, but may face issues such as policy constraints and

insufficient resource allocation. Xiao Xing and Chen Chan (2013), based on the implementation motivation, found that the purpose of implementing equity incentives in private enterprises is mainly to motivate management, reflecting the idea of "optimal contract theory". Due to internal control and other issues, state-owned enterprises are more likely to engage in equity incentive activities for the purpose of seeking personal gain. Li Chuntao and Song Min (2010) pointed out based on empirical research that salary incentives for executives can promote R&D and innovation activities in enterprises, and the promotion effect of private enterprises is stronger.

Specifically, regarding the heterogeneity of ownership nature, state-owned enterprises and non-state-owned enterprises are the two major sectors of listed manufacturing companies. Non state-owned enterprises face fierce market competition and often rely on core research and development and technology to widen the gap with other enterprises. They rely heavily on talent, so implementing equity incentive policies in non-state-owned manufacturing enterprises can form a good connection between enterprises and employees, making core employees more active in serving the company. At the same time, this can also reduce the loss of core personnel in the company and enhance its competitiveness and performance. Zhou Renjun et al. (2010) found that the promotion effect of equity incentives on business performance is more evident in non-state-owned enterprises. At the same time, some scholars hold the view that state-owned enterprises have better incentive effects. Yuan Youlong (2015) found through empirical research that compared to private enterprises, state-owned enterprises have a more significant performance improvement effect by implementing equity incentives. Shen Xiaoyan and Wang Yuetang (2015) reached consistent conclusions through research. Li Chunyu (2021) found that compared to non-state-owned enterprises, the implementation of equity incentives in state-owned enterprises is more effective in suppressing the negative effects of salary restrictions on corporate governance. State owned manufacturing listed companies are usually enterprises that have reached a certain level of scale and are relatively stable, so there are more repetitive and single transactions. Although equity incentives for management can also motivate them to pay attention to the value and performance improvement of enterprises, this promotion effect is far less obvious than that of non-state-owned manufacturing listed companies.

From the actual case analysis of H Company, it can also be confirmed that there

are differences in the nature of non-state-owned and state-owned listed companies in the manufacturing industry, which can also have an impact on the company's performance. On the one hand, in terms of ownership and governance structure, state-owned listed companies are usually controlled or participated in by the government and state-owned enterprises, while non-state-owned listed companies often implement a shareholding system, with shareholders not limited to the government and state-owned enterprises. Therefore, state-owned listed companies may have more advantages in policy support, financing, and other aspects. Non state-owned listed companies may be more prominent in terms of operational flexibility and market competitiveness. On the other hand, there are also differences in management and operation, market expansion, and innovation capabilities among listed companies of different natures. The management and decision-making processes of state-owned listed companies are usually more complex and lack market-oriented mechanisms, resulting in slower response times. Non state-owned listed companies are more sensitive to market changes and customer demands, and can make decisions and adjust strategies more quickly. Therefore, the nature and operational characteristics of non-state-owned and state-owned listed companies in the manufacturing industry will have a differential impact on company performance. For non-state-owned listed companies, their flexibility, market sensitivity, and operational efficiency may be higher, enabling them to better respond to market changes. However, state-owned listed companies have certain advantages in policy support, resource allocation, and international market expansion, which can better respond to industry development trends. Therefore, non-state-owned listed companies and state-owned listed companies should adapt to local conditions and choose management models and business strategies that are suitable for their own enterprise characteristics and market environment, in order to improve the company's performance and growth potential.

Therefore, the fourth hypothesis of this paper is proposed:

H4: Compared with state-owned listed companies, non-state-owned listed companies in the manufacturing industry have a better impact of equity incentives on company performance.

4.1.5 Industry Type and Company Performance

Zang Qi (2017) proposed that regarding industry heterogeneity, listed

manufacturing companies can be composed of two major sectors: high-tech manufacturing and traditional manufacturing. High tech manufacturing enterprises have a high demand for talent and technology, as they need to rely on the intelligent achievements of high-end talents to continuously obtain innovative products to maintain their sustainable competitiveness. Such enterprises often have the characteristics of high initial investment but greater returns than other enterprises. Therefore, highly skilled talents are particularly important for the development of listed companies in the high-tech manufacturing industry. However, traditional manufacturing companies usually have entered a stage of stable development, unlike growth enterprises that urgently need to expand their teams and ensure team stability. Therefore, the possibility of implementing equity incentives to greatly improve company performance is relatively small.

From the actual case analysis of H Company, it can also be confirmed that the net sales profit margin of H Company, benchmark companies, and the industry remained basically unchanged from 2013 to 2015, and the fluctuation range was relatively stable. During the implementation of H Company's equity incentive from 2016 to 2019, its net profit margin on sales continued to rise and began to surpass the benchmark company and industry average in 2017. The net profit margin on sales of the benchmark company only showed an upward trend in 2016 during the implementation of a single equity incentive, and exceeded the average of H company and the industry. After 2016, the average change trend of its net profit margin on sales was roughly the same as the industry average, both showing a downward trend. In 2019, the industry average showed a slight increase, but the benchmark company average still showed a downward trend, even dropping to -30.39%, with a significant decrease. Therefore, from the perspective of sales net profit margin, compared to the benchmark company that implements a single equity incentive, the equity incentive implemented by H Company is more conducive to improving the company's sales net profit margin.

Therefore, the fifth hypothesis of this paper is proposed:

H5: Compared with traditional manufacturing, high-tech manufacturing has a better impact of equity incentives on company performance.

4.1.6 R&D Investment and Company Performance

The mediating effect of R&D investment by listed companies on equity

incentives and corporate financial performance is mainly based on the following theoretical analysis:

According to the principal-agent theory, as rational individuals, management values the pursuit of self-interest, which can easily lead to moral hazard issues. Implementing equity incentives for management can align the interests of management and shareholders, generate a convergence effect, and thus reduce agency costs. The management team is the group responsible for decision-making in the process of enterprise innovation, playing a decisive role in R&D investment. On the one hand, they need to develop innovation strategies and plans, and on the other hand, they need to coordinate innovation technology personnel and allocate the use of innovation funds, bear the risk of R&D failure and be responsible for the consequences. The risk preference of management determines whether they are determined to execute high cost and high-risk projects. The innovation motivation of executives can have a significant impact on innovation behavior, and the equity incentive system can motivate management to be more willing to implement it in order to maximize expected benefits, thereby stimulating their innovation enthusiasm and giving them stronger driving force to execute high-risk innovation research and development investment decisions, thereby improving the financial performance of the enterprise. In addition, the reputation level of corporate executives reflects their level and ability to govern the company. Investing in research and development can enhance the reputation level of executives, which is beneficial for improving corporate profits. Zhu Desheng and Zhang Wei (2017) found that granting executive equity can reduce agency costs in corporate research and development activities. Out of the pursuit of their own reputation, executives have the motivation to review and approve high-risk projects when making innovation decisions, which leads to higher R&D expenses for enterprises to drive innovation activities. From this, it can be seen that incentivizing management in the form of equity can improve their risk resistance ability, increase their investment in research and development in business decision-making, and ultimately enhance the financial performance of the enterprise.

According to the theory of human capital, the reserve of scientific and technological knowledge and innovation experience mastered by core employees are important human capital for enterprises, playing a direct role in the innovation output of the enterprise. From a long-term perspective, granting equity to core technical personnel can help companies effectively attract and retain this group, and even have

better promotion effects than implementing equity incentives by management. Enterprise R&D investment is a necessary resource for innovation output, which is crucial for improving the knowledge and skills of core technical personnel, and also helps to accelerate the transformation of innovation achievements. Zou Wenjie (2015) believes that R&D investment in enterprises is crucial for their innovation, as it can help them accumulate internal knowledge and enhance their innovation capabilities. The greater the intensity of research and development investment, the more significant its effect on improving the efficiency of enterprise research and development. Granting equity to core technical personnel can better promote the innovation output of the enterprise, provided that the R&D expenses of the enterprise are sufficient. Therefore, for management and core employees, R&D investment is an intermediary variable in the mechanism of equity incentives and corporate financial performance.

The actual case analysis of Company H also confirms that during the equity incentive period, the number of technical personnel in Company H increased from 110 in 2008 to 2000 in 2018. The doubling of the number of R&D technical personnel indicates that H Company attaches great importance to investing in R&D and innovation. Therefore, H Company's achievements today are also related to its emphasis on innovation and active introduction of talent.

Based on the above analysis, the sixth hypothesis of this paper is proposed:

H6: Under the premise of controlling other conditions, implementing equity incentives in enterprises will enhance their R&D investment, thereby improving their financial performance.

4.2 Empirical Research Design

4.2.1 Sample Selection and Data Sources

This paper selects manufacturing listed companies that announced equity incentives from 2013 to 2021 as panel data for the study sample composition. The 2012 version of the China Securities Regulatory Commission's Industry Classification Guidelines for Listed Companies is the basis for industry distribution in this paper, and its data is sourced from the CSMAR database. In order to make the results of the article more convincing, the author screened the data in the following six steps. (1)

Excluded ST or PT companies. (2) Excluded companies with incomplete data. (3) Removed listed companies in the finance or insurance industry. (4) This paper has removed the forms of equity incentives and other stock appreciation rights. Because this method occupies a too small proportion in the sample and does not have persuasiveness. (5) If the selected sample undergoes multiple equity incentives within the data interval, the initial one will prevail in this paper. (6) The selected samples were subjected to 1% and 99% Winsorize tail reduction processing. After processing, this paper obtained a total of 1049 manufacturing companies and used Excel and Stata for data processing.

4.2.2 Variable Selection

4.2.2.1 Explained variable

Referring to the research of Chen Lei (2019), Li Wenjing (2020), and Li Zhen (2021), this paper selects the return on equity (ROA) as a measure of company performance. The calculation of return on equity is equal to the ratio of net profit to shareholders' equity. Foreign countries usually use Tobin Q value or EPS as the measurement method, but that is because foreign countries have the prerequisite to use these measurement methods. That is to say, foreign capital markets are more mature, have better stability, and have more certainty in stock prices. However, China's capital market is still in the development stage, and the performance of companies can be more accurately measured through ROE and ROA. Among them, ROE measures the returns generated by shareholder investments, while ROA comprehensively considers the returns generated by shareholder and creditor investments, which is more comprehensive and can reflect the profit creation of all assets. Therefore, this paper uses the indicator ROA as a measure of company performance and utilizes ROE as the explained variable for robustness analysis.

4.2.2.2 Explanatory variables

(1) Equity incentives

This paper introduces dummy variables to explore whether listed companies implementing equity incentives have improved company performance compared to those that have not yet implemented equity incentives. If equity incentives are implemented within the given research interval, M is taken as 1. On the contrary, if equity incentives are not implemented, M is taken as 0.

(2) Equity incentive elements

1) Degree of equity incentives

The degree of equity incentive is expressed by the proportion of equity option compensation to total compensation, denoted as MS.

2) Number of equity incentives

The number of equity incentives refers to the number of incentive targets involved in equity incentives, which is the range of employees radiated by equity incentives and is expressed in PNumber.

4.2.2.3 Control variables

In addition to equity incentive factors, executive compensation, company growth, asset liability ratio, company size, total asset turnover rate, and equity concentration (Feng Fangxin, 2020; Zhou Shuangshuang, 2021; Ni Yan and Hu Yan, 2021; Zhang Yujin, 2019) are all factors that can change a company's performance and efficiency. Therefore, this paper incorporates the above control variables to make the model more accurate. The company size is taken as the natural logarithm of the total asset size to reduce heteroscedasticity.

Table 4-1 Variable Definition Table

Variable Type	Variable Name	Symbol Definition	Variable Definition
Explained Variable	Company performance	*ROA*	Return on total assets=Net profit/total assets * 100%
Explanatory variables	Degree of equity incentives	*MS*	Total number of equity incentives/total share capital
	Number of equity incentives	*PNumber*	Number of incentive recipients granted for the first time
	Exercise validity period	*MTime*	Validity period of equity plan execution
	Exercise price	*MPrice*	Comparison results with other exercise prices

Control variables	Company size	*Sze*	Natural logarithm of total assets at the end of the period
	Asset liability ratio	*Levarege*	Total liabilities/total assets
	Growth	*Grow*	Operating revenue growth rate
	Total asset turnover rate	*OpeLevarege*	Operating income/(ending total asset balance+beginning total asset balance) * (1/2)
	Equity concentration	*Owner*	Shareholding ratio of the top ten shareholders
	Executive compensation	*Pay*	The average total salary of the top three executives (unit: 10000 yuan)

4.2.3 Model Design

Based on the variables selected in this paper, a panel regression model can be constructed as follows:

$$ROA_{it} = a_i + \beta_1 M_{\text{it}} + \gamma_1 Size_{it} + \gamma_2 Rate_{it} + \gamma_3 GROW_{it} + \gamma_4 Operate_{it} + \gamma_5 Owner_{it} + \gamma_6 Pay_{it} + \varepsilon_{it}$$

(4-1)

$$ROA_{it} = a_i + \beta_1 MType_{\text{it}} + \beta_2 MS_{\text{it}} + \beta_3 P\text{number}_{\text{it}} + \beta_4 MTime_{\text{it}} + \beta_5 M\ \text{Price}_{it} + \gamma_1 Size_{it} + \gamma_2 Rate_{it} + \gamma_3 Grow_{it} + \gamma_4 Operate_{it} + \gamma_5 Owner_{it} + \gamma_6 Pay_{it} + \varepsilon_{it}$$

(4-2)

In model (4-1), ROA represents the dependent variable company performance, and M represents whether equity incentives are implemented, which is an independent variable. Size, Leverage, Grow, OpeLeverage, Owner, and Pay represent the logarithms of company size, asset liability ratio, company growth, total asset turnover, equity concentration, and executive compensation, respectively. α It is a constant term, β Is the regression coefficient of the explanatory variable, γ It is the regression coefficient of the control variable and the random error term. Model (4-1) is used to test hypothesis 1 and its sub hypotheses.

In model (4-2), MS, PNumber, MTime, and MPrice represent the intensity of equity incentives, the number of incentives, and the incentive price, respectively. α It is a constant term, β It is the variable regression coefficient and the random error term. Model (4-2) is used to test hypotheses 2 to 6.

4.3 Empirical Analysis

4.3.1 Descriptive Statistics

Table 4-2 Descriptive Statistics of Main Variables in Model (4-1)

Variable Name	N	Mean Value	Standard Deviation	Minimum Value	Maximum Value
ROA	1049	0.0499	0.0505	-0.1577	0.1956
M	1049	0.2185	0.4132	0	1
Size	1049	22.3613	1.1210	20.2479	25.8714
Levarege	1049	0.3828	0.1738	0.0591	0.7678
Grow	1049	0.2466	1.9386	-9.2359	10.5320
OpeLevarege	1049	0.6621	0.3685	0.1397	2.3536
Owner	1049	57.3304	13.5981	27.6887	87.2654
Pay	1049	97.4324	84.4116	16.8033	533.6033

The first is the descriptive statistics of model (4-1). There is a significant difference in the total return on assets (ROA) of the sample companies, with the smallest enterprise coming from Yuanwang Valley (002161), which had a ROA of -15.77% in 2020, and the largest being VASEN (002372), which had a ROA of 19.56% in 2017, with an average of 4.99%. Their standard deviation is 0.0505, and the profitability of the sample companies varies.

M represents whether equity incentives are implemented. It can be seen that 21.85% of the listed companies in the sample manufacturing industry implement equity incentives, with a relatively low proportion. There is still some room for improvement in the coverage of equity incentives in China.

Size is the logarithmic value of a company's total assets. The minimum is 20.2479 for Guangdong Banbao Educational Toys Co., Ltd (603398) in 2016, and the maximum is 25.8714 for CIMC Group (000039) in 2019. After taking the logarithm, the difference in asset values is not significant, with a standard deviation of 1.1210. However, there are significant differences in the actual scale of each company due to differences in their establishment time, development stage, and industry.

The maximum value of Leverage is 76.78% in 2019 for Shenzhen Tiandihe Network (000023), and the minimum value is 5.91% in 2016 for EST (300488). Different companies adopt different strategies, operate differently, and choose different financing methods. Companies with a higher proportion of bond financing will also

have higher asset liability ratios. The increase in Leverage also means an increase in debt repayment pressure, and the company needs to ensure sufficient cash flow or other means to repay its debts. The average asset liability ratio of the sample company is 38.28%, which is at a relatively low level.

Grow is measured by the growth rate of operating revenue. The minimum value is -9.2359 from HANDLER (300201) in 2020, and the maximum value is 10.5320 from Ningxia Building Materials Group Co., Ltd. (600449) in 2017, with a standard deviation of 1.9386. There is a significant difference in the growth rate of operating revenue between companies. Some companies are in the sunrise industry, on the growth track, and their own good operating conditions reflect high development potential and high growth potential. On the contrary, there are also companies in industries with severe policy restrictions or sunset industries, and their corresponding growth performance is very abnormal, with an average revenue growth rate of 0.2466. Overall, the growth rate of operating revenue is at a reasonable level.

The largest OpeLevelage is 2.3536 for Zhejiang Hailiang Co., Ltd. (002203) in 2018, and the minimum value is 0.1397 for Qingdao Zhongcheng (300208) in 2019, with a mean of 0.6621 and a standard deviation of 0.3685. It can be seen that there are differences in asset utilization efficiency and operational capabilities among companies.

The owner is represented by the shareholding ratio of the top ten shareholders. The maximum value is 87.2654% of ZBD Pharmaceutical Island (603567) in 2020, and the minimum value is 27.6887% of China Fangda Group Co. Ltd.(000055) in 2020. The standard deviation of equity concentration is as high as 13.5981. Due to differences in governance and historical backgrounds, there are also significant differences in concentration among manufacturing companies, with an average of 57.3304%.

Pay is measured by the average of the top three executives in the company. The maximum value is 5.336033 million yuan from Chase Sun (300026) in 2020, and the minimum value is 188033 million yuan from Xinjiang Guannong Co., Ltd. (600251) in 2015. The average executive compensation is 974324 yuan, with a standard deviation of 84.4116 yuan. Overall, the salary level in China is relatively high, but each company has different scales and places varying emphasis on talent. Therefore, different salary systems have been adopted, resulting in significant differences. Next is the descriptive statistics of the main variables in the model (4-2):

Table 4-3 Descriptive Statistics of Main Variables in Model (4-2)

Variable Name	N	Minimum Value	Maximum Value	Mean Value	Standard Deviation
MS	516	0.12	8.67	2.2361	1.6519
PNumber	516	2	25.32	2.7117	4.0114
MTime	516	3	7	4.4432	0.7558
MPrice	516	1.22	53.45	11.2548	9.7360

The average incentive intensity (MS) is only 2.24%, with a standard deviation of 1.65. Overall, the incentive intensity in China is relatively low, far below the level of foreign countries. The highest incentive intensity comes from 8.67% of the equity incentive plan launched by Beijing Sumavison (300079) in 2015. The lowest level of incentive comes from 0.12% of the equity incentive plan launched by Fosun Pharmaceutical (600196) in 2015. The intensity of equity incentives is closely related to the proportion of company equity option compensation to total compensation and performance-based compensation, but there is still some room for improvement in the overall intensity of equity incentives in China.

The average number of equity incentives (PNumbers) is approximately 271, with a standard deviation of 401.10. The number of incentives varies among companies. The smallest company among them is Dajin Heavy Industry (002487), which only involved two people in the equity incentive plan announced in 2020. The largest company is Shanghai Electric Group (601727), which issued an equity incentive plan in 2019 to incentivize a total of 2500 employees.

The minimum incentive validity period (MTime) is 3 years and the maximum is 7 years. There are 29 sample companies with a validity period of 3 years, accounting for 5.62% of the sample. There are two sample companies with a validity period of 7 years, accounting for 0.39% of the sample. The mean validity period of the sample is 4.44 years, with a standard deviation of 0.7558. Four years is also the validity period that most companies choose, with 266 companies accounting for 51.55% of the sample, more than half.

The average incentive price (MPrice) is 11.25 yuan, with a standard deviation of 9.74. There is a significant difference in the equity incentive prices set by each company based on their own stock price. The lowest is 1.22 yuan, from the incentive plan announced by Shenzhen Jufei Optoelectronics (300303) in 2018, and the highest is 53.45 yuan, from the incentive plan adjusted by Guangdong Dowstone (300409) in 2017.

4.3.2 Correlation Analysis

Table 4-4 Correlation Analysis of Model (4-1)

ROA	M	Size	Levarege	Grow	OpeLevarege	Owner	Pay
ROA	1						
M	0.0397	1					
Size	-0.0014	0.0050	1				
Levarege	-0.3607	0.0221	0.5333	1			
Grow	0.3776	-0.0183	0.0267	-0.0429	1		
OpeLevarege	0.2213	0.0037	0.1514	0.1816	0.0686	1	
Owner	0.2221	-0.0344	0.0744	-0.0565	0.0370	0.0662	1
Pay	0.1772	0.1171	0.4754	0.1621	0.0309	0.1322	0.0317

In order to better understand the correlation between variables, the author further conducted Pearson correlation tests between each variable before regression analysis.

From table 4-4, it can be preliminarily seen that the correlation coefficient between equity incentives and company performance is 0.0397, which is a positive value. Preliminary verification shows a positive correlation between the two. The correlation coefficient between the variable company size (Size) and the asset liability ratio (Levarege) is controlled at 0.5333, while the correlation coefficients between the other variables are all below 0.5. That is, the variables are not troubled by severe multicollinearity.

Table 4-5 Tolerance of Variance Inflation Factor in Model (4-1)

Variable	Variance Inflation Factor (VIF)	Tolerance
M	1.02	0.9890
Size	1.82	0.5488
Levarege	1.48	0.6776
Grow	1.01	0.9890
OpeLevarege	1.06	0.9459
Owner	1.03	0.9748
Pay	1.35	0.7426
MeanVIF	1.25	

For further verification, the variance inflation factor (VIF) will be further tested. The larger the VIF value, the more severe the multicollinearity. When the VIF is less than 10, it indicates that there is no severe multicollinearity, as shown in table 4-5. Whether it is the independent variable of equity incentive (M) or the control variable

of company size (Size), asset liability ratio (Levarege), revenue growth rate (Grow), total asset turnover rate (OpeLevarege), ownership concentration (Owner), and executive compensation (Pay), the VIF of all variables is less than 1.9, and the average VIF is 1.25. There is no multicollinearity between variables.

Next, validate the model (4-2):

Table 4-6 Correlation Analysis of Model (4-2)

	ROA	MS	PNumber	MTime	Mprice	Size	Levarege	Grow	OpeLevarege	Owner	Pay
ROA	1										
MS	-0.1826	1									
PNumber	0.1162	0.2233	1								
MTime	-0.0371	-0.0193	0.1874	1							
MPrice	0.2301	0.0185	0.1451	0.0639	1						
Size	-0.0154	-0.0361	0.5258	0.2106	0.0219	1					
Levarege	-0.3354	0.1053	0.2193	0.1643	-0.0328	0.5603	1				
Grow	0.3437	-0.0091	0.0149	-0.0341	0.0266	0.0681	0.0325	1			
OpeLevarege	0.2479	0.0482	0.1615	0.0846	-0.0471	0.2094	0.2306	0.0722	1		
Owner	0.2479	-0.1671	0.0254	0.0428	0.2242	-0.0447	-0.0991	-0.0368	0.0902	1	
Pay	0.1525	-0.0256	0.3809	0.1215	0.1816	0.5420	0.1860	-0.0232	0.1314	0.0029	1

From table 4-6, it can be seen that the company performance in model (4-2) has been preliminarily positively correlated. That is to say, the return on total assets (ROA) is positively correlated with the number of incentives (PNumbers) and exercise price (MPrice), with correlation coefficients of 0.1860, 0.1162, and 0.2301, respectively. The correlation coefficient between company performance (ROA), exercise validity period (MTime), and incentive intensity (MS) is negative, with values of -0.0371 and -0.1826, respectively.

Next, the author further conducted the variance inflation factor (VIF) test, as shown in table 4-7. Whether it is the independent variable incentive intensity (MS), exercise validity period (MTime), exercise price (MPrice), incentive number (PNumber), or the control variable company size (Size), asset liability ratio (Leverage), revenue growth rate (Grow), total asset turnover rate (OpeLevarege), equity concentration (Owner), and executive compensation (Pay), all variables have a VIF of less than 2.7, with an average VIF of 1.41, There is no multicollinearity between variables.

Table 4-7 Model (4-2) Variance Inflation Factors

Variable	Variance Inflation Factor（VIF）	Tolerance
Myte	1.23	0.8103
MS	1.21	0.8260

PNumber	1.64	0.6104
MTime	1.08	0.9299
MPrice	1.27	0.7850
Size	2.65	0.3768
Levarege	1.62	0.6164
Grow	1.02	0.9777
OpeLevarege	1.11	0.8989
Owner	1.14	0.8793
Pay	1.55	0.6458
MeanVIF	1.41	

4.4 Empirical Results and Analysis

4.4.1 Regression Results and Analysis of the Impact of Equity Incentives on Company Performance

Due to the large number of models in panel data, in order to make the results more accurate, the author ultimately chose a fixed effects model after undergoing F-test, LM test, and Hausman test (Shu Kunyan, 2017; Tian Guoshuang and Qi Yingnan, 2018). The regression results are as follows:

Table 4-8 Model (4-1) Regression Analysis of Equity Incentive and Corporate Performance in Manufacturing Listed Companies

Model (4-1) - ROA	Regression Results	t-values
M	0.0039**	2.30
Size	0.0290***	12.05
Levarege	-0.1408***	-25.14
Grow	0.0078***	39.08
OpeLevarege	0.0781***	27.40
Owner	0.0001	1.51
Pay	0.0001***	5.37
C	-0.4431***	-11.26
Observations	1049	1049

R-squared	0.0497	0.0378

Note: ***. **. * respectively represent significant levels at 1%, 5%, and 10%, the same below.

From the results in table 4-8, it can be seen that for the independent variable, the correlation coefficient between the implementation of equity incentives and company performance is 0.0039, which is significant at the 5% level. That is to say, equity incentives can indeed promote the performance improvement of a company, which validates hypothesis 1 of this paper.

Among the six control variables of enterprise size, asset liability ratio, Grow (revenue growth rate), OpeLeverage (total asset turnover rate), Owner (equity concentration), and Pay (executive compensation), except for Owner, the other five variables all show a significant relationship with the dependent variable, all of which pass the 1% significance test. The correlation coefficient between enterprise size and company performance is 0.0290, which means that the larger the company size, the better it can reflect the company's long-term and stable operation, and its performance is relatively better. The correlation coefficient between asset liability ratio and company performance is -0.1408. As the asset liability ratio increases and the company's financial risk also increases, it is difficult for the company's performance to maintain high growth at the same time, and there is a negative correlation between the two. The correlation coefficient between revenue growth rate and company performance is 0.0078, and growth itself is a direct reflection of company performance. A company with good growth potential also has outstanding performance. The correlation coefficient between the return on total assets and company performance is 0.0781, indicating that the company's assets are operating effectively and its operating capacity is performing well, resulting in excellent performance. The correlation coefficient between executive compensation and company performance is 0.0001. Although the correlation coefficient between the two is not high, it is still positive and significant. Therefore, increasing executive compensation can motivate them to make effective decisions for the company, guide them in important strategic directions, and thereby enhance company performance. Finally, the positive correlation coefficient

between equity concentration and company performance is only 0.0001, and the result is not significant. That is to say, increasing equity concentration has a general effect on promoting company performance improvement.

4.4.2 Regression Results and Analysis of the Impacts of Equity Incentives on Company Performance under Different Corporate Natures

Table 4-9 Model (4-1) Regression Analysis of Equity Incentive and Corporate Performance of Manufacturing Listed Companies with Different Enterprise Properties

Model (4-1) - ROA	Non state-owned enterprises		State-owned enterprise	
	Regression Results	t-values	Regression Results	t-values
M	0.0053***	2.61	-0.0006	-0.19
Size	0.0253***	10.89	0.0174***	5.99
Levarege	-0.1366***	-19.81	-0.1321***	-13.57
Grow	0.0093***	34.97	0.0042***	17.24
OpeLevarege	0.0909***	23.13	0.0503***	14.38
Owner	0.0002	1.50	-0.0000	-0.34
Pay	0.0000***	3.56	0.0001***	5.77
C	-0.5211***	-10.34	-0.3384***	-5.45

In order to further explore the differences in the impact of equity incentives on corporate performance in manufacturing enterprises with different ownership properties, this paper divides all samples into two major sections: non-state-owned enterprises and state-owned enterprises. From the regression results in the table above, it can be seen that the equity incentive policies of non-state-owned manufacturing enterprise listed companies have a positive impact on company performance. Through a significance test of 1%, the correlation coefficient between the two is 0.0053, while the correlation coefficient between equity incentives and corporate performance of state-owned manufacturing listed companies is -0.0006, and they did not pass the significance test. This indicates that whether state-owned listed manufacturing companies have equity incentive plans has little impact on company performance,

indicating that hypothesis 4 of this paper has been passed. The possible reason is that state-owned enterprises themselves have a high status, large scale, good welfare, stability, and reasonable working hours, and can achieve talent retention without the need for equity incentives. Therefore, the impact of equity incentives on state-owned manufacturing companies is not significant. On the other hand, non-state-owned manufacturing enterprises are facing fierce market competition, and equity incentives can increase employees' sense of belonging to the company and feel the company's importance to themselves, thereby reducing personnel turnover. This can ensure the sustainability of the company's operations and the steady improvement of company performance, so equity incentives are more effective in improving the performance of non-state-owned manufacturing enterprises.

The correlation between the five control variables of non-state-owned manufacturing listed companies, including size, Leverage (asset liability ratio), Grow (revenue growth rate), total asset turnover (OpeLeverage), and Pay (executive compensation), and the dependent variable has all passed the 1% significance test. The positive correlation between ownership concentration (Owner) and corporate performance did not pass the significance test. Specifically, the correlation coefficient between enterprise size and company performance is 0.0253. The larger the scale, the better the performance of non-state-owned manufacturing listed companies. The correlation coefficient between asset liability ratio and company performance is -0.1366. That is to say, the increase in asset liability ratio and the financial risk of non-state-owned enterprises also increase. Therefore, excessive use of liabilities will increase the risk of difficulties in enterprise operation, which will have a negative impact on enterprise performance. The correlation coefficient between the growth rate of operating revenue and company performance is 0.0093, indicating that non-state-owned companies with good growth prospects naturally perform well. The correlation coefficient between total asset turnover rate and company performance is 0.0909. Non state-owned manufacturing companies with low total asset turnover rate also have lower asset utilization rate and lower operating capacity, resulting in lower enterprise performance. Finally, the correlation coefficient between executive

compensation and company performance is relatively small, and the promotion of non-state-owned manufacturing executive compensation on company performance is limited.

The correlation between the five control variables, Size, Leverage, Grow, OpeLeverage, and Pay, of state-owned manufacturing enterprise listed companies, and the dependent variable also passed the 1% significance test. The correlation coefficient between enterprise size and company performance is 0.0174, and the larger the scale, the better the performance of state-owned manufacturing listed companies. The correlation coefficient between asset liability ratio and company performance is -0.1321. An increase in asset liability ratio means an increase in the use of liabilities. Inappropriate use of liabilities can increase debt repayment pressure and reduce company performance. The correlation coefficient between the growth rate of operating revenue and company performance is 0.0042, which is also reflected in the improvement of performance in state-owned companies with good growth potential. The improvement of total asset turnover rate drives the improvement of business capabilities, which also drives the improvement of enterprise performance. The correlation coefficient between the two is 0.0503. The correlation coefficient between equity concentration and company performance is close to 0, indicating that the correlation between the two is not significant. Finally, although the correlation coefficient between executive compensation and the company is significant, it is also very small.

4.4.3 Regression Results and Analysis of the Impacts of Equity Incentives on Company Performance in Different Industries

Table 4-10 Model (4-1) Regression Analysis of Equity Incentive and Corporate Performance of Manufacturing Listed Companies in Different Industries

Model (4-1)-ROA	High tech manufacturing industry		Traditional manufacturing industry	
	Regression Results	t-values	Regression Results	t-values
M	0.0062***	4.15	0.0043*	2.22

Size	0.0047***	5.98	0.0083***	9.21
Levarege	-0.1455***	-33.14	-0.1332***	-24.73
Grow	0.0082***	25.27	0.0083***	21.42
OpeLevarege	0.0554***	24.00	0.0197***	12.02
Owner	0.0006***	12.81	0.0005***	8.96
Pay	0.0001***	8.31	0.0001***	8.76
C	-0.0794***	-4.77	-0.1393***	-7.67

Apart from the nature of property rights, this paper also explores the differences in the impact of equity incentives on company performance among manufacturing enterprises in different industries from the perspective of industry heterogeneity. All samples are divided into two major parts, high-tech manufacturing and traditional manufacturing, according to the *Management Measures for the Recognition of High tech Enterprises*. According to the regression results in the table above, the coefficient of improvement effect of equity incentives on the performance of high-tech manufacturing companies is 0.0062, which passes the 1% significance test. The coefficient of the improvement effect of equity incentives on companies other than high-tech manufacturing is 0.0043, which passes the 10% significance test. It can be seen that equity incentives have a more significant promoting effect on company efficiency in high-tech enterprises, so hypothesis 5 of this paper is valid.

In terms of control variables, the significance and symbols of the results between high-tech manufacturing industry and other enterprises are relatively consistent, with a significant positive correlation between Size, Grow, OpeLeverage, Owner, Pay and company performance, while a significant negative correlation between Leverage and company performance.

4.4.4 Regression Results and Analysis of the Impacts of Equity Incentive Elements on Company Performance

There are many panel data models. In order to make the results more accurate, the author conducted F-test, LM test, and Hausman test. The fixed effects model was ultimately selected for model (4-2), and the regression results are as follows:

Table 4-11 Model (4-2) Regression Analysis of Equity Incentive Elements and Corporate Performance in Manufacturing Listed Companies

Model (4-2)	Regression Results	t-values

MS	-0.0031***	-3.06
PNumber	0.0000**	2.17
MTime	-0.0021	-0.97
Mprice	0.0011***	6.05
Size	0.0024	1.01
Levarege	-0.1252***	-9.87
Grow	0.0088***	10.55
OpeLevarege	0.0399***	8.24
Owner	0.0004***	3.11
Pay	0.0001***	3.09
C	-0.0213	-0.42

From the explanatory variable results, it can be seen that incentive intensity (MS) is negatively correlated with corporate performance, with a correlation coefficient of -0.0031, and is significant at the 1% level. There is a negative correlation between incentive intensity and corporate performance, and hypothesis 2 has not been validated. The increase in incentive intensity not only does not promote the improvement of company performance, but may actually lead to a decrease in company performance. The possible reason is that the increase in the intensity of equity incentives will increase the control of the management and incentivized employees over the company. They may engage in behaviors that are not conducive to the long-term development of the company in order to obtain short-term benefits, resulting in a less than expected improvement in the company's performance.

The positive impact of equity incentive number (PNumber) on company performance has been tested at a significance level of 5%, and hypothesis 3 of this paper is valid. But it can be seen that the correlation coefficient between the two is very small, close to 0. The correlation between the number of equity incentives and company performance is very small, indicating that increasing the number of equity incentives too much will result in less special treatment for the incentivized personnel, and will not actively increase their contributions to the company. Therefore, the stimulating effect on company performance is not strong. There are many elements of equity incentives, and the effect of the number of incentives ultimately reflecting the company's performance is not significant.

The correlation between exercise validity period (MTime) and corporate performance shows a negative value of -0.0021, which did not pass the significance test. The relationship between the exercise validity period of equity incentive

elements and corporate performance is not inevitable, that is, hypothesis 4 cannot be passed. This is because the equity incentives for listed companies in China's manufacturing industry are mainly concentrated in 3-5 years, and the validity period between companies is not significantly different, which cannot have a significant impact on corporate performance.

The relationship between incentive price (MPrice) and corporate performance is significantly positively correlated. At the significance level of 1%, the correlation coefficient was 0.0011, thus verifying hypothesis 5. The higher the price of equity incentives, the better it can promote the improvement of corporate performance. In fact, setting a higher incentive price also means that the company's management has confidence in the company's future business development, which will make employees more proactive and have a stronger sense of belonging. Therefore, a virtuous cycle can be formed in the company, promoting employee motivation and improving corporate performance.

From the results of the control variables, it can be seen that the five control variables, Leverage, OpeLeverage, Grow, Owner, and Pay, all have a significant relationship with the dependent variable and have passed the 1% significance test. However, although there is a positive correlation between enterprise size and company performance, it has not passed the significance test. The correlation coefficient between enterprise size and company performance is 0.0024, which means that larger companies do not necessarily mean better performance. The correlation coefficient between asset liability ratio and company performance is -0.1252. An increase in asset liability ratio means an increase in financial risk for the company, resulting in poor performance of the company. The correlation coefficient between the growth rate of operating revenue and company performance is 0.0088, indicating that companies with good growth performance naturally perform well. The correlation coefficient between total asset turnover rate and company performance is 0.0399, indicating that the higher the total asset turnover rate, the stronger the company's operating capacity, and the higher the company's performance. The correlation coefficient between equity concentration and company performance is 0.0004. The equity incentives for listed companies in China's manufacturing industry are not yet in a very high position, and further improving equity concentration can promote the improvement of company performance. Finally, there is an increase in executive compensation, which is also one of the ways to promote company performance

improvement, and the two are positively correlated and significant.

In summary, it can be seen that the regression results of model (4-2) verify the validity of hypothesis 3 and hypothesis 5, but cannot verify the validity of hypothesis 2 and hypothesis 4.

4.4.5 Mediation Effect Test of R&D Investment

In the previous empirical study, this paper used model (4-2) to test the effect of equity incentives implemented by listed companies on corporate financial performance. When the dependent variables are the total number of patent applications and the number of invention patent applications, the coefficients for implementing equity incentives are significantly positive at the 1% level. This meets the step requirements of the intermediary testing process, which is significance at the 5% level. In this section, steps 2 and 3 of the mediation effect test will continue, examining the mediating effect of research and development investment on the impact of equity incentives and financial performance of listed companies.

This paper uses stepwise regression method to test the mediating effect of R&D investment, and uses Sobel coefficient product method to test the significance of interaction terms in the parameter testing process. Firstly, it explores the mediating effect of research and development investment on the equity incentives of listed companies and the total number of enterprise patent applications. Table 4-12 show the test results.

Table 4-12 Mediation effect test of R&D investment (total number of patent applications)

	(1) RD		(2) T_Patent	
	Coef	Std-Err	Coef	Std-Err
M	0.0049***	(0.0013)	0.1270**	(0.0631)
RD	-	-	9.2813***	(2.4258)
Size	-0.0057***	(0.0010)	0.6491***	(0.0427)
ROA	0.0431***	(0.0132)	1.2789**	(0.5971)
Age	0.0013	(0.0017)	0.1143*	(0.0677)
Lev	-0.0035	(0.0032)	0.0591	(0.1797)
Tangible	-0.0129***	(0.0041)	-0.2560	(0.2367)
Growth	-0.0005	(0.0001)	-0.0004***	(0.0001)
SOE	-0.0000	(0.0018)	0.4291***	(0.1115)

Top1	-0.0001***	(0.0005)	0.0067***	(0.0019)
Dual	-0.0001	(0.0010)	0.0270	(0.0457)
Ins	0.0001***	(0.0000)	-0.0006	(0.0011)
cons	0.1421***	(0.0264)	-12.5240***	(0.9309)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
N	1049		1049	
R2	0.1677		0.2865	

Note: ①***. ** and * indicate significant at the 1%, 5%, and 10% levels, respectively. Std Err is a robust standard error clustered at the enterprise level. ③cons is the constant term of the regression equation. ④N is the number of samples.

According to the empirical results in Tables 4-13, the equity incentive coefficient in model (4-4) is shown in column (1), which is 0.0049 and significantly positive at the 1% level, indicating that equity incentives for listed companies can significantly improve the level of R&D investment of enterprises. The coefficient of R&D investment in model (4-5) is shown in column (2), which is 9.2813, significantly positive at the 1% level. This indicates that equity incentives in listed companies increase the total number of patent applications by promoting R&D investment, and there is a mediating effect. The equity incentive coefficient in model (4-5) is 0.1270, which is significantly positive at the 5% level, and the absolute value is smaller than the coefficient 0.1725 in model (4-2). This indicates that adding the variable of R&D investment in model (4-5) slows down the effect of equity incentives on the total number of patent applications in enterprises. However, the promotion effect of equity incentives on the total number of patent applications is still significant, so research and development investment plays a partial mediating effect in the process of equity incentives affecting the total number of enterprise patent applications.

Next, it will explore the mediating effect of equity incentives in listed companies on the number of invention patent applications for R&D investment. Table 4-13 show the test results:

Table 4-13 Mediation effect test of R&D investment (total number of invention patent applications)

	(3)		(4)	
	RD		Patent1	
	Coef	Std-Err	Coef	Std-Err
M	0.0049***	(0.0013)	0.1317**	(0.0659)

RD	-	-	13.9811***	(3.0819)
Size	-0.0057***	(0.0010)	0.7402***	(0.0434)
ROA	0.0431***	(0.0132)	0.7936	(0.6387)
Age	0.0013	(0.0017)	0.0465	(0.0708)
Lev	-0.0035	(0.0032)	-0.5209***	(0.1888)
Tangible	-0.0129***	(0.0041)	0.1855	(0.2410)
Growth	-0.0002	(0.0001)	0.0001	(0.0001)
SOE	-0.0000	(0.0018)	0.5248***	(0.1191)
Top1	-0.0001***	(0.0002)	0.0033*	(0.0018)
Dual	-0.0001	(0.0010)	0.0346	(0.0466)
Ins	0.0001***	(0.0007)	0.0001	(0.0011)
cons	0.1421***	(0.0264)	-15.0031***	(0.9332)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
N	1049		1049	
R2	0.1677		0.2762	

Note: ① ***. ** and * indicate significant at the 1%, 5%, and 10% levels, respectively. ②Std-Err is the robust standard error for clustering to the enterprise level. ③cons is the constant term of the regression equation. ④N is the number of samples.

According to the empirical results in tables 4-13, the coefficient of equity incentives in model (4-4) is shown in column (3), which is 0.0049 and is significantly positive at the 1% level, indicating that equity incentives in listed companies can significantly improve the level of R&D investment of enterprises. The coefficient of R&D investment in model (4-5) is shown in column (4), which is 13.9811, significantly positive at the 1% level. This indicates that equity incentives for listed companies can increase the number of invention patent applications by promoting R&D investment, and there is a mediating effect. The coefficient of equity incentive in model (4-5) is 0.1317, which is significantly positive at the 5% level, and the absolute value is smaller than the coefficient of 0.2002 in model (4-2). This indicates that adding the variable of R&D investment in model (4-5) slows down the effect of equity incentives on the number of invention patent applications in enterprises. However, the promotion effect of equity incentives on the number of invention patent applications is still significant, so research and development investment plays a partial mediating effect in the impact of equity incentives on the number of enterprise invention patent applications.

Finally, the author further tested the mediating effect of R&D investment using the Sobel coefficient product method. The summary results of the two inspection

methods are shown in tables 4-14:

Table 4-14 Summary of the Mediation Effect Test Results of R&D Investment

Dependent variable	α1 Total effect	α'1×α''2 Mesomeric effect	α'1×α''2 Sobel P value	α''1 Direct effect	Conclusion	Effect proportion
T_Patent	0.1725***	0.0455	0.0002	0.1270**	Partial mediation	26.38%
Pantent1	0.2002***	0.0685	0.0000	0.1317**		34.22%

Note: ***. ** and * respectively indicate significant at the 1%, 5%, and 10% levels

According to the empirical results in table 4-11, the total effect of equity incentives on the total number of patent applications in listed companies is 0.1725, which is significant at the 1% level. The mediating effect of R&D investment on equity incentives of listed companies and the total number of patent applications is 0.0455, and the P-value of Sobel test is less than 0.05, indicating that it passes the Sobel coefficient product test. The intermediary effect of R&D investment accounts for 26.38%. The total effect of equity incentives on the number of invention patent applications in listed companies is 0.2002, which is significantly positive at the 1% level. The mediating effect of R&D investment on equity incentives of listed companies and the number of invention patents is 0.0685, and the P-value of Sobel test is less than 0.05, indicating that it passes the Sobel coefficient product test. The intermediary effect of R&D investment accounts for 34.22%.

There is a mediating effect of R&D investment on the relationship between equity incentives of listed companies and the total number of enterprise patent applications and invention patent applications. Mediation refers to the role of a variable as an intermediary by influencing the relationship between two other variables. In this study, the author explored the mediating effect of R&D investment on equity incentives and enterprise patent applications. Firstly, research and development investment refers to the investment of funds and human resources in technological research and development by enterprises. It represents the level of support and importance that enterprises place on innovation capabilities. Equity incentive is an incentive mechanism that enhances employees' innovation motivation and performance by giving them equity or related rewards. The total number of enterprise patent applications and the number of invention patent applications are

important indicators for evaluating the innovation level and technological strength of enterprises. This study found that research and development investment has a mediating effect on the relationship between equity incentives and enterprise patent applications. Specifically, research and development investment has had a positive impact on equity incentives. By increasing R&D investment, companies can enhance employees' innovation motivation and performance, thereby enhancing their willingness and ability to participate in innovation activities. This further prompted enterprises to increase the number of patent applications, especially for invention patents. Further analysis indicates that research and development investment plays a mediating role in the relationship between equity incentives and patent applications. R&D investment has increased the positive impact of equity incentives on patent applications by increasing innovation resources and technological capabilities. In other words, R&D investment increases the driving effect of equity incentives on patent applications. Overall, research and development investment plays a mediating role between equity incentives for listed companies and the total number of enterprise patent applications and invention patent applications. By increasing research and development investment, the company can motivate employees to participate in innovation activities and increase the number of patent applications. For listed companies, this not only enhances their innovation capabilities and competitive advantages, but also helps to protect their intellectual property rights and technological innovation achievements.

Based on the empirical results, it can be concluded that there is a mediating effect between R&D investment and equity incentives of listed companies, as well as the total number of enterprise patent applications and invention patent applications, all of which are partial mediators. Therefore, under the premise of controlling other conditions, implementing equity incentives will enhance the financial performance of the enterprise by increasing its R&D investment. Hypothetical H9 has been verified.

4.6 Robustness and Endogeneity Tests

4.6.1 Endogeneity Testing Based on PSM Model

(1) Propensity score matching

When conducting empirical research, there are some endogeneity issues that

need to be overcome between equity incentives and corporate financial performance. Firstly, the introduction of equity incentive plans usually selects a period when the company performs well, which may create the illusion of a correlation between equity incentives and the company's financial performance. That is to say, it is not certain whether equity incentives have led to an improvement in the financial performance of the enterprise, or whether the enterprise has already performed well before introducing equity incentives. Secondly, incentivizing employees and management through equity incentives can lead to more favorable behaviors for the long-term development of the enterprise, but this internal motivation may coexist with other external factors, making measuring the impact of equity incentives on financial performance more complex. For example, external factors such as industry competition, market demand fluctuations, and macroeconomic environment may have significant impacts on corporate financial performance, and the causal relationship between these factors and equity incentives is difficult to fully distinguish. In addition, equity incentives are often accompanied by other factors that measure corporate performance, such as technological innovation and market competition. These factors may also have an impact on financial performance, thereby increasing the endogeneity of analyzing the impact of equity incentives on corporate financial performance.

When studying the impact of equity incentives on corporate financial performance in this paper, it is necessary to overcome the problem of sample selectivity bias, that is, there may be differences between companies that implement equity incentives and those that do not. Companies implementing equity incentives may place greater emphasis on innovative research and development, and selective bias may lead to endogenous issues such as missing variables. In order to control this endogeneity issue, this article draws on the approach of Li Danmeng and Wan Hualin (2017), Tian Xuan and Meng Qingyang (2018), and constructs a model (4-8). At the same time, this paper takes whether to implement equity incentives as the dependent variable, selects all control variables in the previous model as the characteristic variable, and performs Logit regression estimation to obtain propensity scores. And this paper adopts a 1:1 nearest neighbor matching with put back, and after the matching, equilibrium testing is also conducted. The inspection results are shown in table 4-15 and figure 4-1.

$$M_{i,t} = \alpha_0 + \alpha_1 Size_{i,t} + \alpha_2 ROA_{i,t} + \alpha_3 Age_{i,t} + \alpha_4 Lev_{i,t} + \alpha_5 Tangible_{i,t} + \alpha_6 Growth_{i,t} +$$

$\alpha_7 SOE_{i,t} + \alpha_8 Top1_{i,t} + \alpha_9 Dual_{i,t} + \alpha_{10} Ins_{i,t} + \alpha_{11} Ind_{i,t} + \alpha_{12} Year_{i,t} + \varepsilon_{i,t}$ (4-8)

In the model, i refers to different individual enterprises, and t refers to different observation years. The dependent variable M is whether the enterprise implements equity incentives, and the characteristic variable is selected from the control variable in the previous model. Size represents the size of the enterprise. ROA represents profitability. Age represents the years of listing. Lev represents the asset liability ratio. Tangible represents the asset structure. Growth represents the growth potential of the enterprise. SOE represents the nature of property rights. Top1 represents the concentration of equity. Dual represents executive power. Ins represents the proportion of institutional shareholding. $Year_{i,t}$ represents the fixed effect of the year. $Industry_{i,t}$ represents industry fixed effects. ε Represents model residuals.

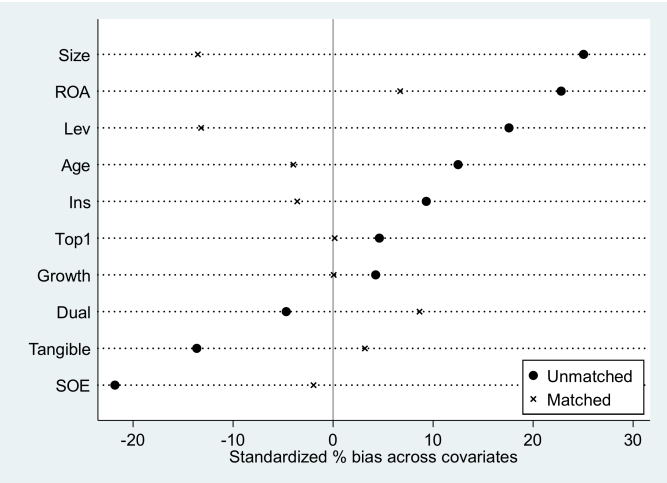


Figure 4-1 Robustness test: Deviation changes of variables before and after propensity score matching

From figure 4-1, it can also be seen that except for the increase in the difference between executive power (Dual) and center 0 after matching, all other variables decrease in their positions from center 0 after matching. This indicates that after propensity score matching, the individual characteristic differences between the experimental group and the control group decreased.

Table 4-15 Robustness test: propensity score matching equilibrium test

Variables		Mean value		%reduct		t-test	
		Treatment group	Control group	%bias	bias	t-values	p>| t |
Size	Unmatched	21.322	21.128	25.0		5.41	0.000
	Matched	21.313	21.418	-13.5	46.0	-2.87	0.004
ROA	Unmatched	0.057	0.047	22.8		4.98	0.000
	Matched	0.057	0.054	6.7	70.6	1.65	0.099
Age	Unmatched	1.535	1.477	12.5		2.73	0.006

	Matched	1.535	1.553	-4.0	68.1	-0.94	0.345
Lev	Unmatched	0.286	0.258	17.6		3.79	0.000
	Matched	0.286	0.307	-13.2	24.9	-2.92	0.004
Tangible	Unmatched	0.149	0.165	-13.6		-2.97	0.003
	Matched	0.150	0.146	3.2	76.7	0.77	0.444
Growth	Unmatched	1.627	0.462	4.3		0.86	0.390
	Matched	0.455	0.440	0.1	98.7	0.42	0.672
SOE	Unmatched	0.015	0.055	-21.8		-4.96	0.000
	Matched	0.015	0.019	-2.0	91.0	-0.65	0.513
Top1	Unmatched	31.898	31.299	4.6		1.00	0.320
	Matched	31.908	31.888	0.2	96.6	0.04	0.971
Dual	Unmatched	0.451	0.474	-4.7		-1.02	0.309
	Matched	0.453	0.410	8.6	-84.4	2.05	0.040
Ins	Unmatched	30.948	28.712	9.3		2.02	0.043
	Matched	30.942	31.802	-3.6	61.5	-0.85	0.395

According to the equilibrium test results in Tables 4-15, the significance levels of company size (Size) and asset liability ratio (Lev) remain unchanged before and after matching, and the P-value is still less than 0.01. The P-value of executive power (Dual) decreases after matching. The P values of profitability (ROA), listing age (Age), asset structure (Tangible), corporate growth (Growth), property ownership (SOE), equity concentration (TOP1), and institutional shareholding ratio (Ins) after matching were greater than the P values before matching, indicating that after propensity score matching, the individual characteristic differences between the experimental group and the control group decreased. The results of the comprehensive balance test showed that the difference between the experimental group and the control group decreased after matching. Next, further analysis and testing will be conducted on the two sets of samples.

(2) Double difference model

After completing the propensity score matching, this paper drew on the research of Li Danmeng and Wan Hualin (2017), Guo Lei et al. (2019), and constructed a double difference model (4-9) to test the different effects of equity incentives on corporate financial performance between the experimental group and the control group. The double difference model is the most common non experimental method used for policy evaluation, mainly used to study the "processing effect". The main idea is to construct a double difference statistic for the effectiveness of policies or systems by comparing the differences between the experimental group and the control group before and after the implementation of policies or systems. The interaction coefficient is the net policy effect in the double difference model.

$$Innovation_{i,t}=\alpha_0 + \alpha_1 M_i + \alpha_2 Time_{i,t} + \alpha_3 M_i \times Time_{i,t} + \gamma X_{i,t} + Year_t + Industry_j + \varepsilon_{i,t} \quad (4\text{-}9)$$

In the model, i refers to different individual enterprises, and t refers to different observation years. The dependent variable "Innovation" is the financial performance of the enterprise, represented by the total number of patent applications "T_Patent" and the total number of invention patent applications "Patent1", respectively. M_i refers to the company that has implemented equity incentives. If equity incentives have been implemented during the sample period, 1 is taken, otherwise 0 is taken. $Time_{i,t}$ indicates that the experimental group takes 1 in the year in which the equity incentive was implemented and subsequent years, otherwise it is 0. The definition of the control group is the same as that of the experimental group. Interaction item $M_i \times Time_{i,t}$ as the core explanatory variable, is used to test whether implementing equity incentives improves the financial performance of a company after controlling for selection bias. X represents all control variables. $Year_t$ represents the fixed year effect. $Industry_j$ represents industry fixed effects. ε Represents model residuals.

The results of the double difference model test are shown in Tables 4-16:

According to the empirical results in Tables 4-16, when the dependent variable is the total number of patent applications, the interaction term between equity incentives and implementation time (M×Time) is significantly positive at the 10% level, with a coefficient of 0.1909. When the dependent variable is the number of invention patent applications, the interaction term (M×Time) is also significantly positive at the 10% level, with a coefficient of 0.2163. Therefore, it can be considered that the financial performance of the experimental group is significantly higher than that of the control group after implementing equity incentives, which means that the implementation of equity incentives by listed companies can significantly improve the financial performance of the enterprise. Thus, this is consistent with the conclusion obtained in 4.4.1.

Table 4-16 Robustness test: propensity score matching and double difference model

	(1) T_Patent		(2) Patent1	
	Coef	Std-Err	Coef	Std-Err
M	0.2059***	(0.0758)	0.0081	(0.0937)
Time	-0.0412	(0.0735)	-0.0801	(0.0894)
M×Time	0.1909*	(0.0996)	0.2163*	(0.1192)
Size	0.5790***	(0.0430)	0.3867***	(0.0533)

ROA	1.2140*	(0.6387)	0.7337	(0.7219)
Age	0.0437	(0.0718)	0.1234	(0.0843)
Lev	-0.0835	(0.1842)	1.0753***	(0.2092)
Tangible	-0.2909	(0.2361)	-0.8382***	(0.2837)
Growth	-0.0005***	(0.0001)	-0.0006***	(0.0001)
SOE	0.5551***	(0.1162)	0.5138***	(0.1309)
Top1	0.0052***	(0.0019)	0.0092***	(0.0024)
Dual	0.0296	(0.0462)	-0.0652	(0.0549)
Ins	-0.0003	(0.0010)	0.0004	(0.0013)
cons	-10.7948***	(0.9482)	-8.0349***	(1.1559)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
N	1049		1049	
R2	0.2753		0.2616	

Note: ①***. ** and * and * indicate significant at the 1%, 5%, and 10% levels, respectively. ②_cons is the constant term of the regression equation. ③N is the number of variables. ④r2_a is adjusting R2.

4.6.2 Robust Testing of the Impacts of Equity Incentives on Company Performance

In order to test the robustness of the results of the previous model (4-1), this paper uses Return on Equity (ROE) instead of Total Return on Assets (ROA) for further testing. ROE is the ratio of net profit to shareholder equity, and table 4-15 show the regression results of the model after replacing the dependent variable. It can be seen that equity incentives can still promote the improvement of manufacturing company performance at this time, and have passed the 1% significance test. Assumption 1 is still valid. In terms of controlling variables, except for a slight increase in the significance of ownership concentration, the stability of the results of model (4-1) has been verified, consistent with the previous text.

Table 4-17 Model (4-1): Equity Incentive and Performance Robustness Test for Manufacturing Listed Companies

Model (4-1)-ROE	Regression results	t-values
M	0.0090***	2.82
Size	0.0430***	12.37
Levarege	-0.1469***	-13.76

Grow	0.0168***	44.01
OpeLevarege	0.1365***	24.88
Owner	0.0003*	1.83
Pay	0.0001***	5.00
C	-0.9309***	-12.38

4.6.3 Robust Testing of the Impacts of Equity Incentives of Different Enterprise Nature on Company Performance

In order to test the robustness of the regression results under different ownership properties in the previous model (4-1), this paper uses Return on Equity (ROE) instead of Total Return on Assets (ROA) for further testing. Table 4-16 show the regression results of the model after replacing the dependent variable. At this point, equity incentives can still promote the improvement of performance of non-state-owned manufacturing listed companies, and have passed the 1% significance test. The relationship between equity incentives and the performance of state-owned listed companies remains insignificant, and Hypothesis 4 also passes. In terms of control variables, except for the slight improvement in the significance of ownership concentration (Owner) when selecting non-state-owned enterprises as samples, the stability of regression results for different ownership properties in model (4-1) was verified, consistent with the previous text.

Table 4-18 Model (4-1): Equity Incentive and Performance Robustness Test for Manufacturing Listed Companies with Different Enterprise Properties

Model (4-1)-ROE	Non state-owned enterprises		State-owned enterprise	
	Regression results	t-values	Regression results	t-values
M	0.0115***	3.03	0.0014	0.22
Size	0.0483***	11.16	0.0407***	6.44
Levarege	-0.1330***	-10.33	-0.1546***	-7.34
Grow	0.0185***	37.31	0.0124***	23.37
OpeLevarege	0.1450***	20.44	0.0991***	12.77
Owner	0.0006***	2.91	-0.0004	-1.32
Pay	0.0001***	3.57	0.0001***	4.39
C	-1.0668***	-11.34	-0.8474***	-6.27

4.6.4 Robust Testing of the Impacts of Equity Incentives in Different Industries on Company Performance

In order to test the robustness of the regression results for different industries in the previous model (4-1), this paper used Return on Equity (ROE) as the replaced dependent variable for further testing. Table 4-12 show the regression results of the model after replacing the dependent variable. At this point, equity incentives at a significance level of 1% can promote the performance improvement of high-tech manufacturing enterprises. At a significance level of 10%, it can promote the improvement of traditional manufacturing enterprises, and the correlation coefficient is 0.0093 for the former and 0.0062 for the latter. This indicates that the positive promotion effect of equity incentives on company performance is more significant and obvious for high-tech manufacturing industries, and hypothesis 5 is still valid. In terms of control variables, the significance and correlation coefficient sign of the regression results of the control variables are consistent with the previous text, and the stability of the regression results in different industries in model (4-1) has been verified.

Table 4-19 Model (4-1): Equity Incentive and Performance Robustness Test for Manufacturing Listed Companies in Different Industries

Model (4-1)-ROE	High-tech manufacturing industries		Traditional manufacturing industries	
	Regression results	Regression results	Regression results	
M	0.0093***	3.58	0.0062*	1.78
Size	0.0083***	6.06	0.0135***	8.50
Levarege	-0.1231***	-16.12	-0.1052***	-10.99
Grow	0.0167***	29.39	0.0192***	28.07
OpeLevarege	0.0951***	23.71	0.0350***	12.06
Owner	0.0010***	11.46	0.0008***	8.13
Pay	0.0001***	8.89	0.0002***	8.91
C	-0.1931***	-6.67	-0.2778***	-8.60

4.6.5 Robust Testing of the Impacts of Equity Incentive Elements on Company Performance

Next, to test the robustness of the results of model (4-2), this paper still uses Return on Equity (ROE) instead of Total Return on Assets (ROA) for further testing. Table 4-20 shows the regression results of the model after replacing the dependent variable. At this point, the correlation coefficients between the incentive type, number of incentives, and incentive price in the equity incentive elements and company performance are still positive, and have passed the significance tests of 1%, 5%, and 1%, respectively. That is to say, hypothesis 2, hypothesis 4, and hypothesis 6 of this paper are still valid. The correlation coefficient between equity incentive intensity, incentive validity period, and company performance is negative. The former passed the 1% significance test, while the latter did not pass the significance test. Hypothesis 3 and 5 of this paper are still not valid, and the results are consistent with the previous text. The sign of the correlation coefficient and the significance of the regression results between the control variable and ROE remain the same as before. This indicates that the robustness of the results of model (4-2) is guaranteed.

Table 4-20 Model (4-2): Equity Incentive Elements and Performance Robustness Test of Manufacturing Listed Companies

Model (4-2)-ROE	Regression results	t-values
MS	-0.0061***	-3.61
PNumber	0.0000**	2.39
MTime	-0.0036	-1.04
Mprice	0.0018***	6.01
Size	0.0047	1.21
Levarege	-0.0536***	-2.59
Grow	0.0158***	11.55
OpeLevarege	0.0686***	8.67
Owner	0.0007***	3.11
Pay	0.0001***	3.01
C	-0.0213	-1.32

Chapter 5 Research Conclusions and Contribution

5.1 Main Findings of the Study

This paper mainly explores the role and impact mechanism of equity incentives implemented by listed companies on their financial performance, and conducts case studies and empirical studies. In the case study section, relevant literature at home and abroad was referenced and summarized to illustrate the impact of different incentive schemes on company performance. Thus, the overall development trend and direction of various financial data since H Company implemented equity incentives have been formed, and the internal mechanism of the impact of equity incentives on enterprise performance has been analyzed. In the empirical research section, listed companies in China's manufacturing market from 2013 to 2021 were selected as samples to first test the overall effect of equity incentives on the financial performance of listed companies. Subsequently, we focused on the incentive target of core employees and explored the impact of core employee equity incentive intensity on corporate financial performance, as well as the differences between core employee stock option incentives and restricted stock incentives. Then it further examined the mediating effect of R&D investment on equity incentives and corporate financial performance, as well as the moderating effect of financing constraints on equity incentives and corporate financial performance. Finally, it conducted robustness tests using three methods: propensity score matching and double difference model, replacing the dependent variable, and controlling the annual trend of the industry. After the above research, the following findings were obtained:

Firstly, research on equity incentive theory. A systematic study of the relevant theories of equity incentives and the connotation and types of equity incentives provides a corresponding theoretical basis for the case study of this paper. Among them, the focus was on the performance evaluation methods of relevant enterprises, laying the foundation for subsequent research in the full text. At present, there are many academic studies on the financial performance of listed companies, but there are fewer studies on the evaluation of financial performance of home appliance enterprises compared to other industries. Through the research of this paper, on the one hand, it can provide improvement references for the establishment of financial performance evaluation index system in the home appliance industry, and on the other

hand, it also enriches the research on financial performance evaluation in the home appliance industry.

Secondly, analysis of equity incentive cases. This article first sorts out and analyzes the current equity incentive measures of Chinese enterprises, and selects representative equity incentive cases of Company H for specific explanations. The improved DuPont analysis method was used to establish a system of the impact of equity incentives on corporate financial performance based on specific cases, and the research hypotheses were empirically tested using actual corporate data. Equity incentives are beneficial for promoting corporate performance growth, enhancing innovation and production enthusiasm. China has gradually recognized the positive impact of equity incentives on enterprises and has continuously strengthened subsidies to enterprises. However, there is still a certain gap between developed countries and the amount of subsidies, and there is a significant gap between the amount of subsidies and the funds required for research and development investment. Therefore, the benefits of equity structure should continue to increase support for enterprise research and development, in order to ensure the smooth development of enterprise innovation activities. According to the principal-agent theory, incentive theory, and human capital theory, equity incentive schemes can to some extent boost the morale of incentive targets, safeguard employee interests, and indirectly improve the performance of the enterprise. Therefore, for home appliance enterprises, a labor-intensive industry that emphasizes innovation, it is particularly important to expand the number of R&D personnel among incentive targets. If necessary, enterprises can set up corresponding equity incentive plans for R&D personnel separately.

Thirdly, the empirical testing of panel data in this paper leads to the following conclusions. Equity incentives for manufacturing listed companies can promote the improvement of company performance. Hypothesis 1 of this paper is valid and has passed the 1% significance test. The equity incentives of non-state-owned listed companies in the manufacturing industry can also significantly promote the company's performance, and have passed the 1% significance test. However, the positive relationship between state-owned listed companies in the manufacturing industry and company performance is not significant, and there is no necessary connection between the two. Equity incentives have a better promoting effect on the performance of non-state-owned listed companies. Hypothesis 4 of this paper is

approved. The possible reason is that state-owned listed companies in the manufacturing industry have a large scale, high status, good welfare benefits, stable work, and moderate working hours. It is less necessary to retain talent through equity incentives, and the impact on company performance is not significant. For the industry, the significance of high-tech manufacturing is higher than that of traditional manufacturing, and the implementation of equity incentives in the former can better improve the company's performance. Hypothesis 5 is valid. This is because high-tech enterprises have a higher demand for high-end talents and technology, and they need to maintain team stability and sustained competitiveness.

Fourthly, there are some elements in the design of equity incentives that can also have a significant impact on company performance, but there are also elements that do not have a significant relationship with company performance. Specifically, both the number of incentives and the exercise price can significantly and positively affect the company's performance, and both have passed the significance test. Under the same circumstances, companies tend to adopt incentive forms of restricted stocks. With the increase in the number of incentives and exercise prices, it can better stimulate the enthusiasm of the incentivized objects, which can also have a positive promoting effect on corporate performance. However, it is worth noting that the number of incentives has a limited effect on improving company performance. Hypothesis 2 and Hypothesis 3 of this paper are valid. In addition, the validity period of equity incentive elements has not passed the significance test, and there is no necessary connection between them and corporate performance. Although the intensity of equity incentives has passed the significance test, the sign of the correlation coefficient between it and corporate performance does not match the hypothesis in this paper. Therefore, this paper did not pass the test of hypothesis 3 and 5. This may be because the increase in incentive intensity will increase the control of the company's incentivized employees, leading them to engage in short-term and detrimental behaviors to the company's long-term development in pursuit of their own interests. Therefore, the impact on company performance is counterproductive. The validity period of incentives is mostly 3-5 years, and it does not reflect a significant relationship with company performance.

5.2 Theoretical Contributions of Research

Firstly, this paper innovatively focuses on the core employee group and explores

the differences in the impact of equity incentive systems on corporate financial performance under different incentive targets. In domestic and foreign literature, there are many studies on how management equity incentives affect company innovation, but there is less research on employee equity incentives. Core employees possess the core technology of the enterprise and have rich innovation experience. This paper distinguishes between enterprise samples implementing stock options and restricted stock incentives, and explores the differences in the impact of core employee equity incentive intensity on corporate financial performance. This provides theoretical guidance for further improving the equity incentive system in the future, with strong practical significance.

Secondly, this paper innovatively uses financing constraints as moderating variables to explore the external financing environment faced by enterprise innovation. The research on equity incentives and corporate financial performance in domestic and foreign literature mainly considers the impact of external macro policies, market factors, and institutional environment, while there is relatively little literature on the regulatory effect of corporate financing constraints. This paper considers that listed companies in the manufacturing industry are mainly technology research enterprises, and their development requires a large amount of external financing support, and financing constraints reflect the difficulty of external financing. This paper innovatively analyzes the impact of financing constraints on equity incentives and financial performance of listed companies, which has significant guiding significance for expanding financing channels for manufacturing listed companies and leveraging the financing function of the capital market theory.

5.3 Practical Implications of the Study

5.3.1 Clarify the Scope of Equity Incentive Implementation

According to the results of vertical comparison, the performance of Company H has steadily increased. The return rate for three consecutive years after the implementation of the first phase of equity incentive plan in the entrusted agency is as follows. The return on equity after deducting non recurring gains and losses was 10.88% in 2007, 11.52% in 2008, and 15.06% in 2009. The performance evaluation indicators have improved every year from 2007 to 2010, and the conditions for

unlocking employee stock ownership plans have been met for three years. After the release of the draft of the second phase of the equity incentive plan in 2013, the performance evaluation indicators have improved every year from 2014 to 2015. In 2014, the ROE of the company during the first exercise period was 8.74%, and the net profit growth rate in 2014 was 93.99%. In the second exercise period, the company's ROE in 2015 was 9.87%, and the net profit growth rate in 2015 was 21.81%. It can be seen that implementing equity incentive plans can improve the company's performance level. The management is a stakeholder and meets the unlocking conditions of the employee stock ownership plan. As a result, the company's stock price continues to rise, and both the management and shareholders receive returns. Through analysis, it can be seen that equity incentive plans can improve company performance and enhance company competitiveness. After the implementation of the second phase of the equity incentive plan, the management took effective cost control measures to stabilize the gross profit margin of the product. The company's operating performance has turned losses into profits, and its profit indicators have steadily increased year after year. In 2014 and 2015, the exercise conditions for the second phase of the equity incentive plan have been met for two consecutive years. H Company has launched an equity incentive plan since 2013 and has successfully executed two phases. The incentive methods for these six phases of the equity incentive plan are mainly based on equity options, only the sixth phase is combined with restricted stocks, and no other incentive modes are used, with strong singularity. In order to better leverage the role of equity incentive plans, this paper will study the characteristics and scope of application of different equity incentive models. The same incentive method is also used for different incentive targets. Based on the previous summary, this paper found that each equity incentive model has its own shortcomings and different scope of application. H Company's equity incentive plan has been implemented for 6 years, and in terms of the entire development stage of the enterprise, H Company has entered a relatively stable development stage. Its equity incentive model selection should be continuously adjusted according to its own business development needs. In recent years, the price fluctuations in the Chinese stock market have been quite severe, and the main way for stock options to benefit is through the difference between the exercise price obtained and the later market price of the stock. Therefore, it is impossible to guarantee that the agreed exercise price can be smoothly exercised, so it may have lost the connotation it inspires. At present, the

completion of H Company's last two incentive plans is not ideal, and the urgent need for change in its single incentive model is explained. Therefore, in order to improve the effectiveness of equity incentive plans, it is necessary to formulate corresponding implementation plans based on the market environment and one's own actual situation. In the long run, a single incentive model has unfavorable incentive effects and cannot ensure the long-term healthy development of the enterprise. In the subsequent development, with the needs of different stages of enterprise development, the incentive mode should be adjusted in a timely manner. Therefore, in the future development, H Company needs to adjust its incentive model in a timely manner to avoid singularity.

In addition, based on the horizontal comparison results with comparable enterprises in the industry, after comparing the differences between the two stages, compared with the selected comparable enterprises that did not implement the equity incentive plan, the ROE of the three accounting years after the implementation of the equity incentive plan showed a significant increase. The initial equity incentive plan implemented by Company H in 2007 has achieved good results, helping to improve the financial performance of the company. After passing through the low periods of 2011 and 2012, and after the release of the second equity incentive plan in 2013, H Company's net asset return rate during the 2014 and 2015 assessment period has significantly improved compared to comparable companies, and all indicators show a rebound trend. Therefore, this paper believes that equity incentive plans can significantly improve a company's performance, but they cannot be simply seen as a tool for performance improvement. Instead, it should be considered whether they truly promote the continuous improvement and long-term development of the company's performance. At the same time, the exercise conditions of the equity incentive plan should not be limited to the overall financial indicators of the enterprise, but also include the proportion of research and development expenses, the number of new invention patent applications, etc., in order to promote the long-term and stable development of the enterprise's innovation ability. At the same time, it needs to cooperate with the performance evaluation of individual employees to ensure that the entire incentive plan is comprehensive, complete, authentic, and effective. To ensure that the execution process is open and transparent, the management should timely release the completion status of each indicator, and make timely adjustments to short-term goals based on changes in reality. In addition, enterprises should establish a

sound information disclosure system to enable information users to have a clearer understanding of equity incentive plans. Implementing equity incentives is beneficial for the improvement of H Company's financial performance. Equity incentives not only improve company performance, but also increase shareholder wealth. Equity incentives provide a direct source of power for enterprises, effectively ensuring the smooth progress of innovation activities, reducing the cost of research and development innovation, and helping to promote the growth of enterprise performance. Equity incentives will also provide guidance and assistance for H Company in related projects, reduce R&D risks and uncertainties caused by information asymmetry, and thus incentivize independent R&D. Equity incentives can improve company performance and market value by influencing management behavior. So the equity incentive plan implemented by Company H twice has achieved good results, helping to improve the financial performance of the company. At the same time, Company H should establish reasonable incentive targets. By designing an equity incentive system, the goal of maximizing the value of human capital can be achieved, and the innovation ability and market competitiveness of enterprises can be improved. Listed companies belong to knowledge intensive enterprises and have high requirements for scientific research level. Talents, especially core technical talents, are the most important factor for the development and growth of an enterprise. Equity incentives, as a short-term incentive measure, can enable employees to work hard to achieve organizational goals, thereby improving employee satisfaction. In response to the characteristics of high operational risks and high talent turnover in high-tech enterprises, equity incentives, as a long-term incentive model, can effectively stabilize the cultivation of core talents, improve the company's performance, and promote the development of the enterprise. In modern enterprises, the problem of agency is ubiquitous, and private technology-based enterprises represented by H Company cannot avoid it. By effectively avoiding the short-sighted and self-interest behavior of professional managers, the acquisition of stock prices can effectively reduce agency costs and maximize the intrinsic potential of enterprise professional managers. Therefore, in terms of setting incentive targets, H Company has clarified that core technical personnel are the main body and considered professional managers.

5.3.2 Reducing the Validity Period of Incentives Appropriately

This paper not only fails to verify the significant relationship between equity incentives and company performance, but also concludes that the correlation between the two is negative. Reducing the validity period of equity incentives appropriately can promote the improvement of company performance. This is because from the current situation of equity incentives in China, the validity period is concentrated in 3-5 years, while the upper limit of the entire equity incentive validity period is 10 years. Although there is still room for further improvement, the current validity period is already within a reasonable range, and excessive increase in validity period cannot bring ideal results. The further extension of the validity period means that it is more difficult for employees to obtain incentives and the time cost increases, which actually leads to laziness in their behavior and attitude. Therefore, it is not advisable to simply increase the validity period of incentives.

At the same time, from the analysis of the current situation of equity incentives in Company H, it can be found that the effectiveness of equity incentives in listed companies is insufficient. In response to relevant issues, similar enterprises can focus on improving from the following aspects. Firstly, enterprises can develop different equity incentive methods based on their own development stage characteristics. Secondly, enterprises should comprehensively consider various factors such as the type of enterprise, long-term development goals, and other factors, in order to reasonably set the total scale of equity incentives. Enterprises should establish appropriate validity periods based on their development goals. Fourthly, enterprises should comprehensively consider various factors such as incentives for long-term employees' length of service, degree of contribution, personal value, etc., in order to determine the extent of incentives for long-term employees. Before designing and implementing equity incentive plans, it is necessary to have a thorough understanding of their feasibility. Only in this way can it become more scientific and better achieve the expected goals. In the process of designing assessment, enterprises need to consider the specific analysis of incentive validity period, which includes the following aspects:

In the short term, H Company has steadily increased its performance for three consecutive years after implementing the first phase of equity incentive plan. The return on equity of the company is 10.88%, 11.52%, and 15.06%, respectively. Within

three years, the management met the conditions for unlocking the employee's shareholding plan, resulting in a continuous increase in the company's stock price, and both the management and shareholders received returns. In the long run, after the expiration date of the equity incentive plan, the company's financial indicators all decline to varying degrees. The company's operating performance began to decline due to various factors, which was the first loss in 2015. From this perspective, the equity incentive plan adopted by Company H can achieve the goal of improving business performance in the short term. However, for a period of time after the expiration of the validity period, it did not achieve the short-term incentive effect achieved. When H Company formulates incentive plans, it is necessary to extend the incentive period and determine the assessment period as a relatively reasonable interval. For example, the assessment period is defined as 5 years and the validity period is set as 10 years. If this period is limited to five years, it can to some extent solve the problem. This period can balance the long-term development of the enterprise with the true benefits of the incentivized objects, and also facilitate consensus between executives and the enterprise in terms of goals. In addition, as the equity incentive plan itself belongs to a long-term incentive mechanism, it will be affected by various factors during the implementation process. And in terms of equity incentive targets, the company's management is the majority, as well as core technical backbone and staff who have made significant contributions to the development of the enterprise. The design of equity incentive plans should develop corresponding incentive measures based on different types of incentives, in order to better unleash the role of equity incentives. H Company has implemented two phases of equity incentive plans and effectively improved the management efficiency by granting certain shares to incentive targets. To some extent, it reduces the agency costs for shareholders and management. The assessment conditions set by the equity incentive plan directly link the specific indicators of the company's financial statements with the management's compensation, and use accounting performance indicators as a basis to motivate the management, thereby promoting the management to make decisions that are conducive to improving the company's financial performance, and also making the company's business objectives more clear. This avoids harming the interests of the company's shareholders and is conducive to further leveraging the role of incentive mechanisms in the future. At the same time, it also avoids the problem of management's excessive reliance on the company's operating conditions and market

expectations. When H Company implemented equity incentives, another proactive response was to retain talent, reduce employee turnover, and stabilize the workforce. Therefore, in order to achieve the goal of maximizing enterprise value, it is necessary to conduct in-depth analysis and research on the role of equity incentives, in order to propose practical and feasible improvement measures. It is also necessary to prevent management's short-sighted behavior, effectively promote incentive plans, and achieve long-term improvement in financial performance.

5.3.3 Avoiding Single Mode of Equity Incentive

The design of equity incentive plans for listed companies is directly related to whether they can be implemented. The implementation of equity incentives serves specific company goals, so the design of equity incentive plans is crucial. At the same time, the design of equity incentive plans should also be combined with the company's own business strategy and strategic objectives, in order to better unleash its due value. If the initial design of equity incentives is not based on the actual needs of the enterprise or does not take into account the true financial situation of the company, blindly executing the success plans of other enterprises will undoubtedly add insult to injury for one's own enterprise. If the equity incentive plan deviates from the actual situation of the company during the implementation process, it will not be able to achieve the expected effect and may even cause serious consequences. To achieve this, we need to design an incentive method that is suitable for the actual situation of our company and ensure that the incentive plan can be effectively executed in order to achieve the expected goals. The essence of equity incentive is an incentive mechanism based on the principle of maximizing enterprise value. The differences in the nature of property rights have directly led to changes in the company's operating mechanism. The root cause of the change in the attributes of controlling shareholders lies in the change in the attributes of property rights. There are differences among different controlling shareholders in terms of company management methods, development positioning, and other aspects. As an integral part of a company's daily business activities, the development and implementation of equity incentive plans are characterized by small amplitude, low exercise conditions, and shortsightedness. After obtaining decision-making power, Saibo Holdings highly separated ownership and management rights, and its managers were under the supervision of foreign shareholders. Family members effectively reduced their self interest behavior through

various channels, overcoming past shortcomings and developing a relatively complete and reasonable equity incentive plan, thus achieving good incentive effects. This paper starts from the perspective of the impact of equity incentives on company performance, and combines case studies to explore the impact of equity incentive systems on company performance.

The specific selection method is shown in table 5-1:

Table 5-1 Summary of the Meaning, Characteristics, and Scope of Application of Six Equity Incentive Models

Mode	Meaning	**Characteristics**	**Scope of Application**
Stock Options	According to the equity incentive plan of a listed company, when the incentive object meets performance indicators during its future tenure, it is a right to obtain the company's stock at the previously agreed price. Its essence is a call option, which can be exercised or exercised upon the expiration of the incentive object.	The convergence of interests between managers and owners has been achieved, enabling operators to participate in the management of the enterprise with a greater sense of ownership, and better promoting the appreciation of the company's value. However, this model relies heavily on the effectiveness of the capital market. Based on the current situation of China's capital market, incentive targets may exhibit short-term behavior. For companies in the early stages of growth or rapid expansion, implementing this model is more suitable.	For companies in the early stages of growth or rapid expansion, implementing this model is more suitable

Stock appreciation rights	The incentive object has the right to receive benefits from performance improvement or stock price growth after meeting the performance conditions specified in the equity incentive plan. This model does not involve rights to issue shares, ownership, or voting rights.	This mode is relatively simple to operate and approve. The manager did not actually purchase the stock, and the incentive recipient did not need to pay cash when exercising the option. This model also overly relies on the capital market, where employees receive returns measured in cash based on rising stock prices, resulting in significant cash payment pressure for the company.	More suitable for companies with sufficient cash flow and stable stock prices.
Restricted stock	Listed companies can obtain their own stocks free of charge or at a price lower than the market price according to the conditions set in the equity incentive plan. The incentive mode in which the incentive object can only sell the stock to benefit from the agreed exercise conditions.	Due to the uncertainty of the stock market, it has a certain degree of punitive nature and strong incentives and constraints. But it sets a lockdown period, and the performance evaluation standards are relatively complex, suitable for enterprises that have poor business performance in the early stages or current period of entrepreneurship, and need to retain talents during the legitimate adjustment period.	Suitable for enterprises that have poor business performance in the early stages or current period of entrepreneurship and need to retain talents during the legitimate adjustment period.

Performance stocks	At the beginning of the period, the enterprise has set a more appropriate performance evaluation target in advance. When the incentive object achieves the target set by the enterprise within the agreed period, it will be granted a predetermined number of shares or a reward fund to purchase the company's shares for free.	The design is relatively standardized, and the most direct way to link the performance of incentive targets with compensation can avoid excessive reliance on market efficiency. However, there may be fraudulent practices by the management to adjust earnings in order to achieve performance goals, resulting in higher incentive costs and difficulty in setting performance evaluation targets.	More suitable for enterprises that have entered a mature stage or have achieved good performance and are constantly growing.
Virtual Stock	According to the incentive plan, the enterprise grants virtual stocks to the incentive objects, enabling them to enjoy stock dividends or the benefits brought by stock appreciation.	The stocks in this model are only the basis for enjoying dividends and will not change the company's equity structure. They only need to be approved by the shareholders' meeting, but it will cause cash payment pressure for the enterprise.	Suitable for enterprises with sufficient cash flow.
Employee Stock Ownership Plan	This is a new form of equity. The company provides a certain amount of shares to be subscribed and held by internal employees, making them shareholders of the company and entrusting them	The incentive targets are relatively broad, and the company shares profits with employees, which is beneficial for the company to retain talents, adjust the profit rights of the enterprise, transform the	Suitable for start-ups and growing enterprises, as well as situations where state-owned capital or founder capital exits.

to the employee shareholding committee or a third-party holding company for centralized management.	constraint mechanism, and also avoid the problem of malicious acquisitions. But this also leads to excessive dispersion of company equity, and in most cases, the incentive efforts are insufficient to achieve the expected incentive effect.

The selected conditions must be adapted to the current development status of the enterprise, as shown in table 5-1. Equity incentives are designed from the perspective of incentive targets, and the selection of incentive models should be consistent with the actual development status of the enterprise. At the same time, the design of equity incentive plans should also be combined with the company's own business strategy and strategic objectives, in order to better unleash its due value. Under the mode of equity incentive, listed companies now generally use stock options and restricted stocks. However, because of the limitations of China's capital market, the implementation of a single mode of equity incentive may not be able to guarantee the intended purpose of enterprises. Only the compound equity incentive and the non single mode of equity incentive can play an active incentive role in enterprises. At the same time, when designing equity incentives, the corresponding equity incentive plan should also be determined based on the actual situation of the company, combined with its own advantages and disadvantages, in order to maximize the value generated by the equity incentive system. Diversified equity incentive methods can be more comprehensive and specific in terms of incentive targets. This paper believes that in a single model, the incentive objects are all the same person, which is obviously limited, and various incentive methods should go hand in hand. Firstly, the scope of incentives should fully consider the specific circumstances of different incentive targets. For example, more incentives were implemented at the executive level. For companies in the growth stage, implementing incentives for cash payments can pose some risks to the company. Therefore, enterprises should choose equity option incentives and restricted stocks in parallel to avoid cash expenditures. In addition, in the process of motivating employees, virtual stocks or virtual value-added rights can be appropriately introduced to solve incentive problems. Meanwhile, for enterprises with

relatively dispersed equity, blindly implementing stock incentives will make equity more dispersed, and in severe cases, it can affect enterprise decision-making. So, just like unlisted companies, or just want to have a form of incentive. In recent years, companies have chosen virtual stocks and stock appreciation rights, which have a positive impact on incentive targets. However, they have also stabilized the company's equity structure and avoided greater conflicts caused by high executive shareholding ratios.

5.3.4 Improving the Operating Mechanism of Equity Incentives

Whether equity incentives can be successfully implemented, and how to ensure their effectiveness during the execution process, all require incentive mechanisms to ensure their effectiveness. At present, there is a widespread phenomenon of disharmony between equity incentives and performance in Chinese enterprises. Therefore, improving the incentive mechanism should start with improving the internal and external environment of equity incentives, promoting equity incentives, and improving the company's organizational structure. In addition, enterprises need to conduct a comprehensive analysis of the overall business situation of the company before preparing the plan, conduct industry analysis, collect data information, and design incentive systems based on the company's lifecycle. Secondly, it is necessary to select suitable incentive targets, determine reasonable incentive plans, and establish corresponding assessment systems. Only in this way can we effectively promote the improvement of enterprise performance and provide a solid foundation for equity incentives. The research results of this paper indicate that the adoption of equity incentive mechanisms by listed companies in China can effectively promote the development of enterprises, but there are still many problems.

Specific operation of equity incentive mechanism:

(1) Moderately increase equity concentration. As the scale of the enterprise increases, the degree of control also deepens. At this time, the separation of control and ownership of the company increases, leading to an increase in equity concentration, which in turn increases the agency cost of the company and reduces the performance level of the enterprise. The influence factor of equity concentration can significantly affect the financial performance of a company. In listed companies in China, due to the high concentration of equity, controlling shareholders often maximize their own interests by controlling the control and cash flow rights of the

listed company. When the largest shareholder of a company holds a significant share of the total share capital, its desired interest goal is to align with the overall interests of the company. If the controlling shareholder's control and income rights are separated, the controlling shareholder will achieve the goal of maximizing their own interests by encroaching on the rights and interests of minority shareholders or minority shareholders. So controlling shareholders tend to take proactive measures to improve the financial performance of the company, while reducing their degree of encroachment on the company's interests, thereby promoting the improvement of the company's financial performance level. When the largest shareholder is state-owned, the controlling shareholder can control the enterprise by increasing its cash flow, thereby reducing financial risk. At this point, the controlling shareholder will play an effective role in corporate governance and assist in the financial performance of the enterprise. In real life, when a company increases the shareholding ratio of its largest shareholder, operational difficulties and other issues may arise, which can provide theoretical guidance to the company. As the implementation time of the company's equity incentive plan increases, the number of circulating shares in listed companies continues to increase. Management can achieve the goal of improving the company's performance by improving internal liquidity. (2) Moderately increase the proportion of circulating shares in the company. If the management does not take proactive and effective measures in a timely manner to cope with potential sharp fluctuations in stock prices, it is necessary to consider whether to continue maintaining the existing equity structure to reduce significant changes in stock prices. The proportion of circulating shares in the equity incentive mechanism can significantly affect the financial performance of enterprises. In China's securities market, institutional investors are a special type of investor, whose investment behavior and interest orientation are closely related to the shareholders of listed companies. The circulation of stocks through the secondary market and changes in stock prices serve as a warning to managers. When making financial decisions, institutional investors will consider issues such as maximizing their own interests and market value. To avoid significant fluctuations in stock prices, managers will be committed to improving the financial performance of the company. Therefore, it is necessary to increase the proportion of circulating shares in the company. The larger the shareholding ratio of institutional investors, the more negative it will have on the company's finances. (3) The shareholding ratio of institutional investors should be moderately reduced. As the

degree of equity balance continues to decline, controlling shareholders often invest more energy in the daily operation and management activities of the company. Under the equity incentive mechanism, the factor of institutional investor shareholding ratio can significantly affect the financial performance of a company. In addition, when the concentration of company equity is too high, the phenomenon of "tunnel effect" caused by the separation of control and ownership, that is, controlling shareholders encroach on the interests of small and medium-sized investors in order to obtain more benefits, often occurs. Institutional investors not only invest money in companies, but also have a bearing on the business dealings between the two. At the same time, institutional investors also invested their money in companies for speculative purposes. This situation can easily make institutional investment unable to function as a "think tank" and promote the improvement of corporate financial performance. Therefore, it is necessary to reduce the share of institutional investors' holdings. (4) Moderately reduce equity checks and balances. Under the equity incentive mechanism, the degree of equity balance as an influencing factor can significantly affect a company's financial performance. In the case of a high degree of equity balance in enterprises, controlling shareholders are easily held back by other major shareholders and cannot effectively promote their involvement in the daily business management activities of the enterprise. Although the 'tunnel effect' has been weakened to varying degrees, in situations where equity is too dispersed, other major shareholders have greater power, which may also lead to their selfish behavior, leading to a decline in the financial performance of the enterprise. Therefore, it is necessary to reduce the impact of equity balance. (5) Establish a sound evaluation system, etc.

In all previous equity incentive plans, H Company has adopted both company and individual performance evaluation methods for the performance evaluation of exercise conditions. Company H has chosen three financial indicators, namely revenue growth rate, net profit growth rate, and return on equity, as its assessment indicators. However, these three financial indicators have been strongly impacted by the market, and executives of the company are prone to controlling or continuing financial data for personal gain. Therefore, the growth rate of market share and the growth rate of new CDN bandwidth can be included in non-financial indicators. At the time when H Company implemented its first equity incentive plan, it had just emerged from a period of sluggish performance. Based on the data from the previous year, the incentive plan was more likely to achieve assessment goals, but the incentive

effect was not significant enough. Considering the significant importance of the equity incentive system for corporate governance mechanisms, the granting period of equity incentives should also be relatively long, and the assessment threshold for performance indicators under exercise conditions can be appropriately increased. The assessment indicators are diversified, which can more comprehensively measure whether the contribution value of employees is proportional to the degree of stock option granting. H Company has a single set of exercise conditions, and the existing standards for limiting conditions are not high. For example, in the first equity incentive, the ROE is $\geq$ 1. However, in the setting of the exercise conditions for the second equity incentive, the setting of ROE is $\geq$ 6% -7.5%, which seems too simple and easier to achieve. Therefore, the effect of equity incentives will weaken in the later stage. The incremental exercise arrangement can avoid the incentive target from obtaining huge profits in the near future, while ignoring the short-term behavior of the enterprise's long-term growth, which is conducive to the effectiveness of equity incentives. The indexed stock option system can not only improve company performance, but also effectively reduce business risks and agency costs, making it a more reasonable incentive method. Firstly, the design of indexed stock options. Through in-depth analysis of the implementation results of H Company's previous equity incentive plans, the author found that external factors have a significant impact on the fixed exercise price. The market impact and the contribution of subjective efforts cannot be accurately measured in the variation of exercise prices. Indexing stock options can adjust their exercise prices accordingly in different markets or industry indices. Compared to fixed prices, this approach abandons the impact of overall market fluctuations on exercise returns. That is to say, when the market is optimistic about the overall socio-economic situation, using the ability index to calculate the cumulative rate of change can eliminate the negative impact of the Chinese market on stock option returns. In this way, abnormal returns in stock options can be excluded and the phenomenon of "free riding" of incentive targets can be avoided.

In addition, the selection of incentive goals must be moderate. When fully considering the cash flow of the enterprise, choosing cash incentives as the main incentive method or giving stock incentives to the company should clearly plan the company's future direction. Composite equity incentives tend to rationalize the selection of incentive targets, but in the parallel of dual models, the implementation of

incentive systems will be strengthened. So, before implementing, it is necessary to consider dual or multiple incentive models. The evaluation system for employees must be clear and clear in order to play a normative role in the future execution process.

At the same time, H Company can also guide employees' career planning from an external perspective through corporate culture, institutional systems, and other auxiliary measures. Enterprises should understand their employees' self-development plans, find the best entry point for their relationship and purpose with the company's philosophy, and guide employees in their career development. Secondly, establish a scientific and comprehensive performance evaluation system, and implement training and rotation exercises based on the interests, expertise, and development needs of employees, so that employees can truly work with confidence and maximize their potential, thus creating a good atmosphere and conditions for the sustainable development of the enterprise and employees. Thirdly, it needed to improve the internal management mechanism. Enterprises should establish a career dual channel management system, change the single position management system that could only be achieved through job promotion, and design new channels for technical development for professional and technical talents. This system separates employees from their original job sequence, forming a new 'career path'. The management channel and technical channel are set up in parallel, and the identities of personnel at the same level in the two channels are equal and freely changeable, in order to adapt to the career development needs of different types of employees. This is of great significance for improving the overall level of human resources and promoting the healthy and harmonious development of enterprises. Career dual channel management provides a strong guarantee for employees to achieve their personal career goals, and is also an effective means for enterprises to retain employees. Therefore, establishing and implementing a dual career channel system is of great practical significance. As one of the important factors of flexible incentives, enterprises must ensure that their channels are two-way smooth and have a lasting incentive effect.

5.3.5 Improving the Internal Governance Structure of the Company

A sound corporate governance structure can not only ensure the premise of equity incentives, but also serve as the foundation for the continuous development and growth of corporate governance. As an institutional arrangement, the role of corporate

governance structure is to create conditions and opportunities for the connection between various stakeholders within the company and external markets. Improve corporate governance structure, etc., in order to be effective in implementing equity incentive plans. With the continuous deepening of China's market economy and the transformation of economic growth mode, competition among enterprises is becoming increasingly fierce, which is both an opportunity and a challenge for Chinese enterprises. However, the current lack of management talents in enterprises has led to an incomplete corporate governance structure and unstable management, resulting in the inability to fully implement the corporate governance structure within the enterprise. Therefore, it is necessary to regulate various corporate governance mechanisms. Fully explore the triangular structure of corporate governance, establish a mutual supervision and balance relationship between the board of directors, managers, and supervisory board. At the same time, strengthen the training and education of company executives to improve their quality. The board of directors should enhance the discourse power of small and medium-sized shareholders, especially in the private enterprises studied by the author, where individuals have too much equity, which invisibly weakens the rights and interests of other shareholders. Enterprises should choose representatives elected by small and medium-sized shareholders to participate in the decision-making of the enterprise. At the same time, it is necessary to strengthen the independence and impartiality of the supervisory board and enhance its supervision. According to the *Company Law* and specific company practices, improve the disclosure system and regulatory system to form a good structural cycle. In addition, by establishing an equity incentive mechanism, both executives and ordinary employees have the right to share the interests of the enterprise. In the process of implementing equity incentives, independent directors hold a decisive position. Therefore, independent directors should express their opinions on the rationality of the design and implementation of the equity incentive plan bill before its implementation. At the same time, independent directors are also completely independent of the company and need to provide more objective and effective evaluations for company management decisions. Therefore, the independent director system should also be optimized. This paper mainly analyzes the problems and reasons of China's equity incentive mechanism, as well as how to improve its relevant legal system to better leverage its positive effects. Specifically:

(1) Increase the proportion of independent directors. The independent director

system is a good supervisory system in modern enterprises, which can enable listed companies to strengthen their control over operators to a certain extent, thereby promoting the improvement of internal governance mechanisms and improving the level of enterprise management. The influencing factor of independent directors can significantly affect the financial performance of a company. Due to the fact that independent directors are held by individuals with relevant knowledge or experience, they can use their professional and technical advantages to help companies solve financial problems. Independent directors have two major characteristics: professionalism and independence. Independent directors can protect the overall rights and interests of the company and safeguard the interests of small and medium-sized shareholders, thereby promoting a "win-win" situation for the enterprise and shareholders. This paper starts with analyzing the role of independent directors in enterprises, and proposes the main content and corresponding suggestions for the current supervision of independent directors in China. Therefore, in response to the specific situation of the enterprise, independent directors should be given certain powers to better exert their supervisory and management functions. Enterprises also need to improve the incentive system for the selection and appointment of independent directors, supervise and urge them to effectively and efficiently fulfill their duties, thereby safeguarding the interests of the company and improving the financial performance of the enterprise.

(2) Expand the size of the board of directors. When the number of board meetings is small, it helps to improve the efficiency of the board. In the case of a large board of directors, different board members represent different stakeholders of the enterprise, become spokespersons for different stakeholders on the board, and seek relevant rights and interests for the stakeholders they represent. At the same time, setting a reasonable number of board members can make it easier for the board to play its role. In the case of a large board of directors, it helps to reconcile conflicts between various stakeholders within the company. With the deepening of enterprise reform and the establishment of modern corporate system in China, there are more and more listed companies. In order to ensure the authenticity and accuracy of financial information disclosure of listed companies, it is necessary to appropriately increase the number of board of directors. When there is a large number of board members, it facilitates communication and coordination among board members, facilitates managers to accept different opinions, improves daily business decision-making, and

reduces business risks related to the enterprise. In the situation where the governance structure of listed companies in China is not yet sound and the phenomenon of insider control is relatively common, the role of board size in evaluating corporate financial performance is not significant. Due to the current clear regulations on the size of the board of directors in China's *Company Law*, in order to improve the financial performance of enterprises, the expansion of the board of directors has a certain degree of difficulty in operation, and the role of the board of directors size in the financial performance of enterprises is relatively weak. Therefore, enterprises need to continuously expand the size of the board of directors based on the specific situation of the company, in order to improve the financial performance of the enterprise.

(3) Increase the proportion of highly educated individuals on the board of directors. Enterprises should improve their corporate governance and financial performance by increasing the degree of highly educated board members. When the educational qualifications of board members are generally relatively high, it helps to improve the overall operational efficiency of the board of directors, thereby improving the financial performance of the enterprise. The larger the proportion of highly educated personnel in the board of directors, the better the financial performance of the enterprise. The overall quality of the members of a company's board of directors is directly related to whether the company's management decisions are scientific, which in turn has an impact on the company's financial performance. At the same time, the low proportion of highly educated personnel in the board of directors is not conducive to the development of the enterprise. However, under the current conditions in China, the proportion of highly educated board members has a weak impact on corporate financial performance, perhaps because the educational background of board members is not valued in enterprises. So it is necessary to conduct research based on the specific situation of the enterprise, increase the proportion of highly educated board members, and improve the financial performance of the enterprise.

(4) Establish a compensation committee. The compensation committee is mainly responsible for establishing a reasonable compensation system, equity incentive plans, etc. In addition, it is also necessary to determine executive compensation matters to ensure that the company's compensation regulations are implemented. The compensation committee must be established in the board of directors and concurrently served by the general manager, with at least one shareholder

participating in the meeting for deliberation and supervision. To ensure the scientific nature of the work of the Compensation Committee, firstly, it is necessary to ensure its economic independence. The chairman and independent directors are important members of the compensation committee and adopt an independent salary system. When establishing a compensation committee, it is necessary to clarify the responsibilities and authorities of each member, and strictly supervise each member to prevent abuse of power. Secondly, the work of the committee will not be interfered with by the board of directors and has objectivity. Therefore, it is necessary to conduct independent evaluations of executive compensation and establish equity incentive plans. Thirdly, by improving the salary structure and performance evaluation standards, the company's governance level can be improved to maximize shareholder benefits. At the same time, establish a fair, open, and just performance evaluation system to promote the implementation of equity incentive mechanisms. Once again, by improving relevant laws and regulations and corporate governance structure, we can ensure the implementation effect of the equity incentive plan. Finally, the supervisory board should strengthen the supervision and power balance of the compensation committee, and establish an accountability mechanism. On the other hand, we must adhere to the transformation from a job compensation system to a competency compensation system. The competency compensation system emphasizes the main focus on job performance, and is classified and designed according to different business fields and majors. That is to divide positions into corresponding positions and develop specific and feasible salary plans based on the characteristics of each position. The competency compensation system is established based on job responsibilities. By assessing employees' knowledge, skills, experience, behavior, attitude, and other abilities and qualities related to the job, we can determine whether they have created value for the enterprise and then determine their salary level. Therefore, the competency compensation system can be applied as an effective incentive mechanism to enterprises. Compared to conventional job compensation systems, competency compensation systems are based on knowledge, skills, self-awareness, and personality traits, as well as motivation and other comprehensive factors, which can maximize employee motivation. Especially for technical personnel with high work enthusiasm, developing their potential and improving their ability and quality level can promote the improvement of the core competitiveness of the enterprise and obtain their satisfactory salary level.

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