# Research on the Market Effect of Major Shareholders' Reduction of Listed Companies: Taking P Company as an Example

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Abstract: In recent years, large shareholders of listed companies frequently reduce their holdings, which to some extent affects the stable development of enterprises and the capital market. This article takes company P as an example, and mainly uses the event research method to explore the short-term and long-term market effects of large shareholder reductions. The research results are as follows: First, no matter in the short-term or long-term, the market holds a negative attitude towards the reduction of the majority shareholder's behavior. Furthermore, frequent shareholder reductions are not conducive to the improvement of the company's operating performance, to a certain extent it will negatively affect the company and damage the company's long-term value. Based on this, this paper puts forward policy Suggestions from the perspectives of enterprises themselves, regulatory authorities and ordinary investors in order to further standardize the behavior of reducing the holdings of listed major shareholders.

**Keywords:** large shareholder reduction; market effect; corporate value

### 1. Introduction

Since the reform of non-tradable shares, the stock market has entered the era of full circulation, and the proportion of non-tradable shares in circulation has increased, which further expands the profit mode of major shareholders, and to some extent, enlarges the frequency and amount of reduction of holdings of major shareholders, causing great impact on corporate investors and the capital market. 2019 is the major year for major shareholders to reduce their shareholdings. More than 1000 companies issued important shareholder reduction announcements, involving more than 5000 shareholders. At the same time, some large shareholders even carry out clearance type reduction, which greatly affects the value of the enterprise and the future development. Moreover, the reduction of large shareholders will often affect the market share price changes, and the size of the reduction will directly affect the risk of stock price crash [1]. Some empirical studies show that the greater the reduction of large shareholders, the higher the risk of stock price collapse. At the same time, it is found that the higher the profit level of listed companies is, the smaller the impact of the reduction of

large shareholders on the risk of stock price crash is. The greater the degree of stock price overvaluation, the greater the impact of large shareholder reduction on stock price crash risk [2]. Moreover, shareholders' manipulation of real earnings management will make the company's stock price rise and fall in a short period of time, increase the range of change, and increase the company's operational risk [3]. Therefore, it is very important to analyze the behavior of large shareholders' reduction. As one of the large-scale enterprises to reduce their holdings in 2019, some of the major shareholders of P company reduced their shares after the lifting of the restricted shares, which affected the normal development of the market to a certain extent. Therefore, the analysis of P company's large shareholder reduction behavior has a certain representativeness.

### 2. Short-term Market Effect of Large Shareholder Reduction of P Company

The reduction of large shareholders often leads to the decline of the company's stock price, which sends a negative signal to outside investors and affects the development prospect of the enterprise. Some empirical studies have found that in the case of an efficient market, the reduction of large shareholders' holdings will often cause the weakness of the company's stock price, resulting in a negative cumulative abnormal return in a short term [4]. P company was founded in 1997 and listed on Shenzhen Stock Exchange in 2018. At the beginning of 2019, its second largest shareholder and the third largest shareholder announced a large-scale reduction of their shares, which, to a certain extent, caused market fluctuations. Based on this, this paper mainly uses the event research method to analyze the short-term market effect of P company's large shareholders' reduction behavior. By comparing the abnormal return and cumulative abnormal return before and after the reduction of P company, the short-term impact of the reduction behavior can be directly reflected. The specific research steps are as follows.

The first step is to select the event date, window period, and estimation period. This paper designates the date when the majority shareholder of P company announces the reduction of shareholding as the event date t (0), takes 10 trading days before and after the announcement date as the window period T (-10, +10), and takes 180 days before the window period as the estimation period (-190, -11).

The second step is to process the data in the estimation period and calculate the expected rate of return. This paper uses the capital asset pricing model to calculate the expected return of P company in January 2019. The formula is as follows:

$$R_t = \alpha + \beta R_{mt} + \varepsilon_t \tag{1}$$

Among them, RT refers to the actual return of the stock, RMT refers to the return rate of the market index,  $\alpha$  is the intercept, and  $\beta$  is the regression coefficient of individual stock return relative to the market return. Assuming that there is a stable linear relationship between the return of a certain stock and the stock market, we collect the changes of stock market index and the stock return fluctuation of company P in the estimation period, and use Excel data analysis tool to carry out regression analysis, and calculate the values of  $\alpha$  and  $\beta$ . The regression equation is as follows:

$$R = 0.0005 + 1.3320R_{\rm m}$$

The third step is to calculate the abnormal return AR and car in the window period. The RMT of time window period T (- 10, + 10) is substituted into the above regression equation to obtain the expected yield E(R). Then according to the actual stock return of P company in the window period, the abnormal return and cumulative abnormal return are calculated. The formula is as follows:

$$AR_{t} = R_{t} - E(R)_{t} \tag{3}$$

$$CAR_{\rm t} = \sum AR_{\rm t} \tag{4}$$

The fourth step is to draw the trend chart of abnormal rate of return and cumulative abnormal rate of return in the window period of large shareholders' reduction in P company, so as to further judge the short-term market effect of large shareholders' reduction. The results are shown in Figure 1.



Figure 1. Changes in AR and car of P company's major shareholders during the reduction window period

### Source: NetEase Finance

From the abnormal rate of return and the cumulative abnormal rate of return of company P, we can see that after the major shareholders of company P announced the reduction, the stock price deviated from the normal level to a large extent, indicating that the market holds a negative attitude to the large shareholders' reduction behavior to a certain extent, and the large shareholders' reduction behavior will affect the short-term value of the company. But two days before the announcement, the market reaction was more intense, the abnormal return rate of the company was basically negative, and then gradually returned to the normal level, which further verified that the market is effective.

## **3.** Long Term Market Effect of P Company's Reduction

In fact, the reduction of large shareholders will not only affect the stock price on the announcement day, but also have a negative impact on the stock price in a long period of time. Generally speaking, the larger the proportion and frequency of large shareholders' reduction, the longer the duration of negative impact. The major shareholders of P company have reduced their holdings for many times during the period of 2019, which, to a certain extent, leads to the weakness of its stock price and affects its long-term value. In order to explore the impact of large shareholder reduction on the long-term earnings of P company, this paper analyzes the long-term market effect of P company by using the abnormal return method of acquisition and holding. The BHAR formula is as follows:

$$BHAR_{i} = \prod_{t=0}^{I} (1+R_{it}) - \prod_{t=0}^{I} [1+E(R_{it})]$$
(5)

Among them, Rit represents the stock return of P company in t month, E(Rit) represents the expected stock return rate of P company in t month, and T represents the time interval of investigation. Combined with the time distribution of P company's announcement of major shareholder reduction in 2019, this paper selects December 2018 to June 2020 for data analysis, in which the expected stock return is still calculated by capital asset pricing model, and the actual yield is calculated by the historical closing price of company P at the beginning and end of each month. The results are shown in Figure 2.



**Figure 2.** Long term earnings change trend of P company from December 2018 to June 2020

Source: www.eastmoney.com

From the change trend of long-term earnings of company P from December 2018 to June 2020, it can be seen that the BHAR value of company P has been in negative value since January 2019 when major shareholders began to announce the reduction, which gradually decreased from 0.0703 before the reduction to - 0.39057 in April 2019, and then fluctuated up and down.

As of June 2020, the BHAR value of company P is -0.35903, which indicates that the market holds a negative attitude towards the long-term performance of large shareholders' reduction of P company. On the other hand, it also shows that the market has doubts about the motivation of the majority shareholders of P company to reduce their holdings. Especially when the overall performance of the company is improved, the reduction behavior of large shareholders will send the signal that the original shareholders are not optimistic about the future development of the company, and then affect the choice of potential investors.

From another point of view, due to the information asymmetry between large shareholders and small and medium-sized shareholders and outside investors, out of the consideration of rational people, large shareholders often seek to maximize their own interests and occupy the interests of small and medium-sized shareholders [5]. After the continuous practice of history, the market is often not optimistic about the reduction of large shareholders, so the market will have a negative effect on P company in a long period of time after it announced the reduction of large shareholders.

### 4. Conclusions and Suggestions

This paper analyzes the short-term and long-term market effects after the reduction of large shareholders in P company by using event research method. It is found that the reduction of large shareholders often sends negative signals to the outside world, and the market holds a negative attitude towards the reduction of large shareholders. Moreover, the reduction of large shareholders will affect the value of the company to a certain extent, which is not conducive to the long-term development of the company. Therefore, from the perspective of the overall development prospect of the company, the company itself and the outside investors should reasonably treat the reduction behavior of major shareholders, actively respond to the potential risks brought about by the reduction of large shareholders, and protect their own rights and interests to the greatest extent.

At the same time, based on the above research, this paper puts forward the following suggestions:

(1) Enterprises should improve the information disclosure mechanism of large shareholder reduction. On the one hand, it is necessary to timely disclose the reasons and plans for the reduction of large shareholders, unify the disclosure standards for the information of large shareholders' reduction, and provide sufficient response time for investors [6]; on the other hand, establish a special information board to announce the flow direction of funds obtained by major shareholders' reduction, and pay attention to whether their use is consistent with the reduction plan. In addition, the potential risks of the company should be disclosed in time, and the major shareholders' reduction behaviors in the same period should be highlighted, so as to prevent the major shareholders from usurping the interests of ordinary shareholders by using internal information.

(2) The regulatory authorities should strengthen the

supervision of the reduction of large shareholders. On the one hand, it is necessary to establish insider trading monitoring platform to strictly prevent large shareholders from using internal information to conduct transactions; on the other hand, it is necessary to further improve the corresponding provisions on reduction of holdings, for example, the scale of reduction should be linked to the performance of the company to a certain extent, and the proportion of reduction can be appropriately relaxed for companies with strong business capacity and good financial condition, otherwise, the scale of reduction should be limited to avoid large shareholders' position clearing reduction Hold. Furthermore, we can adjust the

from reducing their holdings at high positions. (3) Ordinary investors should be cautious to deal with the reduction of large shareholders. On the one hand, we should actively understand the company's operating performance and the lifting time of restricted shares of major shareholders, and make timely response strategies; on the other hand, we should actively select representatives of ordinary investors to actively participate in the company's major decision-making and daily operation and management, and fully protect their own interests. In addition, the representatives of ordinary investors should strengthen the communication with major shareholders to understand their future investment intention and prevent their sudden short-sighted behavior. At the same time, we should be cautious to deal with the stock price rise before the reduction of large shareholders, so as to avoid the large shareholders taking advantage of the opportunity to seize the interests.

lifting time of restricted shares in combination with the life

cycle of the enterprise, so as to prevent large shareholders

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### References

- [1] Yongjian, S.; Dequan, J.; and Donghua C. Large Shareholder Tunneling and Risk of Stock Price Crash: Evidence from China. *Frontiers of Business Research in China (Higher Education Press)*, **2014**, vol. 8, no. 2, pp. 154-181.
- [2] Tong, Y.S. Research on the differential effect of increasing and decreasing shareholders' holdings on stock price. *Journal of Tianjin Commercial University*, 2017, vol. 37, no. 6, pp. 21-27.
- [3] Cao G.H.; Lin C. Non holding reduction and real earnings management. *Mathematical statistics and management*, 2014, vol. 33, no. 1, pp. 181-190.
- [4] Luo, D.L.; Guo M. Reduction of large shareholders and risk of stock price collapse. *Monthly journal of Finance and accounting*, **2019**, vol. 16, pp. 7-14.
- [5] Deng, M.M. Research on the timing of large shareholder reduction and Arbitrage Behavior of private placement. *Audit and economic research*, **2016**, vol. 31, no. 3, pp. 73-82.

[6] Xie, C.; and Wang, L.J. Timing selection and market reaction of major shareholders' reduction of GEM listed

companies. *East China economic management*, **2019**, vol. 33, no. 8, pp. 136-142.