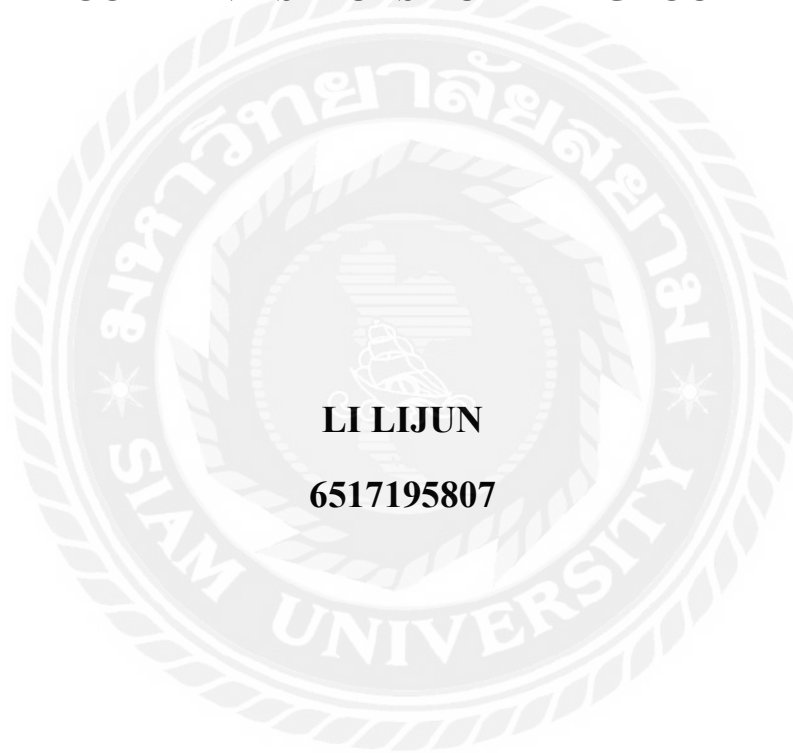




**A STUDY OF THE EQUITY INCENTIVE BENEFICIAL TO
COMPANIES-A CASE OF YILI GROUP**



LI LIJUN

6517195807

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY**

2024



**A STUDY OF THE EQUITY INCENTIVE BENEFICIAL TO
COMPANIES-A CASE OF YILI GROUP**

LI LIJUN

This Independent Study has been Approved as a Partial Fulfillment of the
Requirements for the degree of Master of Business Administration Program)

Advisor: *Jidapa C.*

(Dr. Jidapa Chollathanratanapong)

Date: *19* / *Aug* / *2024*

Jomphong
.....
(Associate Professor Dr. Jomphong Mongkhonvanit)

Dean, Graduate School of Business Administration

Date *20* / *Sept* / *2024*


Siam University, Bangkok, Thailand

Title: A Study of the Equity Incentive Beneficial to Companies-A Case of Yili Group

By: Li Lijun

Degree: Master of Business Administration

Major: International Business Management

Advisor: 

(Dr. Jidapa Chollathanratanapong)

..... 19 Aug / 2024

ABSTRACT

Equity incentive is an enterprise management system that aims to encourage employees to fully utilize their abilities and wisdom by offering them stocks, options, and other forms of equity. This system plays a crucial role in promoting the development of enterprises. However, the implementation of equity incentive has experienced a slow development process in China. Fortunately, with the introduction of national policies, equity incentive has gradually gained momentum and moved in the right direction. When properly implemented, equity incentive can effectively motivate management to work diligently and enhance company performance. Conversely, improper implementation may result in a skewed distribution of interests towards management at the expense of shareholders' rights and benefits, turning it into a tool for executives seeking personal gain.

This paper adopted the quantitative research methods to explore whether the equity incentive plan implemented by Inner Mongolia Yili Industrial Group Co., LTD (referred to as "Yili Group") in 2016 is effective for both the enterprise as a whole or solely for senior executives' self-interests. By referring to relevant literature and applying appropriate theories, this study focuses on analyzing the background context surrounding Yili Group's implementation of its equity incentive plan in 2016 along with challenges faced by its management team. The research objectives of this study were: 1) To explore the implementation effect of the equity incentive scheme of Yili Group; 2) To examine the effectiveness of the equity incentive design scheme of Yili Group.

Based on the analysis of the equity incentive scheme implemented by Yili Group in 2016, this study found that: 1) The actual outcomes align with expectations regarding

program effectiveness; it demonstrates certain incentivizing effects within both capital markets and overall enterprise performance; 2) The design of equity incentive program is effective, which is reflected in the appropriate incentive tools and moderate incentive intensity. However, there are still some problems, such as too low exercise conditions and too short an assessment period. Therefore, this paper puts forward some solutions which include offering flexible choice of equity incentive mode, setting up exercise conditions in various ways, and improving the internal governance structure of the company.

Keywords: equity incentive, Yili Group, company performance



ACKNOWLEDGEMENT

In the process of writing the study, many people have helped and supported me, here to express my most sincere thanks to them.

First of all, I want to thank my supervisor, Dr. Jidapa Chollathanratanapong. In the selection of consulting relevant materials and writing this article, she has devoted a lot of guidance and given me great encouragement. She is not only rigorous in her research, but also her career will affect and inspire my life. I will take this opportunity to express my deep gratitude to my mentor.

Secondly, I am grateful to Chinese Academy of Fiscal Sciences (CAFS) for giving me a stage for learning and growth, so that the theories of finance and management that I have learned in school can be applied in practice.

Again, I would like to thank all the teachers who helped, not only working hard, but also my good mentor; I am grateful to my classmates in the learning process, who gave me help and learning motivation; I appreciate my family encouragement and support, which enabled me to complete the study writing in the busy work.

Finally, I would like to thank my friends and family who have supported me for their support and encouragement. In the future of life on the road, may encounter many difficulties and setbacks, I will persevere to overcome, thank you for your help!

Li Lijun

Declaration

I, Li Lijun, hereby declare that the research embodied in this independent research report entitled “A Study of the Equity Incentive Beneficial to Companies—A Case of Yili Group” is the result of original research and has not been submitted to any other university or institution for a higher degree.

.....Li Lijun.....

Li Lijun

May 30, 2024



Contents

ABSTRACT.....	I
ACKNOWLEDGEMENT	III
Declaration.....	IV
Contents	V
List of Tables.....	VIII
List of Figures.....	IX
Chapter 1 Introduction.....	1
1.1 Research Background	1
1.2 Research Questions.....	2
1.3 Research Objectives.....	2
1.4 Research Scope	3
1.5 Research Significance.....	4
1.6 Research Limitations	4
Chapter 2 Literature Review.....	6
2.1 Introduction.....	6
2.2 Literature Review	6
2.2.1 Definition and tools of stock incentive	6
2.2.2 Motivation of stock incentive	8
2.2.3 Implementation effect of equity incentive	8
2.2.4 Scheme design of stock incentive.....	9

2.3 Theoretical Basis.....	11
2.3.1 Optimal contract theory	11
2.3.2 Principal-agent theory	12
Chapter 3 Research Methodology.....	14
3.1 Introduction.....	14
3.2 Research Methods.....	14
3.2.1 Documentary analysis method.....	14
3.2.2 Case study analysis method	14
3.3 Sources of Data	15
Chapter 4 Research Findings.....	17
4.1 Introduction.....	17
4.2 Content of equity incentive plan in 2016.....	18
4.3 The implementation of equity incentive plan achieved the expected effect.....	22
4.3.1 Capital market reaction.....	22
4.3.2 Business growth performance.....	28
4.4 The design of the equity incentive program was reasonable	33
4.4.1 Appropriate incentive tools.....	33
4.4.2 Moderate incentive	33
4.4.3 Too low exercise condition	35
4.4.4 Too short review period	38
Chapter 5 Conclusion and Recommendation	41
5.1 Conclusion	41

5.2 Recommendation	42
5.2.1 Be flexible in choosing the equity incentive model.....	42
5.2.2 Set the conditions for exercising rights in a diversified manner.....	42
5.2.3 Improve the company's internal governance structure	43
References.....	44



List of Tables

Table 2-1 Main design methods and characteristics of equity incentive	6
Table 4-1 Number of listed companies in China that announced equity incentive plans in 2006, 2014-2018 (Unit: family).....	18
Table 4-2 Third share incentive plan of Yili Group	19
Table 4-3 Profitability of Yili Group in 2014-2018 before and after excluding the impact of share payment expenses (unit: ten thousand yuan)	29
Table 4-4 EVA of Yili Group's Economic value added from 2012 to 2018 (unit: ten thousand yuan).....	32
Table 4-5 Analysis of the proportion of equity in the total share capital of listed companies implementing stock incentive in China	34
Table 4-6 Exercise of equity incentive stock options in 20161	34
Table 4-7 Share incentive restricted stock unlock in 20162	35
Table 4-8 Performance standard conditions for the three equity incentives of Yili Group	36
Table 4-9 Three equity incentive assessment periods of Yili Group	39

List of Figures

Figure 2-1 Logical relation of principal-agent theory	13
Figure 3-1 Research framework diagram	15
Figure 4-1 Market reaction before and after the plan announcement date	23
Figure 4-2 Market reaction before and after the grant date	24
Figure 4-3 Market reaction before and after the day of plan adjustment	25
Figure 4-4 Market reaction before and after the day of first exercise/lifting	26
Figure 4-5 Cumulative returns of Yili Group and Shanghai A-share Index from January 2016 to May 2019 ¹	27
Figure 4-6 Excess cumulative return rate of Yili Group from September 2016 to October 2019 ²	28
Figure 4-7 Profitability including expenses in 2014-2018	30
Figure 4-8 Profitability excluding expenses in 2014-2018.....	31

Chapter 1 Introduction

1.1 Research Background

Equity incentive, as a long-term incentive mechanism to solve the principal-agent problem of enterprises, aims to coordinate the interests between the operators and owners of a company and make their goals converge (Kim et al.,2016). The implementation of this incentive method in China started relatively late (Zhou et al., 2021). With the promulgation of the Measures for the Management of Equity Incentive of Listed Companies (Trial Implementation) in 2005 and the revision of the measures by the CSRC in 2016, China's equity incentive mechanism has gradually stepped into the right track (Fang et al., 2015).

When properly implemented, equity incentive can effectively motivate management to work diligently and enhance company performance (Liu et al.,2017; Essman et al., 2021). Conversely, improper implementation may result in a skewed distribution of interests towards management at the expense of shareholders' rights and benefits, turning it into a tool for executives seeking personal gain (Burns, et al., 2015; Yang et al.,2021). In the long run, not only the interests of small and medium-sized shareholders will be damaged, but also it is not conducive to the long-term sustainable development of the company.

Yili Group is one of the largest dairy enterprises in China. In 1996, Yili was rated as the first A-share in China's dairy industry. The relevant data are not only highly representative in the industry, but also the operation situation is relatively stable in recent years. As a stock with good long-term performance, high reporting efficiency and high investment value, Yili has released different equity incentive plans in 2006, 2016 and 2019 respectively. After the whole process of China's equity incentive from the pilot period to the mature period and then to the blowout period, the specific details of the equity incentive plan have been constantly adjusted. As of today, there is still a period of equity in 2019 that has not been released, so the overall effect cannot be observed. The equity incentive plan in 2016 has a large change compared with the previous plan, and it also reflects the preference of the current listed companies when designing the plan, so it has a certain representation. As one of the earliest enterprises to implement equity incentive plan in China, its leadership, timing, comparability and operability are classic cases worth analyzing.

1.2 Research Questions

Academic circles have different views on whether stock option incentive plans should be supported or opposed (Fang et al., 2015). From a positive point of view, stock option incentive can solve the problem of inconsistent behavior between executives and shareholders' interests in high-growth companies and companies with noisy accounting information due to information asymmetry (Aggarwal & Samwick, 1999; Bebchuk & Fried, 2003) can enhance the competitiveness of companies and achieve performance breakthroughs (Fang et al., 2015). On the contrary, stock incentive sometimes leads to short-term and opportunistic behaviors of executives and seeks benefits for themselves (Street & Cereola, 2004; Fang et al., 2015).

At this time, is stock option incentive a kind of optimal contract under the leadership of shareholders (Bebchuk & Fried, 2003) or a kind of self-determined compensation and self-benefit under the leadership of management (Bernile & Jarrell, 2008)? Obviously, this question is subject to many specific factors, including: Is the operating performance of the company highly correlated with the effort level of the executives (Hochberg & Laura, 2010)? How efficient is the stock market (Cheng & Warfield, 2005)? Whether the internal corporate governance structure is perfect (La Porta et al., 2000; Lee et al., 2018)? Is the external corporate governance environment compatible (Bebchuk et al., 2009)?

Based on the above background, this paper proposes the following research questions:

(1) Does the implementation effect of equity incentive plan have a positive effect on Yili Group?

(2) Is the design of equity incentive scheme of Yili Group conducive to corporate performance incentives or executives seeking excessive benefits?

Based on the above two issues, this study further discusses the reasonable design of equity incentive under the background of compensation control, and finally puts forward relevant suggestions.

1.3 Research Objectives

Equity incentive has experienced a process of gradual experiment and slow development in China. In 2005, the China Securities Regulatory Commission (CSRC) issued the Measures for the Administration of Equity Incentives for Listed Companies (Trial Implementation), which set out the basic norms for the implementation of equity incentives for listed companies in China. In 2016, the CSRC revised the above-mentioned

administrative measures, and the number of listed companies implementing equity incentives reached 415 in the same year. With the introduction of national policies one after another, stock incentive has gradually stepped into the right track in China.

However, with the extensive implementation and application of equity incentive, while being highly sought after, the design scheme is mixed, and its negative effects are also concerned by the mass media and questioned by investors, which are mainly reflected in the imbalance between incentive and constraint. For the purpose of welfare, the management of enterprises manipulates the design and implementation of the equity incentive plan, which leads to invisible benefit transmission and damages the interests of minority shareholders. On the contrary, it affects the play of the incentive role and makes the equity incentive become a tool for executives to seek benefits for themselves.

Therefore, this study aims to explore whether the existing equity incentive plan is effective and the implementation effect is significant by analyzing the 2016 equity incentive scheme of Yili Group, and provide suggestions for other enterprises to formulate equity incentive policies.

Based on this, this paper proposes the following two objectives:

- (1) To explore the implementation effect of the equity incentive scheme of Yili Group.
- (2) To examine the effectiveness of the equity incentive design scheme of Yili Group.

1.4 Research Scope

This paper mainly studies the implementation effect of Yili Group's equity incentive plan in 2016 and deduces the rationality of the plan design based on it. Firstly, by consulting relevant literature on equity incentive, combining principal-agent theory and optimal contract theory, the case analysis framework is constructed from three dimensions: implementation effect of equity incentive plan, design rationality and corporate governance structure. Then, it introduces the basic situation of Yili Group and its three equity incentives. Based on the 2016 equity incentive plan, it explores one by one whether the equity incentive has a positive effect on the company, whether the plan design is conducive to the executives seeking excess benefits, and whether the company has relevant governance defects to protect the approval of the welfare incentive plan. Finally, according to the results of the above discussion, this paper tries to put forward effective solutions to the dilemma of enterprise equity incentive under the background of salary control.

1.5 Research Significance

From a theoretical point of view, there are few literatures to analyze the response of equity incentive at key time points. In addition, most studies on equity incentive of listed companies stay at the theoretical level, and are based on large sample empirical research on the equity incentive draft, and few use case studies to interpret the effectiveness of the scheme, analyze the asymmetry between incentives and constraints, demonstrate whether senior executives are suspected of seeking benefits for themselves, and summarize relevant preventive measures. This paper starts from the market reaction of the key time points of stock incentive, and analyzes the growth of the company's business performance to interpret the implementation effect of the stock incentive plan.

From the perspective of practice, through the incentive effect and welfare effect behind the equity incentive, this paper sorts out the possible problems in Yili's share incentive plan and corporate governance, and then sums up the measures for listed companies to avoid the benefit transfer behavior of executives, providing experience and reference for the subsequent implementation of equity incentive for enterprises.

1.6 Research Limitations

Aiming at the effectiveness and effect of the design and implementation of the equity incentive scheme, this paper not only analyzes the implementation draft of the equity incentive, but also analyzes the incentive level in multiple dimensions by combining the actual operation situation of listed companies and the adjustment before and after the scheme. At the same time, through the structure of the company's shareholders' meeting and the board of directors, this paper analyzes whether there are defects in the corporate governance mechanism in the design of the equity incentive plan, and reveals the internal mechanism of the company's management through the defects in the design and governance mechanism of the equity incentive plan to seek benefits for the executives themselves, and also for the future listed companies, especially state-owned enterprises. The design and implementation of stock incentive plan provides certain reference significance.

However, limited to the existing materials and data conditions, as well as the limitations of research methods, there are still shortcomings in the research and analysis of stock incentive, which can be summarized as follows:

(1) The research on the effectiveness and implementation effect of the equity incentive program is only analyzed from the aspects of relevant theories and financial

data, and the accuracy of the analysis is not comprehensive.

(2) The judgment of equity incentive design scheme stays more at the level of draft and financial statements, and does not organically combine with specific cases.

(3) As a leading enterprise in the industry, the reference significance of Yili Group incentive for small and medium-sized enterprises remains to be verified, which may affect the practicability of the analysis. Therefore, more equity incentive cases will be analyzed and studied in the future to make up for the shortcomings of this paper and improve it.



Chapter 2 Literature Review

2.1 Introduction

Aiming at the effectiveness of equity incentive schemes, this chapter firstly analyzes the definition, tools, motivation, implementation effect and rationality of scheme design of equity incentive schemes through systematic review and induction of relevant literatures. Secondly, the concept of principal-agent theory and optimal contract theory constructed by international scholars are defined and theoretically analyzed. Finally, it finds the research gap, and uses it as the theoretical basis of the conceptual framework of this paper.

2.2 Literature Review

2.2.1 Definition and tools of stock incentive

Equity incentive is a long-term incentive mechanism implemented by enterprises to motivate and retain core talents. Equity incentive plan provides employees with shares of the company they work for (Cheng & Warfield, 2005). Stock can be acquired in the form of stock options, shares, warrants or bonds. The specific form is shown in Table 2-1.

Table 2-1 Main design methods and characteristics of equity incentive

Equity Incentive Modes		Essential Feature
Stock Option		A joint stock company provides the incentive object with the option to acquire the company's shares. The incentive object has the opportunity to purchase a specific number of shares at a predetermined price within a designated timeframe, or alternatively, it may choose not to exercise this right.
Restricted Stock Ownership	Discount stock purchase type	The incentive target individual funds, at a discount price to buy listed companies to issue additional shares for incentive.
	Performance reward type	Listed companies withdraw incentive funds based on performance assessment, which are distributed to individuals or through trust institutions and designated for the purchase of tradable shares in the secondary market.
Executive Stock or Employee Stock Ownership Plan (ESOP)		The incentive object holds a certain number of the company's shares, which are given to the

	incentive object free of charge, purchased by the incentive object with subsidies from the company, or purchased by the incentive object with its own funds.
Stock Appreciation Rights (SAR)	The listed company grants the incentive object the right to obtain the income brought by the increase of the stock price in a specified amount in the future under certain conditions. The incentive object does not actually own the stock, nor does it have the shareholder's voting rights, rights to allotment, or dividend rights.
Performance Shares	The company determines a reasonable annual performance target at the beginning of the year. After the incentive object makes efforts to achieve the predetermined annual performance target, the company will give the incentive object a certain number of shares or award it a certain number of bonuses to buy the company's shares.
Management Buy Out (MBO)	The management or all employees of the company use leverage financing to buy the company's shares, become shareholders of the company, and share risks and benefits with other shareholders, thus changing the company's equity structure, control structure and asset structure, and realizing shareholding operation.

The most important equity incentive tools of listed companies in China are restricted stock, stock options and their compound incentive tools, while stock appreciation rights and other non-major incentive tools. Among them, restricted stock means that the listed company grants a certain amount of its own shares to the incentive object according to predetermined conditions. Only when the incentive object meets the conditions stipulated in the equity incentive plan, can the restricted stock be sold and benefit from it. Stock option means that the listed company grants the incentive object the right to buy a certain number of the company's shares at a predetermined price and conditions within a certain period of time in the future, and the incentive object has the right to exercise or waive this right. The advantages and disadvantages of stock options for shareholders and holders are different because of their differences in the subject matter, price and holding risk. Restricted shares are more beneficial to the holders because of their large profit space and distribution rights. While stock option is more in line with the interests of shareholders because of its lower implementation cost and stronger risk incentive.

2.2.2 Motivation of stock incentive

The motivation of equity incentive of listed companies can be divided into two categories: incentive type and welfare type.

From the perspective of incentive, equity incentive can solve the problem of inconsistency between the behavior of executives and the interests of shareholders caused by information asymmetry in high-growth companies and companies with noisy accounting information (Aggarwal & Samwick, 1999; Bebchuk & Fried, 2003), is conducive to screening out highly competent executives (Kim et al., 2016), and alleviating the problem of short-term vision of executives approaching retirement (Essman et al., 2021). Stabilize and attract the company's core employees (Zolotoy et al., 2018), stimulate their innovation enthusiasm, seize market share, enhance the company's competitiveness, and achieve performance breakthroughs (Fang et al., 2015).

From the opposite perspective, when there are obvious defects in the corporate governance structure, the restriction and supervision mechanism of the company on senior executives will become ineffective (La Porta et al., 2000; Bebchuk et al., 2009) and serious principal-agent problems arise (Wu et al., 2022). At this time, equity incentive will lead to short-term and opportunistic behaviors of executives (Bebchuk & Fried, 2003), and seek benefits for themselves (Street & Cereola, 2004; Fang et al., 2015). In addition, many equity incentives may alleviate cash liquidity constraints (Cleary, 1999; Cheng & Warfield, 2005), reduce the tax burden of executives (Rego & Wilson, 2012), reduce the cost of financial reporting and other non-incentive reasons (Bettis et al., 2010; Burns et al., 2015).

Therefore, it is necessary to analyze the design of the implementation plan, and then avoid the motivation behavior of the enterprise management to seek benefits for themselves through stock incentive.

2.2.3 Implementation effect of equity incentive

The effect of equity incentive can be divided into three categories: positive, negative and no obvious effect.

First, equity incentive enhances the synergy between operators and investors by bundling their interests, resulting in "synergy effect", reducing the principal-agent cost caused by information asymmetry and other factors, and thus improving the management level of the company (Jensen & Meckling, 1976). At the same time, after receiving the equity incentive, the work enthusiasm of the incentive object is obviously enhanced, and the company's performance is thriving (Balafoutas et al., 2013). Subsequently, the improved performance due to equity incentive can act on the capital market and enhance investors' expectations, thus further realizing the accumulation of shareholders' interests

(Aboody & Kasznik, 2008). In addition, stock incentive can improve the innovation ability of the company to a certain extent, but the effect of different incentive models will be different.

However, some scholars have found through research that equity incentives sometimes have adverse effects on the company's development, which are embodied in the following aspects: First, in order to achieve the exercise conditions set by the equity incentive to obtain personal benefits, the management may manipulate the company's operating performance through earnings management (Watts & Zimmerman, 1978). When earnings management fails, it may even resort to financial fraud to help meet the unlocking conditions. Second, when the conditions for the exercise of equity incentives are not challenging, they become a tool to deliver benefits, thus damaging the company's long-term performance and shareholders' equity (Lee et al., 2018). Third, if the shareholding ratio is too high, senior executives will shift their focus to their own interests and ignore the long-term development of the company (Ohad & Yang, 2006). Fourthly, according to the "defense hypothesis", too high proportion of shares granted to the management may affect the balance of the company's ownership structure, and even threaten the shareholders' control right, thus making management decisions that are not conducive to the interests of shareholders (Fama & Jensen, 1983). Fifth, equity incentives for ordinary employees cannot produce substantial incentive effects, but will increase company costs and lead to a decline in profits (Oyer & Schaefer, 2005).

Some other scholars believe that whether senior executives are awarded shares does not affect their management level. This phenomenon is not only reflected in the lack of significant effect of incentive plans on the performance of listed companies (Fang et al., 2015), but also in the lack of significant effect on corporate equity governance (Prevost et al., 2013). However, by analyzing the performance level of the company's equity incentive until the later years, it is still found that there is no significant difference in the performance of the research objects (Bernile and Jarrell, 2008).

2.2.4 Scheme design of stock incentive

The design of equity incentive scheme generally includes the following nine elements: incentive model, incentive mechanism, incentive purpose, incentive source, incentive object, incentive condition, incentive period, incentive quantity and incentive price. The academic research on the design of equity incentive scheme mainly focuses on the incentive form and incentive period, incentive object and incentive strength, as well as the exercise conditions.

In terms of incentive form and incentive period, restricted stock and stock option are the common incentive forms used by listed companies at present. Compared with restricted stock incentive model, stock option incentive model is easier to obtain external financing, so it will generate higher profits (Brick et al., 2006). At the same time,

executives are more inclined to adopt restricted stock when formulating stock incentive because, compared with stock option, restricted stock has no impact on its value in the process of dividend payout, but this process will significantly reduce the value of option (Aboody & Kasznik, 2008). In addition, when setting the incentive period, the longer the validity period is, the better the long-term development of the company, and there is a positive relationship between the validity period and the incentive effect (Bebchuk et al., 2010).

In terms of incentive target and intensity: Considering the unique governance ability of senior managers and the solid professional skills of core technical (business) personnel, these two factors become the primary candidates to be considered when selecting incentive target (Hall & Murphy, 2003). The incentive strength of the core technical personnel is positively related to the innovation ability of the enterprise, and granting a certain proportion of stock options to the core members can better improve the innovation level of the company than granting restricted shares (Lerner & Wulf, 2007). However, in practice, with the sky-high salaries charged by senior executives, the income of core technology (business) backbone can only grow slowly. After the implementation of stock incentive, the gap quickly widened further and crazily. The development of enterprises depends more on the practical work of technical and business personnel. Such unequal salary treatment will threaten the enthusiasm and stability of these employees (Lovett et al.,2022).

Exercise conditions are the key to distinguish the incentive type from the welfare type of equity incentives (Bettis et al., 2010). They are also the core analytical element to judge whether there is a self-welfare behavior of senior executives, and the most important aspect in the design of equity incentive schemes of listed companies. When the performance appraisal target is set higher, the equity incentive plan can better promote enterprise innovation (Lerner & Wulf, 2007). The common problems mainly focus on the company's failure to set assessment indicators from multiple angles, and the assessment indicators fail to fully reflect the multiple subdivision dimensions of medium and long-term goals. Therefore, the company should make horizontal comparison through market indicators and industry indicators when designing equity incentive plans. To ensure the suitability of assessment indicators and medium and long-term development goals of the company (Lovett et al.,2022).

2.3 Theoretical Basis

2.3.1 Optimal contract theory

The optimal contract theory, originally proposed by Berle and Means, studies the role of financial accounting information in alleviating the information asymmetry among various aspects of the contract, thus contributing to the formation of the optimal contract, the play of fiduciary responsibility and effective corporate governance. The principal can formulate the optimal compensation incentive contract through analysis, so that the agent's interests can effectively cooperate with the principal's interests and reduce the agency cost to the minimum.

The senior managers of large enterprises often have outstanding talents and wisdom that most of them cannot have, and can guide the strategic development direction of the enterprise. And a satisfactory compensation incentive contract can not only help the principal retain these talents, but also help the principal retain them. At the same time, it can bind the operation and management team with their own interests and encourage them to make decisions based on the maximization of shareholder value from the perspective of shareholders, so as to solve the principal-agent problem of enterprises (Bebchuk et al., 2010; Wruck & Wu, 2021).

However, in order to enable the motivated management team to make decisions from the perspective of shareholders, the principal is willing to gradually increase the amount of compensation paid to the agent until the incremental costs generated by the incentive exceed the incremental benefits, and there is even a possibility that the amount of compensation paid by the principal has exceeded the retention value of the agent. Under this willingness, the shareholders judge the expected profits that can be brought by reasonable estimation of the increase in compensation, so that the management team can reach the balance point of the optimal compensation. Therefore, when the compensation maker takes the maximization of shareholders' interests as the basic standard for formulation, it should carefully consider the potential profits and potential costs associated with incentives, so as to work out the optimal compensation contract that can maintain or increase the profit output under the condition of minimizing costs (Lovett et al., 2022).

In addition, when the compensation maker decides the optimal salary through the optimal salary contract theory, it needs to follow certain presuppositions and applicable conditions. This theory is based on the premise that the board of directors puts itself in the position of shareholders, regards the maximization of shareholders' interests as the ultimate goal and is independent of the senior management team when making decisions. At the same time, it is constrained by market constraints such as managers' market, external governance mechanism and product market competition, and shareholders' legal action and supervision power.

Therefore, equity incentive is a sound and effective compensation incentive mechanism established by investors inside the company. It can not only reduce the high agency cost generated during supervision, but also further enhance the management team's willingness to stay and mobilize their work enthusiasm, which helps to enhance the company's sustainable long-term development ability and maximize the wealth of shareholders.

2.3.2 Principal-agent theory

The separation of the two rights has become a basic feature of listed companies, but the principal and agent are both economic people, often pursuing the maximization of their own interests, and there are often obvious differences in their interest demands (Jensen & Meckling, 1976). The principal values the capital cost and future returns invested in the process of participating in the investment project; However, the agent is more concerned with his income, leisure time or social status (ibid.) than with the costs and benefits of the project.

However, the principal often does not directly participate in the operation and management of the company due to the knowledge, ability or energy, and is unable to fully grasp the actual operating conditions and daily business activities of the company. Therefore, there is a big gap between the principal and the agent in the time and content of information acquisition. It is precisely because of this information asymmetry between the two parties that the performance conveyed by the company to the outside world may be processed to a certain extent, and can not reflect the real business situation of the company. The agent's interest demand is likely to reduce the enterprise value, so the principal has to avoid the agent's adverse selection and moral hazard, and has to incur the principal-agent cost in the process of implementing supervision, restraint and other activities.

Therefore, the equity incentive mechanism was born. In the daily operation and management of enterprises, the equity incentive plan is incorporated into the compensation system of the company's managers, so that the managers can share the residual claim right of the company by holding the company's equity. In this way, the goal of maximizing the managers' personal interests can be transformed into the goal of maximizing the company's interests, and the win-win situation of the company's owners and managers can be realized. The specific logical relationship is shown in Figure 2-1.

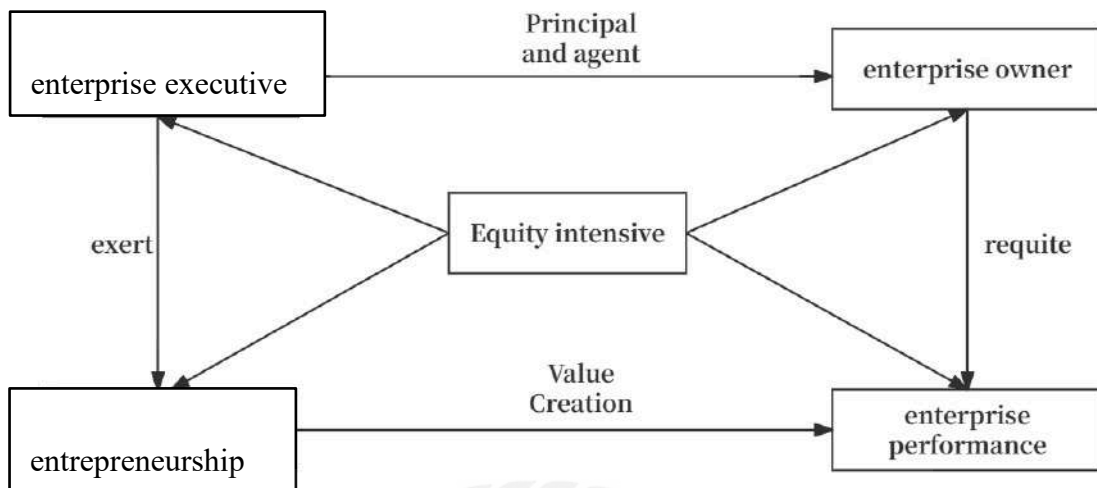
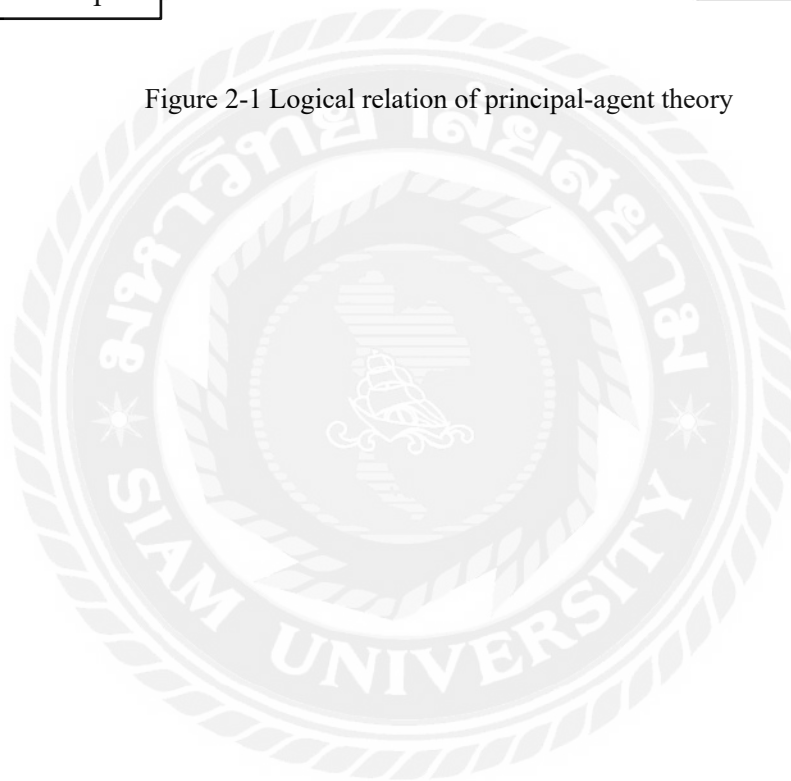


Figure 2-1 Logical relation of principal-agent theory



Chapter 3 Research Methodology

3.1 Introduction

This chapter describes the research methods of this study, points out the processes of this research, and lays the foundation for the following research findings.

3.2 Research Methods

This study adopted the qualitative research methods, using documentary analysis method and single case analysis method.

3.2.1 Documentary analysis method

This study comprehensively combed and analyzed relevant literature and data at home and abroad, so as to establish the innovation point and research significance of this study, then defined the core concept of this study, sorted out the theoretical basis involved in this paper, and provided a research basis to explore the implementation effect of Yili Group equity plan and the rationality of the plan design.

3.2.2 Case study analysis method

Case study method is a commonly used qualitative research method, which is suitable for in-depth and comprehensive investigation of a complex and specific problem in reality. Based on the single case study method and combined with the three equity incentive plans of Yili Group in 2006, 2016 and 2019, this study expounded the relevant background of the implementation of the incentive plan in 2016 and the problems faced by the management with focus on the interpretation of Yili Group, whether the implementation of the equity incentive plan has achieved the expected effect or whether the design of the equity incentive plan is reasonable.

The research framework of this study is shown in Figure 3-1:

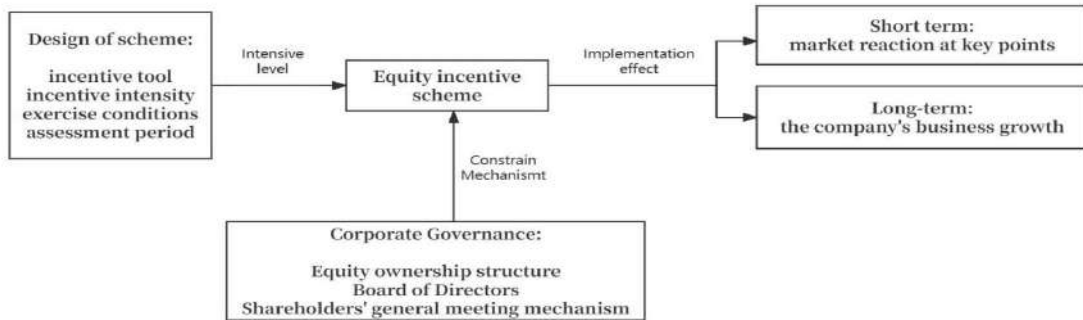


Figure 3-1 Research framework diagram

The following steps were taken in conducting this study:

- (1) Determine the research objectives
- (2) Case selection
- (3) Data collection
- (4) Data analysis

3.3 Sources of Data

The data sources of this paper mainly fall into the following categories:

(1) Periodic announcements. Collect the information publicly disclosed by the company's listed companies and their periodic reports, annual reports, quarterly reports, announcements related to the company's equity incentives, laws and regulations, major disclosures and other information through public channels such as the Shanghai Stock Exchange.

(2) Database information. Through CSMAR database and iFind, the researcher sorted out Yili Group's operating data, company equity change data, equity incentive plan and other data in recent years, as well as related macro data of dairy industry and other relevant information.

(3) Company news and research reports. Download brokerage industry research reports, news reports and speeches by leaders through databases such as Wind and CSMAR, as well as related financial websites such as EastMoney.com and Juchao.com.

(4) Other relevant materials. Macroeconomic data and securities market data obtained through open government platforms such as the National Bureau of Statistics of China, The State Council and the China Securities Regulatory Commission.



Chapter 4 Research Findings

4.1 Introduction

This study chooses Yili Group (stock code 600887) as a typical enterprise of equity incentive for case analysis, mainly for the following reasons.

First, the typicality of the case. First of all, Yili was one of the first companies to implement the equity incentive plan in 2006 after the completion of China's non-tradable share structure reform, which is very pioneering and representative. At the same time, up to now, Yili has launched three equity incentive plans and one employee stock ownership plan. Specifically, in 2006, 2016, 2019, Yili adopted three different forms of stock option incentive, the combination of stock option and restricted stock incentive, and restricted stock incentive. This is a single case nested in a number of small cases, the research data is very rich, with a certain comparability. Secondly, since its listing in 1996, the stock price of Yili has increased by more than 300 times, with an annual return rate of nearly 40% in the last ten years. Meanwhile, the net profit attributable to the owner of the parent company in 2018 has increased by nearly 20 times compared with the net profit at the time of listing, becoming a model of the white horse stock of A-share listed companies. After the release of its equity incentive plan, Yili has aroused great response and attention in the society.

Second, the availability of data. As an A-share listed company, Yili Group' relevant financial and operating data are disclosed through the annual report of the company and the announcement of the listed company, which has rich data sources, which is convenient for case analysis and demonstration.

Thirdly, the case is revelatory. Yili, as a typical state-owned enterprise, has now become the leader of China's dairy industry. The impact of its release of equity incentive plans on enterprises can represent most state-owned enterprises that publish equity incentive plans in terms of design plan and governance mechanism, so that this case study can draw more general conclusions and Revelations, and has certain practical significance.

Since the fifth day of lifting restrictions in Yili Group's 2019 incentive plan has not yet been reached, and its effect has not been fully reflected, this paper chooses the equity incentive event proposed in the complete implementation of the plan with the latest time and the most complicated use method, namely the equity incentive plan in 2016, as the case study.

Based on this, this chapter further breaks down the core issues and demonstrates them from two dimensions: (1) Does the introduction and implementation of equity incentive produce positive effects? (2) Is the scheme design of equity incentive reasonable?

In view of the above two argumentation problems, different dimensions are subdivided and specific indicators are used to provide a strong basis.

4.2 Content of equity incentive plan in 2016

In 2014, the dairy industry was in a period of transition, with serious market homogenization and high saturation. Yili's revenue was only 47.779 billion, its profit was 3.201 billion, and its profit rate was only 6.7%. In the same year, Yili put forward a new goal -- "Top Five hundred billion", that is, to become the top five in the global dairy industry in 2020, and achieve operating income of over 100 billion yuan. At this time, the dairy industry is full of uncertainties, and the new goal is widely regarded as unattainable by the market, so that the team morale and confidence are seriously insufficient, internal and external resistance is huge, and the operation progress is slow. For the purpose of motivating employees, Yili announced the Stock Option and Restricted Stock Incentive Plan (Draft) in October 2016.

From 2006 to 2016, there was a 10-year gap between the two equity incentive plans of Yili, during which China's listed companies gradually began to implement equity incentive plans. According to statistics, from 2006 to 2018, more than 1,400 listed companies in China announced equity incentive plans, with a penetration rate as high as 39.54%, as shown in Table 4-1.

Table 4-1 Number of listed companies in China that announced equity incentive plans in 2006, 2014-2018
(Unit: family)

Project	2006	2014	2015	2016	2017	2018
Number of preplans announced	38	212	225	272	447	467
Stock options	26	73	55	65	94	144
Restricted Stock	11	135	167	204	351	321

Project	2006	2014	2015	2016	2017	2018
Stock appreciation rights	1	4	3	5	2	2

Data source: Data collated according to CSMAR database

In 2016, with the newly issued "Measures for the Management of Equity Incentives of Listed Companies" by the CSRC, the specific incentive methods are clearly stipulated, which strengthens the information supervision while increasing the decision-making space of the company. The equity incentive plan of Yili Group is also very different from the first time. Based on various elements of equity incentive, Table 4-2 lists the basic situation of the three equity incentive drafts of Yili Group.

Table 4-2 Third share incentive plan of Yili Group

Project	2006	2016	2019
Motivational tools	Stock options	Stock options + restricted stock	Restricted Stock
Amount of incentive	50 million shares	45 million stock options + 15 million restricted stock units	183 million shares
Proportion of total equity	9.681%	0.74% + 0.25% = 0.99%	3.00%
Inspiration object	33 people including president, assistant president and core backbone; President Pan Gang 15 million	Stock option incentive plans 294 people and restricted stock	There are 474 employees in total, including directors, senior managers, core technology (business)

	shares, head of finance, assistant president and secretary of the board of directors 5 million shares each	incentive plans motivate 293 people	backbone and other employees who have an impact on the company's future development and business performance
Project	2006	2016	2019
	finance, assistant president and secretary of the board of directors 5 million shares each	motivate 293 people	backbone and other employees who have an impact on the company's future development and business performance
Exercise price	13.33 yuan/share	Stock options \$16.47 / share, restricted stock \$15.33 / share	50% of the price of the trading day before the announcement, or 15.46 yuan/share
Exercise/unlock period		First exercise/unlock period: 24 months from the grant date to 36 months from the grant date; Second exercise/unlock period: 36 months from the grant date to 48 months from the grant date.	The first unlock-up period is from 12 months to 24 months from the grant date; The second lifting restriction period shall be from 24 months to 36 months from the grant date; The third lifting period shall be from 36 months to 48 months from the grant date; The fourth lifting period shall be from 48 months to 60 months from the grant date; And the fifth lifting period is from

			60 months to 72 months from the grant date.
Project	2006	2016	2019
Exercise/unlock conditions	At the time of the first exercise, the net profit growth rate of the company in the previous year shall not be less than 17%, and the growth rate of the main business shall not be less than 20%; After the first exercise, the compound growth rate of the company's main business income in the previous year compared with 2005 shall not be less than 15%	Based on the net profit of 2015, the net profit growth rate of the two exercise/unlock periods in 2017 and 2018 shall not be less than 30% and 45% respectively, and the return on equity shall not be less than 12%	Based on the net profit of 2018, the net profit growth rate of the five unlock restricted periods: 2019, 2020, 2021, 2022 and 2023 shall not be less than 8%, 18%, 28%, 38% and 48% respectively, and the return on equity shall not be less than 15%
Valid Period	8 years from the stock option authorization date		
Option Date	1 year from the vesting date of the stock option		

Specifically, what is the effect of Yili Group's equity incentive in 2016 and whether it has a positive impact? Based on this, is it reasonable to deduce the design of its equity incentive scheme? To solve the above problems, the following analysis is carried out.

4.3 The implementation of equity incentive plan achieved the expected effect

The original intention of Yili's equity incentive is to bring incentive effect to the enterprise and achieve performance growth. Then how do investors view and recognize Yili's equity incentive in the market? Does the incentive plan really play a role in increasing the company's value?

4.3.1 Capital market reaction

Principal-agent risk arises from the separation of management rights and ownership rights, and the management will inevitably produce self-interest and thus damage shareholders' rights and interests, while the equity incentive policy can unify the objectives of the two to a certain extent and effectively alleviate the contradiction of inconsistent interests between owners and operators. Therefore, the introduction of equity incentive plans by listed companies is usually a release of major benefits, and the recognition of the plan by market investors will increase the company's stock price; On the contrary, market investors' doubts about the plan will also bring down the company's stock price. Therefore, using the trend of the company's stock price, we can judge the degree of market investors' recognition of the Yili Group incentive plan.

Figure 4-2 shows the market reaction before and after the announcement date of Yili's equity incentive plan (October 22, 2016), Figure 4-3 shows the market reaction before and after the date of Yili's equity incentive grant (December 28, 2016), and Figure 4-4 shows the market reaction before and after the day of Yili's first plan adjustment (May 11, 2017). Figure 4-5 shows the market reaction before and after the first exercise/lifting date (2019.1.8) of Yili's equity incentive plan.

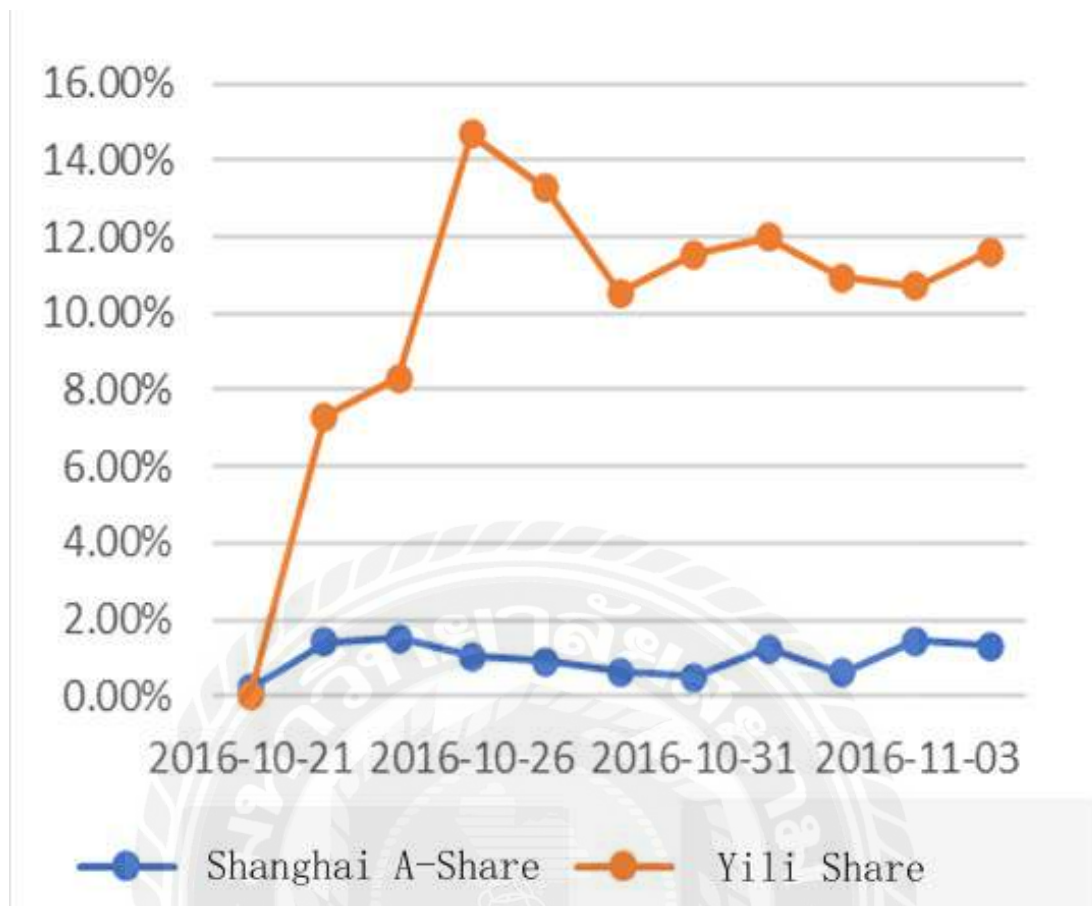


Figure 4-1 Market reaction before and after the plan announcement date

Source: Collated calculations based on data from the CSMAR database



Figure 4-2 Market reaction before and after the grant date

Source: Collated calculations based on data from the CSMAR database

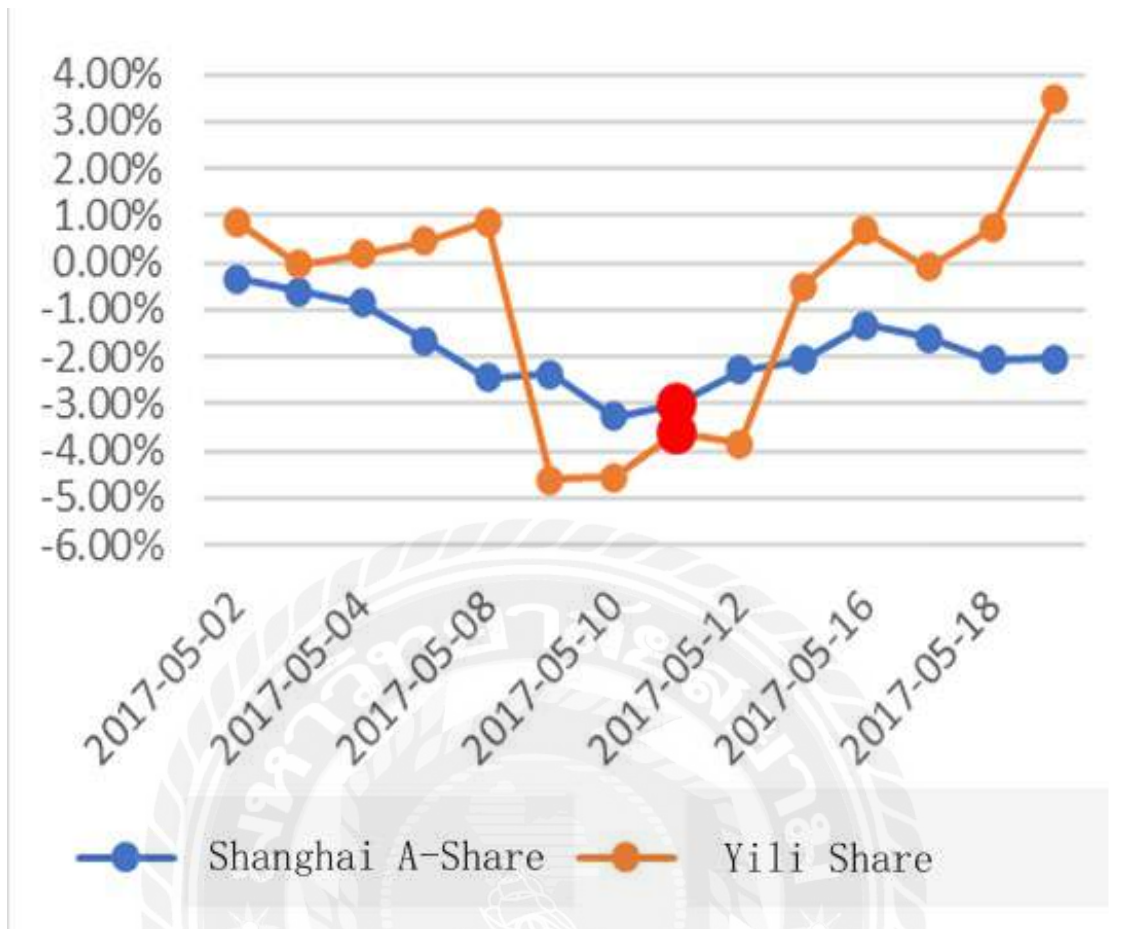


Figure 4-3 Market reaction before and after the day of plan adjustment

Source: Collated calculations based on data from the CSMAR database



Figure 4-4 Market reaction before and after the day of first exercise/lifting

Source: Collated calculations based on data from the CSMAR database

First of all, before the announcement of the 2016 equity incentive plan, Yili Group were suspended for about a month due to the planning of non-public offering of shares, and after the resumption of trading, the equity incentive plan was released. After the first public trading day after the announcement of the incentive plan, the cumulative return rate of Yili Group increased significantly, as shown in Figure 4-2. After that, the cumulative return rate of Yili Group was higher than that of the Shanghai A-share Index for 9 consecutive trading days, indicating that investors more agree with the design of the equity incentive plan of Yili. Secondly, after the grant of stock options and restricted shares, the cumulative return of Yili increased, and it can be seen that the cumulative return of Yili Group was slightly lower than the cumulative return of Shanghai A-share Index before the grant date, but after the grant date, the overall growth trend, and the cumulative return rate was much higher than the average level of the A-share market. After the adjustment of the equity incentive plan, the cumulative return rate of Yili increased rapidly, indicating that the capital market investors are more in favor of and recognized by the adjustment plan. Finally, after the first exercise day of Yili's equity

incentive, the cumulative return rate of the company has maintained A steady growth, similar to the market reaction before and after the grant day. In the third trading day after the first exercise day, there was a reversal of the Shanghai A-share index, and the growth rate after the exercise day was significantly higher than that before the exercise day.

These characteristics can show that investors in the capital market have made a positive response to the incentive behavior of Yili Group. Through the market reaction of four key time points, it can be seen that investors are optimistic about the equity incentive plan of Yili, believing that it is a major good for the company to put into the capital market, which has a certain incentive effect on the company's performance expectations.



Figure 4-5 Cumulative returns of Yili Group and Shanghai A-share Index from January 2016 to May 2019

Source: Data collation and calculation based on the CSMAR database

Compared with the days before and after the announcement of equity incentive plan, the growth of stock price in this stage mainly comes from the positive incentive effect of equity incentive on listed companies, and the value investment factor is larger, which can truly reflect the effect of equity incentive. As shown in Figure 4-6, compared with the overall trend of the market, before the announcement date of the plan (10.22), although Yili's cumulative return rate fluctuated to A certain extent, it was stronger than the A-share market on the whole, indicating that investors have good expectations of the equity incentive plan and believe that the equity incentive plan will bring rapid growth to the company's performance and other aspects. Then, with the announcement and grant of the incentive plan, the cumulative return on Yili Group showed A steady upward trend, and in the second half of 2017, the rapid growth, to the first exercise date (2019.1.8), the cumulative return has reached 60%, much higher than the overall Shanghai A-share market.

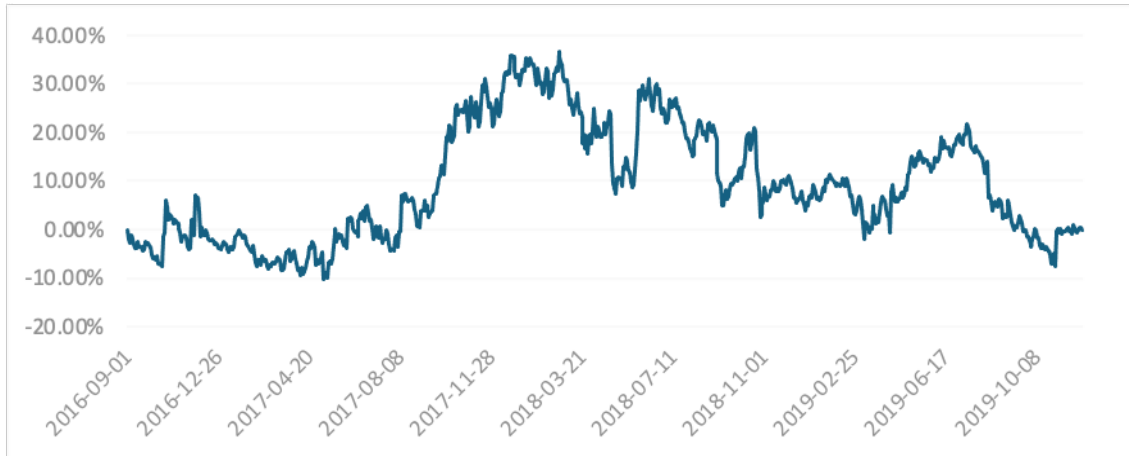


Figure 4-6 Excess cumulative return rate of Yili Group from September 2016 to October 2019

Data source: Data collation and calculation are provided according to the CSMAR database

And as shown in Figure 4-7, the excess cumulative return rate of Yili Group is significantly positive, and investors will get a return higher than the market return rate when investing in Yili Group. On the whole, the accumulated return rate of Yili Group in the waiting period is much higher than the average return rate of A-share market, and the excess cumulative return rate is significantly positive, indicating that the equity incentive plan has the incentive effect expected by investors and has reached the expected goal.

4.3.2 Business growth performance

The growth of the company's performance is the key factor to judge whether an equity incentive scheme can play a role in motivating the target. This section examines whether the equity incentive plan of Yili Group promotes the company's performance growth, and analyzes whether the conventional performance indicators of Yili Group including and excluding option expenses are improved after the implementation of equity incentive.

(1) Financial performance

Profitability measures that include and exclude the amortization expense of share payments Net profit margin on sales, return on assets (ROA) and return on equity (ROE) can be used to reflect the extent to which share payments affect profitability. Generally speaking, the higher the value of the above indicators, the stronger the profitability of the company. If the company can maintain a continuous increase in the net profit rate on sales, it indicates that the company's ability to obtain sales revenue is increasing; If the company can maintain continuous growth of ROA, it means that the company has improved the efficiency of the overall asset use, which has saved the company money or significantly increased the revenue; If the company maintains a continuous increase in ROE, it means

that the company has improved the efficiency of using its own capital and increased the return brought by investment.

According to Yili's 2018 annual report, the company recognized 1,117,200.03 yuan of expenses paid on equity-settled shares in 2016, 92,960,957.43 yuan in 2017, and 81,032,850.09 yuan in 2018. Based on this, the conventional profitability indicators of Yili Group for 2014-2018 including and excluding share payment expenses are shown in Table 4-3.

Table 4-3 Profitability of Yili Group in 2014-2018 before and after excluding the impact of share payment expenses (unit: ten thousand yuan)

	2014	2015	2016	2017	2018
Share payment fees	-	-	111.72	9296.10	8103.29
Net profit	416653.81	465442.51	566903.52	600281.50	645199.61
Net profit after expense	416653.81	465442.51	567015.24	609577.60	653302.90
Gross operating income	5443642.68	6035987.38	6060922.15	6805817.43	7955327.75
Net margin on sales	7.72%	7.78%	9.40%	8.89%	8.17%
Net profit margin on sales after expense	7.72%	7.78%	9.41%	8.96%	8.21%
Capital surplus	648124.22	247670.79	247636.01	276533.46	284133.70
Capital surplus after expense	648124.22	247670.79	247524.29	267237.36	276030.41
ROA	11.51%	11.76%	14.37%	13.56%	13.32%
ROA after expense	11.51%	11.76%	14.32%	13.71%	13.38%
Weighted ROE	23.66%	23.87%	26.58%	25.22%	24.33%

Weighted ROE after fees	23.66%	23.87%	26.57%	25.20%	24.61%
-------------------------------	--------	--------	--------	--------	--------

Data source: Sorting and calculation of Yili Group's 2014-2018 annual report

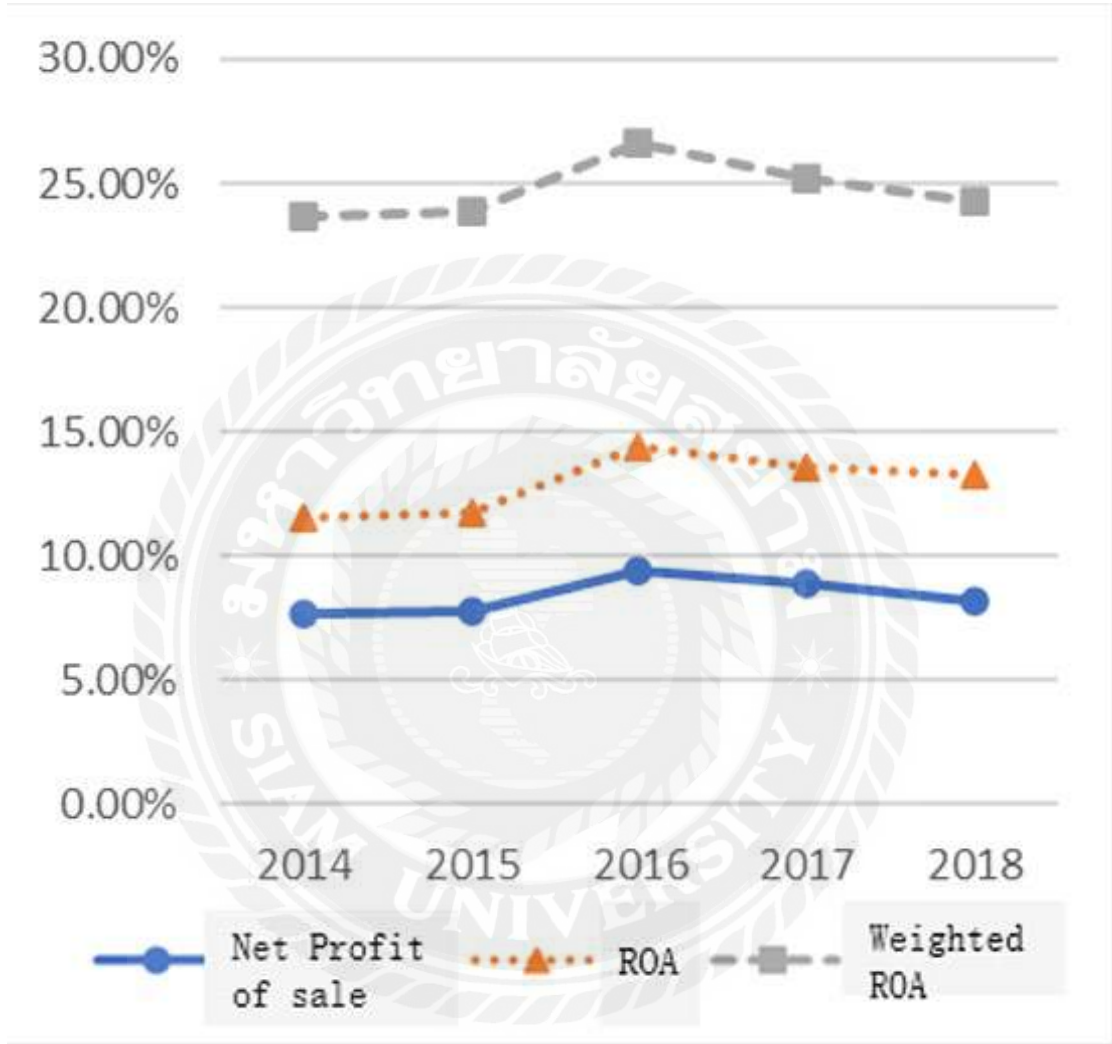


Figure 4-7 Profitability including expenses in 2014-2018

Data source: Arrangement and calculation of Yili's 2014-2018 annual report

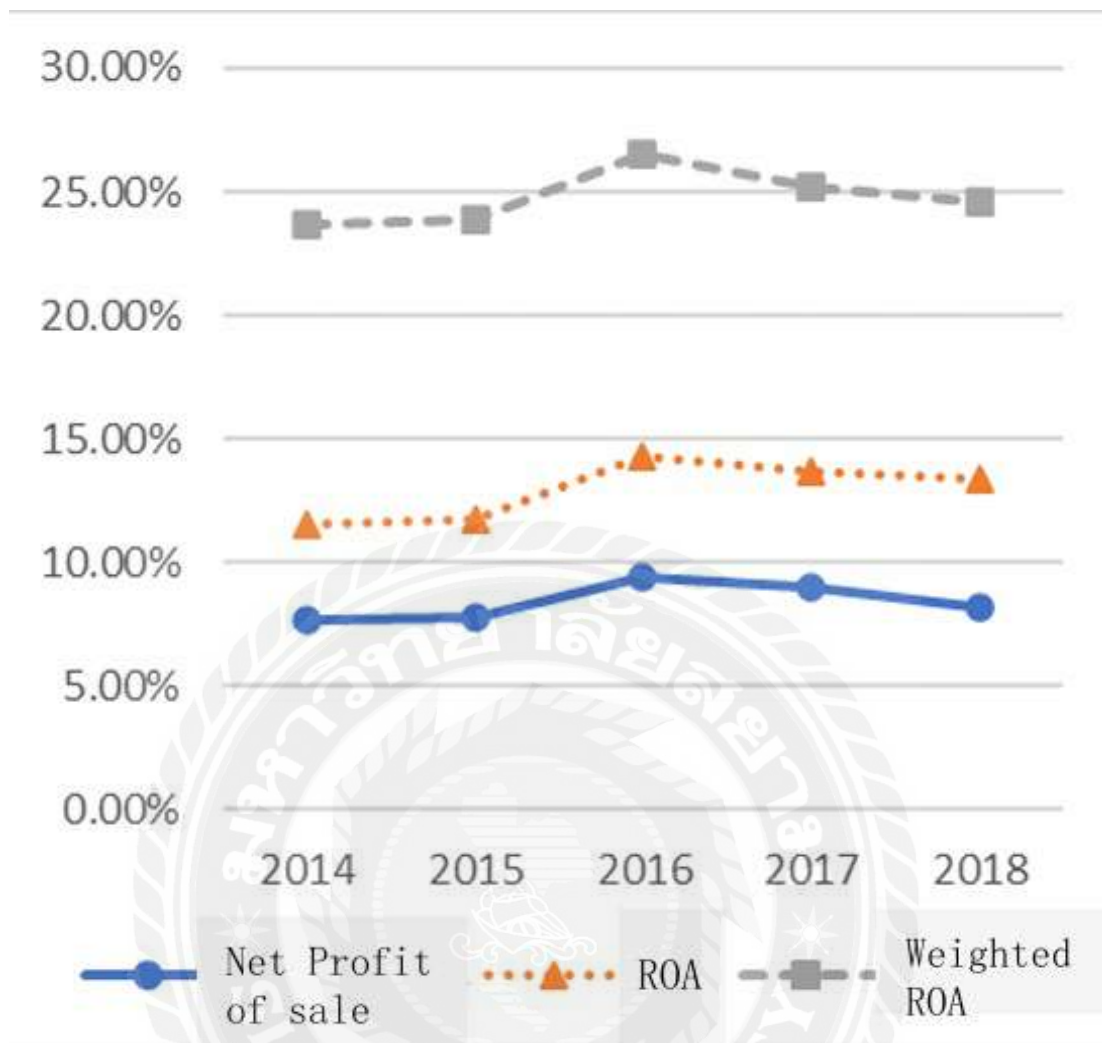


Figure 4-8 Profitability excluding expenses in 2014-2018

Data Source: Arrangement and calculation of Yili's 2014-2018 Annual report

By comparing the three profit indicators including and excluding options and restricted stock expenses, it can be seen that the equity incentive, expenses have little impact on the net profit rate of sales, ROA and weighted ROE. From 2016 to 2018, the share payment expenses arising from the equity incentive program caused the change of the net profit of the same period of the same year to 0.02%, 1.55% and 1.26% respectively, which can be seen that the influence range is very small. During 2014-2018, the changes of net profit rate on sales, ROA and weighted ROE were all relatively stable, and the three indicators all reached a high point in 2016. From 2014 to 2016, the profitability of Yili's shares rose steadily. At this time, the equity incentive plan was announced, and investors were often more optimistic about it. However, due to the decline of the entire A-share market environment in 2017, the profit index of Yili in 2017-2018 also showed a slight decline, but the overall net profit increased steadily, and the average net profit increased by 7.34% from 2016 to 2018 after excluding related expenses.

To sum up, weighted return on equity as the main assessment index of Yili Group, after the implementation of the equity incentive plan, the company's ability to use shareholders' equity to make profits has been strengthened to a certain extent, and its ability to make profits using the company's total assets has been improved, indicating that the company's ability to make profits using borrowed items has been steadily improved. Moreover, on the whole, as a leading enterprise in the industry, Yili's sales ability is still at the leading level in the industry after the implementation of the equity incentive plan. Therefore, the implementation of the equity incentive plan has improved the profitability of Yili.

(2) Value creation efficiency

Value creation efficiency can be used to measure the ability of the management of Yili Group to effectively use capital and create value for shareholders, and economic value added (EVA) can be used to evaluate whether the management has truly realized the maximization of enterprise value.

Table 4-4 EVA of Yili Group's Economic value added from 2012 to 2018 (unit: ten thousand yuan)

Annual	2012	2013	2014	2015	2016	2017	2018
EVA	63731.14	111118.45	245375.77	267891.41	254034.1	391036.16	406897.86

Data source: Yili Group 2012-2018 annual report sorting and calculation

Table 4-4 data shows that before, during and after the implementation of equity incentive, EVA of Yili Group showed a steady upward trend. In addition, after the implementation of the equity incentive in 2016, the economic added value of Yili Group increased significantly in 2017 and 2018, with an average increase of 25.56%, especially in 2017, the economic added value increased as high as 53.93% compared with the previous year. Similarly, although there are other important reasons for the rapid development of Yili Group in 2017, the substantial increase in the growth rate of economic added value reflects that the 2016 equity incentive plan has brought corresponding value growth to the enterprise, and the implementation effect is satisfactory to investors.

In the following three years, Yili achieved rapid and steady growth, and successively launched strategic products such as Amuxi and Changqing, and the high-end product Jindian brand exceeded the 10 billion mark. From 2016 to 2018, Yili's return on equity was 26.29%, 24.91% and 24.29% respectively, far exceeding its industry competitor Mengniu. In 2019, the operating income of Yili Group has reached 900.09 billion yuan, and the net profit has reached 6.934 billion yuan. The second equity incentive program has been tested by the market and has produced positive results.

4.4 The design of the equity incentive program was reasonable

Whether the equity incentive plan can increase shareholder value and play an incentive role is directly related to the design of the incentive plan itself. This section analyzes whether the design of Yili Group's equity incentive plan is reasonable from five dimensions: incentive tool, incentive strength, exercise condition, exercise price, assessment period, and adjustment before and after the incentive plan.

4.4.1 Appropriate incentive tools

Different from the single incentive tool in 2006 and 2019, Yili Group adopted a combination of stock options and restricted stock incentives in 2006, as shown in Table 4-2.

It is mentioned in section 2.2.1 of this paper that restricted stock is more beneficial to holders due to its large profit space and distribution rights; While stock options are more in line with the interests of shareholders because of their lower implementation cost and stronger risk incentive. In the aspect of stock options, the rights and obligations of the grantor are often unequal, so it is of innovative and referential significance to use the form of restricted stock to restrict and control the income of the incentive object. Such restricted period can help Yili Group retain core talents, fully stimulate the creativity and enthusiasm of the team, and effectively combine the interests of all parties closely.

4.4.2 Moderate incentive

The strength of equity incentive is an important factor to consider whether the scheme design is effective. If the incentive force is too small, it is often difficult to play the role of incentive; If the incentive is too large, the incentive object will have the motivation to manipulate the exercise index to achieve the exercise conditions, which will bring damage to the interests of shareholders. This section explains the incentive strength of Yili's equity incentive from the comparison between the value of the incentive object (stock) in Yili's equity incentive plan and the total share capital of the enterprise, as well as the analysis of the profits of senior executives through equity incentive.

(1) Comparison between stock value and total share capital of the enterprise

Taking the listed companies that implemented equity incentives in China from 2016 to 2019 as the research object, the ratio range of the number of stock options and restricted shares granted by listed companies to the total share capital of the companies is shown in Table 4-5.

Table 4-5 Analysis of the proportion of equity in the total share capital of listed companies implementing stock incentive in China

The corresponding number of shares granted/total share capital 2016-2019		
Proportional range	Number of businesses	Percentage of all businesses
(0,5)	1731	93.47%
(5,10)	121	6.53%

Source: Collated according to data provided by CSMAR database

First of all, from 2016 to 2019, the corresponding number of shares granted accounted for less than 5% of the total share capital of enterprises accounted for more than 90%, while the number of stock options and restricted shares granted by Yili's equity incentive in 2016 accounted for 0.99% of the total share capital, which is a lower level compared with most listed companies. At the same time, the incentive scale decreased from 9.68% of the total share capital in the year to 0.99%, and the scale of the incentive plan decreased significantly, indicating that the company stabilized the company's equity structure in order to protect the interests of enterprise owners and prevent equity dilution.

Then, the share payment expense in Yili's equity incentive plan in 2016 accounted for only 0.63% of the total assets. It is generally believed that if the share payment expense of equity incentive accounts for 5% or more of the total assets, it indicates that the impact is significant (Street & Cereola,2004). Therefore, it can be seen that the equity incentive of Yili in 2016 was relatively small.

(2) Profit analysis of equity incentive executives

In the 2016 Yili Group equity incentive plan, the senior executives in 2006 were transformed into the company's core business personnel and technical personnel, which increased from 33 in the first time to 294, and the number of incentives increased by nearly 9 times. Moreover, none of the directors and senior executives were granted shares. According to the announcement of the first exercise date on January 8, 2019, the specific conditions of the first exercise are shown in Table 5-4 and 5-5.

Table 4-6 Exercise of equity incentive stock options in 20161

Job Title	Number of exercises (copies)	Percentage of total stock options granted	Percentage of total equity granted
Core business personnel (50)	3375000	7.50%	0.06%
Core technical staff (196)	15903750	35.34%	0.26%
Total	19278750	42.84%	0.32%

Source: Yili Group Company Announcement on January 8, 2019

Table 4-7 Share incentive restricted stock unlock in 20162

Duties	Number of unlocks (copies)	Percentage of total restricted stock granted	Percentage of total equity granted
Core business personnel (50)	1125000	7.50%	0.02%
Core technical staff (196)	5300000	35.33%	0.09%
Total	6425000	42.83%	0.11%

Source: Yili Group Company Announcement on January 8, 2019

The stock option exercise price is 15.17 yuan/share, which is translated to the average option value of each core business personnel is 1,0240 yuan, and each core technical personnel is 1,230,900 yuan on average; At the same time, the restricted stock exercise price is 14.03 yuan/share, and the average value of restricted stock obtained by each core business personnel is 315,700 yuan, and the average value of each core technical personnel is 379,400 yuan.

According to the disclosure of the 2018 annual report, the employee salary payable by Yili Group is 251,392,700 yuan, while the number of active employees is 56,079 yuan, and the average salary of each employee is 44,800 yuan. For core personnel, the salary should be 10-20 times the average salary of the company, based on this, The stock option incentive of more than 1 million yuan and the restricted stock incentive of more than 300,000 yuan are less incentive. Compared with the equity incentive in 2006, the equity incentive is small. It can be seen that the purpose of this equity incentive is not to provide long-term incentives to the management, but to prevent the loss of core talents, increase the stability of the equity structure, consolidate the leading position in the industry, and promote the long-term development of the company.

4.4.3 Too low exercise condition

In order to achieve the equivalence of incentive and constraint, the high return of

equity incentive should require relatively strict exercise conditions to ensure the incentive effect. If the exercise condition is too simple, the incentive function is difficult to realize, and the equity incentive often becomes a means for the management to obtain its own interests. For schemes with strong incentives, can the exercise conditions adopted by Yili achieve the equivalence of incentives and constraints? The performance standards for the three equity incentives of Yili are shown in Table 4-8.

Table 4-8 Performance standard conditions for the three equity incentives of Yili Group

Equity incentive	Time	Performance criteria
Stock options in 2006	2006.11.28	At the time of the first exercise, the growth rate of net profit of the company in the previous year shall not be less than 17%, and the growth rate of main business shall not be less than 20%; After the first exercise, the compound growth rate of the company's main business income in the previous year compared with 2005 shall not be less than 15%
Stock options and restricted stock in 2016	2016.10.22	On the basis of net profit in 2015, the growth rate of net profit in 2017 and 2018 shall not be less than 30% and 45% respectively, and the return on equity shall not be less than 12%
Restricted stock in 2019	2019.9.7	Based on the net profit of 2018, the growth rate of net profit in 2019, 2020, 2021, 2022 and 2023 shall not be less than 8%, 18%, 28%, 38% and 48% respectively, and the return on equity shall not be less than 15%

Data source: Yili Group 2006, 2016, 2019 equity incentive announcement collated

Through analysis, it is found that the equal setting of the exercise conditions and incentive strength of the equity incentive is reflected in the following two aspects.

(1) The performance appraisal index is simple

Due to the relatively dispersed ownership structure of Yili, Hohhot SASAC was the

second largest shareholder of Yili when the equity incentive plan was introduced, accounting for 8.86% of the shares. Although this proportion did not reach 50%, it also exceeded most of the economic components of the company, so Yili is a state-owned relative holding enterprise. Aiming at such state-holding listed companies, in 2008, the Ministry of Finance and the State-owned Assets Supervision and Administration Commission jointly issued the Relevant Issues on standardizing the Implementation of Equity Incentive System in State-holding Listed Companies. The notice stipulates that when the state-owned holding enterprises implement the equity incentive plan, at least one of the following three subdivided indicators of performance evaluation indicators should be selected: ① comprehensive indicators such as shareholder return and company value creation; Growth indicators such as the company's profitability and market value; ③ the company's income quality index.

Among them, Yili Group 2006 equity incentive assessment conditions net profit growth rate and main business growth rate are the above indicators (2); The rate of return on equity and the growth rate of net profit under the assessment conditions in 2016 are the above indicators ① and ②; In 2019, the assessment condition return on equity and net profit growth rate are also indicators ① and ②, and the index of cash dividend ratio is increased.

In 2016, return on equity incentive was added to reflect the return on equity shareholders, and different from the main business income pure profitability indicator, return on equity measures the ratio of shareholders' input-output, reflects the ability of the company's own capital to obtain net income, indicating a more comprehensive assessment of the asset efficiency used in the source of profit. However, there is still a lack of (3) corporate income quality index.

In summary, the evaluation index of equity incentive has not assessed the quality of corporate earnings. From this point of view, the assessment index is not comprehensive enough, which may lead to the short-sighted behavior of the management that fails to improve the overall company due to the pursuit of maximizing immediate benefits.

(2) The performance appraisal standard is low

In the draft of the stock option and restricted stock incentive plan announced by Yili on October 22, 2016, it was declared that, "With reference to the average profit growth level of the industry, the company sets the average annual growth rate of net profit from 2016 to 2018 at 15%, which is higher than the average level of comparable companies in most industries and the industry; The company set the return on equity for 2016-2018 at 12%, which is also higher than the average level of the industry ". In view of the assessment standards, this section will be analyzed from both horizontal and vertical aspects.

First of all, the performance assessment objectives set by Yili in 2016 are compared and analyzed vertically with the performance achievements of the previous five years to determine whether the assessment indicators are binding. For the comparison between Yili Group and the profitability indicators of comparable companies in the industry from 2013 to 2015, see Table 4-5 and 4-6 in 4.4.2 for details. It can be seen that no matter the growth rate of net profit or return on equity, Yili Group are higher than the average level of comparable companies and the industry, and it belongs to the real industry leader. The compound growth rate of net profit from 2013 to 2015 is 20.42%, and the growth rate of net profit in 2017 is 45% compared with 2015, which is 30% higher than the established target; And the return on equity from 2013 to 2015 was above 18%, with an average of 20.42%, which was also higher than the established target of 12%. The fundamental reason for its profit growth is that Yili's product sales structure continues to optimize, and the sales volume of products with high gross profit rate continues to increase.

Secondly, it makes a horizontal comparison with Mengniu Dairy, its main competitor in the dairy industry, to judge whether the development trend of the industry is conducive to the achievement of the performance assessment objectives. According to ABN Amro's annual survey of the world's largest dairy companies in 2015, the total turnover of the top 20 companies in the global dairy industry grew by only 2.5% in dollar terms in 2015, compared with 7.2% in 2014. In the Chinese market, with the exception of the two giants Yili Group and Mengniu Dairy, almost all other dairy companies experienced negative growth. On the whole, the environment of dairy industry is poor. Since 2014, the dairy industry has been facing transformation, market homogenization competition, and slow business progress. However, Yili Group set the net profit growth and return on equity as the lifting terms instead of the revenue growth, which reflects the constraint of Yili company's equity incentive. It can be believed that in the face of complex and changing economic environment and fierce market and industry competition, the management of Yili Group sets conservative exercise standards and chooses the same industry average level. However, since 2013, Yili has become the real leader of the industry, and the profitability index has long exceeded the average level of the industry. At this time, it is rather biased to forecast the average level of the industry.

4.4.4 Too short review period

Stock incentive is a form of long-term incentive, whose goal is to achieve the convergence of management interests and company interests over a long period of time. Therefore, in the design of equity incentive, the performance indicators used should be conducive to realizing the long-term value growth of the company, which requires that the assessment period of the incentive object should not be too short, especially under high incentive intensity. In order to achieve better results of equity incentive, the assessment period should be appropriately extended to increase the difficulty of exercising the right, and the performance target should be met only in a longer period of time. In order to achieve the equivalence of incentive and constraint.

(1) Waiting period

The unblocking period and unlocking period of equity incentive introduced in 2006, 2016 and 2019 are shown in Table 4-9.

Table 4-9 Three equity incentive assessment periods of Yili Group

Equity incentive	Exercise/release lock-up period	Vesting/lifting ratio
2006	One year after the first exercise, the stock option exercise itself within the 8-year validity period;	The first installment is 25%, and the remaining 75%
2016	Exercise the option in two installments over the next 24 months after the expiration of 24 months from the grant date;	50% in each instalment
2019	The restriction will be lifted in five installments, 12 months from the grant date to 72 months from the grant date.	20% per issue

Data source: Yili Group equity incentive draft announcement collated

The longer waiting period and lifting period mean that the difficulty of assessment increases. Only when the performance target is met in a longer period can the equivalence of incentive and constraint be achieved, which avoids the behavior of enterprise executives to manipulate the exercise conditions and plan implementation through short-term earnings management to seek benefits for themselves to a certain extent.

The more common cycle of equity incentive plan is about 3 years. The lifting period of Yili's equity plan in 2016 is 2 years. The average waiting period is obviously too short to realize the long-term incentive mechanism, and the amortization period of option expense is too short.

(2) One-time grant mode

Generally speaking, in the design of the grant and exercise period of the share

incentive plan, there are two models: one grant and multiple grant and multiple exercise. Yili Group adopted the former model in the three equity incentive plans, which invested the total amount of incentive within the validity period at one time, and then exercised the right or lifted the ban within a longer period. Compared with multiple grants and multiple exercises, this model has the following two defects:

① It has great influence on the performance index of the company

The one-time grant and fractional exercise mode will sell the expenses to a waiting period. If the waiting period is shorter, it will have a greater impact on the performance of listed companies, and it is easy to cause performance losses due to equity incentives. For example, Yili has a large net profit loss in 2007, because the waiting period of equity incentive in 2006 is too short, and the option cost is mainly promoted during the waiting period.

② It is greatly affected by the external capital market

Before the grant, the B-S pricing model is often used to calculate and lock the exercise price at one time. Once the exercise price is determined, it will not be adjusted during the implementation of the program. If the stock market is expected to continue to rise in the next few years, the spread between the market price of the stock and the exercise price will be larger in the single-grant model, and the benefit of such incentive object will be more substantial. However, such incentive strength is maintained by the trend of external capital market. Once the stock market falls, the incentive effect brought by this model will be greatly reduced, which is not conducive to the realization of long-term incentive for the incentive object.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

By consulting relevant literature on equity incentive and combining the principal-agent theory and the optimal contract theory, this paper makes a horizontal and vertical analysis of the equity incentive of Yili Group in 2016 in a single case, to explore one by one (1) whether the equity incentive has a positive effect on the company, (2) whether the plan design is reasonable, whether it is conducive to the executives to obtain excess benefits or to stimulate the enterprise performance. Finally, according to the results discussed above, this study tries to put forward effective solutions for enterprise equity incentive under the background of compensation control.

The conclusion of this study were: (1) the implementation effect of the equity incentive of Yili Group has reached the expected effect, and both the capital market reaction and the business growth performance have certain incentive effect. (2) This is due to the relatively reasonable design of its incentive program, which is reflected in the appropriate incentive tools and moderate incentive intensity. However, there are still some problems such as too low exercise conditions and too short assessment period, which need to be further improved.

First of all, Yili Group's equity incentive in 2016 achieved the established goal and the effect was remarkable. Through tracking the whole process of the incentive plan, it is found that market investors hold a positive attitude towards the plan. The overall trend of the index during the waiting period is similar to the average trend of the capital market, and far exceeds the competitors in the same industry. Further analysis of the financial performance of equity incentive shows that the company's net profit level has increased steadily during the assessment period, and both the net profit growth rate and the return on equity have reached the established assessment goals. After the implementation of equity incentive, the company's profitability has been improved, and the value of enterprise investment has increased. The reason behind this phenomenon may be that equity incentive plays its due incentive effect.

Secondly, the incentive scheme design is relatively reasonable, which is reflected in the appropriate incentive tools and moderate incentive intensity. This equity incentive adopts the combination of stock options and restricted stock to control the income of the incentive object, which can help Yili Group retain core talents, fully stimulate the creativity and enthusiasm of the team, and effectively combine the interests of all parties. The direction of incentive intensity, the ratio of (stock) value to the total share capital of the enterprise is far lower than the average of companies that have issued equity incentive policies in the same year, and the directors and senior executives have not made profits through equity incentive, but are used to motivate 294 core business personnel and

technical personnel. It shows that Yili's equity incentive has the right incentive intensity, which avoids the occurrence of self-interested behavior of senior management, and has more incentive effect on the core talents of the enterprise.

However, in the process of design and final implementation, there are still unreasonable problems such as too low exercise conditions and too short assessment period. First of all, the setting of exercise conditions is low. In 2016, a new assessment index of return on equity assets was added for equity incentive, and the draft announcement declared that the index was set reasonably and scientifically with reference to the average profit growth level of the industry, taking into account the interests of the incentive object, the company and the shareholders. However, it can be seen that since 2013, Yili has become the real industry leader, and the profitability index has long exceeded the average level of the industry. At this time, it is too biased to forecast the average level of the industry. At the same time, Yili Group in 2016 equity incentive assessment time also choose a one-time grant method. The planned lifting period is 2 years, and the average waiting period is obviously too short to realize the long-term incentive mechanism, and also causes the option expense amortization period to be too short. Compared with multiple grants, one-time grants have a greater impact on the company's performance indicators and are more influenced by the external capital market. In other words, the evaluation index and the evaluation time fail to achieve the equivalence of incentive and constraint.

5.2 Recommendation

5.2.1 Be flexible in choosing the equity incentive model

The implementation effect of equity incentive is affected by the choice of equity incentive model, and different enterprise objectives will also have an impact because of the different equity incentive model. The public recognized incentive models include stock option, stock appreciation right, performance stock, virtual stock, restricted stock, operator (employee) ownership, deferred payment, management (personnel) and acquisition book value right. Enterprises can provide more diversified equity incentive models, and choose the equity incentive model suitable for the long-term sustainable development of enterprises according to their own needs.

5.2.2 Set the conditions for exercising rights in a diversified manner

The conditions for the exercise of equity incentive schemes should be both enforceable and challenging, and professionals need to set up comprehensive indicators to examine the company's performance. Although the 2016 equity incentive plan of Yili Group has target setting, the target setting is not rich enough, and it lacks certain quality indicators of the company's earnings and a set of perfect talent evaluation system. At the same time, such as core talent turnover rate, target market share, customer satisfaction

and other quantifiable non-financial indicators can also be used as the exercise conditions.

The conditions for the implementation of equity incentive schemes should be both enforceable and challenging, requiring professionals to establish comprehensive indicators for assessing the company's performance. However, the 2016 equity incentive plan of Yili Group lacks sufficient richness in target setting and fails to incorporate certain quality indicators related to the company's earnings or a well-developed talent evaluation system. Additionally, quantifiable non-financial indicators such as core talent turnover rate, target market share, and customer satisfaction can also serve as exercise conditions.

5.2.3 Improve the company's internal governance structure

Firstly, enhance the autonomy of the remuneration and evaluation committee by delegating the finalization and implementation of share incentive plans to independent directors and external professional consultants, thereby mitigating potential self-serving behavior resulting from management's informational advantages.

Subsequently, it is imperative to fully leverage the efficacy of the board mechanism by augmenting the count of independent directors, thereby establishing a robust system for supervising and constraining managerial authority. It is crucial to bolster the autonomy of independent directors and institute a well-defined accountability framework alongside an appropriate performance evaluation system, ensuring their lawful discharge of duties.

Finally, the role of minority shareholders should be brought into play. In view of the existence of insider control, large shareholder control and other situations, it can be challenging to raise objections to the stock incentive plan approved by the general meeting resolution. The participation of minority shareholders in decision-making should be included in the design procedure, so as to better implement the voting rights of minority shareholders and exert the restraint mechanism.

References

- Aboddy, D., Kasznik, R. (2008). Executive stock - based compensation and firms' cash payout: the role of shareholders' tax - related payout preferences. *Review of Accounting Studies*, 13, 216-251.
- Aggarwal, R. K., & Samwick, A. A. (1999). Executive compensation, strategic competition and relative performance evaluation: theory and evidence. *Journal of Finance*, 54(6), 199-204.
- Andergassen, R. (2008). High-powered incentives and fraudulent behavior: stock-based versus stock option-based compensation. *Economics Letters*, 101(2), 122-125.
- Balafoutas, L., Kocher, M. G., Putterman, L., & Sutter, M. (2013). Equality, equity and incentives: An experiment. *European Economic Review*, 60(2), 32-51.
- Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*, 17(7), 71-92.
- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *Review of Financial Studies*, 22(2), 783-827.
- Bebchuk, L. A., Grinstein, Y., & Peyer, U. (2010). Lucky CEOs and lucky directors. *Journal of Finance*, 65(6), 2363-2401.
- Bernile, G., & Jarrell, G. A. (2008). The impact of the options backdating scandal on shareholders. *Journal of Accounting and Economics*, 11(4), 2-26.
- Bettis, C., Bizjak, J., Coles, J., & Kalpathy, S. (2010). Stock and option grants with performance-based vesting provisions. *Review of Financial Studies*, 23(10), 3849-3888.
- Brick, I. E., Palmon, O., & Wald, J. K. (2006). CEO compensation, director compensation, and firm performance: Evidence of Cronyism? *Journal of Corporate Finance*, 12(3), 403-423.
- Burns, N., Mctier, B. C., & Minnick, K. (2015). Equity-incentive compensation and payout policy in Europe. *Journal of Corporate Finance*, 30, 85-97.
- Cheng, Q., & Warfield, T. (2005). Equity incentives and earnings management. *Accounting Review*, 80, 441-476.
- Cleary, S. (1999). The relationship between firm investment and financial status. *Journal of Finance*, 54(2), 673-692.

- Essman, S. M., Schepker, D. J., Nyberg, A. J., & Ray, C. (2021). Signaling a successor? a theoretical and empirical analysis of the executive compensation-chief executive officer succession relationship. *Strategic Management Journal*, 42(1), 185-201.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301-325.
- Fang, H., Nofsinger, J.R., & Quan, J. (2015). The effects of employee stock option plans operating performance in Chinese firms. *Journal of Banking Finance*, 54, 141-159.
- Hall, B., & Murphy, K. (2003). The trouble with stock options. *Journal of Economic Perspectives*, 17(3),49-70.
- Hochberg, Y. V., & Laura, L. (2010). Incentives, targeting, and firm performance: an analysis of non-executive stock options. *Social Science Electronic Publishing*, 23(11), 4148-4186.
- Jensen, M. C., Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4),305-360.
- Kim, M., Boyd, E. D., Kim, N., & Yi C. H. (2016). CMO equity incentive and shareholder value: moderating role of CMO managerial discretion. *International Journal of Research in Marketing*, 33(4),725-738.
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58, 3-27.
- Lee, C., Kang, H. & Seok W. (2018). How does organizational structure affect executive compensation? *Applied Economic Letters*, 25(6), 405-408.
- Lerner, J., & Wulf, J. (2007). Innovation and Incentives: Evidence from Corporate R&D. *The Review of Economics and Statistics*, 89, 634-644.
- Liu, Y., Padgett, C., & Varotto, S. (2017). Corporate Governance, bank mergers and executive compensation. *International Journal of Finance & Economics*, 22(1), 12-29.
- Lovett, S., Rasheed, A. A., & Hou, W. (2022). Stock options, restricted stock, salary, or bonus? Managing CEO compensation to maximize organizational performance. *Business Horizons*, 65(2), 115-123.

- Ohad, K., & Yang, J. (2006). Executive stock options and earnings management: A theoretical and empirical analysis. *Washington Workingpaper*, 18, 224-245.
- Oyer, P., & Schaefer, S. (2005). Why do some firms give stock options to all employees: An empirical examination of alternative theories. *Journal of Financial Economics*, 76, 99-133.
- Prevost, A. K., Devos, E., & Rao, R. P. (2013). The effects of relative changes in CEO equity incentives on the cost of corporate debt. *Journal of Business Finance & Accounting*, 40(3-4), 470-500.
- Rego, S. O., & Wilson, R. (2012). Equity risk incentives and corporate tax aggressiveness. *Journal of Accounting Research*, 50(3), 775-810.
- Street, D.L. & Cereola, S. (2004). Stock option compensation: Impact of expense recognition on performance indicators of non-domestic companies listed in the U.S. *Journal of International Accounting*, 13(1), 21-37.
- Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112-134.
- Wruck, K. H., & Wu, Y. (2021). The relation between CEO equity incentives and the quality of accounting disclosures: New evidence. *Journal of Corporate Finance*, 67, 101895.
- Wu, J., Liu, B., Zeng, Y., & Luo, H. (2022). Good for the firm, good for the society? causal evidence of the impact of equity incentives on a firm's green investment. *International Review of Economics & Finance*, 77, 435-449.
- Yang, J., Yu, Y., & Zheng, L. (2021). The impact of shareholder litigation risk on equity incentives: evidence from a quasi-natural experiment. *The Accounting Review*, 96(6), 427-449.
- Zhou, B., Li, Y., Sun, F., & Zhou, Z. (2021). Executive compensation incentives, risk level and corporate innovation. *Emerging Markets Review*, 47(3), 100798.
- Zolotoy, L., O'Sullivan, D., Martin, G. P., & Veeraraghavan, M. (2018). The role of affect in shaping the behavioral consequences of CEO option incentives. *Journal of Management*, 45(7), 014920631877117.