

Research on the Relationship of Social Responsibility, Corporate Reputation and Corporate Performance of Listed Pharmaceutical Manufacturing Companies

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ABSTRACT

Enterprises actively fulfill their social responsibilities not only to realize their own performance but also to realize their social value. The outbreak of the new coronavirus pneumonia epidemic in 2020 has pushed pharmaceutical companies to a hot spot in society, and the public's call for pharmaceutical companies to actively fulfill their social responsibilities is increasing. This paper introduces corporate reputation as an intermediary variable, and analyzes the role played by the reputation of pharmaceutical manufacturing companies in the relationship between social responsibility and corporate performance, using data from listed pharmaceutical manufacturing companies from 2013 to 2018. Research shows that corporate social responsibility has a positive impact on corporate reputation and corporate performance, and corporate reputation is significantly positively correlated with corporate performance. At the same time, corporate reputation has a significant intermediary effect in the relationship between social responsibility and performance. Therefore, pharmaceutical manufacturing enterprises actively fulfilling their social responsibilities can effectively enhance the reputation of the enterprise and improve their own performance.

Keywords: *Corporate social responsibility, Corporate reputation, Corporate performance, Intermediary effect*

1. INTRODUCTION

Reviewing domestic and foreign studies, there are abundant research results on the relationship between social responsibility and corporate performance. Scholars generally believe that corporate social responsibility has a positive impact on corporate performance [1], the reputation and image of the company have a positive effect on the reduction of the company's operating costs, corporate social responsibility significantly promotes corporate performance, and corporate reputation The intermediary effect appears in the relationship between corporate social responsibility and corporate performance. However, there is no unified conclusion on the quantification of corporate reputation in related research. At present, corporate reputation is mostly measured by questionnaire scores, intangible assets or related financial indicators.

In recent years, drug safety incidents have occurred frequently, such as Changchun Changsheng's "fake vaccine" and other incidents have caused widespread concern in the society and negatively affected the reputation of the enterprise, which in turn has had undesirable consequences on the performance of the enterprise and made the public pay more attention to the Social responsibility issues. How pharmaceutical companies actively fulfill their social responsibilities, establish a good corporate image, and enhance their own value and performance have become a hot issue of social concern. This paper attempts to reveal the internal relationship between corporate social responsibility, corporate

reputation and corporate performance of listed pharmaceutical manufacturing companies by building a reputation evaluation system to measure corporate reputation.

2. THEORETICAL ANALYSIS AND RESEARCH HYPOTHESIS

2.1. The impact of corporate social responsibility on corporate performance

Modern social responsibility theory holds that the realization of economic goals and the fulfillment of social responsibilities of a company are mutually reinforcing and do not conflict. In other words, the company's active fulfillment of social responsibilities does not affect the company's goal of maximizing its profits. According to the stakeholder theory, stakeholders, such as shareholders, creditors, employees, consumers, the government, and the public, work together on the survival and development of an enterprise, and their interests must be considered when making decisions. Scholars believe that stakeholders are more interested in companies that actively fulfill their social responsibilities: Shareholders are more inclined to invest in companies with better performance of social responsibilities; creditors are more willing to lend money to

companies with higher reputation; employees can get access to such companies Self-identity; consumers are more willing to purchase products of enterprises that actively fulfill social responsibilities and have loyalty; the government is also more inclined to provide policy support for such enterprises [5]. Therefore, companies can get a lot of support from the public, gain unique competitive advantages, reduce corporate costs, and improve corporate performance. Therefore, this paper proposes Hypothesis 1: H1: Corporate social responsibility has a positive impact on corporate performance.

2.2. The impact of corporate social responsibility on corporate reputation

Based on the definition of corporate reputation, corporate reputation is also inseparable from various stakeholders. Existing research results show that: Corporate community responsibility and corporate environmental responsibility have a positive role in promoting corporate reputation; stakeholder pressure positively regulates the positive relationship between corporate environmental responsibility and corporate reputation; corporate social responsibility reports convey more social responsibility information, Enhance the positive correlation between social responsibility performance and corporate reputation. Therefore, the positive performance of a company in fulfilling its social responsibilities will affect the stakeholder's perception of the company and thus its reputation. Corporate social responsibility can enhance the company's reputation. Therefore, this paper proposes Hypothesis 2: H2: Corporate social responsibility positively affects corporate reputation.

2.3. The impact of corporate reputation on corporate performance

Based on the stakeholder theory, a good reputation will enhance consumer loyalty, and at the same time convey the information of good quality of enterprise products and services, making consumers willing to buy products and Service; A company with a good reputation can allow creditors to lend funds with confidence, thereby enhancing the ability of corporate capital turnover to improve corporate performance; At the same time, the supplier will have less contract defaults in business transactions with well-known companies. For this reason, they will be willing to reduce some contract costs. Therefore, a good corporate reputation is conducive to companies to enhance their competitive advantage and increase their value. Therefore, this paper proposes Hypothesis 3: H3: Corporate reputation is positively affecting corporate performance.

2.4. Relationship between social responsibility, corporate reputation and corporate performance

The performance of corporate social responsibility sends a signal to stakeholders, thereby affecting corporate reputation, and corporate reputation positively affects corporate performance, so corporate social responsibility affects corporate performance through corporate reputation, that is, there may be a company between corporate social responsibility and performance Reputation as an intermediate mechanism. Therefore, this paper proposes Hypothesis 4: H4: Corporate reputation plays an intermediary role in the impact of corporate social responsibility on corporate performance.

Based on the above theoretical analysis and research hypothesis, this paper constructs a mechanism framework for the influence of the corporate reputation of listed pharmaceutical manufacturing companies on the relationship between corporate social responsibility and corporate reputation, as shown in Figure 1:

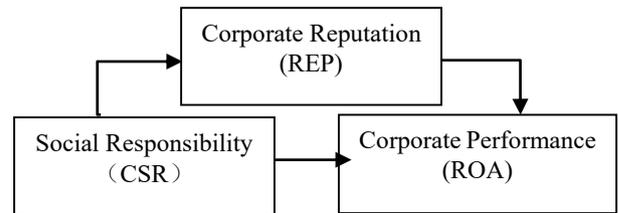


Figure 1 Research framework

3. SAMPLE SELECTION AND RESEARCH DESIGN

3.1. Sample selection and data source

This paper selects 237 listed companies in China's pharmaceutical manufacturing industry as research samples. In the selection of samples, 20 companies with incomplete data and obvious abnormalities were excluded, and 217 companies were selected for the relevant data from 2013 to 2018. When collecting the above company data, this article mainly uses the CSMAR database. The relevant data of corporate social responsibility is taken from the social responsibility score report published by Hexun.com, and then uses Excel to collate the obtained data, and uses SPSS 23.0 to factor the corporate reputation evaluation index. For analysis, use EvIEWS 9.0 to conduct an empirical analysis of the collated data.

3.2. Variable definition

3.2.1. The explained variable

Financial indicators such as return on total assets, Tobin's Q value, earnings per share, and profitability of main business are all indicators to measure corporate performance. Taking into account the current status of my country's capital market and the integrity of the data, this paper selects the ROA (Return on Total Assets) commonly used by domestic scholars to measure corporate performance.

3.2.2. Explanation variables

At present, there is no relatively consistent standard for the evaluation of corporate social responsibility (CSR) in China. Some scholars conduct research through the establishment of a relevant evaluation system. And some have established questions through questionnaires for analysis. However, most of the data used in the existing research mainly come from Runling Global Responsibility Rating and Hexun Online social responsibility score, its evaluation results are authoritative and reliable. However, Runling Global only rated A-share listed companies, while Hexun.com scored all listed companies in China. Hexun's corporate social responsibility evaluation system scores corporate social responsibility performance from the five dimensions of stakeholders, and add the weights to get the total score. This total score represents the company's social responsibility performance. The higher score, explain that the social responsibility performance is better. In order to get more data, this article selects Hexun.com social responsibility score as the evaluation result of corporate social responsibility.

3.2.3. Intermediary variables

This article measures corporate reputation (REP) through a reputation evaluation system [3]. Twelve corporate reputation evaluation indicators were selected, and factor analysis methods were used to calculate corporate reputation scores.

3.2.4. Control variables

The size of listed companies, the number of years listed, and the nature of the company will all affect the performance level to a large extent. Therefore, this paper chooses enterprise size (Size, the logarithm of the company's total assets at the end of the year), Enterprise listing period (Age, estimated based on the listing date), and enterprise nature (Type, the value of state-owned enterprises is 1, otherwise it is 0) as the control variables. In view of the possible endogenous problems in corporate social responsibility and corporate performance, this paper introduces the previous

year's corporate performance (ROAt-1, ROA of the previous year) as a control variable.

3.3. Model design

Based on the above analysis, the following model is established to test the proposed hypothesis:

$$ROA = \alpha_0 + \alpha_1 CSR + \alpha_2 Controls + \varepsilon \quad (1)$$

$$REP = \alpha_0 + \alpha_1 CSR + \alpha_2 Controls + \varepsilon \quad (2)$$

$$ROA = \alpha_0 + \alpha_1 REP + \alpha_2 Controls + \varepsilon \quad (3)$$

$$ROA = \alpha_0 + \alpha_1 CSR + \alpha_2 REP + \alpha_3 Controls + \varepsilon \quad (4)$$

Among them, model (1) is to test the impact of social responsibility on corporate performance; model (2) is to reflect the impact of corporate social responsibility on corporate reputation; model (3) is to reflect the impact of corporate reputation on corporate performance; model (4) To reflect the intermediary effect of corporate reputation. In the above model, α_i is the coefficient to be regression, Controls is the control variable, including Variables such as Size, Age, Type, ROAt-1, and ε is the random interference term.

4. EMPIRICAL ANALYSIS

4.1. Descriptive statistics

Obtain descriptive statistical results of each variable through descriptive statistical analysis: The mean value of ROA is 0.077, the standard deviation is 0.056, the maximum value is 0.34, the minimum value is 0.0005, and the extreme value of ROA varies greatly, which shows that the sample ROA level is more volatile Large, but all within the acceptable range; the minimum value of REP is -1.339, the maximum value is 2.750, the average value is 0.004, and the standard deviation is 0.525, indicating that the reputation gap of listed pharmaceutical companies is large, and domestic pharmaceutical companies pay insufficient attention to reputation management; the average CSR is 28.082, indicating that the overall level of corporate social responsibility is not high; the standard deviation is 13.850, indicating that there are obvious differences between companies; according to the average and standard deviation of Size, it can be seen that the size of the sample companies is relatively concentrated, most At a medium scale, a small number of large enterprises and small enterprises, this is also consistent with the actual situation.

4.2. Correlation analysis

The correlation test of each variable shows that: In addition to the low correlation between the independent variable CSR and the control variable Age, it is positively correlated with other variables at a 1% significance level, which supports and validates hypothesis 1; The intermediary variable REP is significantly correlated with the other

variables at a 99% confidence level, which supports and validates Hypothesis 2 and Hypothesis 3.

5. ANALYSIS OF REGRESSION RESULTS

5.1. Corporate Social Responsibility and Corporate Performance

Model (1) reflects the impact of the performance of social responsibilities by listed pharmaceutical manufacturing companies on corporate performance. The regression results show: Corporate performance and corporate social responsibility are significantly positively correlated at the 1% level, assuming H1 is verified. This shows that the active performance of social responsibilities by listed pharmaceutical manufacturing companies can improve corporate performance to a certain extent.

5.2. Corporate Social Responsibility and Corporate Reputation

Model (2) reflects the relationship between corporate social responsibility and corporate reputation, based on empirical analysis results: the regression coefficient of CSR is significant, indicating that the better the company performs in its social responsibility performance, the higher its reputation will be. The multiple dimensions of the author have a significant positive effect on corporate reputation [4]. Affecting this can make the enterprise itself form a good reputation, assuming that H2 is verified. The coefficients of the nature of the company, the number of years listed by the company, and the reputation of the company are not significant. This shows that the reputation of the listed company in the pharmaceutical manufacturing industry has little effect on whether the company is state-owned or the duration of the listing.

5.3. Corporate reputation and corporate performance

Empirical analysis results of model (3) reveals that the regression coefficient of corporate reputation shows a significant positive correlation with corporate performance at a 1% significance level. Hypothesis H3 is verified. This shows that corporate reputation has an important impact on corporate performance, and corporate visibility and reputation will have a significant positive impact on the reduction of corporate operating costs [2].

5.4. The intermediary role of corporate reputation in corporate social responsibility and corporate performance

For the intermediary effect, this paper first analyzes the coefficient of CSR in the model (1), which is significant at the level of 1%, and initially believes that the intermediary effect may exist; then examines the coefficient of CSR in the model (2), at the level of 1% Under significant conditions, further testing the coefficients of CSR and REP in model (4), it is found that both are significant, thus judging that the corporate reputation has played a part of the intermediary role, assuming H4 is verified.

6. ROBUSTNESS TEST

In order to enhance the credibility of research conclusions, this paper uses a shareholders' equity net interest rate (ROE) instead of ROA to measure the performance of the enterprise and conducts a robust test. The control variable deletes the previous period's corporate performance. The remaining variables are consistent with those involved in the previous empirical analysis process. The regression test is re-tested according to the previous empirical steps. In addition, the sobel test is performed in the intermediary effect, and its p value is less than 0.05 After passing the test, the rest of the test results are basically consistent with the previous main conclusions, indicating that the research conclusion of this article is stable and valid.

7. CONCLUSION

This article uses 2013-2018 Chinese pharmaceutical manufacturing listed companies as a research sample, and starts with the intermediary role of corporate reputation to discuss the relationship between corporate social responsibility and corporate performance. The main conclusions are: ① corporate social responsibility is significantly positively related to corporate performance; ② Corporate social responsibility can significantly promote corporate reputation. Active corporate social responsibility can shape a good corporate image and improve corporate reputation; ③ Corporate reputation is significantly positively correlated with corporate performance, good corporate reputation can bring performance improvement to the company; There is a partial mediation effect. Part of the relationship between corporate social responsibility and the positive impact of corporate performance is due to corporate reputation. Therefore, pharmaceutical manufacturing companies can start by enhancing their reputation, shape a good corporate image, actively fulfill their social responsibilities, and promote the improvement of performance levels.

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