Research on Employee Stock Ownership Plans: Taking Meinian Health's Three Employee Stock Ownership Plans as Examples

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Abstract. The employee stock ownership plan is a mechanism in which employees within a company share ownership of the company and participate in the distribution of company profits by holding the company's stock or options. Taking the three-phase employee stock ownership plans of Meinian Health (Meinian Onehealth Healthcare Holdings Co., Ltd.) as an example, this paper analyzes the implementation motives of Meinian Health's three-phase stock ownership plan, and compares the market reaction before and after the implementation and Meinian Health's corporate governance capabilities and operating performance, it is found that when the employee stock ownership plan is launched, the stock price will rise sharply in the short term, but the self-interested opportunity of major shareholders will greatly weaken this effect.

Keywords: Meinian Health; Employee stock ownership plan; The majority shareholder is self-interested.

1. Introduction

In the management of the modern enterprise system, due to the separation of ownership and management rights, the inconsistency between the interests of shareholders and the interests of operators has led to the problem of agency, and how to find a balance of interests is an important issue that enterprise development needs to solve. Employee Stock Ownership Plans (ESOP) is a kind of internal employees through the holding of the company's stock or options to share the ownership of the enterprise, participate in the distribution of the company's profits mechanism. China began to explore the employee stock ownership plan since 1980s, due to the regulatory system and policy constraints and other objective conditions are not mature, employee stock ownership has not been widely implemented in listed companies.

Although the main design function of the employee stock ownership plan is to motivate employees to improve performance, according to Wind data, more than 60% of the employee stock ownership plans implemented by 307 listed companies since 2017 have suffered losses, and some individual losses exceeded more than 70%. Since 2022, employee stock ownership plans have been released intensively. As of March, 41 A-share listed companies have released employee stock ownership plans, and some listed companies have attracted market attention due to their discounted and low-priced share ownership plans. In this context, this article attempts to provide practical experience for Chinese enterprises to implement employee stock ownership plans by analyzing the three phases of employee stock ownership plans implemented by Meinian Health as an example, we hope we can provide information for small and medium investors to rationally understand employee stock ownership plans and provide regulatory advice to the regulatory authorities to be vigilant against the self-interested behavior of major shareholders.

2. Theoretical basis

2.1 Motivation theory

As a method of equity incentive, employee stock ownership plan (ESOP) makes the interests of employees and shareholders converge, so as to encourage employees to work for the interests of shareholders to the maximum extent and reduce moral hazard behaviors, thereby reducing agency costs of the company (O ’Boyle, 2016) and improving corporate governance ability and corporate
value. Early scholars found the incentive effect of ESOP based on firm-level data from different countries (Kim, 2014; Hochberg, 2010). From the perspective of management supervision, employee stock ownership plan gives staff the management of the enterprise power and voting power, let them have enough motivation and ability to participate in corporate governance, the shareholding employees will actively play a role of supervision (Sun, 2017), reduce the management embezzlement(Yuan, 2019), improving the quality of the company's decision, Improve the information disclosure level of the company (Yao, 2021), reduce the moral hazard of senior executives, reduce the self-interested behavior of management, and then reduce the agency cost. At the same time, from the perspective of company stability and talent attraction, the ESOP with a certain lock-in period can enhance the company's attraction to core talents, so as to achieve the purpose of classifying, attracting and retaining core talents (Zhou Donghua, 2019; Cao Yushan, 2019).

2.2 Signal theory

When the company's stock price is undervalued by the market, the company is more inclined to implement equity incentives for insiders, so that investors realize that there is a deviation between the current company's stock price and its intrinsic value (Grullon and Michaely, 2004). Under the framework of information asymmetry analysis, employees, as the dominant party of internal information, voluntarily buy the company's shares, indicating that the employees have confidence in the long-term development of the company and sends a positive signal to external investors. After receiving this signal, market investors will adjust their investment decisions, prompting the stock price to return to a reasonable level. And from the signal theory, compared with ordinary employees, the management has a more obvious information advantage over the company's operating conditions, and the signal transmitted by the management's voluntary subscription behavior to the market is more positive.

2.3 Self-interest behavior of major shareholders

Behavioral finance believes that the behavior of securities market participants has the characteristics of an incompletely rational "disposal effect", that is, they tend to sell profitable assets quickly and hold loss-making assets for a long time. Restricted shares held by major shareholders from different sources have a lower cost of acquisition, and once they are sold, they can make a large profit, and their own demand for reduction is stronger. A large number of studies have confirmed the existence of self-interest behavior in the reduction of major shareholders (Wu Yuhui, 2010). Due to the existence of a lock-up period of not less than 12 months, it can effectively reduce the impact of major shareholder reduction on the market in the short term, and the source of shares in the shareholding plan is mainly purchased in the secondary market, the direct impact of major shareholder reduction on other major shareholders is small, it is not easy to receive supervision and constraints from other shareholders (Johnson, 2000), and the negotiation ability of ordinary employees to major shareholders is weak. Therefore, the launch of the employee stock ownership plan is likely to be due to the self-interest reduction of major shareholders.

Previously, ESOP could help shareholders inflate the value of collateral (equity) at the time of contract formation to reduce loan costs, and after financing, when the stock price fell close to the liquidation warning line, the risk of blowing up was mitigated by introducing an ESOP (Sun, 2021).

3. Case introduction

Meinian Onehealth Healthcare Holdings Co., Ltd. (A-share:SZ.002044, here in after referred to as "Meinian Health") is A health examination and medical group with significant scale and influence in China. It is in the leading position in the industry and is the only major health target of A-share. In August 2015, Jiangsu Sanyou Company was successfully listed in A-share market by backdoor. In the same year, it successfully controlled Ciming Physical Examination, one of the top three in the industry. In October 2016, it acquired Mega Physical Examination, one of the world's three high-end
physical examination brands. In 2017, it completed the wholly-owned acquisition of Ciming Physical Examination, realizing the multi-level and multi-brand strategy. In the same year, it was selected into the "CSI 300" stock, and its market value exceeded 60 billion yuan. It has more than 400 physical examination centers and serves 20 million customers annually. The entire territory of mainland China will be officially covered in 2018. In October 2019, Meinian Health introduced Alibaba Group, Ant Financial Group and Yunfeng Fund as key strategic shareholders and partners. By the end of 2020, Meinian Health has arranged more than 600 physical examination centers in more than 300 core cities in China, and has a professional service team consisting of nearly 35,000 experts, medical technicians and nurses. In the past five years, Meinian Health has provided professional health services for more than 110 million people.

From the historical evolution of Meinian Health, Meinian Health is a relatively radical enterprise, mainly through the extension of mergers and acquisitions to achieve a large increase in scale and income. In the short six years after listing, Meinian Health has launched three employee stock ownership plans, and these three employee stock ownership plans are in different stages of company development, and have produced different effects.

4. The motivation and effect analysis of stock ownership plan

4.1 Motivation analysis of stock ownership plan

Since the company's development stage and major shareholder pledge are different when the three shareholding plans are announced, the contents of the three shareholding plans may also be different. Therefore, we will analyze the three shareholding plans separately.

Before the first employee stock ownership plan was launched, Meinian Health continuously achieved substantial growth in scale and income through extensional mergers and acquisitions. The rapid expansion of the company brought a large number of new employees and turned current assets into non-current assets, resulting in a rapid decline in the company's short-term solvency. The employee stock ownership plan in 2016 enables the company to quickly bind the benefits of employees attracted by the expansion with the company's performance without cash payment, reduce the possible staff turnover risks and agency costs caused by the rapid expansion, and increase the enterprise value.

On the other hand, as of October 2016, the total pledged capital stock of Yu Rong accounted for 14.08% of the total capital stock of the company, accounting for about 53.78% of the actual shares controlled by Yu Rong. However, after the announcement of the draft of the employee stock ownership Plan in 2016 on August 30, 2016, the actual controller Yu Rong's share pledge ratio rose rapidly. By the end of August 2017, the actual controller's pledge ratio was as high as 98.66%, which almost completed the pledge of all the shares. At this time, the equity price has risen by about a quarter compared with the actual average price of the employee stock ownership plan of 13.25 yuan per share. Therefore, Meinian Health's 2016 employee stock ownership plan is likely to have the self-interest motive of the actual controller behind the incentive motive. The information effect of the stock plan can help the major shareholders to inflate the equity value when the pledge repurchase contract is concluded to reduce the financing cost.

Thanks to the sharp rise in the stock price of Meinian Health during the lock up period of the stock ownership plan, the employee stock ownership plan in 2016 generated a lot of benefits. Soon after the stock ownership plan reached the minimum lock up period in 2016, Meinian Health couldn't wait to end the stock ownership plan and started the employee stock ownership plan in 2017 without stopping. As can be seen there are certain differences between the 2017 ESOP and the 2016 ESOP. From the perspective of leverage ratio, the leverage ratio in 2017 has changed from 1:1 in 2016 to 1.5:1, and inferior funds (employee financing subscription part) are facing greater risks. And the scale of capital increased from 500 million to 800 million in the shareholding plan in 2016, while the proportion of executives’ investment decreased from 33.6% to 19.77%. The number of participants
increased from 1,000 in 2016, accounting for 6% of the company’s total at that time, to about 3,200 people, accounting for about 10% of the company's total number of people.

The interval between the 2021 stock ownership plan and the 2017 stock ownership plan is as long as four years, and there have been great changes in all aspects of health compared with 17 years. From the perspective of the development of the company, the development of Meinian Health during this period was not satisfactory. Due to the rapid expansion, the demand for staff surged, Meinian Health was exposed to a series of extremely bad scandals such as "practicing medicine without a license", "continuous misdiagnosis", and the development speed was hindered. Against such a complex background, Meinian Health launched the third phase of employee stock ownership Plan on August 23, 2021.

Limited by the official release and implementation of the "Guiding Opinions on Regulating the Asset Management Business of Financial Institutions" (referred to as the New Asset Management Regulations) on April 27, 2018, this time the leverage ratio is 1:1, and compared with the previous two period of guarantee means has greatly changed. The former two stock ownership plan is mainly to guarantee the priority of capital income, and provide a capital preservation, the stock ownership plan for employees of the principal, and provide joint and several guarantees for the loan principal and interest of financial institutions such as securities companies' margin financing and securities lending business after insurance cover. In the context of deep pledge by major shareholders and the risk of liquidation, we can speculate that the launch of this shareholding plan is not only for the purpose of motivating employees, but the possibility that major shareholders want to manage market value through signal theory is also extremely high, and Due to the reduction in the shareholding ratio of the actual controller caused by the equity transfer and the increase in the possibility of being acquired due to the decline in the stock price, this plan may also hide the complex motives of the major shareholders to defend against the "barbarian" invasion and consolidate control.

4.2 Short-term market reaction analysis

Generally speaking, when the company's stock price is undervalued by the market, the company is more inclined to implement equity incentives for internal staff, so that investors can realize that the company's stock price is deviating from its intrinsic value. Therefore, generally speaking, the implementation of ESOP has the external market effect of raising the stock price in the short term. However, with the further in-depth understanding of the employee stock ownership plan, we found that the employee stock ownership plan can easily become a tool for major shareholders to manage market value or reduce holdings. Since 2017, more than 60% of the employee stock ownership plans implemented by 307 listed companies have been covered, with individual losses exceeding 70%. Data from June 2019 showed that among the 68 employee stock ownership plans in Shanghai and Shenzhen stock markets after June 2018, the employee stock ownership plans of 35 listed companies were in a state of floating loss. After being widely used by major shareholders as a market capitalization management tool or a channel for reducing holdings, the signaling function of ESOP is greatly weakened. This case uses the case analysis method to analyze the strength of the signal transmission effect of Meinian Health's three-phase shareholding plan by calculating the excess cumulative rate of return (CAR) before and after the announcement. To calculate the CAR value, we first selected the day of Meinian Health's announcement of employee stock ownership plan, namely August 30, 2016, November 25, 2017 and August 23, 2021 as the event days. Then the 14 trading days and three trading days before and after the announcement of the ESOP will be determined as the event window period. Finally, the daily excess return rate and cumulative excess return rate are calculated according to the formula.

Calculate the daily stock return of American health $R_t$ with daily index returns $R_{mt1}$, and the Japanese Pharmaceutical Industry Index (Efangda Shanghai-Shenzhen 300 Pharmaceutical ETF (512010)) yield $R_{mt2}$

$R_t = \frac{\text{Current closing price} - \text{previous closing price}}{\text{previous closing price}}$
\[ R_{mt1} = \frac{(\text{Shenzhen Component Index of the day} - \text{Shenzhen Component index of the day before})}{\text{Shenzhen Component index of the day before}} \]
\[ R_{mt1} = \frac{(\text{Pharmaceutical Industry Index of the day} - \text{Pharmaceutical Industry index of the previous day})}{\text{Pharmaceutical industry index of the previous day}} \]

The daily excess rate of return (AR) and cumulative excess rate of return (CAR) were calculated

\[ AR = R_t - R_{mti} \quad i = 1, 2 \]
\[ CAR = \sum AR \]

Figure 1 and 2 respectively show the CAR [-14,14] and CAR [-3,3] of Meinian Health's disclosure of employee stock ownership plan in 2016. From two Figure we see, on the day of the disclosure in the employee stock ownership plan is having extremely strong short-term excess yields, but then the yield will be time to digest slowly, no obvious effect for a long time, this effect may be due to the stock sources are major shareholders holdings, employee stock ownership plan to launch did not increase the actual market demand, So very quickly excess stock returns are diluted over time.

Figure 3 Market reaction of Health Shareholding Plan in 2017 [-14, 14]
Fig. 4 Market reaction of Health Shareholding Plan in 2017 [-3,3]

Figures 4 and 5 respectively show the market effect of the second phase of the Meinian Health shareholding plan, thanks to the fact that the 2016 stock ownership plan and the 2017 stock ownership plan are too close, and the income of the 2016 employee stock ownership plan is extremely high, from the Figure we can see that the market has long expected the second phase of the Meinian Health stock ownership plan, so the cumulative excess income in the two days before the announcement of the stock ownership plan has risen rapidly, and it has been maintained for a long time before it is slowly digested by time, and compared with the market reaction in 2016, This time, the signal transmission effect is extremely strong, and the maximum excess cumulative income has reached more than 15%.

Fig. 5 Market reaction of Health Shareholding Plan in 2021 [-14,14]

Fig. 6 Market reaction of Health Shareholding Plan in 2021 [-3,3]

Compared with the previous two employee stock ownership plans, the environment in which Meinian Health is located in 2021 has undergone tremendous changes, the actual holding ratio of the actual controller has declined and the high pledge, the long-term decline in stock prices and the continuous impact of the epidemic, the purpose of the employee stock ownership plan launched by Meinian Health at this time is widely interpreted by the market as the actual controller for market value management. Therefore, it can be seen that the CAR value of this period is not very significant, even on the day of the announcement, there is no obvious CAR value.
4.3 Analysis of long-term corporate governance effects

To analyze the incentive effect of the employee stock ownership plan by improving the ability of corporate governance and increasing the value of the company, we mainly evaluate the agency cost, profitability, growth rate and talent attraction ability.

1. cost of agency

Principal-agent issues can be divided into two main categories, the first type of agency issues refers to the agency problems caused by the separation of the company's ownership and operating rights. The second type of agency problem is the agency problem between major shareholders and minority shareholders.

In the first type of agency problem, we measure direct agency costs using the management expense ratio (the ratio of management expenses to operating costs) and the total asset turnover rate (agency efficiency reflects the manager's wrong decisions (such as investing in a project with a negative net present value) or the manager's laziness. Among them, Figure 8 and Figure 9 are the management expense ratio and total asset turnover ratio of Meinian Health, respectively, and the data source is related to the annual report of Meinian Health Company.

![Fig. 7 Manage expense rates](image)

![Fig. 8 Total asset turnover](image)

From Figure 7, we can see that from 2015 to 2021, the company's management expense ratio has been on a downward trend. Although the company has been achieving large-scale growth through epitaxial mergers and acquisitions from 2015 to 2017, management expenses have maintained a downward trend, of which the decline in 2016-2017 has been the largest decline of 1.47%. From the perspective of total asset turnover, the implementation of the third phase of the employee plan coincides with the three years with the highest total asset turnover rate, and from the perspective of the comprehensive two charts, the employee stock ownership plan determines that to a certain extent, the direct agency cost is reduced and the agency efficiency is improved.

In order to study the second type of agency problem, we refer to the literature of the predecessors and use the proportion of other receivables to their total assets to measure the second type of agency problem, as shown in Figure 9.

![Fig. 9 Other receivables as a percentage of its total assets](image)
From Figure 9, we have not been able to see a clear link between other receivables as a percentage of total assets and the employee stock ownership plan, but it is clear that the second type of agency problem has deteriorated rapidly after 2019, which is likely to be related to the further deterioration of the control and cash flow rights of major shareholders after Yu Rong sold part of his equity to Alibaba.

2. Profitability
The value of a company is derived from the discounted value of the company's cash flow, and the increase in the value of all companies comes down to an increase in the profitability of the company. In order to analyze the changes in the profitability of Meinian Health, we mainly analyze the operating margin and return on net assets.

According to the annual report data of Meinian Health, we can calculate that the operating profit margin of Meinian Health has been relatively stable from 15 to 18 years, and has dropped rapidly to -5.26% in 19 years, which can be expected to be due to the impact of the 18-year scandal. In 2020 and 2021, the impact of the scandal gradually decreased, but due to the impact of the epidemic, the operating profit of Meinian Health did not return to the level before 18 years.

Figures 11 and 12 are the weighted average return on net assets of American Health and the non-weighted average return on net assets. From the chart, we see that the general trend of the two is the same, with a small upward trend in the four years from 15 to 18 years, until the performance crash caused by the impact of the scandal in 19 years, and then slowly recovered in 20 years and 21 years.
Due to the lack of data in 2022 and the cyclical nature of the physical examination industry, we cannot predict the profit performance of Meinian Health in 2022, but from the performance of 15-18 years, the time of the launch of the employee stock ownership plan is indeed related to the higher return on net assets, and we can think that the employee stock ownership plan launched by Meinian Health will increase profitability.

In recent years, the proportion of medical care expenditure to consumption expenditure of Chinese residents has shown an overall upward trend. According to iiMedia Research, the size of China's health examination market reached 151.1 billion yuan in 2018. In recent years, the consumption level of China's residents continues to improve, health examination awareness continues to grow, if the scale of China's health examination market to about 10% of the average annual growth rate, is expected to reach 2025, China's health examination market size or will exceed 300 billion yuan, in the rapid development of the physical examination market, the growth capacity of The Great Health of the United States is obviously an important part of the stock price calculation. In order to analyze the growth capacity of Meinian Health, we analyze the growth rate of total assets, the growth rate of operating income and the growth rate of net income.

Fig. 13 Growth rate of total assets  
Fig. 14 Revenue growth rate

From the perspective of the growth rate of total assets and operating income of Meinian Health, the growth rate of total assets and operating income of Meinian Health from 2016 to 2017 is much higher than that of other years, and it has more than doubled, and this is exactly the time when Meinian Health launched the first phase of the stock ownership plan, combined with the management expense ratio in Figure 8 and Figure 9, in the context of such rapid growth, Meinian Health can maintain its own management expense ratio and even decline, which can show that the employee stock ownership plan can play a huge role in reducing the company's management expenses.

Fig. 15 Weighted average ROE growth rate  
Fig. 16 Deduction of non-weighted average ROE growth rate

Figures 15 and 16 are the growth rate of the weighted average return on net assets and the growth rate of the non-weighted average return on net assets of the United States Health, and the return on
net assets of the United States Health has the same trend as Figures 14 and 15, and the first time the employee stock ownership plan was launched from 2016 to 2017, it had the highest yield growth rate, and the net profit yield fell rapidly after a series of scandals in 18 years and continued to lose money. At present, the effect of the third stock ownership plan cannot be observed for the time being, but from the first two observations, the employee stock ownership plan is well adapted to the company's situation at that time, and has played a role in stabilizing the company's rapid growth.

5. Conclusion

In this paper, combined with the phase III shareholding plan of Meinian Health, the motivation and effect of the phase III shareholding plan are analyzed. From the company's annual report, we can know that in the first two phases of the shareholding plan of Meinian Health, although the major shareholders have self-interested motives such as trying to reduce the cost of pledge through the employee stock ownership plan and alleviate the liquidation risk of the deep pledge through the equity pledge, the incentive effect of the first two phases of the employee stock ownership plan is also more obvious, and the two phases of the stock ownership plan launched by the company in the expansion stage are very good to reduce the management expenses that may result due to the large increase in the company's personnel, and to alleviate the risk of company instability caused by the flow of core personnel. From the first two CAR values, we can also see that the market has a short-term signal effect on the company's employee stock ownership plan, indicating that the market has a positive attitude towards the two phases of the stock ownership plan.

The research conclusions based on this paper show that employee stock ownership plans can reduce the management expenses of enterprises through incentive effects, and play a huge role in attracting talents, which in turn can enhance corporate value. However, the signal effect of the ESOP will appear when and only when the main motivation of the ESOP is recognized by the market as an incentive, that is, there will be a significant excess rate of return in the short term. However, when the market interprets that the ESOP is mainly a self-interest behavior of major shareholders, the signal effect of the ESOP will be greatly weakened. Therefore, we put forward the following suggestions: the employee stock ownership plan can be used as a measure of corporate governance to a certain extent to enhance employee enthusiasm, reduce the company's management expenses and enhance the value of the enterprise, but it is necessary to prevent some companies from using the employee stock ownership plan as a market value management tool for major shareholders, attach importance to the short-term behavior of the company and major shareholders that the employee stock ownership plan may bring, and strengthen the supervision before, during and after the event.

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