

Original Paper

The Relationship between Social Responsibility and Majority Shareholders' Stock Selling: Considering the Mediation of Investors Tendency

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Abstract

Based on the research object of majority shareholders' stock selling at the post period of equity division reform, this paper takes 8019 A-share listed companies in Shanghai and Shenzhen stock market from 2007-2013 as sample, empirically analysis the relationship between social responsibility and majority shareholders' stock selling, and consider mediation effect of the investor tendency. The study found that from the point of internal governance effect, the better of social responsibility, the lower possibility of majority shareholders' stock selling. At the same time, the lower of market reduction premium, the lower possibility of majority shareholders' stock selling, after considering the influence of investors' tendency, the inhibition effect of social responsibility will be magnified, which means securities market identity with the inhibition effect that comes from the social responsibility caused by listed companies' internal. Further study found that majority shareholders will avoid stock selling during the period of the social responsibility reporting, and market investors will hold different attitudes toward majority shareholders for their first and continuous stock selling, and on their view, continuous stock selling is a "bad" event.

Keywords

majority shareholders continue stock selling, social responsibility, investor's tendency, the post period of equity division reform

1. Introduction

In 2005, China Securities Regulatory Commission implemented the reform of equity division. This historic event changed the original imbalance of China's securities market. After the "non-tradable shares" with Chinese characteristics were gradually transformed into tradable shares, which makes it come true that the full circulation of the securities market, and "the same shares with the same price" and "the same shares with the same right" were achieved. However, the problem of stock market expansion after non-tradable share gradually listed. According to China Securities Depository statistics, more than 80 billion lifted shares were involved in the shareholding reform, and over 5% of the lifted shares were reduced by the majority shareholders in 2010, the reduction was nearly 50 billion shares, it can be seen that the reduction of the majority shareholders after the split share reform has produced difference from the conventional expansion (Lin & Cao, 2012). In fact, different shareholders will change the proportion of shares according to their own needs, cash requirements or development needs, which is normal. But the "malicious reduction" of shares by majority shareholders in the securities market is unusual. On the one hand, "malicious reduction" of shares by majority shareholders will produce a negative impact on the securities market, it is easy for the market investors mistakenly think that there existed problems within the company, thus damaging the interests of the company; on the other hand, the majority shareholders may encroach on the small and medium-sized shareholders' interests in the process of maliciously reducing the number of shares.

However, because the purpose of reducing stock holdings by the majority shareholders is private, it is difficult to grasp the reasons for reduction actually, resulting in no relevant literatures to better define malicious reduction of shares by the majority shareholders. The early literatures mainly focus on the single reduction of majority shareholders, such as the reduction of market effects (Huang et al., 2009), the factors of reduction (Yuan, 2010) and the occupation of the majority shareholders in the process of the reduction and so on. But these scholars pay little attention to continuous reduction of shareholdings, only Lin and Cao (2013a) explored the reasons for continuous reduction of shareholdings by majority shareholders. They found that the continuous reduction will be influenced by the company's operating conditions, the relationship between shareholders and the interests of the securities market investors; Chen (2016) found that the external auditing can curb the continuous reduction of majority shareholders.

The difference from the existing literatures is that this paper takes the continuous reduction of majority shareholders as the research object, then in search of the inhibitory effect of social responsibility on continuous reductions, and to consider the intermediate effects of market investor preferences as well. By the empirical study, this paper finds that if the majority shareholders reduce the share holdings with "goodwill", they will not take the constraints of regulatory policy into account, but reduce all shares one-time according to their own needs. However, in the process of malicious reduction, considering the "loopholes" of relevant provisions, the majority shareholders may divided the reduction of shares which need to be reduced originally into multiple reductions in order to avoid policy supervision, that is, "continuous reduction" behavior.

The significance for this paper improved the influence of the social responsibility on the majority shareholders' stock selling, in order to create a healthy and fair environment to the investors, not only the CSRC, but also the enterprise itself should be responsible for the stock market, and this paper give a strong evidence for the importance of social responsibility of the enterprise in the stock market.

2. Institutional Background and Hypothesis Development

2.1 Social Responsibility and Continuous Reduction of Majority Shareholders

The behavior of fulfilling the social responsibility by the enterprises is a kind of self-conscious action which is their own request derived from the internal development, that is, the self-conscious act of the enterprise, which is the actual contribution to the promotion of social welfare through the sublimation of self-demand. Li and Xiao (2011) argued that the logical starting point of behavior of fulfilling the social responsibility by the enterprises is derived from voluntary charitable behavior, the social expectation of enterprises' behavior, the social impact of enterprises, the compliance with the spirit of the contract, the match of social rights and obligations, the enterprises' response to social pressure, the enterprise management of social risks and the balance of integrated business goals, then ultimately derived from the contribution to the maximization of social welfare from enterprises. In other words, from the outside, the implementation of corporate social responsibility is to meet the requirements of society, then achieve social expectations for the enterprise. But from the inside, it is derived from perfection and self-regulation of the internal corporate governance system. Enterprises integrate the concept of social responsibility into development and bear the responsibility of the enterprise that concerned about internal and external stakeholders. It will make a self-regulatory effect in the enterprises. Under the regulatory pressures, companies can naturally protect themselves from curbing the behavior that are detrimental to their own development, the interests of stakeholders, social development or the interests of the securities market and its investors. For example, those that perform better social responsibility will not easily hide the related information when they take the interests of stakeholders into account, which will increase the transparency of information (Chih et al., 2008). It can be seen that as an internal governance system, social responsibility will play an important role in natural regulatory capacity, which can control and standardize the relevant behavior of the enterprise management and shareholders.

First of all, from the moral point of view, the implementation of social responsibility will enable listed companies to protect the legitimate interests of the securities market and market investors under the guidance of moral conscience. As social responsibility is more manifested in the moral dimension, so among the listed companies with good social responsibility, the majority shareholders will not take cash out maliciously based on the volatility of securities market, and they will not easily sacrifice the interests of ordinary investors to complete their own interests either. Because it is a "immoral" behavior and the majority shareholders think that this behavior will arouse the attention of market public opinion and market investors, which is not conducive to their own reputation and the company's future development, so there have been a number of listed companies make promise to the market investors in the form of a notice that they will not reduce the company shares within a certain period of time. It is the performance of fulfilling the social responsibility. On the other hand, the majority shareholders will reduce their shares through formal channels and in the formal manner according to the relevant provisions of the Commission if they need the reduction, as well as timely and accurately disclosure the information after reduction. Because these companies or majority shareholders see themselves as moral subject or agent to measure their own behavior based on moral standards. However, among the listed companies with poor performance of social responsibility, some companies will jointly disclose the incident of several or even annual reduction in a notice when the reduction event appeared, which implies the possibility of "deliberately" delaying the disclosure of information, lead to the impossibility of understanding the state of company the first time by the investors, it will "win" the space for the majority of shareholders' benefit but undermine the interests of ordinary investors. What's more, some

companies will divide a reduction of the shares into several parts, which increases the volatility of the company's stock and the companies will acquire more additional benefits (Cai & Wei, 2011), it also reduces the degree of market regulation and investors' attention. Obviously, this is not a "responsible" behavior. It can be seen that under the moral constraints, the companies with implementation of good social responsibility will serve maintaining market stability and the interests of ordinary investors as their own obligations and they will not maliciously reducing shares continuously. But the companies with implementation of poor social responsibility will select a number of special ways to obtain more self-interest through earnings management or selection of holding time and other acts in the process of continuous reduction (Lin & Cao, 2012; Cao & Lin, 2014).

Second, from the perspective of shareholders, their equity itself is the interest that needs to be maintained in the process of social responsibility. On the one hand, listed companies need to safeguard the interests of shareholders in the process of fulfilling social responsibility, because the fundamental goal of the development of the company must be profitable, and direct beneficiaries is the majority shareholder, so the large beneficiaries of which to fulfill social responsibility is the majority shareholder, majority shareholders do not need to obtain short-term gains from the secondary market through continuous reductions once they can get a steady return. Kong et al. (2013) found that listed companies will fulfill the social responsibility better under the supervision of the media, which makes the earnings management of the majority shareholders, associated transactions which were hollowed out and irregularities were significantly reduced. It shows that social responsibility will bring more benefits for the majority shareholders, this kind of income may be actual money or invisible reputation, so that majority shareholders will balance between long and short term interests, even if they need a short term reduction. It will not easily cause unnecessary attention or destroy the established good image because of continuous reduction. On the other hand, the interests of shareholders not only include the interests of majority shareholders, but also the interests of ordinary market investors. In a company with good social responsibility, it is not easy to allow the occurrence of damage to the interests of small and medium investors. So that the behaviors of continuous reduction that will cause the stock price a greater volatility and damage the interests of ordinary investors will be reduced. Especially in the period of post-share split reform, because the reduction of majority shareholders is the core factor of affecting the stable development of capital market, making the reduction of majority shareholder and stable development of capital market bounded together (Jia et al., 2009). Especially this process is accompanied by a strong behavior that majority shareholders will encroach on the interests of small and medium shareholders by taking advantage of the reduction (Liu & Li, 2010). So, the maintenance of this stable task falls on the companies with good social responsibility. Therefore, from the task of safeguarding the interests of shareholders, a company with good social responsibility needs to maintain the long-term interests of shareholders, instead, the companies with poor social responsibility will be "short-sighted", so in the process of continuous reduction, companies with poor social responsibility will not only lose some development opportunities, but also lose the basic trust of market investors. So even if the majority shareholders who have completed the reduction have received short-term excess returns, the long-term development gains and other gains from the majority shareholders will be damaged, and if they need to make up for this loss, they will need to pay more.

Moreover, from the perspective of enterprise development, listed companies choose to fulfill their social responsibility behavior, usually focused on a long period of development planning period, rather than short-term development. Under the long-term development goals, the company does not allow the destruction of corporate image of the incident occurred continuously. Although some literatures found

that the implementation of social responsibility behavior may become the cost of the enterprise (Harrison & Freeman, 1999). But after the transition from “cost” to “opportunity”, social responsibility will give enterprises more opportunities in the long run and bring better financial performance (Ruf et al., 2001). So in this process, the majority shareholders will take their long-term interests into account, and will not take the initiative to undermine the company’s image or undermine the possibility of future greater gains, so there is no need and no reason for continuous reduction. At the same time, the continuous reduction of majority shareholders is contrary to the social responsibility thought advocated by the listed companies. Under the governance of the social responsibility supervision, the cost of the majority shareholders to reduce the holdings may be far greater than the reduction of earnings, and thus they will not easily reduce the share holdings continuously in the short term.

In addition, from a social point of view, the community will be more concerned about the company with the implementation of better social responsibility, which is one of the reasons for actively fulfilling social responsibility. Xu et al. (2011) found that media attention and public opinion play an active role in the fulfillment of social responsibility of listed companies, and the media are more interested in the companies with better social responsibility, and this concern, in turn, enable the company to fulfill its social responsibilities better. At the same time, the securities market will also pay enough attention and support to companies that fulfill their social responsibilities (Godfrey, 2005). So in the case with many concerns, the invisible external regulatory power is formed. Although this regulation does not have a coercive effect, it can give a certain constraint on the listed company, because the listed companies have formed a good impression on the community and market investors, once the companies continuously make malicious reduction, they will cause even more impact on the heart of social and market investors, and the adverse effects will even be greater than the general behavior of listed companies which behave the same. In the poorly performing companies, because of the lack of social concern, the majority shareholders have more opportunities to achieve continuous reductions through various channels, and because of the lack of sufficient attention, the majority shareholders of these companies can try and make profit many times. Therefore, these arguments lead to our first hypothesis.

H1. There is a significant negative correlation between social responsibility and continuous reduction of majority shareholders, that is, the lower the probability of continuous reduction of its majority shareholders in the listed companies with better social responsibility, and if the listed companies with worse behavior of fulfill the social responsibility, the probability of its majority shareholder holdings will be greater.

2.2 Social Responsibility, Tendency of Investors and Continuous Reduction of Majority Shareholders

The market value of listed companies will be affected by many factors, but the market investor’s tendency is an important factor. The market is largely determined by the investors, when investors believe that a listed company has good development potential and future prospects, they will be sought after the company’s stock, which prompted the stock price rise, and even more than its actual book value. But if the investors are not optimistic about a listed company and they think the company does not have a good future development potential, or investors find that their own interests are occupied by majority shareholders or management, they will lose confidence in the company, and then take the “foot vote” approach to punish it (Shleifer & Vishny, 1986). In other words, the securities market will give listed companies the opportunity to accompany the punishment, but whether the opportunity or punishment depends entirely on the cooperation between the listed company’s own performance and the tendency of the market investors, or depending on the presented state of listed company in accordance with the attitude of the market investors. For example, Baker and Wurgler (2004) found

that rational corporate management would choose cash dividends based on whether there was a dividend premium or a discount in the market. Therefore, for majority shareholders with reduced tendencies, in order to obtain more secondary market returns, they need to find ways to deliver good information to the market, such as the most direct earnings management behavior (Cai, N. & Wei, M., 2011), thus gaining short-term high market value. It can be seen that market behavior or market conditions will affect the choice of majority shareholders' holdings.

First, from the perspective of the market itself, Zhang Tao (2008) found that after the split share structure reform, China's stock market has changed from inefficient market to weak efficient market, indicating that the stock market has been able to contain stock prices and some transaction information. In other words, rational market investors and rational majority shareholders or management will game through the stock between the buy and sell. When the market investors give the company stock trust, the majority shareholders will be able to find this trust, and will not easily make damage to the company's image; and when the listed companies issued a benign business signal, the market investors will give the company enough support. Of course, this market investors and listed companies between the "good" relationship once broken, the market investors and the interests of listed companies will be lost.

Second, from the perspective of market investors, because it is difficult to determine the true intention and reasons for the reduction of majority shareholders, so more market investors will see the reduction as a "bad" behavior, that is, when the listed company had a reduction, the market investors will think that there are some problems within the company, thus they will treat the company's stock carefully. Empirical evidence also shows that the reduction has had an impact on the securities market, there will be a long time in the reduce effect, bringing the decline of market price (Huang et al., 2009), and the reduction will also bring investors the forecast that the company's profitability about pessimistic future, then accelerated the stock price fell (Fan, J., 2008). At the same time, if the majority shareholder reduce the share holdings after a period of time, and not reduced once again, the market will gradually ease the impact of the previous reduction. However, if the reduction event occurs again after the first reduction, especially in a relatively short period of time occurs the reduction event again by the same majority shareholder, it will accelerate the volatility of stock prices and result in a more significant reduction effect (Johnston et al., 2005). In addition, such as external audits and other regulatory actions will be through their own behavior (such as different audit opinion), give a corresponding signal to the company financial status represented by the majority shareholders' continuing reduction and so on (Chen et al., 2016). On the one hand, the market investors will be more cautious on the continuous reduction of the event, because the market investors think that the majority shareholders grasp more internal information than the market investors, and they see continuous reduction as the company's "problem". On the other hand, in the event of the first reduction, a rational market investor will considered whether he should invest in the company or withdraw his existing investment, and after a continuous reduction, the market investor will be less optimistic about the company's future, then they will not invest in the company or leave immediately, which brought the company's share price further decline. In other words, this time the stock market has "abandoned" the company.

Moreover, from the perspective of majority shareholders, rational majority shareholders will be aware of market investors for the attitude of the reduction, and thus choose their own behavior. As described by Lin and Cao (2013a), there is a difference in the market value between China's stock market and non-reduced listed companies, that is, market investors will have different tendencies for different companies, if the rational shareholders find this difference existed in the tendency of market investors,

that is, the market investor does not have a special preference for the company that has a reduction, and the market value of the holding company is not significantly lower (or even higher, because there will be speculation in the market or in the short-term the stock price will be untrue because of the asymmetry of information) than the company that did not occur in the reduction, the majority shareholders will use this opportunity to continuously reduce the shares in order to maximize the benefits. However, if there exist opposite situation in the market, that is, when the stock market price in the company with significant reduction is much lower than the stock price of the company without reduction, the majority shareholders in order to avoid greater losses of their own interests, or to protect the company's image and long-development, they will not blindly reduce the share holdings continuously. It can be seen that the rational majority shareholders will give the market investors a tendency to respond, because rational majority shareholders need to consider the relationship between short-term reductions and long-term earnings even if they choose reduction. Especially because of the existence of information asymmetry, the majority shareholders can better choose the reduction time, then the market will not let investors abandon, but obtain the results of maximizing the proceeds. Hence, we posit the following hypothesis.

H2. There is a significant negative correlation between the investor's tendency and the continuous reduction of the majority shareholders, that is, the lower the probability that the majority shareholders will continue to reduce the holdings in the listed companies with more inclined investors. While in the listed companies with less market tendency, the probability of continuous reduction by the majority shareholders will be higher.

The behavior of listed companies to fulfill their social responsibilities will be found and given the corresponding response by the securities market. Empirical evidence suggests that social responsibility is directly sought by investors in the securities market, regardless of whether the behavior of social responsibility is short-term or long-term (Gardberg & Fombrun, 2006; Ye & Wang, 2013), which means that market investors will value the behavior of listed company to fulfill their social responsibility. They assume that the conduct of social responsibility will protect their legitimate rights and interests, thus showing supportive attitude. Similarly, the majority shareholders of listed companies will also feel the pursuit of abandonment and abandonment from market investors, they will find that the behavior of social responsibility can be recognized by market investors. In particular, this behavior will also generate value in the stock price and enhance the company's share price (Kim et al., 2014). As a result, under the strength of securities investors, the inhibiting effect of social responsibility on the main reduction of majority shareholders will be amplified invisibly. On the one hand, when the majority shareholders find the market investors sought after the company's stock because the company fulfilled the social responsibility, the majority shareholders need to cooperate with the company to support the company's development, especially the majority shareholders who do not reduce all the shares, they will not destroy the good image of themselves and the company in the eyes of investors through continuous reduction. On the other hand, when the market investors recognize that listed company has fulfilled their social responsibility, they will show the pursuit of the company's share price. But when the majority shareholders continue to reduce their holdings, the market investors will reduce the trust of the company, which will offset the positive impact of social responsibility, and in this case, the rational management will find the company's market value difference, then they can only continue to strengthen the implementation of fulfilling social responsibility to reduce the adverse effects of continuous reduction of majority shareholders. And rational majority shareholders will also find changes in market investors, in the process of fulfilling social responsibility they will not

deliberately reduce holdings continuously. It can be seen that in the suppression of social responsibility, once the majority shareholders find the behavior that market investors sought after company's stock, then they will not deliberately reduce share holdings continuously, especially when they need not cash the current majority shareholders immediately. Because in the case that the market investors recognize and sought after the company's stock, the company's future earnings will show a better development trend, and the company's stock value and price in the next period of time may show a better situation, so that the majority shareholders will get more revenue, thus there is no need to break this trend through the behavior of continuous reduction, and if they do that, even the basic gains will not be available. Hence, we put forward the following hypotheses.

H3. After considering the influence of investors' tendencies, the impact of social responsibility on continuously reducing shareholdings by majority shareholders will be significantly enlarged.

3. Variables, Models, and Data

3.1 Specification of Variables

Explained variable: Continuous Reduction of majority shareholders (CR). Lin and Cao (2014a) designed the index of majority shareholders' continuous reduction based on whether the company has two or more shareholders who reduce shareholdings or whether appear two or more reduction events in the company, but this indicator can't measure the "malicious" mentality of shareholders in the process of continuous reduction, because the reduction of a shareholder may not be affected by other shareholders. Therefore, the design of the index in this article is based on whether the same shareholder has a continuous reduction in the same fiscal year, that is, if it occurred two or more reduction events by the same shareholder in the listed company, then CR=1. Otherwise, if it didn't occur reduction events by majority shareholders that year, or did not occur a number of reduction events by the same shareholders (even if there are multiple majority shareholders reduce holdings once a time), then CR=0.

Explanatory variable: Social Responsibility (CSR). The index of early measurement of social responsibility are mostly based on whether the listed company disclose the information in the form of publish a report on social responsibility. However, this form can't distinguish the differences in social responsibility among different companies. And according to Stakeholder Theory, the company's daily behavior itself contains the implementation of social responsibility, or social responsibility should be a subtle behavior. Shen (2005) provides an analytical approach that takes the interests of the stakeholders into account, which by using the balance sheet and the income statement for analysis. The paper argues that the balance sheet liabilities and the owner's equity report the source of the company's funds, which include the funds provided by the suppliers, employees and government, as well as the resulting benefits. Owners' equity is considered to represent the shareholder's claim to the company in the narrow sense, but it does not fully reflect the funds from the shareholders. So the company has three types of funds, namely, liabilities, shareholders' equity provided by the shareholders and the company's own funds. The last one is the "main interests". And the main interests are actually the result of a joint effort from the shareholders, creditors, customers, suppliers, employees, government and other stakeholders. Therefore, with reference to Shen (2005), Xiao and Yang (2011), this paper builds a comprehensive index of social responsibility based on the measurement of the interests of different stakeholders, namely:

$$CSR=a_1 GR+a_2 ER+a_3 SR+a_4 ZR+a_5 YR+a_6 KR \quad (1)$$

The above formula shows that social responsibility is a different degree of responsibility for different shareholders, different measures of interest are as follows:

GR=Responsibility Contribution of Government=(Taxes Paid-Refunds Received)/Cash Inflow from Operating Activities×100%; ER=Responsibility Contribution Rate of Employee=Cash Paid to Employees and Cash Paid for Employees×100%; SR=Responsibility Contribution of Shareholder=Dividend/Revenue×100%; ZR=Responsibility Contribution Rate of Creditor=Financial Expense/Operating Income×100%; YR=Responsibility Contribution Rate of Supplier=Cash Outflow from Cash/Business Activity for Purchase of Goods, Payment of Labor Services×100%; KR=Contribution of Customer Liability=Operating Cost/Operating Income×100%.

The above indicators reflect how much of each dollar income of listed companies paid to the relevant stakeholders, and these indicators eliminate the impact of the size of the company to some extent. At the same time, in the formula (1), a_1 - a_6 are the weights of different stakeholders' interests, according to the thinking of Shen (2005), the calculation method of weight value are respectively as follows:

$$\begin{aligned} a_1 &= (MR/Size) \times [GR / (GR + ER + SR + ZR + YR + KR)]; \\ a_2 &= (MR/Size) \times [ER / (GR + ER + SR + ZR + YR + KR)]; \\ a_3 &= (EQ/Size) + (MR/Size) \times [SR / (GR + ER + SR + ZR + YR + KR)]; \\ a_4 &= (DT/Size) + (MR/Size) \times [ZR / (GR + ER + SR + ZR + YR + KR)]; \\ a_5 &= (MR/Size) \times [YR / (GR + ER + SR + ZR + YR + KR)]; \\ a_6 &= (MR/Size) \times [KR / (GR + ER + SR + ZR + YR + KR)]. \end{aligned}$$

In calculating the weights above, apart from the identified variables, EQ refers to the equity, that is the sum of the total share capital of the company and the capital reserve; DT refers to the debt, that is the sum of short-term borrowings, non-current liabilities due within one year, long-term borrowings and bonds payable. Size refers to the company's total assets; MR refers to the main interests, that is, the rest of the company's assets after deducting equity and debt from the total assets of the company.

Explanatory variables: the tendency of investor (Market): investors tend to show the market for investors to pursue or not pursue a class of listed companies, so different companies will be different from the market value. The change of the market value of the company may also be due to the profitability of the company. Therefore, this paper uses the market book value ratio to measure the difference of the company value while considering the change of the book value of the company. At the same time, taking the differences in market value between the companies with reduction of holdings and the companies without reduction of holdings into account, this paper adding an adjusted factor about value difference in the companies with and without reduction of holdings, namely:

$$Market_{i,t} = \ln(MB_{i,t}) - \left[\ln(\overline{MB_{NR,j,t}}) - \ln(\overline{MB_{R,j,t}}) \right] \quad (2)$$

In the formula above, MB refers to the ratio of the company's market value to the book value at the end of the year, $\ln(\overline{MB_{NR}})$ refers to the mean value obtained in the non-reduced company group;

$\ln(\overline{MB_r})$ refers to the average value obtained in the company group with reduction of holdings; i refers to the company, t means the year, j means the industry. That is, the investor orientation index is the ratio of market value to book value after listed companies have been adjusted, while the adjusted factor is the difference in market book value ratio between the company with and without reduction of holdings in the same industry. The specific formula for MB is:

MB=Market Value/Total Assets=(A Shares×the Closing Price of A Shares at the End of the year+B Shares×the Closing Price of B Shares at the End of the year×Year-end Exchange Rate+Total Liabilities at the End of the Year)/Total Assets.

The larger the market value is, the higher the market investor's tendency will be; while the smaller the market value is, the lower the market investor's preference will be.

Control variables: Reference to Helwege et al. (2007) and other studies, control variables are listed in Table 1.

Table 1. Variables Definitions

Variables	Definitions
Continuous reduction (CR)	If a shareholder in the company has twice or more of the reductions, CR=1, otherwise CR=0
Social responsibility (CSR)	Formula (1): $a_1 GR + a_2 ER + a_3 SR + a_4 ZR + a_5 YR + a_6 KR$
The tendency of investors (Market)	Formula (2): $\ln(MB_{i,t}) - [\ln(MB_{NR,j,t}) - \ln(MB_{R,j,t})]$
Assets and liabilities (Debt)	(Total liabilities / Total assets) × 100%
Return on assets (ROA)	(Net profit / Average total assets) × 100%
Ownership concentration (H10)	The sum of square of the proportion of the top 10 shareholders of the company
Market process (Index)	Regional marketization index provided by Fan Gang et al (2011)
Whether it is the largest shareholder reduce holdings (WFBS)	In the company where the reduction occurred, if the reduction of majority shareholders as the largest shareholder, then WFBS=1, otherwise WFBS=0; In companies that do not have a reduction, then WFBS=0

3.2 Empirical Model

According to the previous research hypothesis and the design of the research variables, this paper constructs the empirical model:

$$\log it(CR) = \left(\alpha_1 CSR + \alpha_2 Market + \alpha_3 (CSR \times Market) + \alpha_4 Debt + \alpha_5 ROA + \alpha_6 H10 + \alpha_7 Index + \alpha_8 WFBS + C + \varepsilon \right) \quad (3)$$

Since the explanatory variable is a dummy variable, the empirical model is a binary selection logit model. The estimate of the model is completed by the coefficient maximum likelihood function, where α is the parameter to be estimated, C is a constant term and ε is a random interference term.

3.3 Data Description

On the one hand, the SFC began to split the share reform in 2005 and stipulated that the listed companies need to be completed by the end of 2006, so after 2007, there have been large-scale reductions; on the other hand, the new accounting standards have been in the full implementation of listed companies in China in 2007. Therefore, in order to harmonize the measurement standard of variables, this paper chooses the companies that are not delisting in Shanghai and Shenzhen A-share listed companies in 2007-2013 as the original sample. The number of specific annual samples and the selection process according to the relevant criteria are listed in Table 2.

Table 2. Number of Samples and Selection Process

Year	2007	2008	2009	2010	2011	2012	2013	Total
All A shares	1539	1616	1715	2064	2346	2501	2503	14284
Deletion								
IPO sample	126	77	99	349	282	155	2	1090
Financial industry sample	22	33	33	35	40	43	44	250
Small plates, GEM samples	102	201	272	362	682	925	1053	3597
ST samples	169	150	147	161	143	97	52	919
Missing data or singular samples	27	32	43	72	72	86	77	409
Total	1093	1123	1121	1085	1127	1195	1275	8019

4. Empirical Analysis

4.1 Descriptive Statistics

Table 3. Descriptive Statistics of Continuous Reduction by Majority Shareholders

	2007	2008	2009	2010	2011	2012	2013	Total
The number of companies with continuous reduction samples	155	82	156	75	49	39	40	596
The number of companies with reduction samples	222	157	216	171	124	95	99	1084
Accounting for the proportion of all samples	14.18%	7.30%	13.92%	6.91%	4.35%	3.26%	3.14%	7.43%
Accounting for the proportion of companies with reduction	69.82%	52.23%	72.22%	43.86%	39.52%	41.05%	40.40%	54.98%

Table 3 lists the descriptive statistical status of the majority shareholders' continuous reductions. Overall, about 7.43% of the sample companies occurred that a majority shareholder reduced holdings twice or for more than two times, accounting for 54.98% of the number of companies with the reduction of holdings, indicating that more than half of the companies with reduction have continuous reduction, that is, among the companies with reduction, there will appear more of the emergence of multiple reduction events. From the annual situation, the proportion of reducing holdings by majority shareholders in 2007 is highest, there are nearly 70% of the companies whose majority shareholders reduce shareholdings have continuous reduction in the situation, which is related to the split share reform in 2007; But the proportion of companies with continuous reduction in 2009 is highest. In the remainder of the year, the proportion of the company's total holdings was below 10%, and the proportion after 2011 was even below 5%, and after 2010, the proportion of companies holding reductions was under 50%. This situation also showing a gradual downward trend, indicating that over time, the rationality of reducing holdings by majority shareholders gradually increased.

Table 4. Sample Descriptive Statistics

	Mean	Median	Maximum	Minimum	Standard deviation
CR	0.07	0.00	1.00	0.00	0.26
CSR	0.29	0.28	1.17	-2.63	0.18
Market	-0.75	-0.69	2.83	-3.47	0.55
Debt	0.52	0.54	1.26	0.01	0.19
ROA	0.03	0.03	1.42	-1.00	0.08
H10	0.18	0.14	1.22	0.00	0.13
Index	8.78	8.93	11.80	0.38	2.08
WFBS	0.02	0.00	1.00	0.00	0.14

Table 4 lists the descriptive statistical results of the main variables. In addition to the explanatory variables, the mean of explanatory variables CSR is 0.29, but there were significant differences in the social responsibility status of the listed companies, and some corporate social responsibility values were even negative; the mean of market is -0.75, but the same market for different listed companies investors tend to a greater degree of difference. In the control variable, the mean of variable Debt is 0.52, indicating that the total liabilities of the sample company account for more than half of the total assets; the mean of ROA is 0.03, indicating that the net profit of the sample company accounts for about 3% of the total assets; the mean of H10 is 0.18, indicating that the sample of company's equity concentration is not high, but different companies have a large difference in the concentration of equity. The mean of the index is 8.78, and the regional protection and governance degree of the firms in different regions are also different. The mean of WFBS is 0.02, indicating that about 2% of the listed companies in the sample occurred the event that the first majority shareholder reduce the shareholdings.

4.2 Correlation Analysis

Table 5. Relevance Test Results

	CR	CSR	Market	CSR×M	Debt	ROA	H10	Index	WFBS
CR	1	-0.04***	-0.13***	-0.08***	-0.03***	-0.04***	-0.12***	-0.03**	0.42***
CSR	-0.04***	1	0.12***	-0.48***	0.14***	0.21***	0.08***	0.12***	0.01
Market	-0.12***	0.20***	1	0.72***	0.30***	-0.28***	0.10***	0.04***	-0.06***
CSR×M	-0.05***	-0.68***	0.37***	1	0.17***	-0.38***	0.02**	-0.03**	-0.05***
Debt	-0.02*	0.11***	0.28***	0.13***	1	-0.37***	0.05***	-0.01	0.02
ROA	-0.02**	0.21***	-0.17***	-0.30***	-0.28***	1	0.16***	0.07***	-0.03**
H10	-0.12***	0.08***	0.10***	-0.02*	0.05***	0.11***	1	0.05***	-0.01
Index	-0.03***	0.09***	0.06***	-0.02	-0.02	0.04***	0.05***	1	-0.01
WFBS	0.42***	0.02**	-0.06***	-0.03***	0.02*	-0.02*	-0.02*	-0.01	1

Note. The lower left corner is the normal correlation coefficient value, and the upper right corner is the Spearman correlation coefficient value.

*Indicate significant difference at the 10% level (two-sided).

**Indicate significant difference at the 5% level (two-sided).

***Indicate significant difference at the 1% level (two-sided).

Table 5 shows the correlation test results for variables. Explain that the correlation coefficient between the variable and the explanatory variable and the control variable is not high, all below 0.5, which indicates that there is no problem of multicollinearity between variables.

4.3 Single Variable Analysis

Table 6. Univariate Test Results

Variables	Grouping criteria	N	Mean	T value	Z value
CSR	CR=1	596	0.288	3.862***	4.339***
	CR=0	7423	0.316		
Market	CR=1	596	-1.003	11.506***	12.615***
	CR=0	7423	-0.750		

Note. The T value is the mean test, the Z value is the Wilcoxon test.

*Indicate significant difference at the 10% level (two-sided).

**Indicate significant difference at the 5% level (two-sided).

***Indicate significant difference at the 1% level (two-sided).

In order to test the difference of social responsibility and investor's tendency of different listed companies, this paper divides the sample into continuous reduction group (CR=1) and non-continuous reduction group (CR=0) according to variable CR, and carries out mean difference test. From the variable CSR, the mean value of the CSR group was significantly lower than that of the continuous reduction group. The T test value and the Wilcoxon test value could be tested by the 1% confidence level, indicating that the company with no continuous reduction have better performance of social responsibility, we can see whether the implementation of social responsibility has a significant impact on the continuous reduction of majority shareholders; from the variable Market point of view, continuous reduction group Market average is also significantly lower than the continuous reduction group, which T test Values and Wilcoxon test values were tested with a 1% confidence level, indicating that non-consecutive holdings of listed companies received more market attention. Investors' tendencies also have an important impact on the continuous reduction by majority shareholders. And whether the shareholders choose a continuous reduction will be affected by the market.

4.4 Multivariate Regression Test

Table 7. The Result of the Regression

	(1)	(2)	(3)
CSR	-0.622*** (0.229)		-2.255*** (0.528)
Market		-0.686*** (0.084)	-0.335*** (0.119)
CSR×Market			-1.549*** (0.357)
Debt	-0.512**	-0.038	0.166
ROA	-0.066	-0.696	-0.831
H10	-5.249***	-5.098***	-5.135***
Index	-0.044**	-0.036*	-0.030*
WFBS	4.963***	4.846***	5.005***

C	-1.196***	-2.268***	-1.842***
McFadden R ²	0.179	0.192	0.197
LR Statistic	757.394***	814.493***	836.579***

Note. *Indicate significant difference at the 10% level (two-sided).

**Indicate significant difference at the 5% level (two-sided).

***Indicate significant difference at the 1% level (two-sided).

Table 7 lists some of the results of the multivariate regression test. Firstly, the overall test value of the regression results can be checked by the significance level of the conventional confidence level, indicating that there is no significant difference between the actual probability distribution of the explanatory variables and the predicted distribution fitted by the explanatory variables and the control variables, the result is credible.

Specific to the explanatory variables of the test results, (1) shows that the coefficient between the explanatory variable CSR and CR is significantly negative (significant level is 1%), which indicates that the fulfillment of the social responsibility of the listed company is the same as that of the majority shareholder. There is a significant negative correlation between the holdings, that is, the better the social responsibility of the listed companies, the corresponding occurrence of the majority shareholder of the probability of reduction is even lower, which for the previous study hypothesis 1 provides empirical evidence support; regression results (2) shows that the explanatory variable Market is significantly negative as the coefficient value between the explanatory variables CR (the level of significance is 1%), indicating that the listed companies with more inclined investors, the probability of continuous reduction by majority shareholders is even lower. Regression result (3) takes the results of the investor's reciprocity into account, the coefficient between the variable CSR and the explanatory variable CR is significantly negative (the level of significant level is 1%), and the coefficient between the variable Market and the explanatory variable CR is also significantly negative (significant level of 1%), the interaction term can be tested by the significance of the conventional confidence level, indicating that after considering the investor's influence, the behavior of listed companies to fulfill their social responsibility will restrict the continuous reduction of majority shareholders, and compare the regression results (3) with the regression results (1) in the variable CSR coefficient values found that the absolute value of coefficient in regression result (3) is significantly larger than the regression result (1), indicating that after considering the influencing factors of investors' tendencies, the effect of social responsibility on the continuous reduction of majority shareholders has been obviously strengthened. This conclusion provides empirical evidence for the previous hypothesis 3.

4.5 Robustness Test

In order to prove the reliability of the research conclusion, this paper carries out the robustness test. First, the regression tests were performed in the regression model to control annual factors and industry factors. Second, considering the possibility of multicollinearity caused by the inter-variable correlation in the regression model, the ridge regression test will be performed. Third, taking the possible endogeneity between variables into account, that is, the endogenous problem of social responsibility and investors' tendencies will make the sample self-selection bias, such as investors deliberately choose high social responsibility or low social responsibility to seek special interests. Therefore, this paper uses Heckman two-stage regression method to solve the endogenous problem of social responsibility and investors' tendencies. In the two-stage regression of the social responsibility variables, the first stage is the social responsibility estimation model, join the exogenous variables such

as the previous period of social responsibility, accounting firm audit and so on, and the resulting IMR is used as a control variable for the second stage regression. In the two-stage regression of the investor's tendency variable, the first stage adds the exogenous instrument variable, the accounting firm's audit and other exogenous instrument variables, and the resulting IMR is also used as the control variable for the second stage regression. Fourth, considering a variety of measurement methods of social responsibility, different literatures differ in the way they measure social responsibility. In addition to the method of calculating the degree of social responsibility of the listed company, this paper further uses the dummy variable of the listed company "whether to disclose the social responsibility report" instead of the original social responsibility variable, and then carries on the regression test. The results of the robustness test are basically consistent with the previous empirical results.

5. Further Analysis: When Will Majority Shareholders Choose to Complete Continuous Reduction?

Empirical evidence shows that the majority shareholders will choose the time to reduce holdings (Lin & Cao, 2012; Cai, 2012), which shows that the majority shareholders will choose some time without attention to reduce shareholdings, so that they can avoid some extra time with concern. But the previous empirical evidence shows that social responsibility will inhibit the continuous reduction. Does this mean that majority shareholders will avoid a continuous reduction in the disclosure of social responsibility report period? This article also found that the events of reduction in the second half of the year are far more than the first half of the year. There for, in the point of SCR, the majority shareholders will avoid reducing share-holders in the period of disclosing SCR, for the reduction is contrary to the fulfillment of social responsibility.

6. Research Conclusion

After the split share structure reform period, the reduction of holdings by majority shareholders had a greater impact on the stock market. On the one hand, a significant increase in the market supply after the non-tradable shares lifted, leading to oversupply, leading to oversupply and market equilibrium prices are naturally falling. On the other hand, market investors also follow the majority shareholders to sell shares, resulting in the second decline of market prices. In particular, it is the malicious holdings of majority shareholders, not only further influence the securities market, but also make the original normal fluctuation of shares becomes "abnormal". Therefore, this paper analyzes the effect of social responsibility on the continuous reduction of the majority shareholders by using the annual sample of 8019 listed companies in Shanghai and Shenzhen during the period of 2007 to 2013. The paper analyzes the effect of social responsibility on the continuous reduction of the majority shareholders with considering the mediating role of investor's tendency. The study finds that there is a significant negative correlation between social responsibility and continuous reduction of majority shareholders from the view of internal governance effect, that is, the better the social responsibility is performed, the lower probability of continuous reduction. There was also a significant negative correlation between the degree of the tendency of investors and the continuous reduction of the same majority shareholders, namely in the listed companies with the investors propensity, the lower probability of majority shareholders reduction. And after considering the impact of investor's tendency, the inhibitory effect of social responsibility was amplified, indicating that the market will agree the inhibitory effect arising from the social responsibility within the listed companies. Further study found that majority

shareholders will avoid the period of disclosing social responsibility report to reduce shareholdings. In addition, as the regulation of the reduction of majority shareholders, relying solely on the regulatory policy is not enough, because even the perfect policy may have loopholes, the source of the idea that majority shareholders reduce holdings can't be removed. So in addition to the proposed social responsibility and the attitude of the securities market investors, how to improve the management system through the regulation of majority shareholders reductions should be the follow-up study.

References

- Baker, M., & Wurgler, J. (2004). A Catering Theory of Dividends. *Journal of Finance*, 59(3), 1125-1165. <https://doi.org/10.1111/j.1540-6261.2004.00658.x>
- Cai, N. (2012). Information advantage, timing behavior and insider trading of majority shareholders. *Journal of Financial Research*, (5).
- Cai, N., & Wei, M. H. (2011). Shareholder relations, collusion and the transfer of majority shareholders' interests: A study based on the lifting of the ban on stock transactions. *Journal of Applied Statistics and Management*, (9).
- Cao, G. H., & Lin, C. D. D. (2013). Intertemporal holdings of controlling shareholders based on intertemporal embezzlement. *System Engineering-Theory and Practice*, (6).
- Cao, G. H., Lin, C., & Huang, J. (2014). Large non reduction and real earnings management. *Business Managment Journal*, (1).
- Chen, W., Lin, C., & Peng, C. (2016). External audit and continuous reduction of majority shareholders—Based on the samples of Shanghai and Shenzhen A-share listed companies during 2007 and 2014. *Finance and Accounting Monthly*, (7).
- Chih, H. L., Shen, C. H., & Kang, F. C. (2008). Corporate Social Responsibility, Investor Protection, and Earnings Management: Some International Evidence. *Journal of Business Ethics*, 39(1), 179-198. <https://doi.org/10.1007/s10551-007-9383-7>
- Fan, G., & Wang, X. L. (2011). *China's marketization index: The relative process of marketization in various regions, 2011 Report*. Economic Science Press.
- Fan, J. J. (2008). Why does the stock market decline only blame "the size of non"? *New Economics*, (12).
- Gardberg, N. A., & Fombrun, C. J. (2006). Corporate Citizenship: Creating Intangible Assets Across Institutional Environments. *Academy of Management Review*, 31(2), 329-346. <https://doi.org/10.5465/AMR.2006.20208684>
- Godfrey, P. C. (2005). The Relationship between Corporate Philanthropy and Shareholder Wealth: A Risk Management Perspective. *Academy of Management Review*, 30(4), 777-798. <https://doi.org/10.5465/AMR.2005.18378878>
- Harrison, J., & Freeman, R. (1999). Stakeholders, Social Responsibility, and Performance: Empirical Evidence and Theoretical Perspectives. *Academy of Management Journal*, 42(5), 479-485. <https://doi.org/10.2307/256971>
- Helwege, J., Pirinsky, C., & Stulz, R. M. (2007). Why Do Firms Become Widely Held? An Analysis of the Dynamics of Corporate Ownership. *Journal of Finance*, 62(3), 995-1028. <https://doi.org/10.1111/j.1540-6261.2007.01229.x>
- Huang, J. H., Yin, Z. J., & Su, R. (2009). Study on the reduction effect of the lifting of restricted shares in China's stock market. *Journal of Management Sciences*, (4).
- Huang, Z. Z., Zhou, W., & Xie, W. L. (2009). Motivation of majority shareholders to reduce shares:

- Theory and evidence. *Economic Review*, (6).
- Jia, M., Zhang, Z., & Wan, D. F. (2009). Share reform scheme, agency costs and the sale of majority shareholder ban shares. *Finance and Accounting*, (11).
- Johnston, J., Madura, J., & Harper, J. T. (2005). Interaction between Short Selling and Potential Insider Selling in the IPO Aftermarket. *Journal of Financial Services Research*, 27(3), 283-302. <https://doi.org/10.1007/s10693-005-1805-z>
- Kim, Y., Li, H., & Li, S. (2014). Corporate Social Responsibility and Stock Price Crash Risk. *Journal of Banking & Finance*, 43(6), 1-13. <https://doi.org/10.1016/j.jbankfin.2014.02.013>
- Kong, D. M., Xu, M. L., & Huang, J. (2013). Environmental pollution, media exposure and reactions of different types of investors. *Journal of Huazhong University of Science and Technology* (Social Science Edition).
- Li, W. Y., & Xiao, H. J. (2011). The logic of corporate social responsibility. *China industrial economics*, (10).
- Lin, C., & Cao, G. H. (2012). Management of earnings, non-annual effect and reduction of majority shareholders. *Southern Economy*, (12).
- Lin, C., & Cao, G. H. (2013). Regional marketization process and the reduction of majority shareholders. *Shanghai Finance*, (4).
- Lin, C., & Cao, G. H. (2013). Why majority shareholders continue to reduce share holdings? *Corporate Finance Research*, (1).
- Liu, Y. L., & Li, J. J. (2010). Reduction of majority shareholders, equity transfer premiums and private benefits of control. *Inquiry into Economic Issues*, (8).
- MacKinlay, A. C. (1997). Event Studies in Economics and Finance. *Journal of Economic Literature*, 35(1), 13-39.
- Ruf, B. M., Muralidhar, K., Brown, R. M., Janney, J. J., & Paul, K. (2001). An Empirical Investigation of the Relationship between Change in Corporate Social Performance and Financial Performance: A Stakeholder Theory Perspective. *Journal of Business Ethics*, 32(2), 143-156. <https://doi.org/10.1023/A:1010786912118>
- Shen, H. T. (2005). *Research on the relationship between corporate social responsibility and corporate financial performance—Based on the theory of Stakeholder*. Doctoral Dissertation of Xiamen University.
- Shleifer, A., & Vishny, R. W. (1986). Majority shareholders and Corporate Control. *Journal of Political Economy*, 94(3), 461-488. <https://doi.org/10.1086/261385>
- Wang, T. T. (2009). Reduction: Liquidity demand or signal transmission—A case study based on CITIC Securities. *Economy Management*, (7).
- Xiao, Z. P., Yang, J., & Zhu, H. P. (2011). The impact of corporate governance on Corporate Social Responsibility—Empirical Evidence from Chinese Listed Companies. *Securities Market Herald*, (6).
- Xie, L. (2009). Encounter the three largest shareholder of continuous reduction, kinwa performance decline and in “a crisis of confidence”. *Securities Daily*.
- Xu, L. P., Xin, Y., & Zhu, J. G. (2011). Media attention and the performance of social responsibility of Listed Companies—An Empirical Study Based on Wenchuan earthquake donation. *Management World*, (3).
- Ye, C. G., & Wang, Z. (2013). Social responsibility, performance evaluation and market reaction. *Soft Science*, (6).

- Yeh, Y. H., Shu, P. G., Lee, T. S., & Su, Y. H. (2009). Non-Tra 中国会计评论 dable Share Reform and Corporate Governance in the Chinese Stock Market. *Corporate Governance: An International Review*, 17(4), 457-475. <https://doi.org/10.1111/j.1467-8683.2009.00754.x>
- Yu, H. M., & Xu, L. B. (2010). Ultimate controlling shareholder control and the reduction of majority shareholders under the background of full circulation. *The Study of Finance and Economics*, (1).
- Yuan, Y., & Hong, F. (2010). Theoretical and empirical analysis of the factors affecting the reduction of majority shareholders. *Chinese Accounting Review*, (4).
- Zhang, T. (2008). Empirical analysis of the effect of split share structure reform on the effectiveness of China's stock market. *Jianghai Accademic Journal*, (3).
- Zhang, X. Z., & Hong, F. (2008). Policy orientation analysis of non-reduction of size. *Finance and Accounting*, (11).