

The influence of equity incentive on enterprise performance

-- Taking L company as an example

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Abstract: As an important way of modern enterprise management, equity incentive has been brought into business development planning by more enterprises, especially high-tech enterprises. Some high-tech enterprises use equity incentive to promote enterprise innovation and change, improve enterprise performance level, and the state has also given relevant policy support, focusing on retaining core talents and enhancing core competitiveness of enterprises. Based on the financial data of L company, a private high-tech enterprise, from 2016 to 2021, this paper focuses on two equity incentive schemes, and verifies the incentive effect according to the financial performance and non-financial performance during the implementation period, in order to find out the favorable aspects of equity incentive for the innovation and sustainable development of private high-tech enterprises.

Keywords: Private high-tech enterprises; Equity incentive; Financial performance; Non-financial performance; Enterprise innovation.

1. Introduction

The separation of ownership and management rights is the inevitable result of economic development and social progress, and the principal-agent problem arising from this separation mode has also attracted much attention. As we all know, in addition to the regulatory mechanism, an effective incentive mechanism is also an important means to alleviate the principal-agent conflict and attract and retain talents. However, among the common means, compensation contract and promotion incentive have short-term incentive and are easy to induce short-sighted behavior of the management. As an effective long-term incentive mechanism, equity incentive came into being as the times require, and has become the most important way for modern enterprises to alleviate agency problems [1]. Then more and more enterprises take equity incentive as an important way to attract core talents and improve business performance. As a high-tech enterprise, how to design a reasonable and effective equity incentive plan suitable for the development of the company and stimulate the enthusiasm and creativity of employees has become one of the difficulties faced by the enterprise. Therefore, taking L Company, a high-tech enterprise, as the research object, we found the problems in the implementation of the two periods of equity incentive, and gave targeted suggestions for improvement, which provided a reference for China's high-tech enterprises to carry out long-term equity incentive reform.

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2. Current situation of equity incentive of L Company

2.1. Company Profile

Company L was founded on April 5, 2001 and listed on the GEM in 2015. It is the leading stock in the domestic adsorption material market. The company is committed to the

R&D, production and sales of adsorption and separation materials, as well as a series of system devices formed around adsorption and separation materials. As a company driven by the realization of industrialization of new technologies, the company has made continuous breakthroughs and innovations through unremitting efforts to promote the industrialization of new technologies. The company has now become the top enterprise of adsorption and separation materials in China. In addition, the company has always practiced the concept of green development and complied with the development concept of ESG.

2.2. Development history of equity incentive of L Company

L Company has implemented three equity incentives since its listing, which were successfully unlocked and implemented in 2016, 2019 and 2021. However, due to the incomplete financial data in 2021, which has not been fully unlocked, the following focuses on the basic situation of the previous two equity incentive plans, and the specific implementation is as follows:

2.2.1. The first equity incentive plan

The Board of Directors of the Company proposed an equity incentive plan on March 25, 2016. The stock grant price of this incentive plan was 21.20 yuan/share, with a total of 1.01 million shares granted, accounting for 1.26% of the total share capital of the Company. The number of objects granted in this incentive plan of the Company was 88. On May 18, 2016, the Board of Directors and the Board of Supervisors adjusted the previously issued proposal, and the number of incentive shares was adjusted from 1.01 million shares to 958000 shares, accounting for 1.2% of the total share capital. The number of objects granted incentive was also adjusted, including 4 directors and senior managers, 80 middle managers and core technicians. It can be seen that the Company attaches great importance to technical talents, recognize that the future development cannot be separated from the promotion of core

technology.

2.2.2. The second equity incentive plan

The Board of Directors of the Company issued the second equity incentive draft announcement on January 4, 2019. The share grant price of this incentive plan is 12.5 yuan/share, and the number of shares granted accounts for 2.47% of the total share capital of the Company. After the adjustment of the Board of Directors, taking March 12, 2019 as the grant date of restricted shares of the Company, 4.15 million restricted shares were granted to 158 eligible incentive objects, including 4 directors and senior executives of the Company, 154 middle-level managers, core technicians and other personnel that the Board of Directors considered necessary to be motivated. It can be seen that the purpose of this incentive plan is still to attract and retain core technicians.

By the end of 2021, the secondary equity incentive of L Company has been successfully unlocked, the set financial evaluation performance indicators have met the expected requirements, and the equity incentive scheme has been successfully implemented.

3. Impact of equity incentive on financial performance of L Company

In fact, the implementation effect of equity incentive of enterprises is affected by many factors. In order to better study the impact of equity incentive on enterprises, this paper collects some relevant financial data of L Company from 2016 to 2021, and carries out longitudinal financial performance analysis from three aspects of solvency, profitability and operating ability.

3.1. Analysis of solvency

In this paper, the asset-liability ratio is selected to measure the long-term solvency of enterprises, and the current ratio and quick ratio are selected to measure the short-term solvency. In terms of long-term solvency, the asset-liability ratio increased in 2016-2019, and decreased year by year after 2019, reaching 32.38% in 2021. However, the overall stability is relatively stable, and the ratio is basically below 50%, indicating that the implementation of the enterprise equity incentive plan is conducive to the control of financial risks. In terms of short-term solvency, the current ratio and quick ratio began to decline slowly in 2016-2019, indicating that the equity incentive plan has improved the problem of occupying more current assets and the short-term solvency has been improved. After the second equity incentive, it slowly rose. It can be seen that the second equity incentive plan has a weaker effect on improving the short-term solvency of enterprises than the first equity incentive plan. On the whole, the two-stage equity incentive plan of L Company has a certain effect on the short-term solvency of enterprises, but has not brought obvious positive effects.

3.2. Profitability analysis

In this paper, we choose three indicators to measure the profitability of L company: return on net assets, return on total assets and net interest rate on sales. From the analysis of the return on net assets, the steady increase in 2016-2018 shows that the implementation of the equity incentive policy has helped enterprises grasp the overall economic trend and industry development opportunities, and ensured the steady growth of the company's sales, revenue and profits. There was

a downward trend from 2019 to 2021, indicating that the investment income was decreasing year by year. The main reason was that the COVID-19 in this period had a great impact on China and the world economy and society, and also brought great challenges to the company's operation and management, resulting in a sharp decline in sales. The growth and change of the return on total assets are almost the same as that of the return on net assets. From the perspective of net profit rate on sales, 2016-2019 was in an overall upward trend, with a slight decline in 2020 and a rapid increase of 25.56% in 2021. On the whole, it is the right choice for enterprises to implement equity incentives. The two equity incentives have played a good auxiliary role in improving the profitability of enterprises.

3.3. Operation capacity analysis

This paper selects inventory turnover rate, total asset turnover rate and accounts receivable turnover rate to measure the impact of equity incentive on operating capacity of L Company. The inventory turnover rate of L Company showed an upward trend after the implementation of the equity incentive. The inventory turnover rate decreased slightly in 2018-2019. The reason was that the average balance of inventory of the Company increased significantly due to the substantial increase of finished products, products in process and raw materials corresponding to multiple projects, while the growth of operating costs was far lower than the average balance of inventory, so the inventory turnover rate decreased. The inventory turnover rate in 2021 is 1.65, which is slightly higher than that in 2020, indicating that the enterprise is actively responding to the impact of the COVID-19, and the liquidity of inventory is gradually increasing driven by equity incentives. The total asset turnover rate of L Company fluctuated after the equity incentive policy, with a small fluctuation and an overall increase. The turnover rate of accounts receivable of the company has been steadily increasing from 2016 to 2019, and has declined in 2020, which indicates that the company faces the risk of bad debts in that year. The turnover rate of accounts receivable has risen slowly in 2021, which indicates that the asset liquidity of the company is constantly increasing, the rate of account recovery is also gradually increasing, the risk of bad debts is reduced, and the efficiency of fund use of the company is naturally significantly improved. It can be seen that equity incentives improve the operating capacity of enterprises to a certain extent, and have a positive effect on enterprises.

4. The impact of equity incentives on non-financial performance of L Company

4.1. Impact on human resources

For a high-tech company like L Company, technicians are the company's extremely important human capital, especially the core technicians, which play an important role in the company's independent innovation and sustainable development. If the internal control system of the company's core technology cannot be effectively implemented, it is very likely that the problem of technology leakage will occur, which will affect the company's market competitiveness and adversely affect the company [2]. Therefore, the implementation of equity incentive in L Company is conducive to helping the company optimize the allocation of human resources and promote the construction and

development of human resources system.

Table 1. Total number of active employees and operating income of L Company from 2016 to 2021

Item	2016	2017	2018	2019	2020	2021
Total number of active employees (person)	359	416	692	933	952	1060
Operating income (ten thousand yuan)	3324 0.6	44424 .25	63198 .68	10119 3.03	92263 .09	11949 0.65

From Table 1, it can be seen that the total number of employees in L company is roughly the same as the growth and change of operating income. When L company began to implement the equity incentive policy in 2016, the total number of employees was only 359. At this time, everyone doubts about the effect of equity incentive. With the promotion of equity incentive, employees have obtained tangible self-interest in it, and more people are willing to join the development layout of L company. After the release of the second equity incentive policy in 2019, the total number of employees reached a small peak of growth, and the trend of stable growth in the next few years showed that equity incentive played an important role in human resources. The company not only stabilized the original personnel structure, but also absorbed some new personnel, thus contributing to the growth of the company. At present, the changes in the total income of the main business of the employees and enterprises are roughly the same, which also shows the impact and promotion of human capital on the business income of enterprises.

4.2. Impact on innovation behavior

As the main body of innovation, the strength of enterprises' innovation ability affects the overall level of enterprises, and the strength of enterprises' innovation ability is often reflected in the R&D investment in R&D activities. The R&D investment of enterprises is mainly divided into two parts: one is the investment of R&D personnel, and the other is the investment of R&D expenses [3].

It can be seen from Table 2 that the number of personnel with bachelor's degree and above and the number of R&D personnel have been steadily increasing from 2016 to 2021, which shows that R&D personnel and personnel with high academic qualifications have accounted for a large proportion of the increased staff of L Company in recent years. The peak growth of R&D personnel occurred in the year when the second equity incentive was issued, which shows that everyone is quite satisfied with the profits brought by the first equity incentive. It can be seen that the equity incentive policy of L Company not only builds a value platform for core employees, stimulates their work potential, but also attracts more high-tech talents to join, and also achieves the expected effect of implementing equity incentive. In addition, the growth and change of enterprise R&D expenses and operating income are roughly the same. The R&D expenses increased year by year from 2016 to 2019, and decreased in 2020. However, the proportion of R&D expenses to operating income during the two equity incentive periods basically remained at 6%. The number of R&D personnel also increased with the increase of R&D expenses, indicating that the enterprise's R&D investment is relatively stable, and the enterprise's R&D strategy also tends to mature [4]. The equity

incentive policy also further encourages R&D personnel to improve their R&D capabilities, so as to enhance the competitiveness of enterprises.

Table 2. Number of R&D personnel, number of undergraduate and above personnel and R&D expenses of L Company in 2016-2021

Item	2016	2017	2018	2019	2020	2021
Number of R&D personnel (person)	76	95	112	142	148	208
Number of undergraduate and above personnel (person)	165	174	232	266	282	336
R&D expenses (ten thousand yuan)	1995. 31	2630. 12	3277. 69	6236. 23	5474. 76	7683. 06

5. Problems in the equity incentive plan of L Company

The equity incentive of L Company has brought certain positive impetus to the company, but there are still some deficiencies in the actual operation settings, as shown below:

5.1. Performance evaluation indicators are single and too simple

In the two phases of the plan of L Company, the net profit growth rate is used as the financial performance evaluation index, and the net profit growth rate as the evaluation index has a direct or indirect role in promoting the indicators related to the net profit, but the investigation of the solvency and operating ability is not so obvious, and the single indicator setting is more likely to induce the earnings management behavior of senior executives, for example, enterprises may choose different accounting policies to adjust profits; Modify the depreciation method, depreciation life, net residual value rate, etc. of fixed assets, and realize the improvement of financial assessment indicators, so as to unlock restricted stocks and maximize their own interests. This is undoubtedly not conducive to the development of enterprises, so it needs to be improved.

At the same time, the setting of indicators required for individual performance assessment is too simple. Through the analysis of the two phases of equity incentive of L Company, it can be found that the appraisal objects in the incentive plan are different in their positions and levels, but whether they are senior managers or technical personnel, a set of appraisal standards is uniformly adopted. Under this appraisal mode, although the appraisal process for employees is simplified and certain human and material resources are saved, the lack of targeted appraisal will weaken the incentive effect. In addition, the incentive object set does not take into account the new talents in the future, which is not conducive to the introduction of talents, and will greatly weaken the enthusiasm of new employees. The two evaluations also did not involve non-financial indicators, such as the number of patents capable of evaluating research and development capabilities, and the turnover rate reflecting employee loyalty.

5.2. The excitation period is set too short

At present, among the listed companies that implement equity incentive in China, the vesting period and waiting period in the incentive plan are too short. The waiting period is generally one year, and the vesting period is generally 3-5 years. The setting of the validity period plays an incentive role

to a certain extent. If the setting period is too short, it will induce the short-sighted behavior of the incentive object. A relatively long-term incentive mechanism can avoid the manipulation of stock prices, statements and other earnings management behaviors for the exercise of rights caused by the short-sighted behavior of the management. Equity incentive and its contractual elements and enterprise risk bearing. Through the equity incentive policy of L Company, it is found that the validity period of the company is 3 years. The premature exercise of the incentive object will lack the effect of long-term restraint on it, and it will not give the employees sufficient growth time. Especially for large high-tech enterprises like L Company, product R&D and innovation often take a long time to complete the listing, and the incentive cycle is too short, and the R&D personnel are often difficult to obtain the corresponding benefits, can't achieve a good incentive effect.

5.3. Insufficient equity incentive methods

Through sorting out the equity incentive policies of L Company, it is found that although two periods of equity incentive have been implemented, the equity incentive forms designed in the equity incentive plan are not rich enough. Although compared with the stock option, the setting of restricted stock incentive period can ensure the stability of relevant personnel to a certain extent, and avoid the phenomenon of selling and leaving immediately after getting the stock. However, the biggest disadvantage of restricted stocks is that they can only be unlocked successfully after meeting both the enterprise's performance indicators and the individual's performance indicators. Under this unlocking scheme, it is easy to occur that the company's performance indicators are not completed because the individual's performance is not up to the standard. Especially when the individual performance of a few people is outstanding, even if the individual's performance must be occasionally highlighted, it cannot be unlocked, this will affect the motivation of the incentive object. In addition, another disadvantage of restricted stocks is that if the stock market fluctuates and falls below the purchase price after the stock is unlocked, the incentive object will bear the loss.

6. Improvement methods of L company's equity incentive plan

First, improve performance evaluation standards. A single financial evaluation index cannot fully reflect the real business situation of the enterprise, and it is very easy to induce earnings management behavior of senior executives. Therefore, Company L should improve its financial evaluation system. When formulating the system, the performance evaluation standards should be consistent with the development strength of the enterprise itself, and should not be too high or too low [5]. Company L can also add some indicators that can more intuitively reflect the operating capacity, solvency and development capacity. Financial indicators can more intuitively reflect the impact of equity incentives on enterprise performance, but it should also be considered that L company is a high-tech enterprise. In view of the characteristics of high-tech enterprises, L company should appropriately introduce some non-financial indicators, such as the speed of product research and development, the turnover rate of core technical personnel, market share, and product services to set the exercise criteria, From the single

emphasis on profitability to the assessment of the company's value creation ability and future sustainable development ability. For employees with different positions and levels, you can choose differentiated assessment to ensure the fairness of the assessment system and stimulate the potential of employees.

Second, formulate an equity incentive plan with appropriate duration. As a high-tech enterprise, the incentive period of L Company is not consistent with the product development period, so it is necessary to appropriately extend the incentive period. On the one hand, the R&D and launch of the deployment products are consistent with the unlocking period to obtain continuous income increase. On the other hand, after the extension of the incentive period, the exercise conditions and unlock proportion of equity incentive will be reasonably distributed, and the interests of enterprises and employees will be bound together, so that the management will pay more attention to the long-term development of enterprises, formulate reasonable development plans, avoid short-sighted behavior, damage the interests of enterprises, and improve the sense of responsibility and sense of belonging of employees.

Third, choose a variety of incentives. Although the stock right incentive develops later in our country, but the overall development is also relatively rapid, along with the stock right incentive as a long-term incentive way in our country's enterprises is more and more common, in which there have also been some incentive failure cases, therefore, it is very important for the design of incentive scheme. It is difficult for single incentive mode to adapt to different development stages of enterprises. Enterprises can choose diversified incentive mode to cope with the changes of industry, to better achieve the incentive effect. The Restricted stock incentive model adopted by Company L in both phases has a positive effect on improving the R & D capability of the enterprise, but the overall incentive effect is not good, therefore, company can choose different incentive models for different objects, for example, for managers can take stock options, reduce turnover rate and improve the long-term development of the concept, for the core technical personnel, a Restricted stock model of motivation can be adopted to boost the confidence of the people who are motivated and contribute to the company's performance with a fuller working condition.

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